

*City of Biddeford*  
**City Council**  
**November 21, 2023 6:00 PM Council Chambers & Zoom**

**Please click this URL to join:**

**<https://biddeford.zoom.us/j/96504658208>**

**Or One tap mobile:**

**+16465588656,,96504658208# US (New York)**  
**+16469313860,,96504658208# US**

**Or join by phone:**

**Dial(for higher quality, dial a number based on your current location):**

**US: +1 646 558 8656 or +1 646 931 3860 or +1 301 715 8592 or +1 305 224 1968 or +1 309  
205 3325**

**Webinar ID: 965 0465 8208**

**International numbers available: <https://biddeford.zoom.us/j/96504658208>**

**Status:** - *City Hall Council Chambers in person and virtual via Zoom*

- 1. Roll Call**
- 2. Pledge of Allegiance**
- 3. Adjustment(s) to Agenda**
- 4. Recognition:**
  - 4.a. Swearing in of Chief of Fire Department Lawrence Best
- 5. Proclamation:**
  - 5.a. Proclamation Small Business Saturday  
[Small Business Saturday 2023-PROCLAMATION](#)
- 6. Appointments:**
  - 6.a. Approval/Appointment Dennis Gosselin to the Ad Hoc Eastern Fire/EMS Station Building Committee  
[20231121 Dennis Gosselin -Ad Hoc Eastern Fire Building Committee -ORDER Application- Dennis Gosselin - Ad Hoc Eastern Fire Building Committee](#)
- 7. Public Addressing the Council...(3 minute limit per speaker for up to a total of 15 minutes)**
- 8. Game of Chance Beano/Bingo - Applications**
  - 8.a. Games of Chance: York County Veterans Alliance  
[Games of Chance York County Veterans Alliance application](#)
  - 8.b. Games of Chance AMVETS Post 1  
[Games of Chance AMVETS post 1 application](#)
- 9. Consideration of Minutes:**
  - 9.a. Approval/Council Minutes 10-17-2023

**10. Orders of the Day:**

- 10.a. 2023.136) Approval/Mooring Fee Increase  
[20231121 Mooring Fee Increase - BRIEF](#)  
[20231121 Mooring Fee Increase - ORDER](#)
- 10.b. 2023.68) Approval/Amend/Code of Ordinances, Chapter 10, Animals, Article II, DOGS, Sec. 10-13. Running at large on public ways prohibited: restraint required. Requiring Dogs to be on leash in Clifford Park.  
[20231121 Clifford Park - Dogs on Leash - BRIEF](#)  
[2023.68 Clifford Park Dogs Off Leash - ORDER](#)  
[Chapter 10-Animals, Sec10-31; Chapter 46-Parks, Sec 46-13 - REFERENCE](#)  
[Clifford Park Online Input Summary - REFERENCE](#)  
[Facebook Post-email Dogs in Clifford Park - REFERENCE](#)  
[Recreation Commission Meeting Minutes of 09.25.2023 - REFERENCE](#)  
[State and National Park Policies on Dogs 2023 - REFERENCE](#)
- 10.c. 2023.137) Approval/Amendment CDBG Year 6 Action Plan (FY 2023-24)  
[2023.137 CDBG Year 6 Action Plan Amendment Council Brief 11-21-23](#)  
[2023.137 CDBG Year 6 Action Plan Amendment Order 11-21-23](#)  
[Year 6 Action Plan - Amendment](#)
- 10.d. 2023.138) Approval/CDBG - CV Allocation to Seeds of Hope  
[20231121 CDBG-CV Allocation to Seeds of Hope - BRIEF](#)  
[20231121 CDBG-CV Allocation to Seeds of Hope - ORDER](#)
- 10.e. 2023.139) Approval/York-Laconia Riverwalk Sidewalk Improvements Award Contract  
[20231121 York-Laconia Riverwalk - Council Brief](#)  
[20231121 York-Laconia Riverwalk - Council Order](#)  
[1 - Overall Riverwalk Connections Site Plan - REFERENCE](#)  
[2 - Shaw Brothers Bid Tab - REFERENCE](#)
- 10.f. 2023.140) Approval/Alfred Street CSO Separation  
[20231121 Council - Alfred St CSO Separation Project - BRIEF](#)  
[20231121 Alfred Street CSO Separation Project - ORDER](#)  
[Alfred Street CSO Separation Project - REFERENCE](#)
- 10.g. 2023.141) Approval/City of Biddeford Climate Action Plan  
[20231121 Climate Action Plan - BRIEF](#)  
[20231121 Approval Climate Action Plan - ORDER](#)  
[Draft - Biddeford CAP Oct 23 with Appendices - CLIMATE ACTION PLAN](#)
- 10.h. 2023.142) Approval/Amendment Street Reduction Ordinance Table B  
[20231121 Street Frontage Reduction Ordinance - BRIEF](#)  
[20231121 Street Frontage Reduction Ordinance - ORDER](#)  
[20231101 Memo to Planning Board - Street Reduction Ordinance w Attachment - REFERENCE](#)
- 10.i. 2023.143) Approval/Amendment Zoning Ordinance Article VI - Performance Standards, Section 78 - Accessory Dwelling Units, Section B.1.a.  
[20231121 Amend Sec 78 Accessory Dwelling Unit - BRIEF](#)  
[20231121 Amend Sec 78 Accessory Dwelling Units - ORDER](#)  
[20231115 Planning Board Memo - ADU Ordinance Amendment - REFERENCE](#)



- [20231121 Section 78 Accessory Dwelling Units Full Text - REFERENCE](#)
- 10.j. 2023.144) Approval/Amendments Zoning Ordinance Table A, Accessory Dwelling Units (ADU)  
[20231121 ADU Table A Amendment - BRIEF](#)  
[20231121 ADU Table A Amendment - ORDER](#)  
[20231115 ADU Article V, Table A Amended - REFERENCE](#)  
[20231115 Planning Board Memo - Accessory Dwelling Unit Amend Table A - REFERENCE](#)
- 10.k 2023.145) Approval/Amendment to Zoning Ordinance Table A Marijuana Adult Use Sales  
[20231121 Marijuana Adult Use Sales - Amend Table A - BRIEF](#)  
[20231121 Amend Marijuana Adult Use Sales - Table A - ORDER](#)  
[20231115 Planning Board Memo - Marijuana Amendments - REFERENCE](#)  
[20231121 Marijuana Adult Use Sales - Amend Table A - REFERENCE](#)
- 10.l 2023.146) Approval/Amendment to Zoning Ordinance Article VI - Performance Standards, Section 77 - Marijuana Establishments  
[20231121 Amend Performance Standards for Marijuana Odor Control - BRIEF](#)  
[20231121 Amend Performance Standards for Marijuana Odor Control - ORDER](#)  
[20231115 Planning Board Memo - Marijuana Amendments Odor Control - REFERENCE](#)  
[20231121 Marijuana Establishments Sec 77, Full Text w Amendments - REFERENCE](#)
- 10.m 2023.147) Approval/Amendment Table B Dimensional Requirements Density Bonus Ordinance  
[20231121 Amend Land Use Regulation - Density Bonus - BRIEF](#)  
[20231121 Amend Land Use Regulation - Density Bonus - ORDER](#)  
[20231115 Planning Board - Public Hearing Recommendation - Table B Amendment - Full Text - REFERENCE UPDATE](#)  
[20231115 Planning Board Memo - Land Use Table B Density Bonus - REFERENCE](#)
- 10.n. 2023.148) Approval/Amendment Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 40 (New Chapter) – Inclusionary Zoning (IZ)  
[20231121 Inclusionary Zoning IZ Amendment - BRIEF](#)  
[20231121 Inclusionary Zoning IZ Amendment - ORDER](#)  
[20230620 2023.25 Inclusionary Zoning Order Housing Task Force - REFERENCE](#)  
[20231101 Planning Board Memo - Inclusionary Zoning Ordinance - REFERENCE](#)  
[20231102 Planning Board Public Hearing - IZ Amendment - Full Text - REFERENCE](#)
- 10.o 2023.149) Approval/Amendment Code of Ordinances, Part III: Land Use Development Regulations, Article II – Definitions  
[20231121 Affordable Housing Development Definitions Amendment - BRIEF](#)  
[20231121 Ordinance Amendment for Definition of Affordable Housing Development \(Inclusionary Zoning\) - ORDER](#)  
[20231101 Planning Board IZ Ordinance and Density Bonus Definitions - REFERENCE](#)
- 10.p 2023.150) Approval/State of Maine Department of Transportation Cooperative Agreement for Multi-Project Design Cost Sharing for Proposed Improvements to Multiple Elm Street Segments Biddeford Maine

20231121 Approval MeDOT-PACTS-City of Biddeford Elm Street Cooperative Agreement - BRIEF

20231121 MDOT-PACTS-City of Biddeford Elm Street Coopertaive Agreement - ORDER

20231121 MDOT -PACTS-City of Biddeford Elm Street Cooperative Agreement - FINAL DRAFT

20231027 Biddeford PACTS MaineDOT Cooperative Agreement Elm Street with GAM edits - REFERENCE

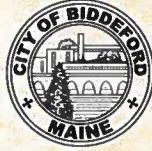
Biddeford Elm Street - TMP Intersection Sections Map CONCEPT IMPROVEMENTS MDOT 09-20-23

Elm Street Corridor Project Area Improvements - Concept Plan

11. **Public Addressing the Council..(5 minute limit per speaker)**
12. **City Manager Report**
13. **Other Business**
14. **Council President Addressing the Council**
15. **Mayor Addressing the Council**
16. **Adjourn**



# City of Biddeford



## PROCLAMATION

WHEREAS, the government of Biddeford, Maine celebrates our local small businesses and the contributions they make to our local economy and community; and

WHEREAS, according to the United States Small Business Administration, there are 32 million small businesses in the United States, and

WHEREAS, the majority of consumers understand the importance of supporting the small businesses in their community on Small Business Saturday®, as well as year round; and

WHEREAS, Biddeford supports our local businesses that create jobs, boost our local economy, and preserve our communities; and

WHEREAS, advocacy groups, as well as public and private organizations, across the country have endorsed the Saturday after Thanksgiving as Small Business Saturday.

NOW, THEREFORE, I, Alan Casavant, Mayor of the City of Biddeford, do hereby proclaim, November 25, 2023, as: SMALL BUSINESS SATURDAY and urge the residents of our community, and communities across the country, to support small businesses and merchants on Small Business Saturday and throughout the year.

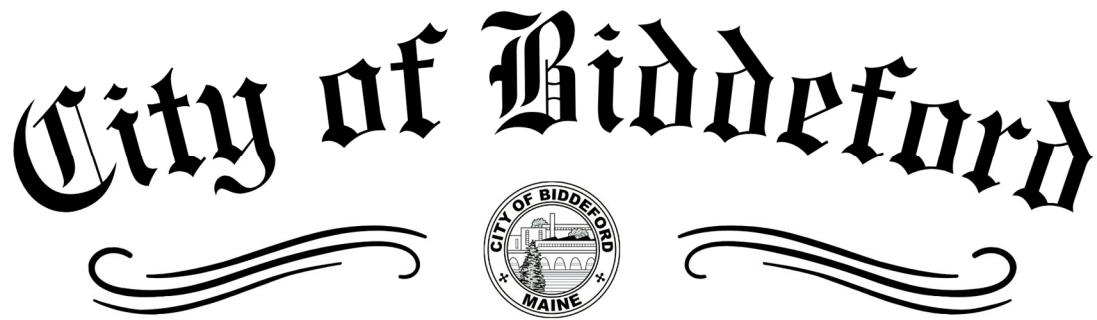
*In Witness Whereof, We the undersigned have herewith affixed  
our signatures this 21st day of November 2023.*

\_\_\_\_\_  
*Mayor Alan Casavant*



\_\_\_\_\_  
*City Clerk, Robin Patterson*





**2023.151**

**IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023**

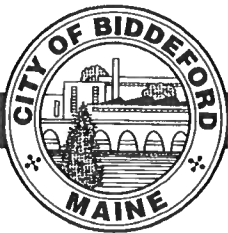
**BE IT ORDERED**, that I, Alan M. Casavant, Mayor of the City of Biddeford, do hereby appoint:

Dennis Gosselin  
Ward 3

to the Ad Hoc Eastern Fire/EMS Station Building Committee.

**Attest by:**\_\_\_\_\_

**Robin Patterson, City Clerk**



## CITY OF BIDDEFORD

### Application for City Committees, Commissions and Boards

**Date:** October 18, 2023

**Name:** Dennis P. Gosselin

**Street Address:** 8 Levi Lane #103

**Mailing Address:**  
(if different)

**Phone Number(s):** 207.468.4654

**Email Address:** dpg.hbg@gmail.com

Which City Committee, Board or Commission do you request to be appointed to:

- |                                                                      |                                                                          |
|----------------------------------------------------------------------|--------------------------------------------------------------------------|
| <input type="checkbox"/> • Airport Commission                        | <input type="checkbox"/> • Harbor Commission                             |
| <input type="checkbox"/> • Biddeford Citizens Advisory Committee     | <input type="checkbox"/> • Historic Preservation Commission              |
| <input type="checkbox"/> • Biddeford Fire Advisory Committee         | <input type="checkbox"/> • Planning Board                                |
| <input type="checkbox"/> • Biddeford Housing Authority               | <input type="checkbox"/> • Policy Committee                              |
| <input type="checkbox"/> • Biddeford Police Advisory Committee       | <input type="checkbox"/> • Project Canopy Committee                      |
| <input type="checkbox"/> • Board of Assessment Review                | <input type="checkbox"/> • Recreation Commission                         |
| <input type="checkbox"/> • Cable T.V. Committee                      | <input type="checkbox"/> • Recycling & Solid Waste Management Commission |
| <input type="checkbox"/> • Capital Projects Committee                | <input type="checkbox"/> • Shellfish Conservation Committee              |
| <input type="checkbox"/> • Conservation Commission                   | <input type="checkbox"/> • Wastewater Management Commission              |
| <input type="checkbox"/> • Diversity, Equity and Inclusion Committee | <input type="checkbox"/> • Zoning Board of Appeals                       |
| <input type="checkbox"/> • Downtown Development Commission           | <input checked="" type="checkbox"/> • Other: Fire Sub Station            |
| <input type="checkbox"/> • Economic Improvement Commission           |                                                                          |

**CITY OF BIDDEFORD**  
**Committee Application**

Please list any prior experience serving on any Public Boards, Commissions or Committees (and approximate dates)

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Please list any other experience that may be pertinent to the Board or Committee in which you are requesting to serve on.

Nearly 50 years in the construction field with 38 of those being self employed.  
Many projects that I was involved were large commercial jobs whereas I had a staff of 14 at one point.  
Along with on site experience I was also responsible for estimating, billing and all administrating duties that comes with running a business.  
I was also an Associate Broker for 19 years with Ocean View Properties in Biddeford Pool.

Please provide a brief statement describing your interest in serving the City of Biddeford.

Born and raised here I do take a special interest in our community.  
With my experience I feel I could be an asset to this committee.

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Attach any additional information to this application and return it to the City Clerk's Office.

**FOR OFFICE USE ONLY**

Check # \_\_\_\_\_

Amount \$ \_\_\_\_\_



# **Application to Register Games of Chance**

**MGCU - 5400**

**\*\*The application (to include the organization's rules for the game(s)) and the registration fees must be received by the Gambling Control Unit at least ten business days prior to the Game(s) of Chance requested\*\***

**Games of Chance (Includes Raffles):** \$15 Calendar Week (Monday through Sunday); \$60 Calendar Month; \$700 Calendar Year (January to December)

**Make check payable to Treasurer, State of Maine**

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**Return the completed and signed application to:**

**Department of Public Safety  
Gambling Control Unit  
Central Maine Commerce Center  
87 State House Station  
45 Commerce Drive, Suite 3  
Augusta, Maine 04333-0087  
(207) 626-3900 – Office  
(207) 287-4356 – Fax**

1. For what game(s) are you registering (please indicate number of games adjacent the name of the game and attach the organization's rules for the game(s) requested to the application):

Sealed Ticket 3 Dice 1 Wheel \_\_\_\_\_ Pot of Gold (Daily/Weekly Pool) 1

Queen of Hearts \_\_\_\_\_ Three Card Challenge \_\_\_\_\_ Other (Indicate Name of Game) \_\_\_\_\_

2. Organization Name: YORK COUNTY VETERANS ALLIANCE

Organization Number (NPO or NCO): 2196 Federal Tax ID # (EIN): 01-0533038

Business Address: 24 BRADBURY ST.

City: Biddeford State: ME Zip Code: 04005

Mailing Address: SAME Phone: 207-294-7330

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

3. Current Officers:

| NAME & TITLE             | ADDRESS        | CITY/ZIP        | PHONE        | DATE TERM EXPIRES |
|--------------------------|----------------|-----------------|--------------|-------------------|
| LINDA INVERGIE PRESIDENT | 416 GAYSON ST. | Biddeford 04003 | 207-283-0463 | 8/4/24            |

|                              |             |                 |              |        |
|------------------------------|-------------|-----------------|--------------|--------|
| DOLores HIGGINS V. PRESIDENT | 7 GRAMM ST. | Biddeford 04003 | 207-571-4046 | 8/4/24 |
|------------------------------|-------------|-----------------|--------------|--------|

|                             |              |               |              |        |
|-----------------------------|--------------|---------------|--------------|--------|
| MERESA WATERHOUSE SECRETARY | 53 DANLEY RD | DAVISON 04005 | 207-286-9551 | 8/4/24 |
|-----------------------------|--------------|---------------|--------------|--------|

|                            |                   |                 |              |        |
|----------------------------|-------------------|-----------------|--------------|--------|
| BERNADETTE GAGNE TREASURER | 114 PROSPECT #116 | Biddeford 04003 | 207-608-9583 | 8/4/24 |
|----------------------------|-------------------|-----------------|--------------|--------|



4. Location where Game of Chance is to be conducted:

YCVA 24 BRADBURY STREET Biddeford ME 04005  
 BUILDING ADDRESS CITY/ZIP

5. Person responsible for the conduct of the Game(s) of Chance:

Benadette Bagne 207-294-7330 - 207-608-9  
 NAME DAYTIME PHONE & EVENING PHONE

E-Mail Address: YCVA MAINE @ GMAIL . COM

6. Circle the day(s) of the week you will be conducting Game of Chance:

Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat ☒ Sun ☒

7. What time do the doors open? 11 AM What time does the game start? 11 AM

8. Dates – Please specify either weeks (Monday through Sunday), full calendar months or calendar year (Jan to Dec). If more space is needed attach a sheet of paper to this application listing the information. Please write your organization name and number on the sheet

JAN 1ST 2024 TO JAN 31ST 2024  
 FEB 1ST 2024 TO FEB 29TH 2024

9. Does the organization own all the equipment used in operating the Game of Chance? Yes ☒ No ☐

If "NO", Attach a sheet of paper to this application explaining the circumstances under which the equipment was acquired. Please write your organization name and number on the sheet.

10. Has any current officer of this organization or association ever been convicted of or have any charges currently pending for violating the gambling or lottery laws of the United States or the State of Maine?

Yes ☐ No ☒

If "YES" attach a sheet of paper to this application providing the person's name, address, and date and place of conviction or date and location of pending charge. Please write your organization name and number on the sheet.

11. Does the organization have any delinquent / outstanding Disposition of Funds Reports? Yes ☐ No ☒

If "YES" include all reports with this application. If the reports are not included, this application is considered incomplete.

12. **Fair Association Only:** Attach a list of the names and home addresses of the persons operating or assisting in the registered activity. Please write your organization name and number on the list.

13. The applicant agrees to obey Federal, State of Maine laws, and rules governing Games of Chance promulgated by the Department of Public Safety, Gambling Control Unit. The applicant warrants the truth of the foregoing statements on penalty of perjury.

**NOTE: A MGCU-5475 Sealed Ticket report form must be submitted to the unit by the 10th of each month for the previous month.**

Signed: Bernadette Gagne

Print Name: Bernadette Gagne Title: TREASURER

Date: 11-7-23 Age 18 or older: Yes ☒ No ☐

FOR OFFICE USE ONLY

Check # \_\_\_\_\_

Amount \$ \_\_\_\_\_



# Application to Register Games of Chance

MGCU - 5400

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**Games of Chance (Includes Raffles):** \$15 Calendar Week (Monday through Sunday); \$60 Calendar Month; \$700 Calendar Year (January to December)

Make check payable to Treasurer, State of Maine

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Return the completed and signed application to:

Department of Public Safety  
Gambling Control Unit  
Central Maine Commerce Center  
87 State House Station  
45 Commerce Drive, Suite 3  
Augusta, Maine 04333-0087  
(207) 626-3900 – Office  
(207) 287-4356 – Fax

1. For what game(s) are you registering (please indicate number of games adjacent the name of the game and attach the organization's rules for the game(s) requested to the application):

Sealed Ticket 4 Dice 1 Wheel \_\_\_\_\_ Pot of Gold (Daily/Weekly Pool) 1

Queen of Hearts \_\_\_\_\_ Three Card Challenge \_\_\_\_\_ Other (Indicate Name of Game) \_\_\_\_\_

2. Organization Name: AMVETS POST 1

Organization Number (NPO or NCO): 2205 Federal Tax ID # (EIN): 01-0342874

Business Address: Amvets Post 1

147 Alfred Street

City: Biddeford, ME 04005 State: \_\_\_\_\_ Zip Code \_\_\_\_\_

Mailing Address: SAME Phone: 282-9461

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

3. Current Officers:

FINANCE OFFICER

JAMES THIBODEAU 400 ALFRED ST. BIDDEFORD ME 04005 590-0020 APR. 2024

| NAME & TITLE     | ADDRESS | CITY/ZIP | PHONE | DATE TERM EXPIRES |
|------------------|---------|----------|-------|-------------------|
| 2 VICE COMMANDER |         |          |       |                   |

LIONEL LAMONTAGNE 6 FIELDCREST DR. BIDDEFORD ME 04005 229-8495 APR. 2024

| NAME & TITLE | ADDRESS | CITY/ZIP | PHONE | DATE TERM EXPIRES |
|--------------|---------|----------|-------|-------------------|
|              |         |          |       |                   |

| NAME & TITLE | ADDRESS | CITY/ZIP | PHONE | DATE TERM EXPIRES |
|--------------|---------|----------|-------|-------------------|
|              |         |          |       |                   |

| NAME & TITLE | ADDRESS | CITY/ZIP | PHONE | DATE TERM EXPIRES |
|--------------|---------|----------|-------|-------------------|
|              |         |          |       |                   |

4. Location where Game of Chance is to be conducted:

Amvets Post 1  
147 Alfred Street  
Biddeford, ME 04005

BUILDING

ADDRESS

CITY/ZIP

5. Person responsible for the conduct of the Game(s) of Chance:

JAMES THIBODEAU  
NAME

590-0020  
DAYTIME PHONE & EVENING PHONE

E-Mail Address: Jim Tib 1 @ yahoo.com

6. Circle the day(s) of the week you will be conducting Game of Chance:

Mon Tue Wed Thu Fri Sat Sun

7. What time do the doors open? 12:00 PM What time does the game start? 12:00 PM

8. Dates – Please specify either weeks (Monday through Sunday), full calendar months or calendar year (Jan to Dec). If more space is needed attach a sheet of paper to this application listing the information. Please write your organization name and number on the sheet.

JAN 2024

MAY 2024

SEPT 2024

FEB 2024

JUN 2024

OCT 2024

MAR 2024

JUL 2024

NOV 2024

APR 2024

AUG 2024

DEC 2024



9. Does the organization own all the equipment used in operating the Game of Chance? Yes ☒ No ☐

If "NO", Attach a sheet of paper to this application explaining the circumstances under which the equipment was acquired. Please write your organization name and number on the sheet.

10. Has any current officer of this organization or association ever been convicted of or have any charges currently pending for violating the gambling or lottery laws of the United States or the State of Maine?

Yes ☐ No ☒

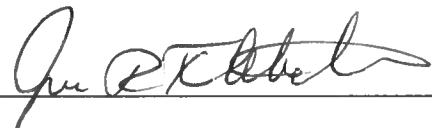
If "YES" attach a sheet of paper to this application providing the person's name, address, and date and place of conviction or date and location of pending charge. Please write your organization name and number on the sheet.

11. Does the organization have any delinquent / outstanding Disposition of Funds Reports? Yes ☐ No ☒

If "YES" include all reports with this application. If the reports are not included, this application is considered incomplete.

12. **Fair Association Only:** Attach a list of the names and home addresses of the persons operating or assisting in the registered activity. Please write your organization name and number on the list.

13. The applicant agrees to obey Federal, State of Maine laws, and rules governing Games of Chance promulgated by the Department of Public Safety, Gambling Control Unit. The applicant warrants the truth of the foregoing statements on penalty of perjury.

Signed: 

Print Name: JAMES R. THIBODEAU Title: FINANCE OFFICER

Date: 11-6-2023 Age 18 or older: Yes ☒ No ☐

*City of Biddeford*  
**City Council**  
**October 17, 2023 6:00 PM Council Chambers & Zoom**

**Status:**

**1. Roll Call - all present**

**Chairman Belanger**  
**Councilor Lessard**  
**Councilor Ortiz**  
**Councilor Emhiser**  
**Councilor Whiting**  
**Councilor Grohman**  
**Councilor Mills**  
**Councilor Schlaver**  
**Councilor LaFountain**

**2. Pledge of Allegiance**

**3. Adjustment(s) to Agenda**

**4. Proclamation:**

- 4.a. Proclamation Domestic Violence Awareness Month  
[Domestic Violence Awareness Month -PROCLAMATION](#)  
Mayor Casavant read the proclamation
- 4.b. Proclamation Extra Mile Day  
Mayor Casavant read the proclamation

**5. Presentation:**

- 5.a. Presentation Spirit Aerosystems

**6. Appointments:**

- 6.a. Approval/Appointment Syed Zafar to Zoning Board of Appeals and Board of Assessment Review  
  
Motion: Councilor Mills  
Second: Councilor Schlaver  
Vote: Unanimous in favor.  
Motion passed.

**7. Public Addressing the Council...(3 minute limit per speaker for up to a total of 15 minutes)**

There were several comments about unhoused encampments at Mechanics Park.

**8. Consideration of Minutes:**

- 8.a. Approval/City Council Minutes 10-3-2023  
Motion: Councilor Mills  
Second: Councilor Whiting  
Vote: Unanimous in favor.  
Motion passed.

**9. Second Reading:**

- 9.a. 2023.127) - Approval/Use of City Seal  
[20231003 Use of City Seal - ORDER 2nd](#)  
[20231003 Use of City Seal - BRIEF](#)

[Motion: Councilor Belanger](#)  
[Second: Councilor Whiting](#)  
[Vote: Unanimous in favor.](#)  
[Motion passed.](#)

- 9.b. 2023.129) Approval/Housing Trust Fund Ordinance

Motion: Councilor Belanger  
Second: Councilor Grohman  
Vote: Unanimous in favor.  
Motion passed.

**10. Orders of the Day:**

- 10.a. 2023.130) Approval/Elm Street CSO Sewer Crossing

Motion: Councilor Belanger  
Second: Councilor Lessard

City Engineer Chekan spoke about the project. It will allow the City to solve several problems at once while the area is being worked on for another project. They are actively working with DEP on the compliance list.

Councilor Lessard – this is a great opportunity to be more efficient, he supports it.

Councilor Mills – supports it.

Councilor Grohman – great job by Engineering and Public Works

Vote: Unanimous in favor.  
Motion passed.

- 10.b. 2023.131) Approval/Biddeford Housing Authority Funding Request for Adams Point  
Motion: Councilor Grohman  
Second: Councilor Mills

Biddeford Housing Authority Executive Director Guy Gagnon gave an overview of the project. This is for 39 affordable housing units and the total cost of the project

is 12 million. The City investment is a small portion of the total. They have secured all of the other funding to get approval from the Maine Housing, they will only use this money at the end if needed.

Some Councilors had concerns with committing all of the new Affordable Housing Funds to one project and the timing of the project. Others stated that there are no other projects in the pipeline and this is what the fund is for.

Councilor LaFountain reminded everyone that they spent \$400,000 on sidewalks for a private development.

Councilor Belanger – motion to amend to separate the order into two separate votes  
Second: Councilor Mills

Vote on the amendment: 7 yeas – Councilors Lessard, Schlaver, Mills, Grohman, Whiting, Emhiser and Belanger.  
2 nays – Councilors Ortiz and LaFountain.  
Amendment passed.

Councilor Belanger – motion on the first part of the order that the funds will be committed but the commitment will expire if ground is not broken on or before June 1<sup>st</sup>, 2024.  
Second: Councilor Mills

Councilor Belanger would like final numbers soon so Council can motion the total amount down if possible.

Councilors had questions on other funding sources including vouchers. Director Gagnon explained the formula. If part 2 of the order is removed it would lower the total.

City Manager Bennett – explained that the management fees are consistent with what is allowed.

Vote on the amendment -  
5 yeas – Councilors Belanger, Emhiser, Whiting, Grohman and Schlaver  
4 nays – Councilors Lessard, Ortiz, Mills, and LaFountain.  
Amendment passed.

Vote on the order as amended:  
7 yeas – Councilors Belanger, Emhiser, Whiting, Mills, Schlaver, Ortiz and LaFountain.  
2 nays – Councilors Lessard and Grohman  
Motion on part 1 passed.

Councilor Belanger – motion to Table the second part on the permit fee until a later date when the total is known.  
Second – Councilor Lessard.

Vote:

5 yeas – Councilors Belanger, Mills, Lessard, Schlaver, and Emhiser

4 nays – Councilors Grohman, Whiting, Ortiz and LaFountain.

Motion to Table part 2 passed.

- 10.c. 2023.132) Approval/Blanket Letter of Approval Beano/Bingo and Game of Chance applications

Motion: Councilor Belanger

Second: Councilor Lessard

Vote: Unanimous in favor.

Motion passed.

- 10.d 2023.133) Approval/CIP Vehicles

Motion: Councilor Mills

Second: Councilor Lessard

Councilor Lessard – this was discussed in the Finance meeting. Everything checked out.

Fire Department Chief Best reviewed the status of the vehicles in his department.

City Manager – discussed the most efficient way to use some of the vehicles. All of the purchases will have to come back to Finance and Council.

Motion by Councilor Belanger to amend the chart to delete the Year, Requested and Comments columns from the chart.

Second: Councilor Schlaver

Vote on the amendment: Unanimous in favor

Vote on the order as amended: Unanimous in favor.

Motion passed.

**11. Public Addressing the Council..(5 minute limit per speaker - none**

**12. City Manager Report**

City Manager Jim Bennett gave an update on the City Hall Project, staff met today on some of preliminary details. The project should begin in April 2024. The new Council broadcast system should be in soon. New Town Road has been paved. Bike lanes have been added with some paving projects.

The Unhoused Report from the consultants will be available in November. The purpose is to identify options, costs and outcomes for the Council. Manager Bennett reminded the Council of some of the actions that have been taken on this issue so far this year.

**13. Other Business**

**Councilor Lessard** – would appreciate extra hours at the recycling station for fall clean up.

**Councilor LaFountain** – Absentee Ballots are available, the Housing Trust Fund provides a transparent, public process for funding; private projects are not subject to the same level of scrutiny.

**Councilor Schlaver** – thanked the teachers, parents and students for a great homecoming.

**Councilor Mills** – wanted to make a correction - the artist who painted the current mural at 230 Main Street is Susan Bartlett Rice. He also provided details about the revised Halloween events, it will be at 39 Sullivan St parking lot from 4 – 7 pm; it is not a City event but does go through the required permitting process if needed.

**14. Council President Addressing the Council** - Councilor President Belanger reminded everyone that this is the last meeting before the elections, he encouraged everyone to go vote.

**15. Mayor Addressing the Council** - Mayor Casavant did not address the Council.

**Executive Session**

Executive Session 1 MRSA 405 (6) (a) Personnel Matters

Motion to go into Executive Session at 8:18 pm by Councilor Mills

Second: Councilor Lessard

Vote: Unanimous in favor

Motion to come out of Executive Session at 9:02 pm by Councilor Belanger

Second: Councilor Lessard

Vote: Unanimous in favor.

**16. Adjourn:**

Motion to adjourn at 9:02 pm by Councilor Belanger

Second: Councilor Lessard

Vote: Unanimous in favor.

Motion adjourned

**Attested by:** \_\_\_\_\_

**Robin Patterson, City Clerk**



## City Council

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Meeting Date: November 21, 2023

Meeting Time: 6:00 PM

Agenda Item No: 10.a.

Item Description: 2023.136) Approval/Amend Part II: Code of Ordinances, Chapter 74 - Waterways, Article II - Harbor, Division 4 - Mooring, Sec. 74-77 Permit Application

Submitted by: Brian S. Phinney, COO on behalf of Harbor Commission

Supporting Information/Documentation:

N/A

Key Terms:

N/A

Executive Summary:

An affirmative vote for this item will increase the existing mooring fee from \$125 to \$180 annually.

Detailed Review:

The Harbor Commission reviewed the Mooring Fund budget and existing mooring fee schedule and voted unanimously to increase the mooring fee from the current amount of \$125 annually to \$180 annually to support a sustainable budget.

There have been three increases in the mooring fee structure since 2008. The 2008 fee increase established a permit or renewal fee of \$75 with a subsequent increase in March of 2008 to \$100. The 2014 mooring fee increase raised the fee from \$100 to \$125 and streamlined the fee schedule by removing the distinction between an application fee and a renewal fee.

The Harbor Commission moved this item forward requesting an effective date on or near January 1, 2024. After discussion with the chair of the Policy Committee, the chair determined that the item should go directly to council as the only change to the ordinance is the dollar amount. If the first reading is supported at the Nov 21<sup>st</sup> meeting a second reading could occur in December resulting in an effective date 30-days following the date of the second reading.

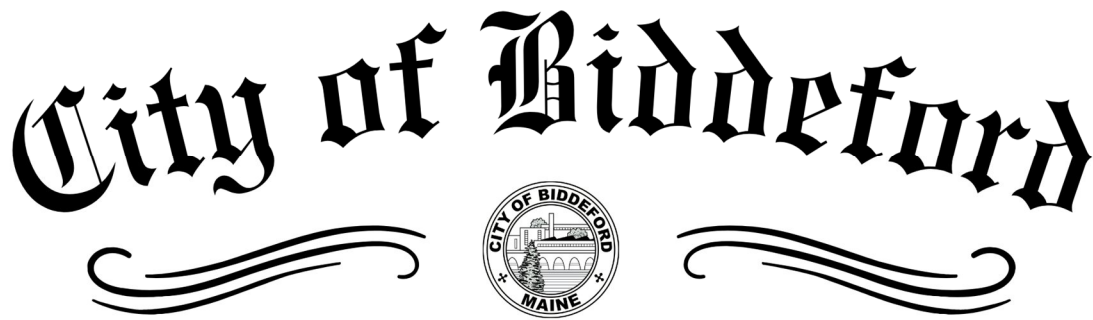
Funding Source:

N/A - this amendment is a revenue item.

Staff Recommendation:

Staff is neutral on the recommendation as this is a policy item.





**2023.136 IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023**

**BE IT ORDAINED**, by the City Council of the City of Biddeford, that Part II: Code of Ordinances, Chapter 74 - Waterways, Article II - Harbor, Division 4 - Mooring, Sec. 74-77 Permit Application be amended by adding or ~~deleting~~ text as follows:

Sec. 74-77 Permit application.

(a) Applications for mooring permits must be filed with the City no later than March 15 of the current year. Permits are valid for a one-year period, from March 15 of the current year to March 14 of the following year. Applications shall be made on forms prescribed by the Harbormaster. Applications that are filed after the deadline shall be subject to mooring allocations made to persons applying prior to the deadline date. There shall be a late fee of \$50 applied towards any application for a mooring permit which is received after March 15 of the requested year.

(b) Mooring permits shall specify:

- (1) The name and address of the owner of the mooring;
- (2) The type of mooring (see Section 74-78);
- (3) The kind of ground tackle or block used;
- (4) Whether the mooring has been inspected, and when;
- (5) The location of the mooring;
- (6) The name, draft, size and kind of vessel to be moored; and
- (7) The year the vessel was manufactured.

(c) A permit for a mooring is valid for the period from March 15 of the current year to March 14 of the following year and must be renewed annually.

(d) A mooring that is not used for any consecutive three-month period between May 1 and September 30 shall be presumed to be abandoned, and the Harbormaster may allocate that mooring location to any other person in accordance with this article.

(e) The Harbormaster shall maintain a waiting list for areas in which no more vessels can be safely moored, showing the priority of each applicant.

(f) Under the direction of the Harbor Commission, the Harbormaster shall maintain charts showing the location of all assigned moorings.

(g) The Harbor Commission may set the form of the mooring permit and renewal applications.

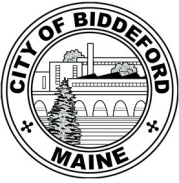
(h) The annual application fee for the waiting list for moorings shall be \$10 which shall be applied against the mooring permit fee as a credit the year the mooring is placed.

(i) A granted mooring permit or renewal fee shall be ~~\$125~~\$180.

(j) All funds collected as a result of this section shall be considered designated revenue for the sole purpose of the execution of this division and the promotion of marine related facilities in the harbor.

(k) No vessel is allowed to moor between December 1 and April 1 without written permission of the Harbormaster.

**Attest by:**\_\_\_\_\_



## City Council

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Meeting Date: November 21, 2023

Meeting Time: 6:00pm

Agenda Item No: 10.b

Item Description: 2023.68 Amend/Code of Ordinances, Chapter 10, Animals, Article II, DOGS, Sec. 10-13. Running at large on public ways prohibited: restraint required. Requiring Dogs to be on leash in Clifford Park.

Submitted by: Catherine Ellis, Recreation Director

### Supporting Information/Documentation:

1. Recreation Commission meeting minutes 09.25.2023
2. 2023.68) Clifford Park Dogs Off Leash
3. Chapter 10 Animals Sec 10-31 - Chapter 46 Parks Sec 46-13
4. State and National Parks Policies on Dogs 2023
5. Clifford Park Online Input Summary.pdf
6. Facebook Post- email Dogs in Clifford Park

### Key Terms:

n/a

### Executive Summary:

Action on this item authorizes an update to the Code of Ordinance, removing language that allows dogs to be off-leash in the wooded section of Clifford Park 100 yards from the trailheads and parking areas while under voice control.

### Detailed Review:

On May 22, 2023, *Item 5.2) Review - Require Dogs to be on Leash in Clifford Park* was brought before the Policy Committee. The brief asked for a discussion on striking the current code, Chapter 10 Animals, Article II. Dogs, Sec. 10-31 - (2), which allows dogs to be off-leash in the wooded trail system of Clifford Park. The Policy Committee recommended the code be updated to delete the following section:

(2) Clifford Park: Dogs may be off-leash and under voice command on designated trails in the wooded section of the park. This section is defined as the wooded area of the public park and 100 yards from all trailheads and parking areas.

On June 6, 2023, *Item 9.j) 2023.68) Amend/Code of Ordinances, Chapter 10, Animals, Article II, DOGS, Sec. 10-13* was brought before the City Council to approve. The ordinance update would no longer allow unleashed dogs in the Clifford Park trail system. The Council motioned to table the item until July to allow for a public hearing.

On July 18, 2023, there was a public hearing regarding 2023.68) *Clifford Park Dogs Off Leash*. After public comments, the Council voted again to table the discussion and allow the Conservation and Recreation Commissions to make a joint recommendation on the issue or state that a joint recommendation was not possible.

On September 25, 2023, members of the Conservation Commission and a representative of the Friends of Clifford Park organization attended the Recreation Commission monthly meeting. The discussion and final vote regarding 2023.68) *Clifford Park Dogs Off Leash* resulted in all Recreation Commission members and the Friends of Clifford Park representative voting to change the ordinance. The Conservation Commission voted with two in favor of the ordinance change and two against it. The Conservation Commission set a meeting for their group specifically to meet in October for further discussion and to have a clear recommendation.

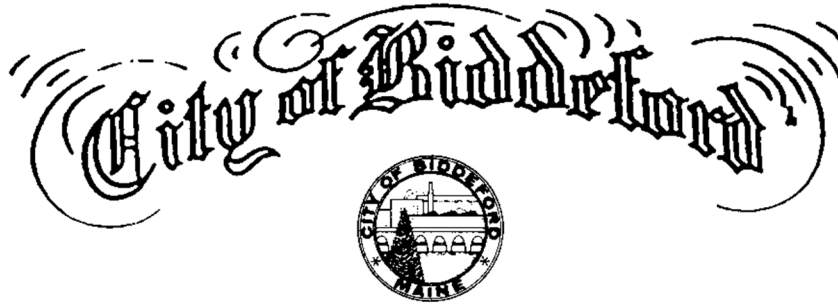
On October 5, 2023, members of the Conservation Commission met and discussed the recommended ordinance change. The final motion voted to support the Recreation Commission's recommendation to require that pets be leashed in Clifford Park.

Funding Source:

n/a

Staff Recommendation:

The Recreation Commission and Conservation Commission support that pets be leashed in Clifford Park.



2023. 68)

IN BOARD OF CITY COUNCIL... JUNE 6, 2023

**BE IT ORDERED**, by the City Council of the City of Biddeford that the Code of Ordinances, Chapter 10, Animals, Article II. DOGS, Section 10-31. Running at large on public ways prohibited; restraint required, be amended by deleting to read as follows:

~~(2) Clifford Park: Dogs may be off leash and under voice command on designated trails in the wooded section of the park. This section is defined as the wooded area of the public park and 100 yards from all trail heads and parking areas.~~

Attest by: \_\_\_\_\_

## Chapter 10. Animals

### Article II. DOGS

#### Sec. 10-31. Running at large on public ways prohibited; restraint required.

Dogs on a public way or place shall be under restraint. For a dog to be "under restraint" as required in this section, it must be controlled by a leash, which shall not be more than eight feet in length, on or within a vehicle being driven or parked on the streets, or within the property limits of its owner or keeper, or in specially designated "off leash" areas.

Off-leash areas: All dogs must be within 50 feet of owner or keeper and be under voice control. "Voice control" is defined as being able to immediately call the dog back with one call.

Off-leash areas within the City include:

- (1) Rotary Park: The river bank along the boat launch side of the park. This shall be defined as the area bordered by and including the boat launch, up the river bank to where the access road and the river split. The "river bank," for this purpose, is defined as up to but not including the dirt road in the park. Dogs may not use any part of the Rotary Park beach between the hours of 9:00 a.m. and 8:00 p.m. from May 25 to September 15 of each year.
- (2) Clifford Park: Dogs may be off leash and under voice command on designated trails in the wooded section of the park. This section is defined as the wooded area of the public park and 100 yards from all trail heads and parking areas.
- (3) City beaches: See Chapter 46, Section 46-13(d).
- (4) A person who violates this section commits a civil violation for which a forfeiture of not less than \$50 nor more than \$250 may be adjudged for the first violation and not less than \$100 and not more than \$500 for any subsequent violations.

## Chapter 46. Parks

### Sec. 46-13. Park operating policy.

- (a) Hours. All parks, as defined herein, shall be open to the public every day of the year from dawn to dusk. In the event that activities are conducted at either the St. Louis Field or Mechanics Park for which there is an admission fee charged or access is otherwise controlled, no member of the public shall have the right to enter said park areas without authorization and/or payment of such admission fee. The Director shall cause notices of the opening and closing hours to be posted in each individual park for public information and enforcement purposes.
- (b) Closed areas. Any section or part of any park may be declared closed to the public by the Director at any time for any interval of time, either temporarily or at regular stated intervals (daily or otherwise).
- (c) Entry prohibited. Except with the written permission of the Director, no person shall enter, pass through or remain in any park, or the closed area of any park, except during the hours and times when such park, or portion thereof, is open to the public as provided in this section.
- (d) Dogs, horses and horse-drawn vehicles.  
[Amended 5-16-2017 by Ord. No. 2017.38; 4-16-2019 by Ord. No. 2019.28; 8-20-2019 by Ord. No. 2019.78; 7-20-2021 by Ord. No. 2021.58]
  - (1) Dogs are prohibited from entering or remaining in any playground, schoolyard, athletic field, beach areas or any other area posted under authorization of the Recreation Director, except as follows:
    - a. City beaches. No unleashed dog is allowed on any of the City's public beaches from March 15 to September 15. Dogs are completely prohibited from May 25 to September 15 between the hours of 9:00 a.m. and 5:00 p.m. Unleashed dogs under voice command are allowed on the City's public beaches all day from September 16 to March 14. This subsection does not apply to the beach at Rotary Park.
    - b. Rotary Park. Dogs may not use any part of the Rotary Park beach between the hours of 9:00 a.m. and 8:00 p.m. from May 25 to September 15 of each year.
  - (2) Horses.
    - a. Horses and horse-drawn vehicles are prohibited from entering or remaining in any park or athletic field. They are restricted from beach areas between the hours of 9:00 a.m. and 5:00 p.m. from May 25 to September 15.
    - b. Horses using the public beaches must utilize a manure catch device.
  - (3) Nothing herein is intended to prohibit the Recreation Commission from creating and maintaining a dog park, as defined herein under Section 46-1(b), and for establishing rules and regulations governing the operation thereof.

| Title                                                     | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Author Name | Likes |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------|
| <b>Leashes Please!</b>                                    | I take my dog here often and we have had multiple instances of dogs running up to us. Not all dogs appreciate being approached by an unleashed dog/dogs while they are on a leash. Also, not all dogs are good with other dogs and saying "they're friendly" doesn't mean that every dog is! As a compromise, having certain hours where they can be off leash could be a good idea.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Anonymous   | 2     |
| <b>Why are electronic leashes for dogs being ignored?</b> | I emailed all councilors the plea below. I was stunned to read Bob Mills' reply to my letter as follows: "... I feel responsible pet owners don't take their dogs to a park." - Bob Mills Councilor, Ward 4. Here is what I wrote: I'm a Biddeford taxpayer who owns two trained, well-behaved dogs which I walk in Clifford Park and elsewhere in Biddeford as permitted. My dogs are not only always under voice control but also wear electronic control collars ("shock collars") on their runs. The purpose of this technology is to allow dog-owning taxpayers to exercise our pets properly by allowing them healthy runs while at the same time controlling them electronically, just as effectively as if they were restrained by physical leashes. But at present the City is unreasonably recognizing only physical leashes, ignoring the existence of electronic control technology. This is unfair to taxpayers whose tax dollars contribute to the upkeep of our public spaces and who choose to run their dogs under the control of electronic collars. I vehemently oppose any ordinance that requires my dogs to be physically leashed at Clifford Park and similar open spaces that I support financially. Physical leashes don't allow my dogs to receive the exercise and mental stimulation they need. Dogs are sentient creatures and it's downright cruel to subject them to arbitrary constraint. I understand that some people will not be moved by any argument about the health and well-being of animals. To those who feel this way, I assert my rights as a taxpayer. Why should I constrain my pet unreasonably to satisfy the whim of someone who chooses not to recognize the existence of electronic pet control technology? Don't enforce leashes, please. It's not fair. Not healthy. Not necessary. And the evasive argument that I should take my dogs elsewhere is unacceptable. Not all spaces are suitable to run all dogs, and in any case I choose to run my dogs at Clifford. Please help me to stand up for my rights and for logic, reasonability and common sense. Yours sincerely, Mirlea Saks | Mirlea Saks | 1     |



|                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |   |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---|
| <b>Dogs Off Leash</b>                                                  | Please don't take this away from us. There is no where else in Biddeford dogs can be off leash. My two well behaved dogs love being able to romp through the woods.                                                                                                                                                                                                                                                                                                                                                                          | Theresa Phillips | 2 |
| <b>Good leashes make good neighbors</b>                                | Everyone should feel safe in the park. All too often my dog and I are threatened by a dog who's owner claims thier dog is friendly. A dog that is completely under voice control is extremely rare. Too many people don't pay attention to what dogs are doing and fail to clean up after them.                                                                                                                                                                                                                                              | Laura Seaver     | 2 |
| <b>Dogs are dogs and it's the owners you should be concerned about</b> | Letting dogs run where they please in popular recreation spots is disrespectful to people (and other dogs) who may be concerned by them or who simply want to enjoy the space and trails undisturbed. You don't want your pet scaring a little kid but neither do you want her distracting a service animal or bothering a dog who's kept on-leash because he doesn't play well with others. It's a matter of common sense. The pups are innocent. As a responsible dog owner I support leash law requirements for all of our public spaces. | Ben Neveux       | 2 |
| <b>Unfortunately needed</b>                                            | There are way too many ppl letting their big "friendly" dogs run up to ANYONE with zero recall. Unfortunately these people have ruined it for everyone, and you can't even bring a dog here for fear of a strange dog running up to them.                                                                                                                                                                                                                                                                                                    | Anonymous        | 2 |
| <b>Leashes please</b>                                                  | I have two Chihuahua's that I walk on leash in the park. They are frequently trampled by off leash dogs. The owners of the off leash dogs frequently yell out, "he is friendly" as the dog is running over my dogs. The leash law will help keep this situation from happening to me and other small dog owners.                                                                                                                                                                                                                             | Anonymous        | 1 |
| <b>Leashes Please</b>                                                  | Majority of dogs that are brought and allowed off leash have no recall. Not all people or other dogs want to be approached. If your dog is indeed friendly then take it to the dog park. I shouldn't have to put myself in between my leashed dog and a random loose dog that is running towards us. Thanks                                                                                                                                                                                                                                  | Anonymous        | 2 |
| <b>Dogs on leash</b>                                                   | I've walked the park extensively and never experienced a dog issue. I see no need for a required leash ordinance.                                                                                                                                                                                                                                                                                                                                                                                                                            | George Lozier    | 3 |

|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |   |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---|
| <b>Dogs on Leash -<br/>For the Birds &amp;<br/>Wildlife</b> | <p>First - I think it would be great for there to be a dog park or enclosed dog run at or near Clifford Park, as I agree with many that dogs having space to free run &amp; explore is vital to their health and wellbeing! But, I strongly support leash laws at Clifford Park. As one of our largest green spaces in Biddeford, it is also one of the largest areas where local birds &amp; native wildlife live and/or stopover on migrations. Though domesticated, when dogs interact with wild animals/enter wild animals' spaces, they are perceived by those animals as predators. Unleashed dogs are less predictable to prey animals. They can unknowingly crush or disrupt low-lying or ground-level nests, scare off birds &amp; small animals foraging (even if they are chasing them "just for fun") - even causing the animals birds to abandon the area or their young entirely. Additionally, like cats, they do hunt small prey animals - but they do not have to literally kill a bird or squirrel to cause serious pattern disruptions. Studies in Australia have shown that bird-roosting areas that switched from unleashed to leashed dog laws saw survival rates for chicks jump from 12% to 40%. In Santa Barbara, researchers saw a 25% reduction in bird stress/harassment rates when dogs were leashed. And that's just birds! These numbers are similarly replicated across other animals such as squirrels, chipmunks, amphibians, etc. The Nature Institute found that across the board, bringing a predator animal into green spaces (dog, cat, etc) causes an impact on animal behavior, health, and longevity. Leashing dogs does not eliminate the impact they have on wildlife - but it does reduce the impact significantly. Essentially, leashing is a compromise, between the dog and the native animals of the green space the dog is walking through. Leashed dogs are better neighbors to their wild counterparts. Further reading/sources: <a href="https://www.audubon.org/news/why-leashing-dogs-easy-way-protect-birds-and-their-chicks">https://www.audubon.org/news/why-leashing-dogs-easy-way-protect-birds-and-their-chicks</a><br/> <a href="https://www.thenatureinstitute.org/wp-content/uploads/2019/02/The-impact-of-dogs-on-wildlife.pdf">https://www.thenatureinstitute.org/wp-content/uploads/2019/02/The-impact-of-dogs-on-wildlife.pdf</a> <a href="https://www.cambridge.org/core/journals/bird-conservation-international/article/managing-a-breeding-population-of-the-hooded-plover-thinornis-rubricollis-in-a-high-use-recreational-environment/D6A23920BBB410BBF308401D31D8CB6D">https://www.cambridge.org/core/journals/bird-conservation-international/article/managing-a-breeding-population-of-the-hooded-plover-thinornis-rubricollis-in-a-high-use-recreational-environment/D6A23920BBB410BBF308401D31D8CB6D</a><br/> <a href="https://academic.oup.com/bioscience/article/61/2/125/242696?login=false">https://academic.oup.com/bioscience/article/61/2/125/242696?login=false</a></p> | Eben Thomas  | 1 |
| <b>Dogs off leash</b>                                       | I love taking my dog there. It can be hard to properly exercise a dog in a small dog park or on a leash. I understand not everyone has their dog on voice control, so maybe leash dogs only on the black (story) trail.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Robert Fritz | 1 |

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |   |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---|
| <b>Support for leashes</b>         | I am IN Support of dogs needing to be leashed on the trails. Doing the story walk with my children and having unleashed dogs approach us with owners not in sight has been a scary event for my children who are afraid of dogs. It has made us stay away from the trails. I would be in support of leashed (storywalk trail) vs unleashed trails as a compromise.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Anonymous      | 2 |
| <b>Please keep off leash</b>       | I only tend to take my dog off leash during the winter deep in the trails. I think the black trail should be leashed, but there's not many parks that allow letting your dog off leash in the woods. Yards and dog parks aren't the same as letting your dog run up and down the cliffs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Anonymous      | 1 |
| <b>Supporting Off-Leash Access</b> | I walk the park twice a day, every day, and the majority of people I encounter are walking dogs, with the majority of those being off-leash — and I have never had an issue. I support the continued off-leash access in the park. I believe that rather than banning off-leash access, there needs to be increased awareness for dog owners as to what "recall" means and why it's something they need to work on before they let their dog(s) off-leash. This is a people problem, and simply changing the off-leash access is not going to prevent people from letting dogs run around. We were all taught to drive with our hands at 10/2 and none of us do that - we develop our own habits, and I see this as an opportunity to remind dog owners in the park to question their habits and work to be good neighbors in the park, without the need to remove off-leash access entirely. As others have noted, there are plenty of places in the area people can walk dogs on a leash. There are few to none where you can walk off-leash, and based on my observations, the majority are off-leash users and the park should remain that way. Lastly, the Conservation Commission and Recreation Department are planning to meet and discuss the leash policy in more detail — looking at the park as a whole, as well as trail-by-trail in a way that could make recommendations with certain compromises for all park users instead of an outright ban. | Erik Heumiller | 3 |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           |   |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---|
| <b>I see both sides</b> | As a smaller dog owner I can see why some dogs should be kept leashed. Most owners are pretty quick to recognize when it's safe to let their dogs loose. I think leashes should be on hand at all times, but also that dog owners need to respect that they are sharing a public space with others who may not be comfortable with loose dogs. The people who take the time to train their dogs how to behave off leash shouldn't be punished, but others whose dogs are not trained definitely need to have a leash. | Anonymous | 0 |
| <b>Dogs off leash</b>   | I strongly urge you to consider continuing to allow dogs to be off leash in this park - at minimum. If an agreement should be reached to reduce the freedoms of our four legged friends - I would suggest dog being off leash at certain hours. Dogs are better than people- not this sentiment sways me in any way... thank you.                                                                                                                                                                                     | Anonymous | 0 |

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|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---|
| <b>Let's work together and train our dogs better!</b> | <p>While I understand both the safety and wildlife concerns of having dogs off leash, I think that our existing rules (voice control in off-leash areas of the park) SHOULD prevent the worst of these concerns. I am aware that they don't necessarily do that, as I have had encounters with unruly dogs as well. I do not think that an all-dogs-on-leash-at-all-times rule would solve the problem, however. I do not think that changing the rules will change the behavior unless there is regulation, which would likely be prohibitively expensive and a waste of resources. I also know that having a safe place to take a dog off leash in the woods in town is a great way for dogs and humans to exercise together and to build trust for adventures farther afield. There is already a rule that dogs should be under voice control if they are off leash. I believe we should try to encourage and enforce the existing rule before implementing a heavier-handed rule that will also be hard to enforce. Let's try to encourage dog people to train their dogs better and/or follow the rules. If you're not on voice control, don't let your dog off leash. We could also offer resources for training dogs to be better with recall. Surely we can work together as a community to solve this problem without infringing on existing freedoms. Some ideas on how to do this: * Improve signage. There's not signage at every entrance to the park. The signage about leash rules could be clearer where it is signed. * Send out information with dog registration about places to take your dog (off leash, on leash, dog parks, training facilities) and what Voice Control means. Maybe a flyer that could be shared with local veterinarians. * Partner with some dog trainers to offer some community lessons * use the adult education system to offer affordable training For those of us with dogs who DO have a voice control relationship with those dogs -- and dogs who more or less stay on the trail -- the freedom of movement afforded is a great benefit to the health of the dog and our relationship with the dog. Dog parks aren't a great fit for all dogs.</p> | Chrystina Gastelum | 2 |
| <b>Why not a dog park?</b>                            | <p>Here's a compromise..... Take a segment, maybe the tennis courts, and make it into a dog park. Its already fenced in and you can throw as many unleashed dogs in there as you want. It works at Rotary Park. While it would be nice to own some land to let my little guy roam free..... I try not to infringe on others enjoyment of the park, so I keep him leashed at all times when not in our back yard.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Antonio            | 2 |
| <b>In Support of Off-Leash Clifford Park</b>          | <p>There are so few options for dogs to be off-leash in Southern Maine. I am in support of Clifford Park continuing to be off-leash or at the very least having specific off-leash hours.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Erin White         | 1 |

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |   |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---|
| <b>Dog's on leash please!</b>     | <p>I am for this. Why do some dog owners not understand that not all people like dogs... or that there are some people that have fear of dogs (regardless of size and temperament). There are some places where it makes sense for dogs to be off-leash, like a dog park or in your yard. There are some places where it does not, trails, parks, beaches, etc. Places where you have many people and tight spaces. How is it fair for those that wish to us the park for what it was intended for, to have to deal with unleashed pets. While there are dogs that behave, there are just as many that don't, and selfish owners. If you can't put a leash on your pet, then maybe you shouldn't have one, or move to the countryside where there are fields large enough to warrant it. I have a newborn. I do not take him to restaurants, ballgames, movies, etc.... why? Because that is potential for causing a rousus, plus I don't know how he'll react to others in such a loud, crowded space. If I can contain myself with a newborn, you can contain yourselves with a pet.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Anonymous    | 2 |
| <b>Please keep dogs off leash</b> | <p>There are not many places in the city where dogs and their companions can enjoy open spaces without being on leash. Please do not add another location where such a restriction is imposed. I also find the summer leash rule at the beaches to be burdensome, especially since dogs are limited at the beaches during particular hours in the summer. If the council feels it must impose a leash restriction at Clifford Park, perhaps it should have certain hours of the day where dogs can be off leash. The best of both worlds. Hours of the day where people don't have to fret about off leash dogs and then hours of the day where dogs get to be off leash. I think the same should be the case at the beaches. If dogs can only be there during certain hours in the summer, let them be off leash. When I go to the beach in the summer during the dog hours, it is mostly people walking their dogs. And many people don't follow the restriction anyhow. Meanwhile, our dogs who have been conditioned in the spring/fall to expect to run free (for the tennis ball) are amped up to run but are prevented by the leash. Pretty unpleasant experience for us dog owners. In conclusion, please don't adopt a leash requirement. However, if you must, at least designate certain hours where dogs can go to Clifford without being leashed. If you are feeling adventurous, perhaps, you might even consider relenting on the leash rules at the beach in the summer given dogs are only allowed at certain hours anyhow. Thanks!</p> | Ryan Fecteau | 1 |

## Walsh, Carl

---

**From:**  
**Sent:** Wednesday, March 2, 2022 7:05 PM  
**To:** Walsh, Carl;  
**Subject:** Clifford Park Dog Post on FB

### Bryan

This is a bit of a plea and rant. I'm not looking to start an argument, though I'm well aware this topic usually does. If you are taking your pups through Clifford Park, keep them on a damn leash! If you actually have single-command recall, then this isn't for you. But I have yet to encounter any other dogs with that level of recall. I felt the need to speak up after yet another encounter with an off-leashed dog. For those that don't know dog psychology, off-leash dogs meeting on-leash dogs is risky. There is a power imbalance because they are all aware that one party is free while the other is tethered to their human. This time, I ended up backing up as far as I could with my dogs in a grove of trees to put distance between the approaching dogs that did not listen to a single recall command and us. It took the owner physically removing the dog to get it away. I then stayed there for a little bit to calm my dogs before heading back out.

The thing is, I'm not so much afraid for myself or my dogs. I don't want them to hurt another dog. A 2-on-1 fight between usually a Golden Retriever and my German Shepherd and St. Bernard mix is not a fair fight. That being said, if an off-leash dog makes contact with mine, I will have to drop my leashes for my own safety. I don't want to hear it about how "oh but my Fido loves to run free" or "let the dogs be dogs" or any other irresponsible lines. Because a dog's place is by their human, they are a companion animal. Is your dog a trained hunting/tracking/or other types of working dog? No? Then they will absolutely love being by your side. If not, well, you are boring, and it's on you to provide enrichment.

I leash my pups every single time we are in Clifford. I am also very vocal with my pups - not so much for them, but so other people are warned that I'm in the area with 2 dogs. My pups absolutely love hiking through the trails there; it's one of their favorite things ever. Yes, they enjoy the great outdoors while leashed. Don't let your irresponsibility and selfishness ruin it for others that are just trying to follow the posted laws.

Again, if your dog listens to a single command recall every time, then, by all means, let them off-leash. You put in the time and went above and beyond standard training. So you get the reward of letting them be free because they will come back to you immediately every damn time.

Heck, people ride their bikes through Clifford all the time. What if they make a quick turn on a trail and your dog is there? They have a split second to decide between possibly killing the dog or themselves. Not everyone likes dogs also, so sure, your fluffy puppy might be a bouncing bundle of joy, but not everyone will see it that way. You need to think about more than yourself.

Dogs are like toddlers, so they are like your kids. Be the responsible parent. Leash your damn dogs.

### Responses

#### Rachel

Dogs need to have bomb proof recall or be on a leash- there shouldn't be anymore to this discussion than that! Folks need to think about others as well! Being approached by an off leash dog is AWFUL when you have a reactive dog. And going someplace tha...

See more

- Reply
- Share

- [1h](#)

•

[Bryan](#) \_\_\_\_\_

Author

[Rachel](#) , exactly! I've been approached so many times at this point. My pups are dog friendly also, but it has to be on even ground.

- Reply
- Share
- [1h](#)

•

[Rachel](#) \_\_\_\_\_

[Bryan](#) yes definitely! Our (amazing, fantastic, force free) trainer taught us that meeting face to face is difficult for dogs (like you've stated), it's best for them to both be off leash on neutral ground.

[Terri](#) \_\_\_\_\_

[Rachel](#) THIS!!!

[Carol](#) \_\_\_\_\_



[Donna](#) \_\_\_\_\_

Well said

[Jean](#) \_\_\_\_\_

I agree and agree. Though I let my old hound off leash in orange at times while hiking. He does stay by outside though and returns when told. I agree ppl with dogs need to take ownership and train said dog. I'm so over the ppl whining at there dog to s...

See more

[Tabitha](#) \_\_\_\_\_

Whenever we have our kids in Clifford Park it's nerve wracking to be approached by an unleashed dog. I want to grab them and get them up on my shoulders, as I've been bitten and get anxious around any unknown dog.

- Reply
- Share
- [1h](#)

•

[Amy](#) \_\_\_\_\_

[Tabitha](#) my pup lovvvvvesssss babies, any age, which is why she's leashed. I feel so bad when we scare someone from even her excitement this is super understandable.

- Reply
- Share
- [1h](#)

•

[Tabitha](#) \_\_\_\_\_



Amy I would never push my insecurities onto my kids but I do make sure they're aware and if the owner is okay with it we stop and pet them. I treat it just as I would a strange person. ❤️

Amy

Tabitha exactly 🎯 I totally agree. ❤️

Mary

Very well communicated!!!

Jessica

Well said and in complete agreement!

Michael

Sounds like maybe Long Island is better for you

Heathe

Very well said!!

Cynthia

I agree

Jaye

Hear hear! Loose dogs on hiking trails is a pet peeve of mine.

Chris

Nicely done. I could agree more.

Amy

I love this post and 100% agree. I have 2 dogs one recalls very well, that's taken A LOT OF TRAINING and he still slips sometimes for a squirrel. One does not she's leashed if a dog she don't know runs up to her friendly or not she has the right on our...

See more

- Reply
- Share
- [1h](#)

•

Michael

Delusional

- Reply
- Share
- [38m](#)

•

Amy

Michael probably but 🙄 if your dog listens to you and isn't mean than this wouldn't offend 🙄

Brandie

Yes please well said my pup is very skittish around dogs/people that just come up to him so he gets scared very easily so I'm always telling ppl to leash there dogs!!

Ken

Well said

Ho

But where else in the Biddeford/Saco area do people have for their dogs to run free off a leash/ to release some of their wild for a bit? 🤔

- Reply

- Share
- [51m](#)
- Edited

•

[Jennie](#)

[Hoi](#) \_\_\_\_\_ the dog park over at Rotary!

[Elizab](#) \_\_\_\_\_

[Hc](#) \_\_\_\_\_ ; dog park

- - Reply
  - Share
  - [43m](#)

[Carrie](#) \_\_\_\_\_

The worst is when they tie them to a tree and leave them there. I've seen it happen more than once.

[Brenda](#) \_\_\_\_\_

There is a leash law and it's on the books for a reason. For the safety of other pets and humans.

[Julie](#) \_\_\_\_\_

I have a rescue and for many reasons I 100% agree with this. Humans need to be more responsible and reach their children as well as well as learn the proper way of introducing self and other dogs to your leashed ones. Not all dogs are approachable.

[Jennie](#) \_\_\_\_\_

Agree. Dogs should be leashed in the park. Can't believe this has to be said!!

[Britt](#) \_\_\_\_\_

Yes yes yes!!! 🙌🙌🙌

[Brian](#) \_\_\_\_\_

I think that if someone wants to take their dogs in a park and they already know that the dog is socialized and friendly then I see no problem, but then again I don't worry about every single thing in life I'd be pretty miserable if I did. Even before I...

See more

- Reply
- Share
- [40m](#)
- Edited

•

[Christina](#) \_\_\_\_\_

[Brian](#) did you read the post? He is worried about his dog doing harm to your off leash friendly dog. You don't need to shelter your dogs in every moment of their lives, but you shouldn't let them run around off leash and charge up to a leashed dog because...

See more

[Alexan](#) \_\_\_\_\_

I am very happy to see this! I have a cane corso, while working to make him single command dog ... I'd like to add ... I would never use that as my training grounds ... he's been cornered, he's going to be a big boy and just like my kids, I don't want him to...

See more

[Sam](#)

Totally agree to the author!! If someone want to let their dog run off leash they either need to go to a dog park or buy a house with enough yard to let them run around at home. Love the toddler analogy. I carry my toddler in a parking lot despite he w...

See more

[Doreen](#)

I agree with you 110. I have a small dog. We have been attacked before a couple times. My dog is always on a leash. I don't go to dog parks. Dogs are unpredictable. Mine is very unpredictable.

[Tricia](#)

Well said!

[Sue](#)

Thank you!! Thank you!!

I don't walk my dog in any area that irresponsible dog owners let them off leash when the leash law is clearly stated! It can sometimes be terrifying which is why I don't put myself in that situation! And there's a reason why t...

See more

[Terri](#)

Don't forget the 🐾

[Ear](#)

This is such a solid public service announcement. Thank you.

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- Reply
- Share
- [1h](#)

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- Reply
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Reply

- Share
- [1h](#)

## Walsh, Carl

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**From:**  
**Sent:** Tuesday, September 27, 2022 8:25 AM  
**To:** Walsh, Carl  
**Subject:** Another comment on fb

I'm not one to be a "Karen" about these things, but 2 out of 3 hikes over the past 3 days at Clifford Park in the mornings, a man's dog came running up to me, barking and not being friendly. He was also not listening to his owner and this scared me too. The second morning I saw this man with his dog I turned around to go home.

Are dogs supposed to be unleashed on the trails? I'm kind of scared to go walk there in the mornings now, which is a shame.

Recreation Commission meeting  
Minutes  
September 25, 2023

Meeting Called to order at 6:01 pm

In attendance: Joe McKenney, Chair, David Marchand Rec. Commission Board member, Tim Stebbins, Rec. Commission Board Member, Lisa Thompson, Recreation Department Deputy Director

Guests: Conservation Commission members: Richard Rhames, Erik Heumiller, Maya Atlas and Denis Roux.

Friends of Clifford Park: Evie (Last name?)

Joe began the meeting by starting with the discussion and gathering input on the leash ordinance for Clifford Park. Lisa Thompson was asked to facilitate the discussion. Lisa started by letting the group know that she was going to present 3 questions (as needed) as a guide for discussion.

The first question was: **What effects would dogs off leash have on the eco system and health on forest and trails in the park?**

Richard Rhames (Cons Comm. Chair): Looking at requiring leash on in the park to protect the wildlife and eco systems in the park. Clifford Park has Vernal Pool Complex and that must be protected. Dogs off leash can disrupt and ruin these areas.

Maya Atlas: (Cons. Comm. Member) Maya expressed that she sees both sides and understands the implications. She asked how and why we are at this impasse, and what brought us to this point. However, would like to see a Hybrid model, such as having certain trails that are on leash and other trails be off leash.

Eric Heumiller (rec. Comm. Member) Eric expressed agreement with Maya, but also wanted to point out that there are endangered species in the park such as turtles and dogs can disrupt their eco systems and therefore, threaten their existence. There are also humans that like to take turtles from the park, which is also a threat to the wildlife. He went on to say that a combination of education and awareness through signage, trail information and how to manage your dog. Eric was also in favor of a hybrid compromise.

Joe McKenney talked to the group of the history of this discussion and how we got to where we are now. He also mentioned that a Master Plan has not been done on the Park and now that the additional land has been acquired by the city, a master plan will need to be done and rules such as this will be part of that plan.

Denis Roux: (Rec Comm. Member) Denis spoke that as a conservation committee member, he is in favor of leashes on dogs in the park to help protect the eco systems. He sees this as a “compromise” to protect the wildlife in the park.

Evie (Friends of Clifford Park member) Evie stated she was representing the Friends of Clifford Park, who have discussed this subject and are in favor of an “on leash” rule in Clifford Park.

Discussion continues amongst the group to include the following  
Concerns for having dogs on leash

- Who will enforce it?
- Hard to enforce

Concerns for having dogs off leash:

- Dogs can disrupt and/or destroy the parks eco systems and existing vernal pool complex
- Dog owners do not have their pets under voice control
- Even well trained dogs can run on instinct
- Dog owners allow their dogs to wander far from owners
- Dog bites to humans
- Fights between dogs

Liability lies with the dog owner regardless of a leash or no-leash rule.

Ideas for allowing on leash and off leash in the park:

- Hybrid trail system- some trails can be “off leash” others” on leash” to protect the eco systems that exist among certain trails.
- Allowing off leash during certain times of day or season.
- More signage to educate the public on the eco systems and trails.
- Staff or volunteer coverage of the park at certain times of the year to provide information and education to the public about protecting the park and abiding by the rules of the park.
- Enforcement of the leash ordinance came up several times. Questions about “who “would enforce it and how it would be enforced were discussed. Eric said that people will not leash their dogs, but if we could provide information, education and awareness, it may help to curb the issues.
- Other parks and beaches in the city allow for off leash time (Rotary Park- designated spot near the boat launch) and all beaches after September 15 through March 14 each year.

Lisa reminded the group that we were not here to vote on anything; but to come up with a recommendation to the council of where the three groups stand. It did appear there was no need to present the next 2 questions as the discussion evolved on its own and covered all parts desired by the group. The group agreed that they could not come to a group recommendation. The discussion ended with the group agreeing on the following:

- Recreation Commission was in favor of dogs on leash in Clifford Park
- Friends of Clifford Park was in favor of dogs on leash in Clifford Park
- Conservation Commission was divided; of the 4 CC members present, two were in favor of dogs on leash in the park; two were against having dogs on leash in the park.

Richard Rhames, Conservation Commission chair, said that he regretted not having the committee take a formal vote at its last meeting so that they could come to this meeting with a formal recommendation. He said he was hoping to meet with the committee before the City Council meets on this in November to take formal vote and send their recommendation to the council.

Discussion ended at 7:15pm. Recreation Commission resumed with their meeting agenda

Recreation Department Update: Lisa gave a report on the summer programs, new Director Cathi Ellis and New Youth Sports Program Assistant Patrick Collins. The department is now fully staffed with our full time positions.

**Old Business:**

**Trail mapping at Clifford Park :** Joe mentioned that Maine Coast Heritage Trust would like to come in for a future meeting to discuss the additional trail work and mapping that is needed at Clifford Park.

**New Business:**

Joe told the group that there is currently one vacant seat on the commission and anyone knew of resident who was interested, please let him know. All other spots on the commission are open until 2025 or 2026, with the exception of Joe's seat, which expires in December. Joe said he would be running for the seat again.

There was some discussion about commitment from board members and how to move forward if commission members continue not to come to meetings. This discussion will be on next month's agenda.

**New Business:**

Lisa discussed presenting a local resident Bill Harriman with recognition for 40 years of service to the department and city at the next meeting. Tim and Dave were both in favor of this recognition and asked if we could invite former Rec. Director Carl Walsh to help present this to Bill.

**Meeting adjourned at 8:00pm**

# Maine State Parks

Bureau of Parks and Lands

**Leashes** - Pets must be on a leash under the physical control of the pet handler and must not be left unattended.

No pets are allowed in the Sebago Lake State Park campground. Pets are not allowed on beaches between April 1 and September 30. Pets must be on a leash under the physical control of the pet handler and must not be left unattended. Pet owners must immediately clean up any fecal deposits left by their pets. Pet owners may be assigned picnic or campsites in a less congested area of the park.

[Pets in the Parks: Reservations: State Parks and Public Lands: Maine DCF](#)

## National Parks

Information provided taken from the National Park Service B.A.R.K. program.

### A = Always Wear a Leash

- Pets must be restrained on a leash no longer than 6 feet (2 m); retractable leashes extended beyond this limit are prohibited.
- Leashes protect dogs from becoming lost and from wilderness hazards such as porcupines.
- Not everyone is a dog person no matter how friendly and well behaved your dog may be. Dog friendly areas are a privilege would could be lost if leash regulations are not followed.
- Many people, especially children, are frightened by dogs, even small ones. Uncontrolled dogs can present a danger to other visitors. Leashes also protect the experience of other visitors who may be afraid, allergic, or who do not want a dog approaching them.
- Unfamiliar sights, sounds, and smells can disturb even the calmest, friendliest, and best-trained dog, causing them to behave unpredictably or bark excessively.

### R = Respect Wildlife

- Dogs can chase and threaten wildlife, scaring birds and other animals away from nesting, feeding, and resting sites.
- Be especially careful around the nests of loons and turtles.
- The scent left behind by a dog can signal the presence of a predator, disrupting or altering the behavior of park wildlife. Small animals may hide in their burrow the entire day after smelling a dog and may not venture out to feed.
- Please keep your dog at a respectful distance from any animals you may encounter.

[Be an Acadia Bark Ranger \(U.S. National Park Service\) \(nps.gov\)](#)

While required minimum distances vary across national parks, be aware that if your presence changes the behavior of any wild animal, you are too close.





## City Council

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Meeting Date: November 21, 2023

Meeting Time: 6:00 PM

Agenda Item No: 10.c.

Item Description: Order #2023.137 CDBG Year 6 Action Plan - Amendment (FY 2023-24)

Submitted by: Jessica Wilson, Community Development Coordinator

Supporting Information/Documentation:

Attached CDBG Year 6 Action Plan - Amendment

Key Terms:

HUD: U.S. Department of Housing & Urban Development, the federal funder of the CDBG program.

CDBG: Community Development Block Grant, an annual award provided on a formula basis to entitled cities to develop viable communities via decent housing and a suitable living environment and via expanded economic opportunities, principally for low- and moderate-income persons (i.e., households earning no more than 80% of area median income).

Executive Summary:

The Citizens Advisory Committee (CAC) recommends amending the Year 6 (FY 2023-24) CDBG Annual Action Plan to help meet HUD's timely spending requirements while addressing the needs of low/moderate-income persons in our community. The proposed Year 6 Plan amendments are:

- To reallocate \$750,000, previously allocated to the acquisition/rehabilitation of real property for the development of affordable housing project, to the improvement of public facilities/infrastructure.
- To reallocate \$100,000, previously allocated to the down-payment assistance program for first-time homebuyers, to the housing rehabilitation program.

Detailed Review:

Since 2005, the City has received annual formula-based awards from the CDBG Entitlement Grant Program to support the social service, public infrastructure, economic opportunity, and housing needs of Biddeford residents, primarily those earning no more than 80% of HUD's area median income. As of May 1, 2023, the CDBG award balance, which includes both the FY 2022-23 award and unspent prior-year funds, stood at \$1.27 million. Given that HUD requires all but 1.5 times the current year's grant award to be spent on eligible activities/projects by May 1<sup>st</sup> of the following year, the CDBG Program failed to meet its timeliness benchmark in FY 2022-23. City staff was required to develop a work out plan to demonstrate how the funds would be spent pursuant to the timeliness requirement. The original plan offered that \$750,000 would be spent on the acquisition/rehabilitation of real property for the development of affordable housing, however, HUD voiced concerns the activity was not likely to be completed by the timeliness deadline. Given this feedback and the need to sustain CDBG compliance now that the HUD legacy

monitoring issues is complete, staff recommended to the CAC that the funding be set aside and made available next program year as a priority. This timing coincides well with the availability of other key funding sources that attract affordable housing developers, including the state's newly funded Low-Income Housing Tax Credit and Rural Affordable Rental Housing Development Programs, as well as the City's soon-to-be-established Affordable Housing Trust Fund. Additionally, the cities of Biddeford and Saco have been working together with consultants to gather data around unhoused services policy. An analysis together with recommendations will be forthcoming. That information is expected to be considered during the final preparation of the RFP for the acquisition/rehabilitation of real property for the development of affordable housing activity.

The Year 5 Plan was previously amended to allocate \$100,000 for down-payment assistance program for first-time homebuyers. Unfortunately, residents have been unable to utilize this program due to the high demand for housing coupled with HUD's regulations. Reallocation of these funds to the housing rehab program will be a more effective and immediate use in furthering HUD's prioritization of "housing first" and "rapid re-housing".

Public input is being gathered to develop a plan for the use of the allocation of CDBG funding for the next five years is being gathered so staff relied upon that data to identify activities to be included in the work out plan.

Staff has confirmed the following activities from the City's approved Capital Improvement Projects Plan are eligible, located in LMI areas, and can be completed and paid for prior to the next timeliness test on May 1, 2024:

- |                                             |            |
|---------------------------------------------|------------|
| • York/Laconia Streets Sidewalks            | \$ 581,568 |
| • Williams Court Park Lighting Improvements | \$ 2,000   |
| • Water/Main Streets Park Improvements      | \$ 16,000  |
| • Pearl Point Park Design                   | \$ 50,000  |
| • Bike Racks Installation (6)               | \$ 6,000   |

The CAC discussed and recommends the proposed amendments to the Year 6 Action Plan to help meet timeliness requirements by May 1, 2024 and address program-eligible activities.

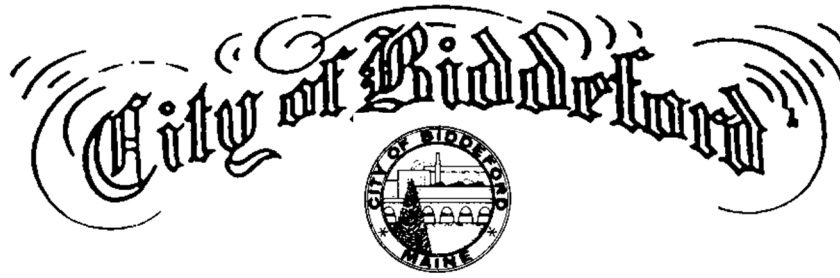
The public comment period on the Year 6 Plan Amendments ran from October 20 through November 21 with a public hearing on November 15. No comments have been received to date, but will be included in the attached plan amendment as they are received. Staff will update the Council as to any comments received through the remainder of the comment period.

Funding Source:

Community Development Block Grant Program

Staff Recommendation:

Staff recommends approval of the amendment.



**2023.137**

**IN BOARD OF CITY COUNCIL...November 21, 2023**

**BE IT ORDERED**, that the proposed Amendment to the CDBG Year 6 Action Plan (FY 20230-24) be adopted, which is summarized as follows: (1) To reallocate \$750,000, previously allocated to the acquisition/rehabilitation of real property for the development of affordable housing project, to the improvement of public facilities/infrastructure; and (2) To reallocate \$100,000, previously allocated to the down-payment assistance program for first-time homebuyers, to the housing rehabilitation program.

**Attest by:** \_\_\_\_\_

# **CITY OF BIDDEFORD**

## **2023-2024 Annual Action Plan**

**July 1, 2023 – June 30, 2024**

### **First Amendment**



City of Biddeford, Maine  
Planning and Development Department  
Community Development Program  
205 Main Street  
Biddeford, ME 04005  
[www.biddefordmaine.org](http://www.biddefordmaine.org)

October 18, 2023

# CITY OF BIDDEFORD

## 2023-2024 Annual Action Plan Amendment

The purpose of this amendment is to:

1. Reallocate \$750,000 from the acquisition and development of affordable housing activity to the public infrastructure improvements activity. *Updated the content in the AP-20, AP-35, and AP-38 sections to reflect updated resources and projects.*
2. Reallocate \$100,000 from the first-time homebuyers' assistance program to the housing rehabilitation program. *Updated the content in the AP-20, AP-35, and AP-38 sections to reflect updated resources and projects.*

The full text of the original 2023-2024 Annual Action Plan (AAP) may be found at <https://www.biddefordmaine.org/DocumentCenter/View/11557/CDBG-Year-6-Action-Plan>.

### Executive Summary

#### AP-05 Executive Summary - 24 CFR 91.200(c), 91.220(b)

##### Introduction

The 2023-2024 Annual Action Plan (AAP) is being amended to revise the allocations and language relating to the housing rehabilitation and public infrastructure improvements programs. These reallocations are necessary for the City to be in compliance with its timely spending of CDBG funding.

## CITIZEN PARTICIPATION

### PR-05 Lead & Responsible Agencies – 91.200(b)

#### 1. Agency/entity responsible for preparing/administering the Consolidated Plan

Describe the agency/entity responsible for preparing the Consolidated Plan and those responsible for administration of each grant program and funding source.

| Agency Role        | Name      | Department/Agency                         |
|--------------------|-----------|-------------------------------------------|
| Lead Agency        | BIDDEFORD | Dept. of Economic & Community Development |
| CDBG Administrator | BIDDEFORD | Dept. of Economic & Community Development |

Table 1 – Responsible Agencies

#### Consolidated Plan Public Contact Information

Gail Wilkerson, HUD Programs Director

Jessica Wilson, Community Development Coordinator

### AP-10 Consultation – 91.100, 91.200(b), 91.215(l)

Based on the City of Biddeford's Citizen Participation Plan (CPP), this amendment is considered substantial and will follow the CPP process.

## Annual Goals and Objectives

### AP-20 Annual Goals and Objectives

#### Goals Summary Information

| Sort Order | Goal Name             | Start Year | End Year | Category                                                        | Geographic Area | Needs Addressed       | Funding         | Goal Outcome Indicator                                                                                                                                                               |
|------------|-----------------------|------------|----------|-----------------------------------------------------------------|-----------------|-----------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1          | Housing               | 2018       | 2023     | Affordable Housing<br>Homeless<br>Non-Homeless<br>Special Needs | CITYWIDE        | Housing               | CDBG: \$415,000 | Rental units constructed: 7<br>Household Housing Unit<br>Rental units rehabilitated: 10<br>Household Housing Unit<br>Homeowner Housing<br>Rehabilitated: 5 Household<br>Housing Unit |
| 2          | Social Services       | 2018       | 2023     | Non-Housing<br>Community<br>Development<br>Social Services      |                 | Social Services       | CDBG: \$58,262  | Public service activities other<br>than Low/Moderate Income<br>Housing Benefit: 2040<br>Persons Assisted                                                                             |
| 3          | Public Infrastructure | 2018       | 2023     | Public Infrastructure                                           | CITYWIDE        | Public Infrastructure | CDBG: \$901,512 |                                                                                                                                                                                      |
| 4          | Administration        | 2018       | 2023     | Administration                                                  | CITYWIDE        |                       | CDBG: \$78,168  |                                                                                                                                                                                      |

Table 2 – Goals Summary

#### Goal Descriptions

|   |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <b>Goal Name</b>        | Housing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|   | <b>Goal Description</b> | Funds will support: (1) the rehabilitation of 10 owner-occupied, non-profit- or investor-owned 2- to 7-unit buildings in the target area, with a minimum 51% of households in subject properties meeting income LMI requirements and with rehabbed units carrying a 10-year deed restriction to assure rent affordability is maintained; and (2) grants for emergency repairs to 5 owner-occupied single-family homes for LMI                                                                                                                                                                       |
| 2 | <b>Goal Name</b>        | Social Services                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|   | <b>Goal Description</b> | Funds will support social service agencies that provide a variety of services to low- to moderate-income individuals and families. The agencies are Seeds of Hope Neighborhood Center (running a Winter Warming Center for those experiencing homelessness), Southern Maine Agency on Aging (running the Meals on Wheels program), and the Biddeford Food Pantry. The City will continue to administer the Mission Hill Neighborhood Hotspot, which provides free internet access to residents of a high-LMI neighborhood. Any additional social service funds will be allocated depending on need. |
| 3 | <b>Goal Name</b>        | Public Infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|   | <b>Goal Description</b> | Funds will support accessibility and safety improvements to public facilities serving LMI neighborhoods.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 4 | <b>Goal Name</b>        | Administration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|   | <b>Goal Description</b> | Administration will fund office staff, equipment, supplies, and other administrative expenses.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



## Projects

### AP-35 Projects – 91.220(d)

#### Introduction

Programs supported will be the social services, housing rehabilitation, ADA improvements under public infrastructure, and administration.

#### Projects

| # | Project Name          |
|---|-----------------------|
| 1 | Housing               |
| 2 | Social Services       |
| 3 | Public Infrastructure |
| 4 | Administration        |

**Table 3 - Project Information**

#### Describe the reasons for allocation priorities and any obstacles to addressing underserved needs

The City continues to focus its efforts on target Census tracts, particularly through the rehabilitation of 2- to 7-unit structures to preserve safe, healthy, and affordable housing. Additional support will be provided to Seeds of Hope for their Winter Warming Center, to the Meals on Wheels program for seniors and persons with disabilities experiencing food insecurity, to the Mission Hill Neighborhood Hotspot providing free wireless internet to residents in the range of 46 Sullivan St, to the Biddeford Food Pantry, and to public facilities requiring accessibility and safety improvements. Other social service needs are being examined in order to allocate any remaining the social service funds. These priorities were chosen given increased need to create and preserve housing affordability for LMI residents; an increased number of unhoused persons; rising food insecurity, high rates of LMI households in identified Census tracts, and health and safety issues in Biddeford's housing stock.

**AP-38 Project Summary**  
**Project Summary Information**

|   |                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <b>Project Name</b>                                                                            | Housing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|   | <b>Target Area</b>                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|   | <b>Goals Supported</b>                                                                         | Housing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|   | <b>Needs Addressed</b>                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|   | <b>Funding</b>                                                                                 | CDBG: \$415,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|   | <b>Description</b>                                                                             | Housing Rehabilitation will focus on 2- to 7-unit structures, with 51% of the units being affordable at 80% of median income for at least 10 years, as well as emergency repair grants to LMI owner-occupied single-family homes. There are also funds available for delivery costs associated with these housing activities.                                                                                                                                                                                                                                                      |
|   | <b>Target Date</b>                                                                             | 6/30/2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|   | <b>Estimate the number and type of families that will benefit from the proposed activities</b> | a. Housing Rehab: 15 housing units with at least 8 units occupied by households at or below 80% AMI via a 10-year deed restriction                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|   | <b>Location Description</b>                                                                    | CDBG designated census tracts of 252.01 and 252.02 as a first priority. Citywide as a secondary geographic focus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2 | <b>Planned Activities</b>                                                                      | <p>Rehabilitation loans for units in accordance with CDBG rules, and associated program delivery costs, following this priority list: 1. Owner-occupants of 2- to 7-unit residential rental properties; 2. Non-profit owners of 2- to 7-unit residential rental properties; and 3. Investor-owned 2- to 7-unit residential rental properties.</p> <p>Emergency housing rehabilitation grant assistance to owner-occupied single-family property owners who demonstrate need, allowing them to return to safe housing conditions as soon as possible after an unforeseen event.</p> |
|   | <b>Project Name</b>                                                                            | Social Services                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|   | <b>Target Area</b>                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|   | <b>Goals Supported</b>                                                                         | Social Services                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|   | <b>Needs Addressed</b>                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|   | <b>Funding</b>                                                                                 | CDBG: \$58,626                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|          |                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | <b>Description</b>                                                                             | Biddeford will support at least three Public Service agencies and a neighborhood hotspot with the maximum 15% of program funds (\$58,626.15). Seeds of Hope will run an Overnight Warming Center during the winter months for people experiencing homelessness, estimate of 25 people to be served (\$19,142). Southern Maine Agency on Aging will operate its Meals on Wheels program, providing meal delivery to 75 eligible seniors and persons with disabilities (\$19,142); and Biddeford Food Pantry will provide food/toiletries/paper products/diapers to 375 unique LMI individuals (\$19,142). The City will administer the Mission Hill Neighborhood Hotspot (\$1,200). Any remaining funds may be programmed for other social services depending on need. |
|          | <b>Target Date</b>                                                                             | 6/30/2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|          | <b>Estimate the number and type of families that will benefit from the proposed activities</b> | Seeds of Hope - 25 people experiencing homelessness<br>Meals on Wheels - 75 eligible seniors and persons with disabilities<br>Mission Hill Neighborhood hotspot - 1,665 persons in Census Tract 252.02, Block Group 1, where the hotspot is located<br>Biddeford Food Pantry – 375 unique LMI individuals from Biddeford                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | <b>Location Description</b>                                                                    | Seeds of Hope operates at 35 South St. Meals on Wheels operates citywide, with offices at 189 Alfred St. Biddeford Food Pantry serves 375 unique income-eligible individuals per month at 162 Elm St. The Mission Hill Neighborhood Hotspot is coordinated by the city and located at 46 Sullivan Street.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|          | <b>Planned Activities</b>                                                                      | Seeds of Hope - Overnight Warming Center during the winter months for people experiencing homelessness<br>Southern Maine Agency on Aging - Meals on Wheels program, providing meal delivery to eligible seniors and persons with disabilities<br>Mission Hill Neighborhood Hotspot - free wifi internet to people in hotspot range<br>Biddeford Food Pantry – food, paper goods, diapers, and toiletries to 375 unique individuals per year from Biddeford                                                                                                                                                                                                                                                                                                            |
| <b>3</b> | <b>Project Name</b>                                                                            | Public Infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          | <b>Target Area</b>                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|          | <b>Goals Supported</b>                                                                         | Public Infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|          | <b>Needs Addressed</b>                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|          | <b>Funding</b>                                                                                 | CDBG: \$901,512                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|   |                                                                                                |                                                                                                                                                                                                                                                         |
|---|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <b>Description</b>                                                                             | The city will make (a) ADA accessibility improvements to city properties, as identified in the ADA Self-Evaluation and Transition Plan, (b) street/sidewalk/parks/gardens improvements to enhance public safety, and (c) public facilities improvements |
|   | <b>Target Date</b>                                                                             | 6/30/2024                                                                                                                                                                                                                                               |
|   | <b>Estimate the number and type of families that will benefit from the proposed activities</b> | These improvements will benefit persons with disabilities citywide, a population of 4,597 people, as well as targeted neighborhoods served by improved parks/gardens/streets/sidewalks.                                                                 |
|   | <b>Location Description</b>                                                                    | Public facilities throughout LMI target area.                                                                                                                                                                                                           |
|   | <b>Planned Activities</b>                                                                      | Accessibility and public safety improvements to public facilities in LMI area.                                                                                                                                                                          |
|   |                                                                                                |                                                                                                                                                                                                                                                         |
| 4 | <b>Project Name</b>                                                                            | Administration                                                                                                                                                                                                                                          |
|   | <b>Target Area</b>                                                                             |                                                                                                                                                                                                                                                         |
|   | <b>Goals Supported</b>                                                                         | Administration                                                                                                                                                                                                                                          |
|   | <b>Needs Addressed</b>                                                                         |                                                                                                                                                                                                                                                         |
|   | <b>Funding</b>                                                                                 | CDBG: \$78,168                                                                                                                                                                                                                                          |
|   | <b>Description</b>                                                                             | Administration costs to administer the CDBG program.                                                                                                                                                                                                    |
|   | <b>Target Date</b>                                                                             | 6/30/2024                                                                                                                                                                                                                                               |
|   | <b>Estimate the number and type of families that will benefit from the proposed activities</b> | N/A                                                                                                                                                                                                                                                     |
|   | <b>Location Description</b>                                                                    | N/A                                                                                                                                                                                                                                                     |
|   | <b>Planned Activities</b>                                                                      | Provide administrative oversight and support administrative costs of the CDBG program                                                                                                                                                                   |



## City Council

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Meeting Date: November 21, 2023

Meeting Time: 6:00 PM

Agenda Item No: 10.d.

Item Description: 2023.138) Approval/CDBG-CV Allocation to Seeds of Hope

Submitted by: Jessica Wilson, Community Development Coordinator

Supporting Information/Documentation:

None

Key Terms:

HUD: U.S. Department of Housing & Urban Development, the federal funder of the CDBG program.

CDBG: Community Development Block Grant, an annual award provided on a formula basis to entitled cities to develop viable communities via decent housing and a suitable living environment and via expanded economic opportunities, principally for low- and moderate-income persons (i.e., households earning no more than 80% of area median income).

CDBG-CV: The Community Development Block Grant CARES Act (CDBG-CV) program provides formula-based grants to states, insular areas, and local governments to prevent, prepare for, and respond to the spread of COVID-19.

Executive Summary:

Staff recommends an additional allocation of CDBG-CV funds, for \$75,428.49, to Seeds of Hope for reimbursement of salary and fringe benefit costs associated with staff time dedicated to providing coordinated services and referrals as part of the community support program.

Detailed Review:

In response to COVID-19, HUD allocated CDBG-CV funding, authorized by the Coronavirus Act, Relief, and Economic Security Act, to the City totaling \$402,684 to support COVID-related expenses. The City amended its 2018-2023 Consolidated Plan and 2019 Annual Action Plan to enable the use of the CDBG-CV funds. These funds must be expended within six years of the City's grant agreement with HUD, or June 18, 2026.

The required public participation process identified priority activities that included supporting a job retention program (\$236,079), an emergency food bank (\$5,447), and a community support program (\$86,069). The funds for job retention and the emergency food bank have been fully drawn. The community support program was designed to include a group of nonprofits and service providers who would launch a program to provide coordinated services and referrals for community members facing substance use issues, mental and physical health concerns, and those experiencing housing insecurity or homelessness. Seeds of Hope received an allocation of \$31,450 to be reimbursed over a two-year period that ended on October 25, 2023. Seeds of Hope is the only hub from which this program has administered

so far. Thus, there is an ongoing quantifiable increase in demand for the services provided through this program dictating the necessity for additional staff availability. The community support program available balance is \$75,428.49, which would fund increased staff hours over the next 12 months.

There is no requirement for public process to move forward with the requested action, as it does not meet the criteria for a substantial amendment.

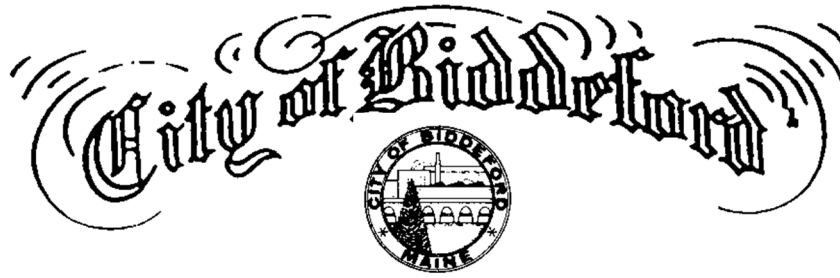
The allocation of \$56,428 for administrative expenses has not yet been charged against. Staff will be exploring additional public service efforts in the coming months and expect to bring an additional proposal to the Council for allocation of the remaining funds.

Funding Source:

Community Development Block Grant CARES Act Program

Staff Recommendation:

Staff recommends approval of the allocation as requested.



**2023.138**

**IN BOARD OF CITY COUNCIL...November 21, 2023**

**BE IT ORDERED,** that the requested allocation of CDBG-CV funds of \$75,428.29 to Seeds of Hope be approved for reimbursement of salary and fringe benefit costs associated with staff time dedicated to providing coordinated services and referrals as part of the community support program for community members facing substance use issues, mental and physical health concerns, and those experiencing housing insecurity or homelessness.

**Attest by:**\_\_\_\_\_





## City Council

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**Meeting Date:** November 21<sup>st</sup>, 2023  
**Meeting Time:** 6:00 PM

**Agenda Item No:** 10.e  
**Item Description:** 2023.139) Approval/York-Laconia Street - Riverwalk Sidewalk Improvements

**Submitted by:** Jeff Demers (Public Works Director)  
Craig Chekan, PE (City Engineer)  
Tom Milligan, PE (City Engineer Emeritus)  
Gail Wilkerson (HUD Housing Director)

### Supporting Information/Documentation:

1. Overall Site Plan
2. Shaw Brothers Bid Tab

### Executive Summary:

For the past three years, the Engineering Department has been designing, permitting, and coordinating a portion of the City's Riverwalk Master Plan that runs down York Street, Laconia Street, and through the Pepperell Mill campus.

After initially receiving no interested bidders for a Fall 2023 construction season, City Staff prepared and reissued a formal bid package in August for a March-July 2024 construction season. One bid was received from Shaw Brothers for \$1,157,153 (which aligns with the City's construction estimate).

### Detailed Review:

The City's Engineering Department surveyed and designed in-house a series of new sidewalks, pedestrian lighting, and ADA ramps for the York-Laconia Riverwalk Sidewalk project.

This section of the Riverwalk Master Plan will give pedestrians safe passage through the Pepperell Mill campus from Main Street to the Pearl Street Parking Garage, via York Street, Laconia Street, and the Lincoln Mill. See attached Overall Site Plan.

In accordance with the 2018 Joint Developer Agreement, this project has been closely coordinated with and approved by the Pepperell Mill and Lincoln Mill property owners. This project received unanimous approval from the Historic Preservation Commission on June 14<sup>th</sup>, 2023.

After initially receiving no interested bidders for a Fall 2023 construction season, City Staff prepared and reissued a formal bid package in August for a March-July 2024 construction season. One bid was received from Shaw Brothers for \$1,157,153 (which aligns with the City's construction estimate).

A portion of this project will utilize CDBG funding.

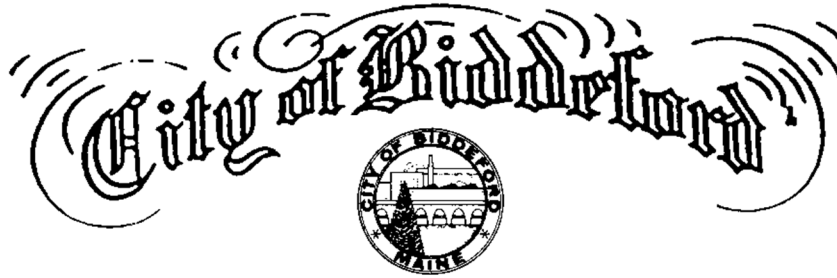
**Staff Recommendation:**

Staff recommends to accept Shaw Brothers' *'York-Laconia Riverwalk Sidewalk Improvements Project'* bid of \$1,157,153 and allot \$92,847 (8%) for change orders, RFIs, and inspection/administrative fees – for a total amount of \$1,250,000.

**Funding Source:**

Funding for this \$1,250,000 project will be as follows:

- \$581,568.23 from Community Development Block Grant (CDBG) funds
- \$668,431.77 from 400-32340-60610 Capital Expenditures



**2023.139**

**IN BOARD OF CITY COUNCIL...November 21<sup>st</sup>, 2023**

**BE IT ORDERED**, that the City Manager or his designee be authorized to sign a unit cost contract with Shaw Brothers of Gorham, Maine for the construction of the York-Laonia Riverwalk Sidewalk Improvements project as per the bid submitted and opened on October 26<sup>th</sup>, 2023 in the amount of \$1,157,153.

**BE IT FURTHER ORDERED**, that \$92,847 (8%) be allocated for change orders, RFIs, and inspection/administrative fees.

Funding for this \$1,250,000 project will be as follows:

- \$581,568.23 from Community Development Block Grant (CDBG) funds
- \$668,431.77 from 400-32340-60610 Capital Expenditures

**NOTE:** The Finance Committee will review this item at their November 21<sup>st</sup>, 2023 meeting.

**Attest by:** \_\_\_\_\_  
**Robin Patterson, City Clerk**







| YORK-LACONIA RIVERWALK SIDEWALK IMPROVEMENTS |                                                        |          |        |                            |        |              |        |                   |                        |
|----------------------------------------------|--------------------------------------------------------|----------|--------|----------------------------|--------|--------------|--------|-------------------|------------------------|
| BID TAB / APPROXIMATE SUMMARY OF QUANTITIES  |                                                        |          |        |                            |        |              |        |                   |                        |
| CITY'S DRAWINGS                              |                                                        |          |        | PEPPERELL BLDG 11 DRAWINGS |        | DESIGN TOTAL |        | UNIT PRICE        | COST                   |
| ITEM                                         | NAME                                                   | QUANTITY | UNITS  | QUANTITY                   | UNITS  | QUANTITY     | UNITS  |                   |                        |
| <b>A</b>                                     | <b>SITE PREP/DEMOLITION</b>                            |          |        |                            |        |              |        |                   |                        |
| 1                                            | MOBILIZATION/TRAFFIC CONTROL                           | 0.9      | LS     | 0.1                        | LS     | 1            | LS     | \$ 278,793.00     | \$ 278,793.00          |
| 2                                            | INLET PROTECTION                                       | 8        | EA     | 0                          | EA     | 8            | EA     | \$ 125.00         | \$ 1,000.00            |
| 3                                            | EROSION CONTROL/DUST CONTROL/STOCKPILE PROTECTION      | 0.9      | LS     | 0.1                        | LS     | 1            | LS     | \$ 13,450.00      | \$ 13,450.00           |
| 4                                            | SITE DEMO                                              | 0.9      | LS     | 0.1                        | LS     | 1            | LS     | \$ 48,595.00      | \$ 48,595.00           |
| <b>B</b>                                     | <b>SITE WORK</b>                                       |          |        |                            |        |              |        |                   |                        |
| 5                                            | 8"x16" CROSSWALK PAVERS (W/ 5" SIDE STRIPING)          | 1650     | SF     | 0                          | SF     | 1650         | SF     | \$ 32.30          | \$ 53,295.00           |
| 6                                            | DETECTABLE WARNING PLATES (CAST IRON)                  | 210      | SF     | 24                         | SF     | 234          | SF     | \$ 125.00         | \$ 29,250.00           |
| 7                                            | 0.8"x0.8" CONCRETE STEP RISER (STA 20+80)              | 1        | EA     | 0                          | EA     | 1            | EA     | \$ 1,000.00       | \$ 1,000.00            |
| 8                                            | REINFORCED CONCRETE SIDEWALK                           | 6850     | SF     | 1960                       | SF     | 8810         | SF     | \$ 20.25          | \$ 178,402.50          |
| 9                                            | ASPHALT PAVEMENT                                       | 8400     | SF     | 0                          | SF     | 8400         | SF     | \$ 16.25          | \$ 136,500.00          |
| 10                                           | LOAM & SEED                                            | 2000     | SF     | 0                          | SF     | 2000         | SF     | \$ 1.70           | \$ 3,400.00            |
| 11A                                          | PINE TREE (B&B, 8-10' MIN. HEIGHT); (STA 30+25)        | 1        | EA     | 0                          | EA     | 1            | EA     | \$ 1,500.00       | \$ 1,500.00            |
| 11B                                          | PROTECTIVE PIPE BOLLARD (STA 3+50)                     | 2        | EA     | 0                          | EA     | 2            | EA     | \$ 1,600.00       | \$ 3,200.00            |
| <b>C</b>                                     | <b>STRIPING/SIGNAGE</b>                                |          |        |                            |        |              |        |                   |                        |
| 12                                           | PEDESTRIAN SIGN (W11-2 MUTCD, 24"x24" YELLOW)          | 4        | EA     | 0                          | EA     | 4            | EA     | \$ 250.00         | \$ 1,000.00            |
| 13                                           | STOP SIGN (R1-1 MUTCD, 30"x30" RED)                    | 4        | EA     | 0                          | EA     | 4            | EA     | \$ 250.00         | \$ 1,000.00            |
| 14                                           | ADA PARKING SIGN (R7-8 MUTCD)                          | 2        | EA     | 0                          | EA     | 2            | EA     | \$ 225.00         | \$ 450.00              |
| 15                                           | 24" STOP BAR (WHITE THERMOPLASTIC)                     | 2        | EA     | 0                          | EA     | 2            | EA     | \$ 1,500.00       | \$ 3,000.00            |
| 16                                           | PARKING STALL STRIPING (WHITE THERMOPLASTIC)           | 16       | SPACES | 0                          | SPACES | 16           | SPACES | \$ 400.00         | \$ 6,400.00            |
| 17                                           | ADA PARKING STRIPING (LIGHT-BLUE THERMOPLASTIC)        | 2        | SPACES | 0                          | SPACES | 2            | SPACES | \$ 1,200.00       | \$ 2,400.00            |
| 18                                           | 6' WIDE CROSSWALK STRIPING (BUILDING 11 TO SMITH ST)   | 0        | LF     | 52                         | LF     | 52           | LF     | \$ 15.00          | \$ 780.00              |
| 19                                           | RELOCATE EXISTING SIGNAGE (STA 12+50; STA 20+65)       | 1        | LS     | 0                          | LS     | 1            | LS     | \$ 800.00         | \$ 800.00              |
| <b>D</b>                                     | <b>CURBING</b>                                         |          |        |                            |        |              |        |                   |                        |
| 20                                           | VERTICAL GRANITE CURB (STRAIGHT SECTION)               | 700      | LF     | 230                        | LF     | 930          | LF     | \$ 50.35          | \$ 46,825.50           |
| 21                                           | VERTICAL GRANITE CURB (10.0' RADII LOCATION)           | 2        | EA     | 0                          | EA     | 2            | EA     | \$ 526.75         | \$ 1,053.50            |
| 22                                           | VERTICAL GRANITE CURB (6.0' RADII LOCATION)            | 1        | EA     | 0                          | EA     | 1            | EA     | \$ 478.25         | \$ 478.25              |
| 23                                           | VERTICAL GRANITE CURB (3.0' RADII LOCATION)            | 1        | EA     | 0                          | EA     | 1            | EA     | \$ 740.85         | \$ 740.85              |
| 24                                           | TRANSITION GRANITE CURB (STRAIGHT SECTION)             | 180      | LF     | 18                         | LF     | 198          | LF     | \$ 50.30          | \$ 9,959.40            |
| 25                                           | TRANSITION GRANITE CURB (7.5' RADII LOCATION)          | 1        | EA     | 0                          | EA     | 1            | EA     | \$ 1,481.00       | \$ 1,481.00            |
| 26                                           | DEPRESSED/FLUSH GRANITE CURB (STRAIGHT SECTION)        | 150      | LF     | 0                          | LF     | 150          | LF     | \$ 50.00          | \$ 7,500.00            |
| 27                                           | DEPRESSED/FLUSH GRANITE CURB (7.5' RADII LOCATION)     | 1        | EA     | 0                          | EA     | 1            | EA     | \$ 1,015.00       | \$ 1,015.00            |
| 28                                           | DEPRESSED/FLUSH GRANITE CURB (3.75' RADII LOCATION)    | 3        | EA     | 0                          | EA     | 3            | EA     | \$ 988.00         | \$ 2,964.00            |
| 29                                           | DEPRESSED/FLUSH GRANITE CURB (3' RADII LOCATION)       | 7        | EA     | 0                          | EA     | 7            | EA     | \$ 430.00         | \$ 3,010.00            |
| 30                                           | ASPHALT CURB (STA 20+60)                               | 12       | LF     | 0                          | LF     | 12           | LF     | \$ 100.00         | \$ 1,200.00            |
| <b>E</b>                                     | <b>UTILITIES</b>                                       |          |        |                            |        |              |        |                   |                        |
| 31                                           | 17"x30" ELECTRIC HANDHOLE                              | 16       | EA     | 5                          | EA     | 21           | EA     | \$ 1,100.00       | \$ 23,100.00           |
| 32                                           | 17"x30" TELECOM HANDHOLE                               | 16       | EA     | 5                          | EA     | 21           | EA     | \$ 1,100.00       | \$ 23,100.00           |
| 33                                           | STYLE 'A' LIGHT POLE (NON-RAISED CONCRETE BASE)        | 5        | EA     | 0                          | EA     | 5            | EA     | \$ 7,400.00       | \$ 37,000.00           |
| 34                                           | STYLE 'A' LIGHT POLE (2' RAISED CONCRETE BASE)         | 3        | EA     | 0                          | EA     | 3            | EA     | \$ 7,400.00       | \$ 22,200.00           |
| 35                                           | STYLE 'B' LIGHT POLE (18" RAISED CONCRETE BASE)        | 5        | EA     | 5                          | EA     | 10           | EA     | \$ 7,900.00       | \$ 79,000.00           |
| 36                                           | LIGHTING CONTROL CABINET PACKAGE (STA 31+35)           | 1        | EA     | 0                          | EA     | 1            | EA     | \$ 12,600.00      | \$ 12,600.00           |
| 37                                           | (2) 2" SCH 40 PVC CONDUIT (ELECTRIC)                   | 1125     | LF     | 250                        | LF     | 1375         | LF     | \$ 34.00          | \$ 46,750.00           |
| 38                                           | (1) 3" SCH 40 PVC CONDUIT (ELECTRIC)                   | 140      | LF     | 0                          | LF     | 140          | LF     | \$ 39.00          | \$ 5,460.00            |
| 39                                           | (2) 2.5" SCH 40 PVC CONDUIT (TELECOM)                  | 1175     | LF     | 250                        | LF     | 1425         | LF     | \$ 36.00          | \$ 51,300.00           |
| 40                                           | (1) 5" SCH 40 PVC CONDUIT (TELECOM)                    | 100      | LF     | 0                          | LF     | 100          | LF     | \$ 48.00          | \$ 4,800.00            |
| 41                                           | CONDUIT CONCRETE ENCASEMENT (SUBJECT TO VEHICLE LOADS) | 440      | LF     | 0                          | LF     | 440          | LF     | \$ 22.50          | \$ 9,900.00            |
| <b>F</b>                                     | <b>PROJECT CLOSEOUT</b>                                |          |        |                            |        |              |        |                   |                        |
| 42                                           | AS-BUILT DRAWINGS                                      | 0.9      | LS     | 0.1                        | LS     | 1            | LS     | \$ 1,500.00       | \$ 1,500.00            |
|                                              |                                                        |          |        |                            |        |              |        | <b>TOTAL COST</b> | <b>\$ 1,157,153.00</b> |

\*QUANTITIES PROVIDED ARE BEST ESTIMATES BASED ON CAD FILES. CONTRACTOR TO VERIFY QUANTITIES INDEPENDENTLY & NOTE ANY DISCREPANCIES.



## City Council

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Meeting Date: November 21<sup>th</sup>, 2023

Meeting Time: 6:00 PM

Agenda Item No: 10.f

Item Description: 2023.140) Approval/Alfred Street CSO Project – Acceptance of Low Bid by D and C Construction Co., Inc. of Weymouth MA and Waterboro Maine

Submitted by: Tom Milligan, PE (City Engineer Emeritus)  
Craig Chekan, PE (City Engineer)  
Jeff Demers (Public Works Director)

### Supporting Information/Documentation:

1. Bid Summary Results
2. Newspaper advertisement
3. Approved \$2,000,000 DEP Grant
4. Locus Map
5. Location Map

### Executive Summary:

- a) The City is required by the Maine Department of Environmental Protection to reduce/eliminate Combined Sewer Overflows into the City's receiving waterbodies.
- b) This project will separate the combined sewage now flowing in a single pipe into a two pipe system, one new pipe for conveying the stormwater component and the existing combined pipe system to convey the separated sewage component.
- c) The City received 4 bids for the work.
- d) The low unit cost bid was submitted by D and C Construction Co., Inc. in the amount of \$1,985,636.00.

### Detailed Review:

- a) Project Timeline:
  - i September 28, 2023: Invitation to Bid advertised in the Portland Press Herald.
  - ii November 8, 2023: Bid Opened
  - iii November 21, 2023: Bid Award (pending Council's and MeDEP approval)
  - iv June 31, 2024: Construction Completion Deadline
- b) The proposed CSO Project design as prepared by BH2M was recently approved by DEP.
- c) The bid package and qualifications have been reviewed, compared against the bid documents, and are deemed acceptable.
- d) D and C Construction Co. has constructed several projects within the City and they are deemed qualified to do the work.

Funding Source:

Total Estimated Project Cost \$2,250,636:

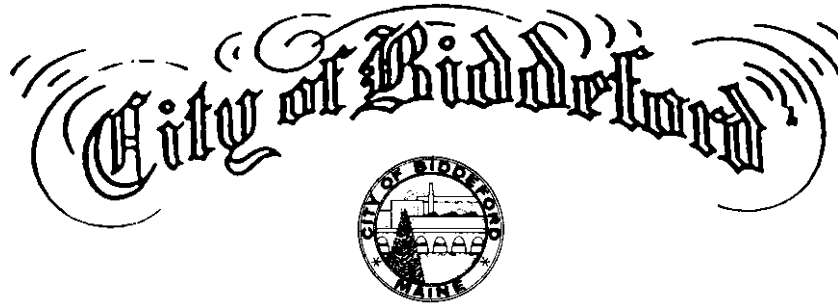
- \$1,985,636 for D&C Construction
- \$265,000 for potential change orders, inspections, ledge removal, bypass pumping, unknowns and services during construction by the design engineers.

Funding for this \$2,250,636 project will be as follows:

- \$2,000,000 from the Me DEP's 2022 CWSRF grant to the City
- \$250,636 from account fund 400-32340-60610

Staff Recommendation:

- City Staff recommends that D and C Construction Co., Inc. be awarded the bid to construct the Alfred Street CSO Project for the unit cost bid amount of \$1,985,636.00.
- Furthermore, Staff also recommends that an amount of \$265,000 be authorized for potential change orders, inspections, ledge removal, bypass pumping, unknowns and services during construction by the design engineers.



2023.140

IN BOARD OF CITY COUNCIL...November 21, 2023

BE IT ORDERED, that the City Manager or his designee be authorized to proceed with the Alfred Street CS Separation Project in the amount of \$2,250,636 by entering into a construction contract with by D and C Construction Co., Inc. of Weymouth, MA and Waterboro, Maine for the unit price bid amount of \$1,985,636.00 for the construction of the Alfred Street Combined Sewer Overflow (CSO) Separation Project contingent upon the approval of the contract documents by the Maine Department of Environmental Protection (MeDEP).

BE IT FURTHER ORDERED, that \$265,636 be allocated from 400-32340-60610 as a contingency for potential change orders, inspections, ledge removal, bypass pumping, and other unknowns.

Note:

Total Estimated Project Cost \$2,250,636:

- \$1,985,636 for D&C Construction
- \$265,000 for potential change orders, inspections, ledge removal, bypass pumping, unknowns and services during construction by the design engineers

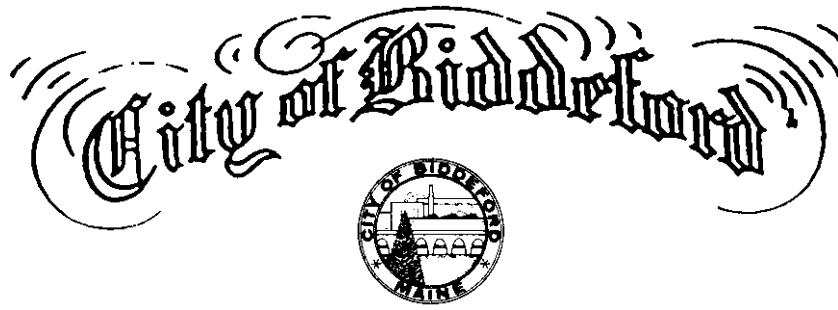
Funding for this \$2,250,636 project will be as follows:

- \$2,000,000 from the Me DEP's 2022 CWSRF grant to the City
- \$250,636 from account fund 400-32340-60610

**NOTE:** The Finance Committee will review this item at their November 21, 2023 meeting.

**Attest by:** \_\_\_\_\_





**Robin Patterson, City Clerk**

| Item No. | Description                                             | Unit  | D&C Construction Co. |          |                 | Pratt & Sons, Inc. |          |                 | Gorham Sand & Gravel |          |                 | Dearborn Construction |          |                 |
|----------|---------------------------------------------------------|-------|----------------------|----------|-----------------|--------------------|----------|-----------------|----------------------|----------|-----------------|-----------------------|----------|-----------------|
|          |                                                         |       | Unit Cost            | Quantity | Cost            | Unit Cost          | Quantity | Cost            | Unit Cost            | Quantity | Cost            | Unit Cost             | Quantity | Cost            |
| 1        | SITE PREPARATION                                        | LS    | \$95,000.00          | 1        | \$ 95,000.00    | \$ 175,000.00      | 1        | \$ 175,000.00   | \$ 159,071.00        | 1        | \$ 159,071.00   | \$ 224,930.00         | 1        | \$ 224,930.00   |
| 2        | TEST PITS                                               | EACH  | \$1,000.00           | 5        | \$ 5,000.00     | \$ 3,500.00        | 5        | \$ 17,500.00    | \$ 1,910.00          | 5        | \$ 9,550.00     | \$ 1,800.00           | 5        | \$ 9,000.00     |
| 3        | TRAFFIC CONTROL                                         | LS    | \$10,000.00          | 1        | \$ 10,000.00    | \$ 100,000.00      | 1        | \$ 100,000.00   | \$ 23,500.00         | 1        | \$ 23,500.00    | \$ 48,550.00          | 1        | \$ 48,550.00    |
| 4        | EROSION AND SEDIMENT CONTROL                            | LS    | \$3,500.00           | 1        | \$ 3,500.00     | \$ 100,000.00      | 1        | \$ 100,000.00   | \$ 5,000.00          | 1        | \$ 5,000.00     | \$ 41,775.00          | 1        | \$ 41,775.00    |
| 5        | 2 FT SQ (TYPE F) CATCH BASIN                            | EACH  | \$3,100.00           | 12       | \$ 37,200.00    | \$ 5,000.00        | 12       | \$ 60,000.00    | \$ 4,385.00          | 12       | \$ 52,620.00    | \$ 5,360.00           | 12       | \$ 64,320.00    |
| 6        | 4 FT DIAMETER CATCH BASIN                               | EACH  | \$3,900.00           | 3        | \$ 11,700.00    | \$ 8,000.00        | 3        | \$ 24,000.00    | \$ 5,497.00          | 3        | \$ 16,491.00    | \$ 5,590.00           | 3        | \$ 16,770.00    |
| 7        | 6 FT DIAMETER CATCH BASIN                               | EACH  | \$5,500.00           | 1        | \$ 5,500.00     | \$ 7,500.00        | 1        | \$ 7,500.00     | \$ 7,012.00          | 1        | \$ 7,012.00     | \$ 7,420.00           | 1        | \$ 7,420.00     |
| 8        | 4 FT DIAMETER DRAIN MANHOLE                             | EACH  | \$7,200.00           | 1        | \$ 7,200.00     | \$ 17,500.00       | 1        | \$ 17,500.00    | \$ 9,435.00          | 1        | \$ 9,435.00     | \$ 16,705.00          | 1        | \$ 16,705.00    |
| 9        | 6 FT DIAMETER DRAIN MANHOLE                             | EACH  | \$10,100.00          | 6        | \$ 60,600.00    | \$ 17,500.00       | 6        | \$ 105,000.00   | \$ 13,413.00         | 6        | \$ 80,478.00    | \$ 22,430.00          | 6        | \$ 134,580.00   |
| 10       | CORE DRILL STRUCTURE                                    | EACH  | \$1,200.00           | 5        | \$ 6,000.00     | \$ 2,500.00        | 5        | \$ 12,500.00    | \$ 2,100.00          | 5        | \$ 10,500.00    | \$ 2,230.00           | 5        | \$ 11,150.00    |
| 11       | 6" DRAIN SERVICE                                        | EACH  | \$10,000.00          | 22       | \$ 220,000.00   | \$ 5,000.00        | 22       | \$ 110,000.00   | \$ 4,930.00          | 22       | \$ 108,460.00   | \$ 4,875.00           | 22       | \$ 107,250.00   |
| 12       | 12" STORM DRAIN                                         | LF    | \$335.00             | 49       | \$ 16,415.00    | \$ 400.00          | 49       | \$ 19,600.00    | \$ 185.20            | 49       | \$ 9,074.80     | \$ 184.00             | 49       | \$ 9,016.00     |
| 13       | 15" STORM DRAIN                                         | LF    | \$300.00             | 331      | \$ 99,300.00    | \$ 400.00          | 331      | \$ 132,400.00   | \$ 282.00            | 331      | \$ 93,342.00    | \$ 207.00             | 331      | \$ 68,517.00    |
| 14       | 24" STORM DRAIN                                         | LF    | \$340.00             | 208      | \$ 70,720.00    | \$ 500.00          | 208      | \$ 104,000.00   | \$ 302.00            | 208      | \$ 62,816.00    | \$ 284.00             | 208      | \$ 59,072.00    |
| 15       | 36" STORM DRAIN                                         | LF    | \$433.00             | 447      | \$ 193,551.00   | \$ 600.00          | 447      | \$ 268,200.00   | \$ 379.00            | 447      | \$ 169,413.00   | \$ 413.00             | 447      | \$ 184,611.00   |
| 16       | 42" STORM DRAIN                                         | LF    | \$530.00             | 10       | \$ 5,300.00     | \$ 1,000.00        | 10       | \$ 10,000.00    | \$ 1,137.00          | 10       | \$ 11,370.00    | \$ 1,180.00           | 10       | \$ 11,800.00    |
| 17       | 48" STORM DRAIN                                         | LF    | \$530.00             | 915      | \$ 484,950.00   | \$ 650.00          | 915      | \$ 594,750.00   | \$ 614.00            | 915      | \$ 561,810.00   | \$ 538.00             | 915      | \$ 492,270.00   |
| 18       | ABANDON PIPE AND STRUCTURES                             | LS    | \$10,000.00          | 1        | \$ 10,000.00    | \$ 20,000.00       | 1        | \$ 20,000.00    | \$ 11,039.95         | 1        | \$ 11,039.95    | \$ 20,100.00          | 1        | \$ 20,100.00    |
| 19       | LOAM & SEED                                             | SY    | \$100.00             | 50       | \$ 5,000.00     | \$ 35.00           | 50       | \$ 1,750.00     | \$ 11.00             | 50       | \$ 550.00       | \$ 65.00              | 50       | \$ 3,250.00     |
| 20       | TRENCH CAP (PAVEMENT)                                   | LF    | \$48.00              | 2250     | \$ 108,000.00   | \$ 140.00          | 2250     | \$ 315,000.00   | \$ 53.75             | 2250     | \$ 120,937.50   | \$ 64.50              | 2250     | \$ 145,125.00   |
| 21       | SIDEWALK REPAIR                                         | LF    | \$60.00              | 315      | \$ 18,900.00    | \$ 300.00          | 315      | \$ 94,500.00    | \$ 221.50            | 315      | \$ 69,772.50    | \$ 147.50             | 315      | \$ 46,462.50    |
| 22       | RESET CURB                                              | LF    | \$30.00              | 400      | \$ 12,000.00    | \$ 75.00           | 400      | \$ 30,000.00    | \$ 40.00             | 400      | \$ 16,000.00    | \$ 80.50              | 400      | \$ 32,200.00    |
| 23       | RELOCATE WATER SERVICES                                 | EACH  | \$10,600.00          | 9        | \$ 95,400.00    | \$ 4,500.00        | 9        | \$ 40,500.00    | \$ 4,393.00          | 9        | \$ 39,537.00    | \$ 4,830.00           | 9        | \$ 43,470.00    |
| 24       | RELOCATE WATER MAIN (4" PIPE OR GREATER)                | EACH  | \$18,500.00          | 4        | \$ 74,000.00    | \$ 10,000.00       | 4        | \$ 40,000.00    | \$ 23,612.00         | 4        | \$ 94,448.00    | \$ 14,700.00          | 4        | \$ 58,800.00    |
| 25       | STORM DRAIN PIPE LINING                                 | LF    | \$200.00             | 800      | \$ 160,000.00   | \$ 200.00          | 800      | \$ 160,000.00   | \$ 177.00            | 800      | \$ 141,600.00   | \$ 204.00             | 800      | \$ 163,200.00   |
| 26       | **REMOVED**                                             |       |                      |          |                 |                    |          |                 |                      |          |                 |                       |          |                 |
| 27       | 5 FT DIAMETER CATCH BASIN                               | EACH  | \$5,550.00           | 3        | \$ 16,650.00    | \$ 17,000.00       | 3        | \$ 51,000.00    | \$ 11,850.00         | 3        | \$ 35,550.00    | \$ 15,450.00          | 3        | \$ 46,350.00    |
| 28       | TRAFFIC CONTROL - FLAGGERS                              | HOURL | \$50.00              | 1950     | \$ 97,500.00    | \$ 55.00           | 1950     | \$ 107,250.00   | \$ 58.90             | 1950     | \$ 114,855.00   | \$ 51.50              | 1950     | \$ 100,425.00   |
| 29       | TRAFFIC CONTROL - UNIFORMED POLICE OFFICER              | HOURL | \$100.00             | 75       | \$ 7,500.00     | \$ 100.00          | 75       | \$ 7,500.00     | \$ 100.00            | 75       | \$ 7,500.00     | \$ 100.00             | 75       | \$ 7,500.00     |
| 30       | TRAFFIC CONTROL - POLICE CRISER                         | HOURL | \$75.00              | 75       | \$ 5,625.00     | \$ 75.00           | 75       | \$ 5,625.00     | \$ 75.00             | 75       | \$ 5,625.00     | \$ 75.00              | 75       | \$ 5,625.00     |
| 31       | TRAFFIC CONTROL - UNIFORMED POLICE OFFICER WITH CRUISER | HOURL | \$175.00             | 75       | \$ 13,125.00    | \$ 175.00          | 75       | \$ 13,125.00    | \$ 175.00            | 75       | \$ 13,125.00    | \$ 175.00             | 75       | \$ 13,125.00    |
| 32       | COBBLE TRENCH CAP (CONCRETE)                            | LF    | \$80.00              | 250      | \$ 20,000.00    | \$ 225.00          | 250      | \$ 56,250.00    | \$ 60.00             | 250      | \$ 15,000.00    | \$ 288.50             | 250      | \$ 72,125.00    |
| 33       | REMOTE TROLLY TRACK RAILS                               | LF    | \$50.00              | 200      | \$ 10,000.00    | \$ 150.00          | 200      | \$ 30,000.00    | \$ 20.00             | 200      | \$ 4,000.00     | \$ 40.00              | 200      | \$ 8,000.00     |
| TOTAL    |                                                         |       |                      |          | \$ 1,985,636.00 |                    |          | \$ 2,830,450.00 |                      |          | \$ 2,079,482.75 |                       |          | \$ 2,273,493.50 |

# Portland Press Herald

EST. 1862

## Maine Sunday Telegram

pressherald.com

Classified Advertising Proof

Marsha Forrest  
Bh2m Engineers  
380 B Main Street

Gorham  
ME  
04038  
(207) 839-2771  
mforrest@bh2m.com

Thank you for placing your advertisement with us.

Your order information and a preview of your advertisement are attached below for your review. If there are changes or questions, please contact the classified department at (207) 791-6100

Thank you

(207) 791-6100

jjensen@mainetoday.com

Monday – Friday 8:00 am – 5pm

|                |                       |                 |                                                      |
|----------------|-----------------------|-----------------|------------------------------------------------------|
| Order Number   | 0456464               | Order Price     | \$965.80                                             |
| Sales Rep.     | Joan Jensen           | PO No.          | Invitation-Alfred and Summer Street / Marsha Forrest |
| Account        | 150427                | Payment Type    | Invoice                                              |
| Publication    | Portland Press Herald | Number of dates | 1                                                    |
| First Run Date | 09/28/2023            | Last Run Date   | 09/28/2023                                           |
| Publication    | Online Upsell PPH     | Number of dates | 1                                                    |
| First Run Date | 09/28/2023            | Last Run Date   | 09/28/2023                                           |

### Public Notice

#### INVITATION TO BID

The City of Biddeford will receive sealed bids for the Alfred Street and Summer Street Sewer Separation Project until **2:00 p.m.** prevailing local time on October 25, 2023 at the Biddeford City Hall, 205 Main Street, 3rd floor – Engineering Dept., Biddeford, Maine 04005. Bid documents shall be in clearly marked sealed envelopes titled Alfred Street and Summer Street Sewer Separation Project. All bids will be opened and read aloud at the Biddeford City Hall at 2:00 pm on October 25, 2023. Bids shall be hand delivered to the

City prior to the bid opening as described above. The project is currently scheduled to be awarded on November 7, 2023 at the City Council Meeting.

Work associated with the project will generally include installation of storm drain and catch basins on Alfred Street, from Main Street to Summer Street, and Summer Street from Alfred Street to Foss Street. All work associated with the project shall commence no earlier than April 1, 2024, unless allowed earlier by the City and shall be completed by June 28, 2024.

A copy of the Contract Documents for the work may be examined at the Design Engineer's office, or City Hall, 205 Main Street, Biddeford, Maine 04005 after September 28, 2023. A copy of the contract documents may be purchased from the design engineer's office BH2M, 380B Main Street, Gorham, Maine upon the deposit of \$100.00 (\$110.00 if mailed) in cash or check made payable to BH2M. No refund. If contractor prefers electronic copies, they can be received by (as a pdf file for a fee of \$50.00) contacting the design engineer's office as described below. Submit all questions in writing no later than 7 days prior to the bid opening to the attention of: Chris MacDonald @ (207)839-2771, e-mail: cmacdonald@bh2m.com.

A bid must be accompanied by Bid security made payable to Owner in an amount of 5% of Bidder's maximum bid price and in the form of a certified check or Bid bond issued by surety meeting the requirements of the General Conditions.

This contract is expected to be funded in whole or in part by the State of Maine Department of Environmental Protection (DEP) Clean Water State Revolving Loan Fund (CWSRF) program. Neither the State of Maine nor any of its departments, agencies, or employees is or will be a party to this contract.

The contractor must comply with the Disadvantaged Business Enterprises (DBE) requirements contained in the CWSRF Supplementary Conditions. The contractor must comply with all Federal Requirements per the CWSRF Supplementary Conditions. The contractor must comply with the use of American Iron and Steel requirements per the CWSRF Supplementary Conditions. The contractor must comply with the Davis-Bacon Related Act per the CWSRF Supplementary Conditions. All laborers and

supplementary conditions. All laborers and mechanics employed by the contractor and subcontractors on this project shall not be paid less than the prevailing wage rates contained in the wage determination published in the bidding documents, or as may be determined by Davis-Bacon or existing State of Maine wage rates, whichever is greater. The successful bidder shall be required to furnish a performance bond and payment bond each for 100% of the contract price. All bidders shall be on the Maine DOT Prequalified Contractor List.

The Owner reserves the right to reject any or all Bids, to waive any technical or legal deficiencies, to accept any Bid that it may deem to be in the best interests of the Owner, to negotiate the contract Price with any Bidder, and to omit any item or items deemed advisable for the interest of the Owner.

## Milligan, Tom

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**From:** Lamontagne, Danica  
**Sent:** Tuesday, October 3, 2023 12:58 PM  
**To:** Milligan, Tom  
**Cc:** Chekan, Craig  
**Subject:** RE: Posting for City Web Site

Good afternoon Tom,

I've posted the Invitation to Bid here: <https://www.biddefordmaine.org/4524/RFB---Alfred-Street-CSO>.

Thanks,  
Danica

**From:** Milligan, Tom <Tom.Milligan@Biddefordmaine.org>  
**Sent:** Tuesday, October 3, 2023 12:18 PM  
**To:** Lamontagne, Danica <Danica.Lamontagne@Biddefordmaine.org>  
**Cc:** Chekan, Craig <Craig.Chekan@Biddefordmaine.org>  
**Subject:** Posting for City Web Site

Hi Danica  
Would you please post this bid add on the city web site  
Thank you  
Tom

**Tom Milligan, PE, PLS, SE**  
**City of Biddeford** | P.O. Box 586, Biddeford, ME 04005  
207-571-0638 | [tom.milligan@biddefordmaine.org](mailto:tom.milligan@biddefordmaine.org) (Office Hours: Mon-Thu, Closed Fri)



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



JANET T. MILLS  
GOVERNOR

MELANIE LOYZIM  
COMMISSIONER

**APPLICANT AGREEMENT TO COMPLY WITH  
2022 CLEAN WATER STATE REVOLVING FUND (CWSRF) REQUIREMENTS  
(Affordability Principal Forgiveness-CWSRF and BIL)**

**Applicant: City of Biddeford**

**Project Name: Alfred St. Sewer Separation - Phase I, Main St. to Pool St.**

This year, the Department received funds from the Bipartisan Infrastructure Law (BIL) to be directed towards wastewater infrastructure projects. The supplemental CWSRF allotment, which requires 49% Principal Forgiveness (PF), is awarded under the same conditions as PF for the base CWSRF, including an investment in a loan through the Maine Municipal Bond Bank, but the Department lowered the affordability ranking so that we might be able to support additional communities.

The Affordability Principal Forgiveness we are offering is identified in the table entitled "*CWSRF 2022 DRAFT Offer Ranking*" (attached) and detailed below. Your Affordability Principal Forgiveness Ratio is **70.39%**. That means that this project is eligible to receive **70.39%** of the borrowed amount in loan principal forgiveness up to, but not exceeding, the maximum Affordability Principal Forgiveness amount set by Maine DEP.

The Department is offering the following funding package for this project, subject to available CWSRF funding and loan approval by the Maine Municipal Bond Bank:

|                                                |                    |
|------------------------------------------------|--------------------|
| Project Cost                                   | \$1,873,400        |
| Requested Loan Amount                          | \$1,807,400        |
| Affordability Principal Forgiveness-CWSRF      | (\$1,000,000)      |
| <u>Affordability Principal Forgiveness-BIL</u> | <u>(\$807,400)</u> |
| CWSRF Loan Payback Amount                      | \$0                |

**Please keep in mind that this offer is based on the information submitted in your request for funding and is subject to change if you receive additional funding from another source or agency or reduce the estimated CWSRF borrowing. If either of these occur, that information will be used to revise your CWSRF User Rate Calculator and your Affordability Principal Forgiveness Ratio, which could result in an adjustment to the Affordability Principal Forgiveness offered.**

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769-2094  
(207) 764-0477 FAX: (207) 760-3143



**Capital Project with Affordability Principal Forgiveness - CWSRF. (check one)**

☒ We agree to apply for assistance for the project listed above and identified in the table entitled "CWSRF 2022 DRAFT Offer Ranking" and to enter into a binding loan commitment with the Maine Municipal Bond Bank for this project by September 30, 2023 in order to receive loan principal forgiveness. We agree to certify that we have implemented a fiscal sustainability plan in accordance with the Department's *Clean Water State Revolving Fund (CWSRF) Requirements and Guidance for a Fiscal Sustainability Plan (FSP)*, DEPLW1274-C-2018, and to certify that the project meets the *Clean Water State Revolving Fund (CWSRF) Cost and Effectiveness Analysis Requirements and Guidance*, DEPWQ1280-A-2017, (see attached).

**OR**

☐ We choose not to apply for a loan for the project listed above and identified in the table entitled "CWSRF 2022 DRAFT Offer Ranking."

**Capital Project with Affordability Principal Forgiveness - BIL. (check one)**

☒ We agree to apply for assistance for the project listed above and identified in the table entitled "CWSRF 2022 DRAFT Offer Ranking" and to enter into a binding loan commitment with the Maine Municipal Bond Bank for this project by September 30, 2023 in order to receive loan principal forgiveness. We agree to certify that we have implemented a fiscal sustainability plan in accordance with the Department's *Clean Water State Revolving Fund (CWSRF) Requirements and Guidance for a Fiscal Sustainability Plan (FSP)*, DEPLW1274-C-2018, and to certify that the project meets the *Clean Water State Revolving Fund (CWSRF) Cost and Effectiveness Analysis Requirements and Guidance*, DEPWQ1280-A-2017, (see attached).

**OR**

☐ We choose not to apply for a loan for the project listed above and identified in the table entitled "CWSRF 2022 DRAFT Offer Ranking."

Authorized Representative Name: THOMAS MULLIGAN Title: CITY ENGINEER

Signature: Thomas Mulligan Date: 5/5/22

**Please submit the Applicant Intent to Apply form by 5:00 pm, Friday, May 6, 2022. Please e-mail the form to [Maine.CWSRF.Grants@maine.gov](mailto:Maine.CWSRF.Grants@maine.gov) (fax available (207) 287-3435). If there are any comments or questions, please email the SRF team at the above address or contact Brandy Piers at (207) 287-6093.**





STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



JANET T. MILLS  
GOVERNOR

MELANIE LOYZIM  
COMMISSIONER

**APPLICANT AGREEMENT TO COMPLY WITH  
2022 CLEAN WATER STATE REVOLVING FUND (CWSRF) REQUIREMENTS  
(Affordability Principal Forgiveness-CWSRF Form)**

**Applicant: City of Biddeford**

**Project Name: Alfred Street Sewer Separation-Phase II, Pool St. to Summer St.**

The Affordability Principal Forgiveness we are offering is identified in the table entitled "*CWSRF 2022 DRAFT Offer Ranking*" (attached) and detailed below. Your Affordability Principal Forgiveness Ratio is **70.39%**. That means that this project is eligible to receive **70.39%** of the borrowed amount in loan principal forgiveness up to, but not exceeding, the maximum Affordability Principal Forgiveness amount set by Maine DEP.

The Department is offering the following funding package for this project, subject to available CWSRF funding and loan approval by the Maine Municipal Bond Bank:

|                                                         |                           |
|---------------------------------------------------------|---------------------------|
| Project Cost                                            | \$787,750                 |
| Requested Loan Amount                                   | \$687,750                 |
| <b><u>Affordability Principal Forgiveness-CWSRF</u></b> | <b><u>(\$)192,600</u></b> |
| CWSRF Loan Payback Amount                               | \$495,150                 |

**Please keep in mind that this offer is based on the information submitted in your request for funding and is subject to change if you receive additional funding from another source or agency or reduce the estimated CWSRF borrowing. If either of these occur, that information will be used to revise your CWSRF User Rate Calculator and your Affordability Principal Forgiveness Ratio, which could result in an adjustment to the Affordability Principal Forgiveness offered.**

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769-2094  
(207) 764-0477 FAX: (207) 760-3143

**Capital Project with Affordability Principal Forgiveness - CWSRF. (check one)**

☒ We agree to apply for assistance for the project listed above and identified in the table entitled "CWSRF 2022 DRAFT Offer Ranking" and to enter into a binding loan commitment with the Maine Municipal Bond Bank for this project by September 30, 2023 in order to receive loan principal forgiveness. We agree to certify that we have implemented a fiscal sustainability plan in accordance with the Department's *Clean Water State Revolving Fund (CWSRF) Requirements and Guidance for a Fiscal Sustainability Plan (FSP)*, DEPLW1274-C-2018, and to certify that the project meets the *Clean Water State Revolving Fund (CWSRF) Cost and Effectiveness Analysis Requirements and Guidance*, DEPWQ1280-A-2017, (see attached).

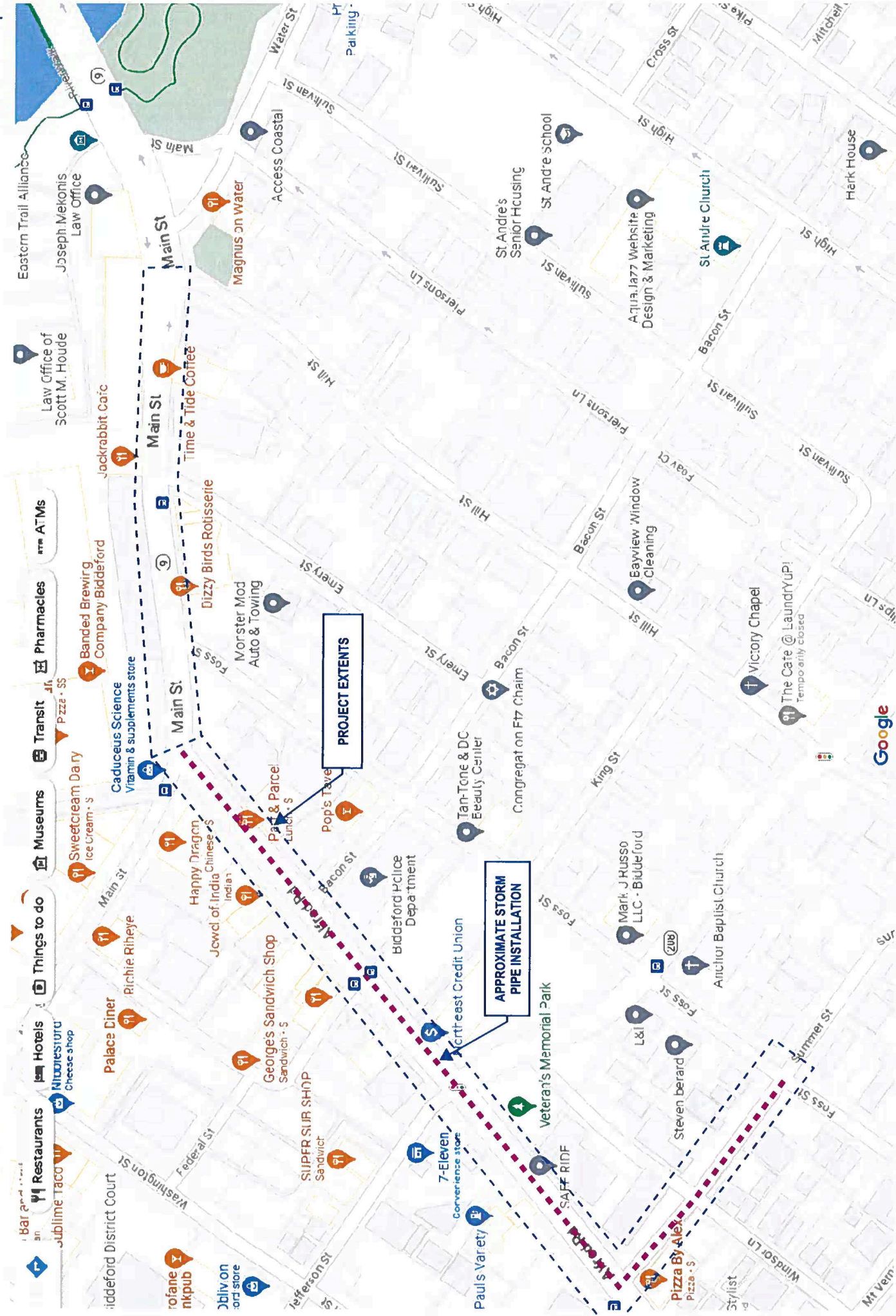
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Authorized Representative Name: THOMAS MULLIGAN Title: CITY ENGINEER  
Signature: Thomas Mulligan Date: 5/5/22

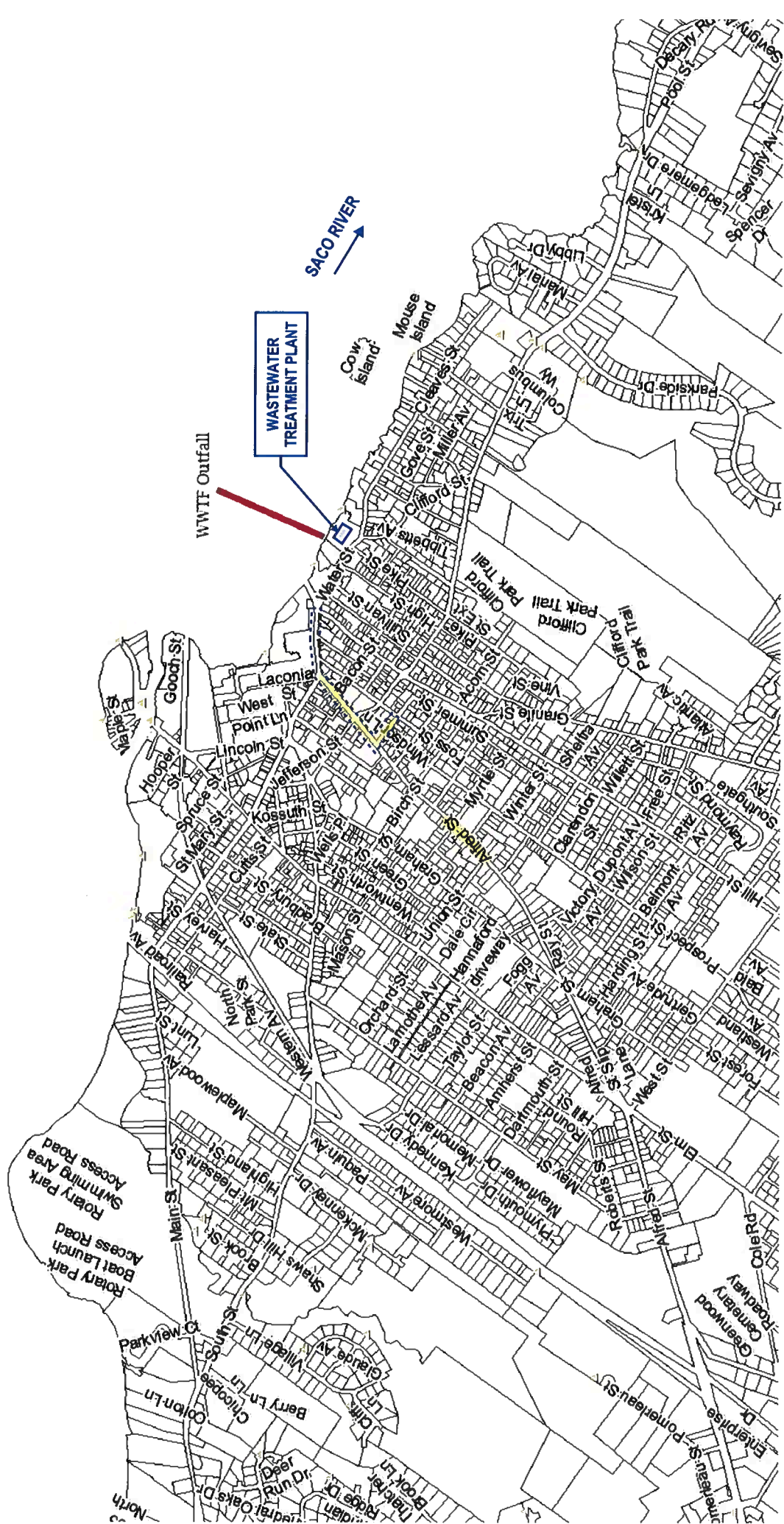
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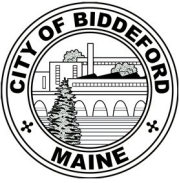
# ALFRED STREET CSO SEPARATION - PROJECT LOCATION MAP CITY OF BIDDEFORD





**ALFRED STREET CSO SEPARATION - WWTP LOCATION & OUTFALL**  
**CITY OF BIDDEFORD**





## City Council

---

Meeting Date: November 21, 2023

Meeting Time: 6:00 p.m.

Agenda Item No: 10.g

Item Description: 2023.141) Approval/Biddeford Climate Action Plan

Submitted by: Steve Reiter, Chair Biddeford Climate Task Force

Supporting Information/Documentation:

Draft Climate Action Plan

Key Terms:

N/A

Executive Summary:

The draft Climate Action Plan was presented to City Council at the October 10, 2023 Council Workshop, attended by the Biddeford Climate Task Force and Southern Maine Planning and Development Commission. A detailed view of the plan was presented at that time. Approval of the plan is requested now.

Detailed Review:

This draft document is the culmination of effort over nearly three years by the Biddeford Climate Task Force, SMPDC, ICLEI\*, local partner organizations, and Biddeford residents. It was created as part of our participation in a regional cohort that included SMPDC, Kennebunk, Kennebunkport, and Kittery. Although developed through this cohort, our CAP is unique to Biddeford and is tailored to the unique geographic characteristics and demographics of Biddeford.

This Plan contains 48 actions within five categories:

- Buildings and Energy;
- Transportation and Infrastructure;
- Land Use and Natural Environment;
- Health, Safety, and Wellbeing, and
- Leadership and Support.

These actions were evaluated by the task force this past summer using six criteria:

- Effectiveness,
- Efficiency,

\*ICLEI is a global organization committed to sustainable urban development.

- Equity,
- Community Needs,
- Co-Benefits, and
- Feasibility.

The actions then went through a public engagement process that included an online survey, posting on our.biddefordmaine.org, release through Biddeford Beat, release through the task force newsletter, five focus groups, and an open house held at McArthur library. Only with this thorough public process were these actions drafted into the document under discussion here.

The initial draft action plan was presented to the task force in September. It went through additional public engagement (posting online, release through Biddeford Beat and the task force newsletter) to garner public feedback and was thoroughly edited by the task force for completeness and conciseness into the version seen here.

In addition to the list of climate actions, this document includes sections about climate change in Biddeford and our vulnerabilities, our extensive public engagement process, next steps we can take, and an appendix with details about Biddeford's Vulnerability Assessment and our Greenhouse Gas Emission Inventory. It is designed to help Biddeford mitigate and adapt to climate change over the next three to five years.

We are especially indebted to SMPDC for its leadership in this endeavor, and to Zoe Miller Strategies, who guided our public engagement process.

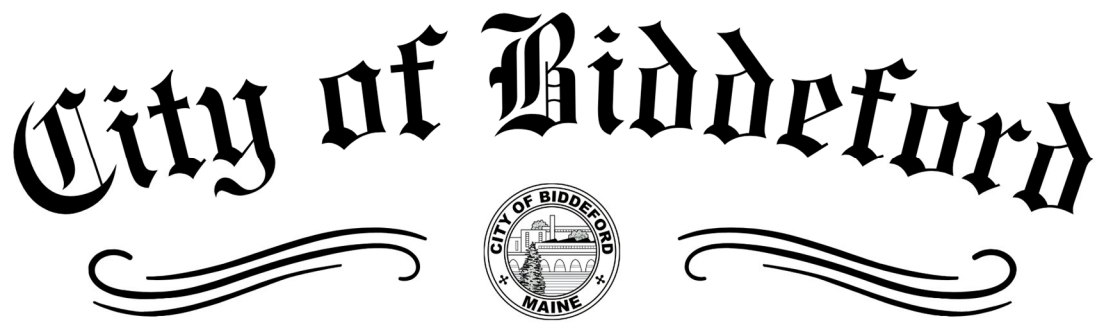
With the direction and guidance of City Council and Planning Board, we can make this an action plan to help Biddeford navigate changes that may occur in the coming years.

Funding Source:

N/A

Staff Recommendation:

Staff supports the adoption of the Biddeford Climate Action Plan.



2023.141

IN BOARD OF CITY COUNCIL... November 21, 2023

**WHEREAS** Biddeford City Council declared a Climate Emergency on Oct 6, 2020, and;

**WHEREAS** Mayor Alan Casavant formed the Biddeford Climate Task Force with a mandate to develop a Climate Action Plan, and;

**WHEREAS** the Biddeford Climate Task Force, with Regional, State, and National partners developed such a plan, fulfilling this mandate and;

**WHEREAS** a draft of this plan was presented to the Biddeford City Council and Biddeford Planning Board in a joint Workshop on October 10, 2023 for discussion;

**NOW, THEREFORE, BE IT ORDERED** that Biddeford City Council does hereby approve and adopt the Biddeford Climate Action Plan and its 48 Actions and Strategies for implementation.

Attest by:\_\_\_\_\_





# BIDDEFORD: CLIMATE ACTION PLAN

**OCTOBER 2023**





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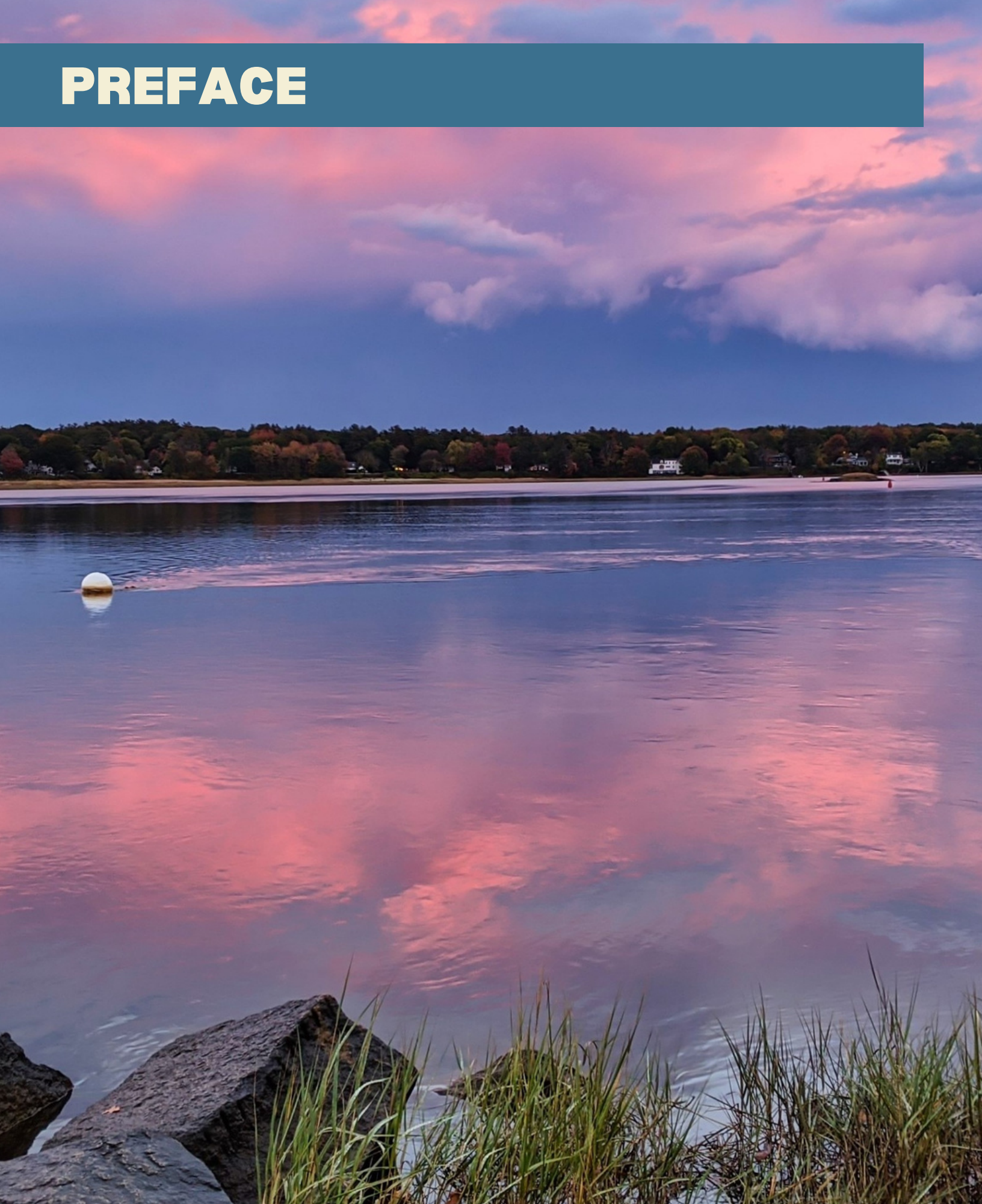
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# PREFACE





# ACKNOWLEDGMENTS

## Biddeford City Council

Alan Casavant, Mayor  
Bill Emhiser, Ward 1  
Scott Whiting, Ward 2  
Martin Grohman, Ward 3  
Bobby Mills, Ward 4  
Julian Schlaver, Ward 5  
Norman Belanger, Ward 6  
Laim LaFountain, Ward 7  
Marc Lessard, Councilor-At-Large  
Doris Ortiz, Councilor-At-Large

## Municipal Staff

Jim Bennett, City Manager  
Brian Phinney, Chief Operating Officer  
Greg Mitchell, Former Planning and Development Director  
Roby Fecteau, Code Enforcement Director  
Greg Copeland, GIS Manager  
Danica Lamontagne, Assistant to the City Manager

## Partner Organizations

Heart of Biddeford  
Engine  
McArthur Library  
Wells Reserve at Laudholm  
Bike Biddeford Saco  
Biddeford Adult Education  
Learning Works  
Biddeford Community Gardens  
Governors Office of Policy, Innovation, and the Future  
Biddeford Housing Authority

## Biddeford Climate Task Force

Steve Reiter, Chair  
Jake Aman  
Tim Boston  
Dr. Meaghan Daly  
Ally Demeule  
Bill Emhiser  
Brad Favreau  
Kiara Frischkorn  
Junelle Soucy  
Beverly Thorpe  
Max Zakian

## Consultants

Southern Maine Planning and Development Commission  
Zoe Miller Strategies, Portland, Maine  
Morris Communications, Kennebunkport, Maine  
ICLEI – Local Governments for Sustainability, Denver, Colorado

## Cohort Communities

Town of Kennebunkport  
Town of Kennebunk  
Town of Kittery

Special thanks go to **Southern Maine Planning and Development Commission**. Without the leadership of SMPDC this effort would not have been possible.



This work was supported by a Community Action Grant from the Maine Community Resilience Partnership. The work by SMPDC was also partially supported by award C2M NA21NOS4190082 to the Maine Coastal Program from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the National Oceanic and Atmospheric Administration or the Department of Commerce.

# LETTER FROM THE MAYOR



## City of Biddeford, Maine

205 Main St • P.O. Box 586 • Biddeford, Maine 04005

(207) 286-9385

[acasavant@biddefordmaine.org](mailto:acasavant@biddefordmaine.org)



**Alan M. Casavant**

The City of Biddeford is pleased to release our first Climate Action Plan. This plan will help guide Biddeford in our efforts to lower our carbon emissions in the coming years and to adapt to climate-related events as they occur. This plan gives us a broad roadmap to guide us over the next few years as we pursue our climate-related targets.

In 2022, the Biddeford City Council adopted aggressive goals for carbon emissions reductions for Biddeford: a reduction of 62.6% by 2030 and net zero emissions by 2050. To achieve these goals, we need a strong plan that will help us reduce our reliance on fossil fuels and strengthen our community's assets against the threats of climate change, without compromising Biddeford's quality of life.

Our plan presents 48 strategies spread over five categories: Buildings and Energy; Transportation and Infrastructure; Land Use and Natural Environment; Health, Safety, and Wellbeing; and Leadership and Support. These strategies will help us reduce energy use, protect the vulnerable areas of our city, manage risk, and educate Biddeford residents about the many ways to participate in reaching our goals. It will also help Biddeford do its part to help manage this global crisis.

This plan is the result of listening to Biddeford residents. It is the culmination of a three- years' effort by the Biddeford Climate Task Force, in collaboration with regional, state, and national partners. We are especially grateful for the leadership of the Southern Maine Planning and Development Commission (SMPDC), who directed and managed our planning efforts. Our first priority in the process has been to ensure that the plan reflects the voices of everyone who lives, works, and plays in Biddeford. We want to be sure that everyone will benefit equally from the progress we make. Through all of the work done to prepare this plan, we made public engagement the center of the process.

But now the real work begins. Now we have to make every effort to implement these strategies and adopt the policies outlined here that. Together, we can make Biddeford become a stronger, more resilient community.

We all want to live a healthy, prosperous life. With Biddeford's Climate Action Plan in place, we can live more sustainably, as well.

Sincerely,

A blue ink signature of Alan M. Casavant, written in a cursive style.

**Alan Casavant**  
**Mayor**



# EXECUTIVE SUMMARY

## The Need for Action

**We live in a rapidly changing world.** Climate change is causing global disruptions: wildfires, flooding, record high temperatures, extreme storms, and rising seas. In Maine, the statewide annual temperature has increased by 3.2°F since 1895, and annual rain and snowfall have increased by more than 6 inches. These changes are bringing extreme heat and storms that impact community health and threaten essential community infrastructure. On top of that, they are threatening native fish, wildlife, and our unique natural areas.

**Biddeford is already experiencing climate change.** In just the last two years, we have seen extreme rain cause the collapse of a portion of the RiverWalk and the collapse of culverts at the Biddeford Connector, both disrupting the community and requiring expensive emergency repairs. Biddeford has been a hotspot for wildfire occurrences in recent years, and droughts have threatened farms and private wells. **The need for action is here.**

**Biddeford is among seven municipalities in Maine that have declared a Climate Emergency** and 1,136 cities worldwide that have joined the Race to Zero initiative to halve global greenhouse gas emissions by 2030. By taking action on climate change at the local level, Biddeford is joining cities in Maine and around the world in working toward a future that is not only livable, but resilient, innovative, and prosperous. **The time for action is now.**



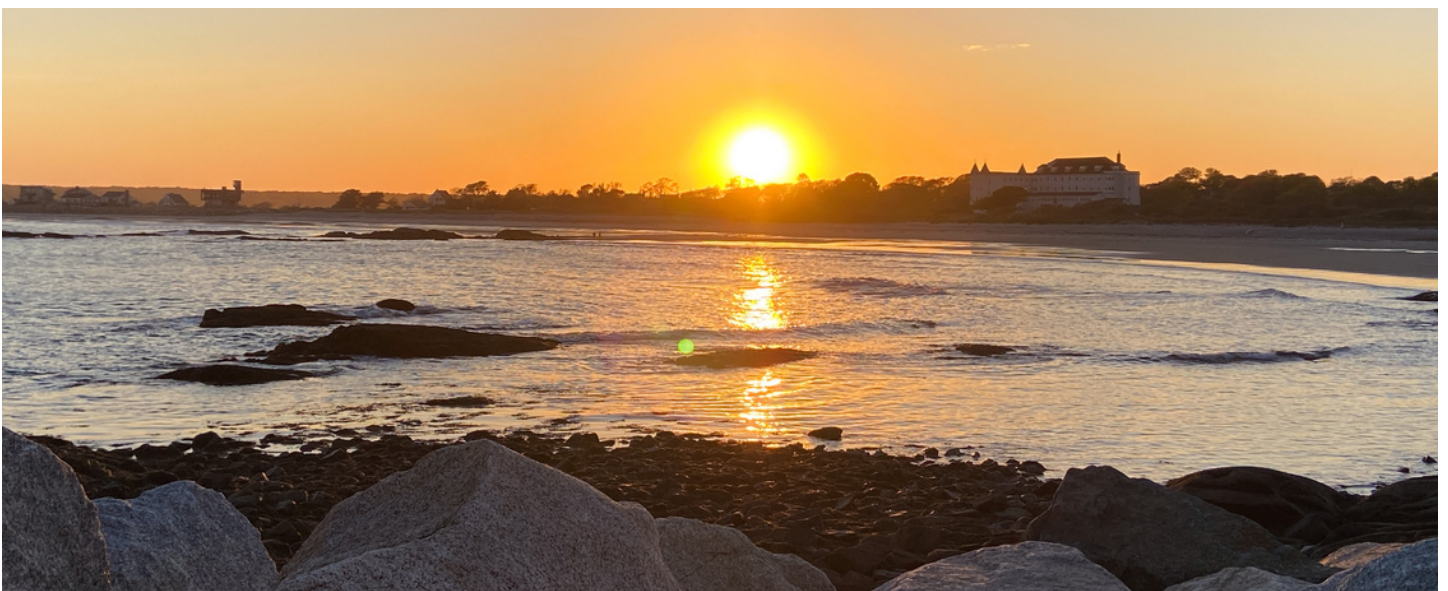
*Beautiful Destruction. PhotoVoice Contest 2023 Entry*

“

With a changing climate, how we receive our precipitation is now less predictable than in the past. Where we might once have expected snow, our wintry mixes are often more sleet, ice, and slush -- which can cause damage to power lines, trees, and our homes.

– PhotoVoice Contest 2023 Entry

”



## Our Vision

Our vision is a resilient, zero-carbon Biddeford where clean energy powers accessible transportation and buildings and where inclusive communities can thrive. We believe that being good stewards of the natural world, and being responsible for the quality of the environment, will help ensure opportunities for everyone, now and in the years to come.

**Biddeford's Climate Action Plan (CAP) will serve as a roadmap** for our climate ready future, including:

- 1 Where we are now:** our city's climate change vulnerabilities (how we're impacted) and current greenhouse gas emissions (how we're contributing).
- 2 Where we are headed:** goals, targets, and actions to reduce our greenhouse gas emissions and adapt to the impacts of climate change.

**The establishment of a new position of Sustainability Coordinator is a fundamental first step toward achieving the goals and targets outlined in this plan.**

## Our Goals, Actions and Targets

Our plan outlines the **48 comprehensive actions** across five categories that we will take to reduce our greenhouse gas emissions and adapt to the impacts of climate change. Seeking out input from our community was instrumental in learning what actions and goals our community values most, shaping the actions that appear in this plan. By taking these actions we will achieve the targets we set in the **Biddeford Race to Zero Resolution**:

## Our Targets

62.6% absolute emissions reductions by 2030

Net-zero emissions by 2050



*BCTF members and friends.*



## Our Goals and Priority Actions



### Buildings and Energy

- Foster energy efficiency programs that reduce vulnerability to volatile fossil fuel prices.
- Reduce emissions by electrifying buildings and energy systems.
- Bolster the resilience of neighborhoods and critical facilities to natural disasters.

**Renewable Energy (B1)** - Encourage & incentivize small scale renewable energy, like rooftop solar.

**Energy Efficiency (B3)** - Increase efficiency of large buildings & rental properties.



### Transportation and Infrastructure

- Enhance active mobility (walking and biking) and public transit as alternatives to single-occupancy vehicle use to improve health, safety, and accessibility.
- Reduce emissions by electrifying public and private vehicles.

**Public Transit (T1)** - Expand access to & use of public transit services.

**Increase Walkability (T2)** - Create a safe, comfortable, & convenient network of pedestrian walkways.

**Increase Bikeability (T3)** - Create a safe, comfortable, & convenient network of bikeways & infrastructure.

**Transit-Oriented Development (T4)** - Concentrate housing, business, & leisure activities within easy walking distance to public transit.

**Encourage Transition to Electric Vehicles (T10)** - Through efforts such as streamlined permitting, installation of public EV chargers, EV charging station requirements, & the municipal fleet.



#### More Information

Priority actions are included in this summary. To learn more about all the CAP actions, see the "Climate Actions" Section of this plan.



## Our Goals and Priority Actions



### Land Use and Natural Resources

- Implement land use policies that foster sustainable food production and reduce the impact of development on the natural world.
- Commit city ordinances and plans to limiting our carbon footprint and to protecting the natural environment.

**Sustainable Landscaping (LN1)** - Promote & practice climate resilient landscaping approaches on municipal landscapes.

**Sustainable Food Systems (LN5)** - Promote & expand local food systems.

**Mixed-Use Zoning (LN6)** - Allow a blend of residential & commercial uses to reduce sprawl.



### Health, Safety, and Well Being

- Ensure the health and safety of everyone in the Biddeford community to climate change hazards, especially those who are most vulnerable.
- Ensure community resilience to climate change through the expansion of public resources and affordable housing.

**Affordable Housing (H5)** - Create resilient, energy-efficient & low-carbon affordable housing.

**Ensure Safe Drinking Water Supply (H6)** - Assess & manage drinking water, septic systems & wells.

**Shade Structure Ordinance (H7)** - Adopt an ordinance requiring shade structures on city-owned properties.

**Tree Ordinance (H8)** - Adopt an ordinance to increase tree canopy on city-owned & private property.



### Leadership and Support

- Ensure Biddeford City government has the funding, dedicated staff, and skills to address climate change effectively, efficiently, and equitably.
- Engage community members and regional partners to broaden the impact of resiliency actions.

**Create Climate Commission (LS1)** - Create a commission to assist with implementing the CAP.

**School Curricula (LS2)** - Support local schools to include climate change and sustainability in school curricula.

**Create a position of Sustainability Coordinator (LS4)** - Create a municipal Office of Sustainability and a position of Sustainability Coordinator, whose mandate will be to implement the CAP.



# INTRODUCTION AND BACKGROUND





# WHAT IS A CLIMATE ACTION PLAN?

A Climate Action Plan (CAP) is a strategic plan that lays out policies and programs for reducing a community's greenhouse gas (GHG) emissions and adapting to the impacts of climate change. CAPs include an *inventory* of the municipality's current GHG emissions and existing vulnerabilities, *goals* for emissions reductions and climate adaptation, and *actions* to achieve those goals.

**This CAP will serve as a roadmap to ensure Biddeford's climate ready future.**



*Birder on the Rocks, Photovoice Contest 2023 Entry.*



**Emissions reductions** – Actions that help reduce the total amount of GHGs in the earth's atmosphere. These actions put the brakes on the speed at which climate change is happening.



**Climate adaptation** – Actions taken to strengthen a community's ability to adjust to climate change and thrive in spite of its impacts. Adaptation softens the blow of climate change.

“

The failure to act against the effects of climate change carries a great risk for Maine, as doing nothing will cause costly damage to Maine's buildings & infrastructure, vulnerable ecosystems, iconic species, & public health.

– *Maine Won't Wait, 2020*

”

# OUR CLIMATE ACTION PLANNING TIMELINE

In October 2020, the City Council passed a Climate Emergency Resolution for the City of Biddeford. The resolution sparked a multi-year effort to create a Climate Action Plan (CAP). The Mayor established our group, the **Biddeford Climate Task Force (BCTF)**, to create an action plan that focuses on adaptation, emissions reduction and sustainability strategies.

Our climate action planning efforts were perfectly timed to coincide with efforts to plan for climate change by the State of Maine and by our neighboring communities. We decided to work with the Towns of Kennebunk, Kennebunkport, and Kittery as part of the Southern Maine Planning and Development Commission (SMPDC) Southern Maine CAP Cohort.

All four community task forces developed CAPs concurrently. While we each set our own priorities and actions, we learned from one another, sharing ideas for actions to include and ways to engage with our communities. We also discussed and agreed upon regional actions to include in our plans and work on together in the future.

## State Actions

### Pre-Plan Actions

### CAP Planning Actions

Governor Janet Mills signs LD 1679 into law, creating the **Maine Climate Council**

June 2019

City Council adopts resolution declaring a **Climate Emergency**

October 2020



December 2020

Biddeford Mayor **establishes ad hoc Climate Task Force** to develop a Climate Action Plan

December 2020

Maine releases **4-year CAP** to confront climate change and its risks to the state

Biddeford joins the **State's Community Resilience Partnership**

March 2022

BCTF conducts **Greenhouse Gas emissions inventory**

February 2022

State launches the **Community Resilience Partnership** to support local climate action

Summer 2021

January 2021

January 2021

Mayor approves **Biddeford Climate Task Force** and meetings begin

September 2022

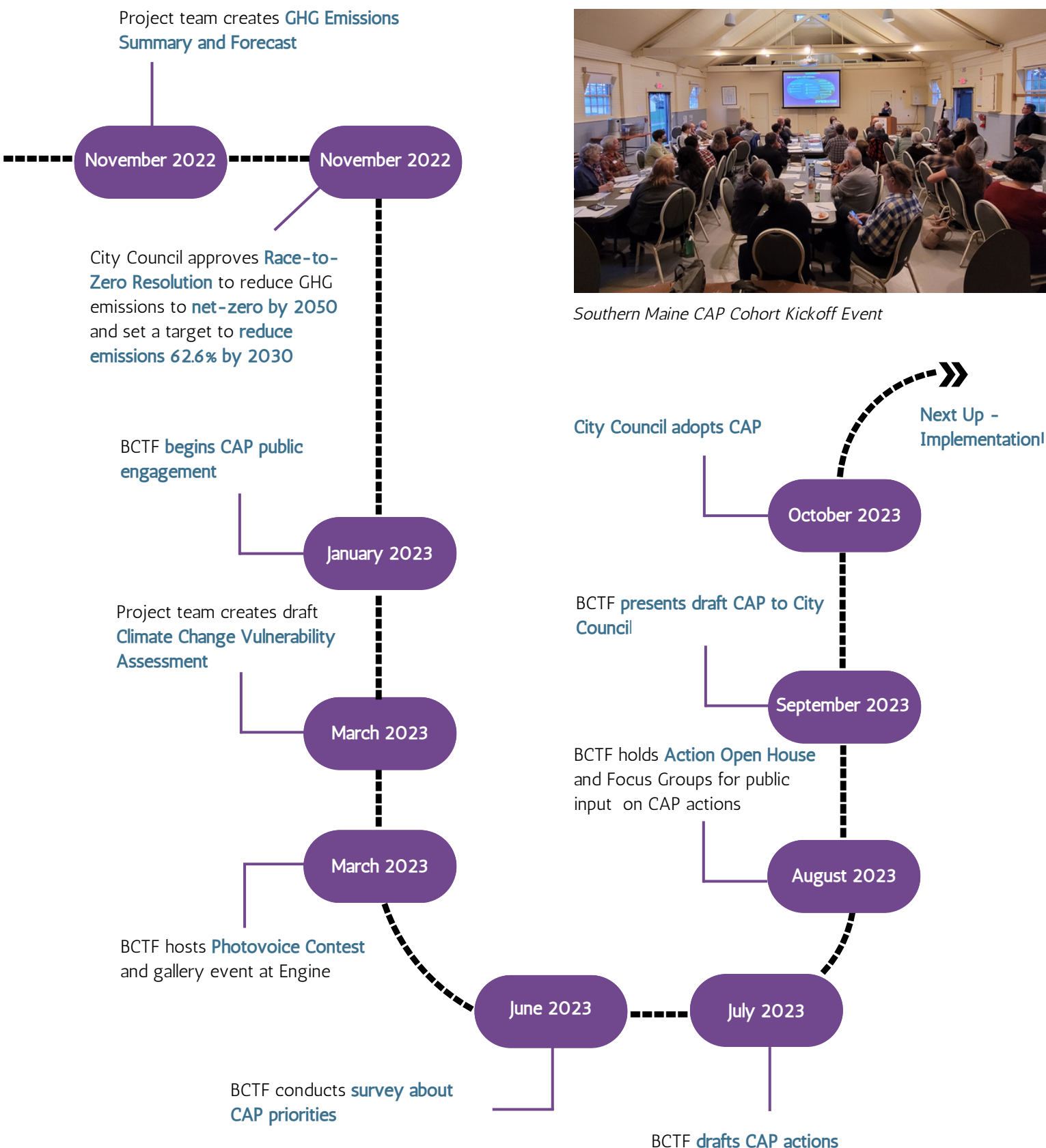
Project team hosts **Southern Maine CAP Cohort Kickoff event**

BCTF hosts **gallery event at Engine** with climate artist Jill Peltó



*Biddeford Climate Task Force members.*

# Our Climate Action Planning Timeline





# BIDDEFORD'S VISIONS, GOALS, & TARGETS

## Our Vision

In the City of Biddeford, the future beckons us. We recognize that we are but one small part of our Earth and that living sustainably in the natural world reaps many benefits. We respect that the environment requires stewardship, not dominance, and so we strive to ensure that humanity coexists harmoniously with nature.

- Beyond our modern urbanized areas, there are wide verdant expanses accessible for all to enjoy; **the air is clean, the water is pure, and healthy food is abundant for everyone.**
- We rely on **renewable energy that does not add to our carbon footprint; green transportation is available to all** members of the community through many mass transit options using carbon neutral technology; and we continue to **develop affordable housing that uses renewable energy resources for heating, cooling and power.**
- Our community is **resilient, and with fairness and equity**, we ensure that **there is a place for everyone in Biddeford's future.**
- We create **thriving inclusive neighborhoods.**
- At its foundation, our community adapts to changes in our climate, providing **new opportunities for everyone, now and for future generations.** Biddeford is a center of **green development and job creation.**





## Our Goals

### Buildings and Energy

- Foster energy efficiency programs that reduce vulnerability to volatile fossil fuel prices.
- Reduce emissions by electrifying buildings and energy systems.
- Bolster the resilience of neighborhoods and critical facilities to natural disasters.

### Transportation and Infrastructure

- Enhance active mobility (walking and biking) and public transit as alternatives to single-occupancy vehicle use to improve health, safety, and accessibility.
- Reduce emissions by electrifying public and private vehicles.

### Land Use and Natural Resources

- Implement land use policies that foster sustainable food production and reduce the impact of development on the natural world.
- Commit city ordinances and plans to limiting our carbon footprint and to protecting the natural environment.

### Health, Safety, and Well-Being

- Ensure the health and safety of everyone in the Biddeford community to climate change hazards, especially those who are most vulnerable.
- Ensure community resilience to climate change through the expansion of public resources and affordable housing.

### Leadership and Support

- Ensure Biddeford City government has the funding, dedicated staff, and skills to address climate change effectively, efficiently, and equitably.
- Engage community members and regional partners to broaden the impact of resiliency actions.

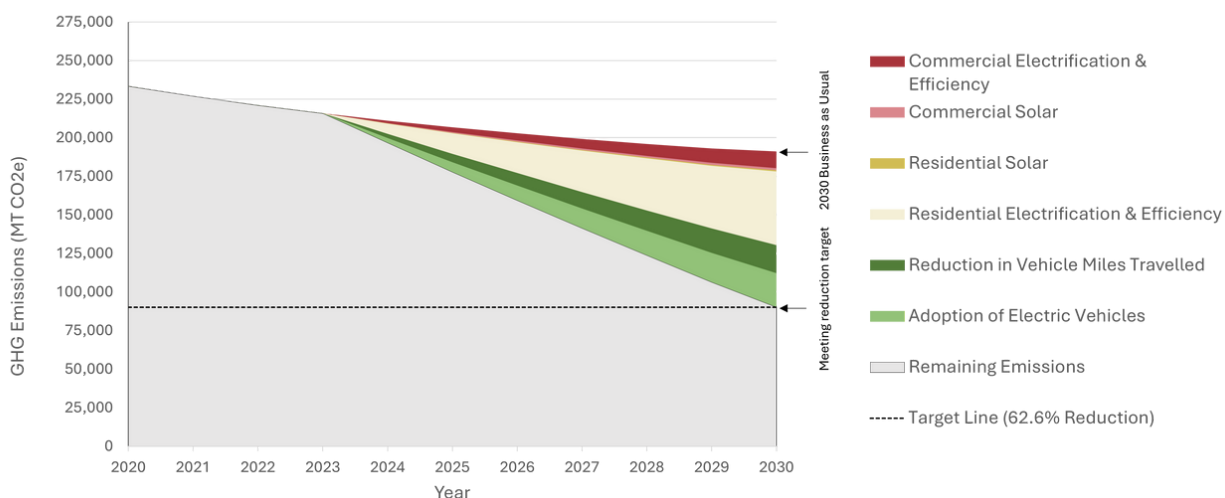
## Our Targets

Biddeford is a member of [Race to Zero](#), a global campaign to avoid the worst impacts of climate change by limiting global warming to no more than 1.5°C. Biddeford's [Race to Zero](#) targets:

62.6% absolute emissions reductions by 2030

Net-zero emissions by 2050

## Biddeford Emissions with Reductions for Climate Action



# COMMUNITY ENGAGEMENT

Community engagement was critical to the development of this CAP. We employed various engagement tools and tactics to educate the community and seek out public input, informing the actions in this plan that will direct Biddeford's climate efforts for years to come.

## Winter 2022

- Jill Peltó Gallery event at Engine

## Summer 2022

- Music in the Park BCTF Table
- Pollinator Festival BCTF Table
- Earth Day Bike Ride
- Fringe Fest BCTF Table
- River Jam BCTF Table



## Spring 2023

- Downtown Development Commission Presentation
- Chamber of Commerce Presentation
- Biddeford Pool Community Assn. Community Conversation
- Earth Day Event BCTF Table
- Pollinator Festival BCTF Table
- **PhotoVoice Contest & Exhibition:** BCTF encouraged community members to submit photos answering the question, "What does climate change look like to you?" The contest culminated in a display of the photos at the Engine art gallery on April 21, with winners selected in multiple categories.
- Climate Action Public Survey



*PhotoVoice Contest Exhibition*

## Summer 2023

CAP development's public engagement chapter closes, but the implementation dialogue continues!



*Climate Action Open House Event*

- Heart of Biddeford Community Conversation
- BLAST Program K-4th graders Community Conversation
- Art Walks BCTF Table
- Adult Ed Focus Group
- LearningWorks Focus Group
- General Public Focus Group
- **Climate Action Open House:** BCTF hosted an open house at McArthur Public Library giving community members a chance to provide feedback on the proposed climate actions. This input shaped how the actions appear in the plan.
- Community Gardens Focus Group
- Biddeford City Council Workshop
- River Jam BCTF Table
- BLAST Focus Group
- Biddeford Community Gardens Focus Group



*Biddeford Adult Ed Focus Group*

# WHAT WE HEARD

## Climate Concerns

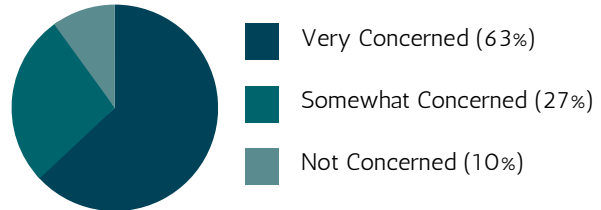
We listened to the climate concerns shared by our community members.

- 1 **Changes in natural environment including loss of wildlife/wildlife habitat and increase in invasive species**
- 2 **Risks to roads, water & sewage treatment from storms and sea level rise**
- 3 **Coastal, river, and flash flooding**



Worried about Nature, PhotoVoice Contest 2023 Entry.

## Are you concerned that climate change will affect Biddeford over the coming decades?



Data source: Biddeford Climate Action Public Survey (387 responses)



Sea Level Rise and Erosion, PhotoVoice Contest 2023 Entry.

## Climate Action Feedback

We heard your ideas for actions Biddeford can take to tackle climate change.



Preserve open space.



Many more EV charging stations.



Drought has been getting worse every year. I worry that our community is not ready for the threat of wildfire we face in a hotter, drier world.



Make Biddeford bikeable.



Retrofit our historic buildings to make them more energy efficient.



Accessible and affordable public transit.



More energy efficient building construction and housing.



We need to start making our shoreline more resilient ASAP.



Concerned about downtown heat, too many paved surfaces. We need more trees.



All neighboring towns/cities need to work together.



Our interdependent responsibility for Mother Earth is crucial. Without it, we forget how we created this catastrophe in the first place.



Affordable housing, active transportation and climate are all connected.

# PLANNING FOR EQUITABLE CLIMATE ACTION

Social equity means all community members can participate, prosper, and reach their full potential. Climate change and social equity are closely intertwined. **Climate change affects some members and groups of our community differently**, some more severely than others. Equally, climate action has many benefits, and in some cases, negative impacts, that can be distributed unevenly and unfairly to different groups.

**Biddeford's climate actions must address social equity every step of the way.** We've embedded equity in the design and implementation of our CAP to ensure that actions respond to social inequities and the needs of those who are most vulnerable.

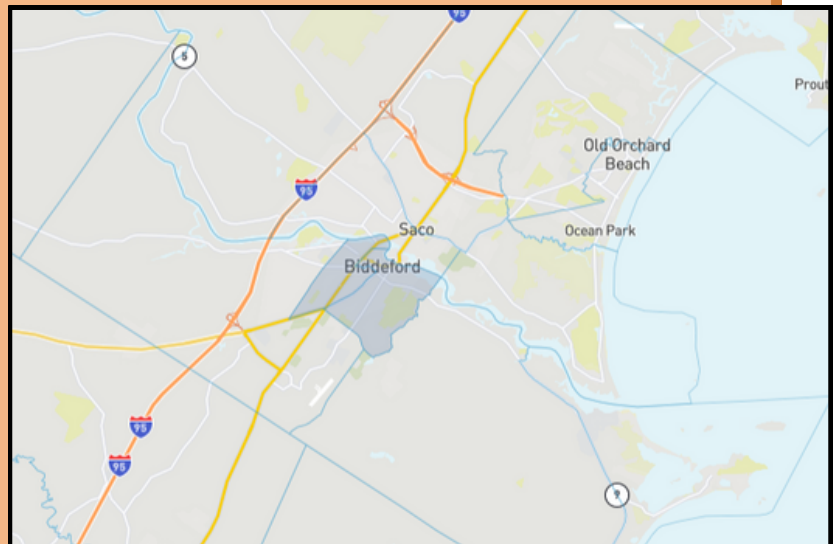
- Public engagement efforts such as the survey, focus groups, and Action Open House were designed to reach vulnerable community groups including immigrants and asylum seekers, youth, and unhoused community members.
- Equity was one of three priority criteria for the action evaluation process. In considering each potential action, we asked, *"Are the costs, benefits of this action distributed fairly? Does this action minimize harm to the most vulnerable groups?"*

**As we look towards implementing our CAP, we will need to be flexible, adaptive, and reflexive to ensure the biggest benefit and least harm to our vulnerable community members.**

## Biddeford's Equity Considerations

Over Biddeford's long history, the city has seen many changes. Once an agricultural center for the indigenous tribes that thrived along the Saco River, Biddeford was incorporated as a town in 1653. From mill town, to trash town, to Maine's coolest city, Biddeford has grown into a thriving small city of more than 22,000 residents. Biddeford is **one of Maine's most diverse and young communities**, with a relatively high number of Black, Indigenous, and People of Color (BIPOC) residents and an influx of new residents from out-of-state.

But the city's growth is not without challenges. **13% of residents live below federal poverty levels and 41% earn less than \$50,000 annually.** Biddeford, along with the rest of Maine, is **experiencing a housing affordability crisis.** And while Downtown Biddeford is seeing rapid commercial and residential development, that growth is pushing out long-term Downtown residents, and it has led to an **increase in unhoused community members.** In the future, Biddeford could become a popular destination for people leaving regions of the country that have become more endangered by climate change, worsening the city's housing challenges.



*Part of Biddeford's downtown has been designated disadvantaged due to low household income and health risks. The residents here are therefore more sensitive to climate hazards than other parts of the city.*



# CLIMATE CHANGE IN BIDDEFORD





# HOW CLIMATE CHANGE IS AFFECTING BIDDEFORD



*Biddeford Pool in 1930 (left) and in 2015 (right).*



## How did we determine these impacts?

We conducted a climate change vulnerability assessment to identify who, what, and where will be impacted by local climate hazards and what those impacts could be. The assessment used a combination of national, state, and local data sets, as well as input from the Task Force and community members, to assess local impacts of climate hazards (flooding from sea level rise and storm surge, precipitation and extreme storms, extreme temperatures, drought, and changing marine conditions) and Biddeford's vulnerability to those hazards. Find the full assessment in Appendix A.

## Climate Impacts

**We face major threats to the future of our community and the places we love. Increasing temperatures, changing precipitation, sea level rise, and shifting ecosystems are driving changes here in Biddeford.**



### Increasing Temperatures

#### Impacts of increasing air temperatures:

- Maine's statewide annual temperature has increased by 3.2 °F ( $\approx 1.8$  °C) since 1895.
- There will be 4 times more extreme heat days (heat index  $>95^{\circ}\text{F}$ ) in Southern Maine by 2050.



*A Terrifying February Day in Maine. 65 degrees and no snow in the middle of a Maine winter. PhotoVoice Contest 2023 Entry.*



# How Climate Change is Affecting Biddeford

## Changing Precipitation

### Impacts of changing precipitation:

- Maine's annual precipitation (rain and snowfall) has increased by more than 6 inches since 1895, and extreme precipitation events are becoming more frequent.



In 2021, an intense downpour washed out a large portion of an embankment along the Saco River in Biddeford, with repair costs estimated over \$2 Million. Credit: A. Sherwin

## Sea Level Rise

### Impacts of sea level rise:

- By 2050, Maine will likely experience between 1.1 - 1.8 feet of sea level rise, and between 3.0 - 4.6 feet of sea level rise by 2100, with higher amounts possible.
- Increased likelihood and severity of coastal flooding, especially during storms.



Sea Level Rise Will Have Dramatic Impact on Biddeford. PhotoVoice Contest 2023 Entry.

## Changing Ecosystems

### Impacts of changing ecosystems:

- System-wide changes to marine and land ecosystems are decreasing biodiversity and giving a leg up to invasive species
- Of the State's 378 most at-risk fish and wildlife species, nearly one-third are predicted to be negatively affected by climate-change related threats, including habitat shifts and alterations, droughts, temperature extremes, and storms and flooding



Blue Invader. Blue Crabs are a recent invasive species in Maine. PhotoVoice Contest 2023 Entry.

## Drought and Wildfires

### Impacts of changing drought and wildfires:

- Warmer air temperatures and changing precipitation patterns are increasing the severity of droughts.
- York County has experienced three severe droughts in the last five years, which lasted between two to eight months.
- Wildfire frequency, particularly in the spring, is increasing due to drought, decreased snowpack, and windier conditions.



Over the last several decades, Biddeford has been a hotspot for wildfire occurrences compared to the rest of the county. In April 2020, high winds and dry conditions led to more than a dozen wildfires in Maine, including one in Biddeford that burned about 20 acres of forest.

## Climate Vulnerabilities

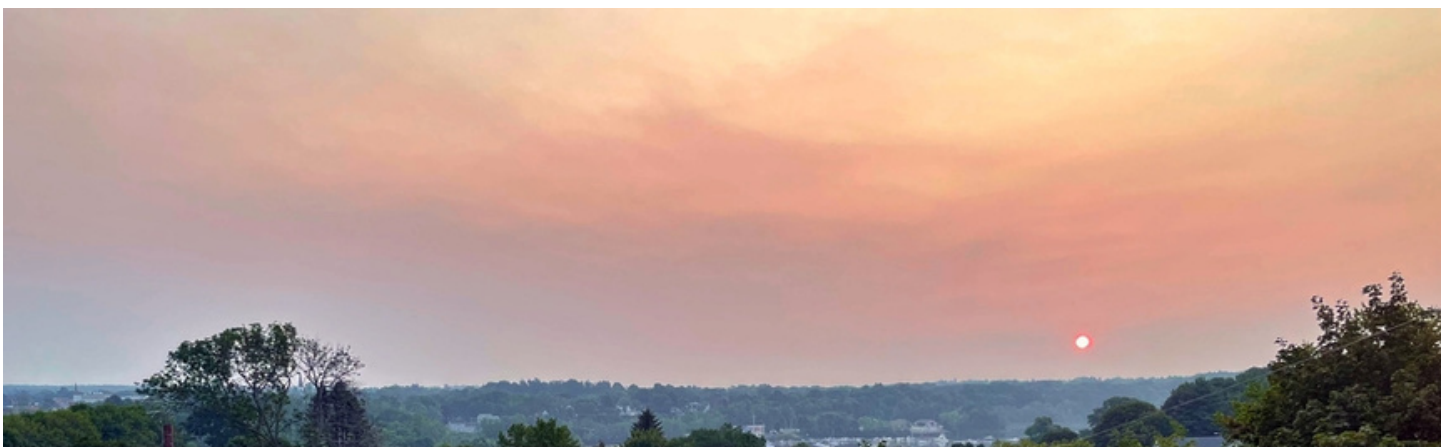
The impacts of climate change will not be felt evenly across the community, with portions of the population that will be more affected by climate hazards having less ability to prepare for, respond to, and recover from these hazards. Climate vulnerability is how strongly people or ecosystems are likely to be negatively affected by climate change.



### Public Health

*Extreme heat and heat waves are putting people at risk, especially those who are elderly, have health issues, or have limited access to home air conditioning. Extreme heat is the leading cause of weather-related deaths across the United States.*

- Warmer, shorter winters are contributing to increased Vector-borne illnesses, such as Lyme disease. The prevalence of tickborne diseases has increased in York County in recent years. Diagnosis rates of Lyme disease have doubled and rare diseases like anaplasmosis and babesiosis have become more common.
- Like the rest of Maine, Biddeford's aging electrical grid is increasingly vulnerable to extreme storms and increasing temperatures. This will result in more frequent and longer duration power outages that can pose serious risks for public health and safety.
- Increasing frequency of wildfires, both locally and across North America will negatively affect public health by creating poor air quality and public safety risks.



*Ashes from Away. Ashes falling in Maine from the 2021 fires in Oregon, thousands of miles away. PhotoVoice Contest 2023 Entry.*

### Elevated Risk

Downtown Biddeford is considered a "heat island", or area with a lot of impervious surfaces, such as buildings and pavement, that make the area hotter than normal, magnifying the impact of extreme heat. With more residents who are renters, have low annual incomes, and who face other social and health barriers, the Downtown community is especially vulnerable to extreme heat.



## Infrastructure

*Sea level rise, coastal storms, and extreme precipitation put coastal infrastructure at very high risk.*

- Neighborhoods and infrastructure located around Biddeford Pool, Fortunes Rocks, Timber Point, and along the Saco River are vulnerable to flood hazards. With climate change these neighborhoods can expect more frequent coastal flooding events and associated damage to property, infrastructure, and the coastline.
- Types of infrastructure that are vulnerable to flooding include roads, bridges, culverts, and stormwater systems.
- Drinking water wells, septic systems, and subsurface infrastructure such as sewer and water mains are vulnerable to failure as coastal water tables rise and groundwater becomes contaminated by saltwater due to sea level rise.
- Extreme precipitation causes stormwater runoff and inland flooding, and Biddeford's proximity to the Saco River and its tributaries increases the risk of flooding.
- Drought and decreases in summertime precipitation are negatively impacting drinking water supply for both private wells and public water systems. Recent droughts resulted in historically low groundwater levels and streamflows in the Saco River, Biddeford's sole public water supply source.



*How Will Our Infrastructure Function in the Future? PhotoVoice Contest 2023 Entry.*

### Elevated Risk

Many of Biddeford's coastal buildings were built before 1970, meaning that they are likely not constructed to modern building codes, making them more vulnerable to flooding. Many coastal residents are older, living alone, and potentially on a fixed income, limiting their ability to prepare for and safely navigate coastal storms events. Biddeford's coastal roads, including access and evacuation routes, are very vulnerable to storm-related flooding and could become impassable during and after storm events.



### Elevated Risk

Downtown Biddeford is more likely to be impacted by flooding and stormwater overflow because of a high degree of impervious surfaces. With the oldest buildings, aging stormwater infrastructure, and a high proportion of residents facing social and health barriers, Downtown Biddeford community members are especially vulnerable to flooding.





## Natural Environment

- Increases in precipitation, stormwater runoff, and saltwater intrusion into groundwater will negatively affect water quality and ecosystem health in Biddeford's watersheds, such as the Thatcher Brook Watershed.
- Sea level rise threatens to erode coastal beaches and tidal marshes. It will also lead to the landward migration of tidal marshes. Areas along Biddeford Pool, Little River, and the Saco River have been identified as being able to support future marsh migration.
- Average, extreme, and wintertime temperatures are stressing local flora and fauna and aiding the spread of invasive species, decreasing biodiversity in Biddeford's natural areas like Clifford Park, Blandings Park Wildlife Sanctuary, and Rotary Park.
- More frequent and severe extreme precipitation events will negatively impact coastal water quality and marine habitats.



*As Our Past Washes Away. Shoreline erosion isn't new to Maine, but as storms grow more intense, water and wind threatens to carry away our coastal lands faster than ever before. PhotoVoice Contest 2023 Entry.*

# How Climate Change is Affecting Biddeford



## Public Services

- More frequent flooding and extreme weather events will lead to higher municipal costs and will stress municipal capacity to respond to and repair after storm events.
- Higher sea levels and flooding may cut off emergency routes and access to neighborhoods during storm events, obstructing emergency services and disrupting local travel.
- Municipal property tax revenue could be affected if coastal properties, which generate a large portion of local tax revenue and provide vital funds that sustain community operations, services, and programs, are exposed to flooding and if development in flood-prone areas continues.



With 1.6 ft of sea level rise, flooding from a coastal storm event will cut off road access to 56 properties in Biddeford, putting the people who live there and emergency access to them at risk.



Properties that will be vulnerable to flooding from a coastal storm event after 1.6 ft of sea level rise have a total assessed value of almost \$4 million, representing more than 11% of city-wide assessed property value and almost 30% of the City's 2023 municipal budget.



## Economy

- More frequent and intense droughts have the potential to reduce local farmers' production, increase their costs, and disrupt the local food system and economy.
- Tourism activity driven by Biddeford's sandy beaches and a healthy coastline could decline as flooding becomes more frequent and the amount of dry beach decreases as sea level rises.
- According to Biddeford's Assessing Department, coastal properties represent almost 29% of the city's tax base.



Soil at Girard Farm. PhotoVoice Contest 2023 Entry.



# BIDDEFORD'S GREENHOUSE GAS EMISSIONS

Greenhouse gas (GHG) emissions are created when Biddeford's residents, visitors, and workers engage in daily activities such as driving, heating homes, and powering our appliances and devices. Measuring GHGs from specific sources helps us understand where and how to take action to achieve our goals.

## Sources of Emissions

### Transportation

Emissions from the burning of fossil fuels from cars, trucks, ships, trains and planes.

### Residential Buildings

Emissions from homes are from burning fossil fuels for heat and electricity.

### Commercial & Industry +

Emissions from businesses from electricity use and fossil fuel burning for heat and manufacturing.

### Waste

Emissions from septic tanks, the Biddeford Wastewater Treatment Plant, and the incineration of trash sent to the EcoMaine waste-to-energy plant.

## Types of Greenhouse Gases

### Carbon Dioxide (CO<sub>2</sub>)

Carbon dioxide is the main byproduct of fossil fuel combustion, such as burning gasoline, oil, coal, or other fuels for energy.

### Methane (CH<sub>4</sub>)

Methane is primarily emitted through agricultural activities, waste management, and natural gas combustion. Pound for pound, the comparative impact of methane is 25 times greater than carbon dioxide over a 100-year period.

### Nitrous Oxide (NO<sub>2</sub>)

Nitrous oxide is primarily emitted through agricultural soil management and fertilizer use. Fertilizer production and domestic wastewater management are also sources.

### Fluorinated Gases

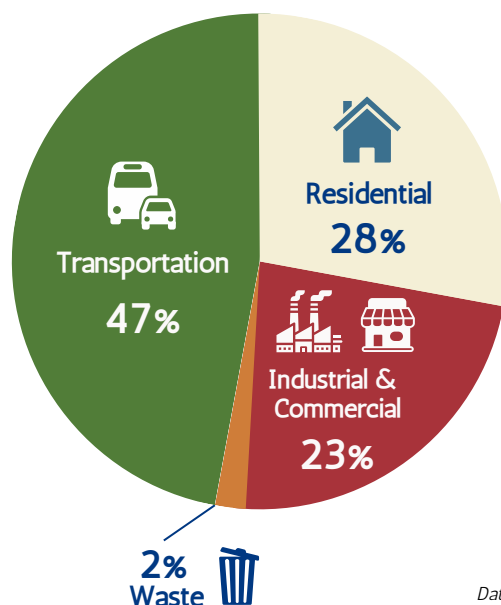
Synthetic gases that are emitted from a variety of household and commercial applications such as refrigerants, aerosol propellants, foam blowing agents, solvents, and fire retardants. Although they are emitted at far lower quantities, they are particularly potent and trap substantially more heat than carbon dioxide.



### Where does this data come from?

This data comes from a 2019 Greenhouse Gas Inventory conducted by the City of Biddeford. See all the data in Appendix X: GHG Emissions Summary and Forecast.

## Biddeford's Carbon Dioxide Emissions from Fossil Fuel Combustion by Source (2019)

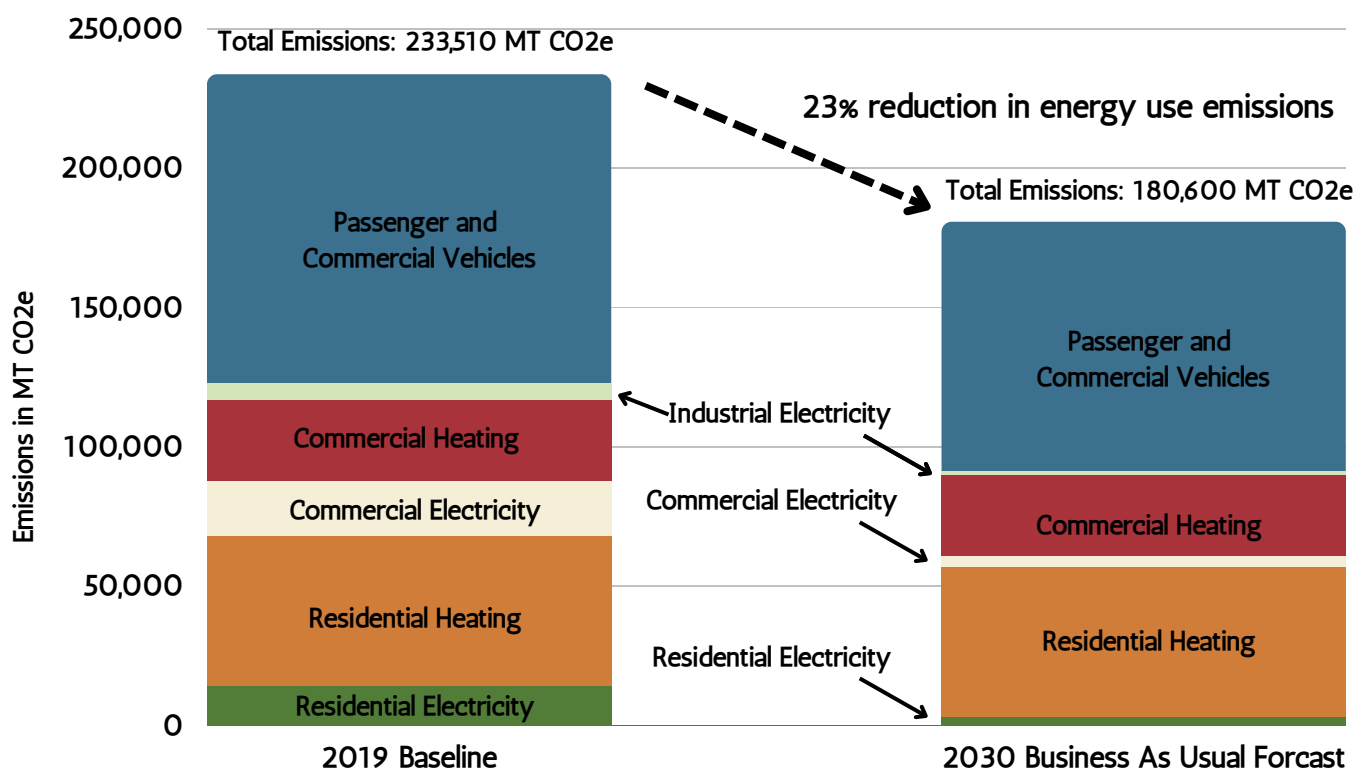


Data source::  
Southern Maine Planning and  
Development Commission, 2022

# GHG INVENTORY KEY TAKEAWAYS

- ① Driving gasoline and diesel cars and trucks contributes the most GHG emissions in Biddeford.
- ② Residential heating is the 2nd largest source of GHG emissions. 80% of residential heating emissions come from burning heating oil in furnaces.
- ③ Municipal GHG emissions (from municipal buildings and vehicles) are only 2% of all the community's emissions.

## 2019 Emissions vs. Business As Usual Emissions



In order to change course on GHG emissions, we should be aware of efforts already underway. Forecasting "Business as Usual" emissions can help to identify the greatest barriers and opportunities for getting to net-zero emissions.

Without taking any additional action, Biddeford's GHG emissions from energy use are expected to fall 23% by 2030 driven by 1) increasing renewable energy sources on the electricity grid and 2) decreasing transportation emissions due to stricter fuel efficiency standards and electric vehicle expansion.

With ambitious but realistic actions to reduce emissions, Biddeford can achieve an even greater reduction in emissions and play our part in the global effort to prevent the worst impacts of climate change. [This plan outlines the additional activities the City has pledged to undertake to reduce emissions even more.](#)



# CLIMATE ACTIONS





# CLIMATE ACTIONS

## Climate Actions Overview

To make a difference on climate change, we're focusing on taking action in five focus areas:



- **Buildings and Energy:** Making buildings and energy systems resilient and reducing their emissions.



- **Transportation and Land use:** Facilitating the transition to low and zero emissions transportation while supporting alternatives to single-occupancy vehicles and strengthening local infrastructure.



- **Natural Environment:** Protecting and enhancing natural resources while directing development to protect vulnerable people and places.



- **Health, Safety, and Well Being:** Ensuring the health and safety of Biddeford's community members and increasing overall community resilience.



- **Leadership and Support:** Building support and cooperation for climate action between municipal staff, community members, and partner organizations.

## Guiding Criteria

To assess and prioritize actions that align with Biddeford's values and priorities, we used a framework that incorporates six guiding criteria.

### Primary Criteria

#### Effective

Does this action reduce GHG emissions, reduce vulnerability, is effective in supporting overarching goals?

#### Efficient

Does this action maximize benefits relative to costs or efficient resources needed to enact it?

#### Equitable

Are the costs, benefits of this action distributed fairly?

Does this action minimize harm to the most vulnerable groups?

### Secondary Criteria

#### Meets Community Needs

Does this action address other identified community needs (e.g. housing, infrastructure, service)?

#### Wider Co-benefits

Does this action provide broader benefits for health, social co-benefits, health and well-being, the environment, or the economy?

#### Feasible

Does this action have the necessary conditions to enable feasibility implementation (e.g. financing, public support, political will)?



### Connection to Climate Change

The electricity, natural gas, and/or oil that we use in our homes, businesses, institutions, and municipal facilities result in over half of greenhouse gas emissions in Biddeford. We must enhance energy efficiency and switch our building systems and appliances over to electricity that is sourced from clean, low carbon energy. At the same time, we need to ensure that our buildings and energy systems are resilient to increasing climate hazards like storms, sea level rise, and extreme precipitation.

#### Our Goals

- Foster energy efficiency programs that reduce vulnerability to volatile fossil fuel prices.
- Reduce emissions by electrifying buildings and energy systems.
- Bolster the resilience of neighborhoods and critical facilities to natural disasters.

#### Where We Stand

- Taking steps to reduce municipal fossil fuel consumption and implement municipal energy efficiency measures.
  - Performed energy audits and efficiency upgrades of municipal facilities in 2007 - 2009
  - Upgraded lighting in municipal facilities in 2007 - 2009
  - Installed a solar wall at the Biddeford public works garage
  - Installing new windows in City Hall as part of renovations
  - Upgrading streetlight equipment to LEDs
- Promoting energy efficiency for residents and businesses
  - The Climate Task Force conducts outreach to residents and businesses
  - The City is developing a community weatherization program for low-income residents
- Enabling the development of and access to renewable energy
  - The City set an electrical permit fee for alternative energy resources of \$1 per kilowatt



*Solar Comes to May Street. PhotoVoice Contest 2023 Entry.*



*Raise or Raze. PhotoVoice Contest 2023 Entry.*



## How We'll Get There

### How to Read the Action Tables

- ★ Priority - Identified through public engagement
- Associated goal/action in Comprehensive Plan
- Potential Regional Action

#### Timeframe

Short = 1-2 years  
 Medium - 3-4 years  
 Long = 5+ years

#### Costs:

Low = \$  
 Medium = \$\$  
 High = \$\$\$

| Action Description                                                                                                                                                                                                                                   | Additional Benefits                                                                                                                                           | Equity Considerations                                                                                         | Timeframe to Implement | Cost |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------|------|
| <b>Building Electrification</b>                                                                                                                                                                                                                      |                                                                                                                                                               |                                                                                                               |                        |      |
| <b>B1. Renewable Energy</b>                                                                                                                                                                                                                          |                                                                                                                                                               |                                                                                                               |                        |      |
| ★ Encourage and incentivize small scale renewable energy installation, such as rooftop solar panels.                                                                                                                                                 | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Local Economy</li> <li>• Education</li> <li>• Job Creation</li> </ul>                        | Connect low-income homeowners to programs with reduced upfront costs; support multi-family solar development. | Medium                 | \$   |
| <b>B2. Building Electrification</b>                                                                                                                                                                                                                  |                                                                                                                                                               |                                                                                                               |                        |      |
| ● Shift existing buildings & new construction to all-electric heating and appliances.                                                                                                                                                                | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Local Economy</li> <li>• Education</li> <li>• Air Quality</li> <li>• Job Creation</li> </ul> | Prioritize and support low-income homeowners, multi-unit properties, homes using fuel oil.                    | Medium                 | \$\$ |
| <b>Building Energy Efficiency</b>                                                                                                                                                                                                                    |                                                                                                                                                               |                                                                                                               |                        |      |
| <b>B3. Energy Efficiency</b>                                                                                                                                                                                                                         |                                                                                                                                                               |                                                                                                               |                        |      |
| ★ Increase efficiency of large buildings and rental properties through local ordinances and standards. Includes standards to increase efficiency over time, programs to track and disclose energy consumption, and efficiency standards for rentals. | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Education</li> <li>• Air Quality</li> <li>• Job Creation</li> </ul>                          | Rental efficiency standards enhance equity by reducing energy costs for non-homeowners.                       | Medium                 | \$\$ |
| <b>B4. Maine 'Stretch Code'</b>                                                                                                                                                                                                                      |                                                                                                                                                               |                                                                                                               |                        |      |
| ● Adopt the most up-to-date building codes (also known as "stretch codes") to help new buildings to be more efficient.                                                                                                                               | <ul style="list-style-type: none"> <li>• Local Economy</li> <li>• Air Quality</li> <li>• Job Creation</li> </ul>                                              | Higher upfront costs, but buildings are more efficient and healthier.                                         | Short                  | \$\$ |
| <b>B5. Building Weatherization</b>                                                                                                                                                                                                                   |                                                                                                                                                               |                                                                                                               |                        |      |
| ● Create a program to help single family homes increase energy efficiency through weatherization efforts.                                                                                                                                            | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Local Economy</li> <li>• Air Quality</li> <li>• Job Creation</li> </ul>                      | Prioritize and support low income weatherization programs.                                                    | Medium                 | \$   |

| Action Description                                                                                                                                                                                                                                                                                                                        | Additional Benefits                                                                                                     | Equity Considerations                                                            | Timeframe to Implement | Cost     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------|----------|
| <b>Building Energy Efficiency (continued)</b>                                                                                                                                                                                                                                                                                             |                                                                                                                         |                                                                                  |                        |          |
| <b>B6. Municipal Energy Efficiency</b>                                                                                                                                                                                                                                                                                                    |                                                                                                                         |                                                                                  |                        |          |
|  <p>Increase municipal energy efficiency through energy audits, renewable energy installation, and energy efficiency measures for all municipal facilities.</p>                                                                                          | <ul style="list-style-type: none"> <li>Cost Savings</li> </ul>                                                          | Target buildings that provide public services to vulnerable community members.   | Medium                 | \$ \$    |
| <b>Building Resilience</b>                                                                                                                                                                                                                                                                                                                |                                                                                                                         |                                                                                  |                        |          |
| <b>B7. Risk Management</b>                                                                                                                                                                                                                                                                                                                |                                                                                                                         |                                                                                  |                        |          |
|  <p>Reduce climate risks to buildings through improved information, education, and action, including. Requiring hazard disclosures for property transactions; Increasing awareness of adaptation options; Encouraging actions to manage flood risks.</p> | <ul style="list-style-type: none"> <li>Education</li> </ul>                                                             | Risk reduction measures can prevent upfront costs for low income residents.      | Short                  | \$       |
| <b>B8. Limit Reconstruction &amp; Encourage Relocation</b>                                                                                                                                                                                                                                                                                |                                                                                                                         |                                                                                  |                        |          |
|  <p>Limit reconstruction and/or encourage relocation of buildings damaged by hazards that are expected to recur or intensify with climate change.</p>                                                                                                  | <ul style="list-style-type: none"> <li>Cost Savings</li> <li>Smart Growth</li> <li>Greenspace and Recreation</li> </ul> | Limit cost burdens and provide extra support to disadvantaged community members. | Long                   | \$       |
| <b>B9. Resilient Design Standards</b>                                                                                                                                                                                                                                                                                                     |                                                                                                                         |                                                                                  |                        |          |
|  <p>Encourage or require new and redeveloped buildings to include sustainable and resilient design measures, especially in flood-prone areas.</p>                                                                                                      | <ul style="list-style-type: none"> <li>Cost Savings</li> <li>Smart Growth</li> <li>Community Development</li> </ul>     | Limit cost burdens and provide extra support to disadvantaged community members. | Short                  | \$       |
| <b>B10. Critical Facility Resilience</b>                                                                                                                                                                                                                                                                                                  |                                                                                                                         |                                                                                  |                        |          |
|  <p>Increase the resilience of critical facilities such as our wastewater treatment facility through risk reduction or relocation.</p>                                                                                                                 | <ul style="list-style-type: none"> <li>Education</li> <li>Community Development</li> </ul>                              |                                                                                  | Long                   | \$ \$ \$ |

| Action Description                                                                                                                                                                                       | Additional Benefits                                                                                            | Equity Considerations                                                                                                                          | Timeframe to Implement | Cost      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------|
| <b>Energy Resilience</b>                                                                                                                                                                                 |                                                                                                                |                                                                                                                                                |                        |           |
| <b>B11. Maintain Power at Critical Facilities</b>                                                                                                                                                        |                                                                                                                |                                                                                                                                                |                        |           |
| Develop and implement a plan for maintaining power at critical facilities during power outages.                                                                                                          | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Education</li> <li>• Job Creation</li> </ul>  | Target facilities that provide public services to vulnerable community members (police, fire, healthcare, etc).                                | Long                   | \$\$\$    |
| <b>B12. Improve Grid Resilience</b>                                                                                                                                                                      |                                                                                                                |                                                                                                                                                |                        |           |
|  Work with power companies and state agencies to advocate for efforts to improve the resilience of the electrical grid. | <ul style="list-style-type: none"> <li>• Local Economy</li> <li>• Education</li> <li>• Job Creation</li> </ul> | Power outages have disproportionate negative effects on vulnerable populations, especially people who are older or who have health conditions. | Long                   | \$ - \$\$ |

## How We'll Measure Success



### Focus Area

|                                   |                                                                                             |
|-----------------------------------|---------------------------------------------------------------------------------------------|
| <b>Building Electrification</b>   | Number of permits issued for rooftop solar                                                  |
|                                   | Percent of buildings using heating oil, natural gas, propane or coal                        |
|                                   | Electrify 15% of existing homes using heating oil or propane every year                     |
| <b>Building Energy Efficiency</b> | Number of buildings participating in energy efficiency programs                             |
|                                   | Perform energy efficiency retrofits to 15% of existing housing stock every year             |
|                                   | Perform energy efficiency retrofits to 15% of existing commercial square footage every year |
|                                   | Total annual municipal energy use                                                           |
|                                   | Most up-to-date energy code adopted                                                         |
| <b>Building Resilience</b>        | Assess resilience needs for municipal facilities by 2027                                    |
|                                   | Number of "substantial improvement" or "substantial damage" floodplain permits issued       |
| <b>Energy Resilience</b>          | Municipal Power Plan created by 2024                                                        |
|                                   | Frequency, duration, location, and causes of power outages                                  |



### Do you want to learn more?

See the full Buildings and Energy Action matrix in the appendix to learn more about an action.



# TRANSPORTATION AND INFRASTRUCTURE

FACILITATING THE TRANSITION TO LOW AND ZERO EMISSIONS TRANSPORTATION WHILE SUPPORTING ALTERNATIVES TO SINGLE-OCCUPANCY VEHICLES AND STRENGTHENING LOCAL INFRASTRUCTURE.

## Connection to Climate Change

Our travel choices have a big impact on climate change, especially when most of us drive alone in gas or diesel vehicles to commute. Transportation emissions make up almost half of Biddeford's GHG emissions. We must create a sustainable transportation system that prioritizes safe, accessible, clean options for travel, including public transportation, bicycling, and walking. At the same time, we need to ensure that Biddeford's infrastructure, including roads, bridges, and wastewater systems, are resilient to increasing climate hazards like storms, sea level rise, and extreme precipitation.

## Our Goals

- Enhance active mobility (walking and biking) and public transit as alternatives to single-occupancy vehicle use to improve health, safety, and accessibility.
- Reduce emissions by electrifying public and private vehicles.

## Where We Stand

- Promoting and facilitating transit systems
  - Biddeford works closely with Biddeford-Saco-Old Orchard Beach Transit (BSOOB Transit). BSOOB has two all-electric buses and is acquiring two more.
- Promoting and facilitating pedestrian and bike networks
  - Biddeford has many current projects to address bikeability and walkability throughout the city and particularly in the downtown area. These include:
    - Hill, Water, and Main Street intersection redesign
    - Pearl Street Redevelopment
    - RiverWalk extensions
    - Pearl, Elm, and Spruce Street intersection review and potential redesign
    - A proposed pedestrian and bike bridge that would connect Pearl Street to the Saco Transportation Center
    - Extension of the Eastern Trail through downtown Biddeford to connect existing portions in Biddeford and Saco
    - Rotary Park bicycle and pedestrian connections
- Pursuing transit oriented development and transit-supportive land uses in new development
  - Biddeford worked with Saco and PACTS to put together a [Transit-Oriented Development Plan](#) in 2023.
- Supporting the adoption of EVs by leading by example with the municipal fleet and facilities
  - Biddeford installed 2 EV charging stations outside city hall.
  - Biddeford is leasing EVs for municipal use.



*Recycle with Bicycle. PhotoVoice Contest 2023 Entry*



*EV Charing Station. PhotoVoice Contest 2023 Entry.*

## How We'll Get There

### How to Read the Action Tables

- ★ Priority - Identified through public engagement
- Associated goal/action in Comprehensive Plan
- Potential Regional Action

#### Timeframe

Short = 1–2 years  
 Medium = 3–4 years  
 Long = 5+ years

#### Costs:

Low = \$  
 Medium = \$\$  
 High = \$\$\$

| Action Description                  |                                                                                                                                               | Additional Benefits                                                                                                                                                                                                                     | Equity Considerations                                                                                                                     | Timeframe to Implement | Cost        |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------|
| Reduce Vehicle Miles Traveled       |                                                                                                                                               |                                                                                                                                                                                                                                         |                                                                                                                                           |                        |             |
| T1. Public Transit                  |                                                                                                                                               |                                                                                                                                                                                                                                         |                                                                                                                                           |                        |             |
| <div><div>★</div><div>●</div></div> | Expand access to and use of public transit services.                                                                                          | <ul style="list-style-type: none"><li>• Cost Savings</li><li>• Local Economy</li><li>• Mobility Improvement</li><li>• Water and Air Quality</li></ul>                                                                                   | Public transit is an essential public service, especially for more vulnerable community members and those without a vehicle.              | Medium                 | \$\$-\$\$\$ |
| T2. Increase Walkability            |                                                                                                                                               |                                                                                                                                                                                                                                         |                                                                                                                                           |                        |             |
| <div>★</div>                        | Improving the “walkability” of our city’s roadways through a safe, comfortable, and convenient network of pedestrian walkways.                | <ul style="list-style-type: none"><li>• Cost Savings</li><li>• Education</li><li>• Mobility Improvement</li><li>• Air Quality</li><li>• Greenspace and Recreation</li></ul>                                                             | Incorporate equity into decisions about where to invest in pedestrian infrastructure.                                                     | Long                   | \$\$\$      |
| T3. Increase Bikeability            |                                                                                                                                               |                                                                                                                                                                                                                                         |                                                                                                                                           |                        |             |
| <div>★</div>                        | Improve the “bikeability” of our city’s roadways with safe, comfortable, and convenient networks of bikeways and bike-related infrastructure. | <ul style="list-style-type: none"><li>• Cost Savings</li><li>• Education</li><li>• Mobility Improvement</li><li>• Air Quality</li><li>• Greenspace and Recreation</li></ul>                                                             | Incorporate equity into decisions about where to invest in bicycle infrastructure.                                                        | Long                   | \$\$        |
| T4. Transit-Oriented Development    |                                                                                                                                               |                                                                                                                                                                                                                                         |                                                                                                                                           |                        |             |
| <div>★</div>                        | Concentrate housing, business, and leisure activities within easy walking distance to public transit in new development.                      | <ul style="list-style-type: none"><li>• Cost Savings</li><li>• Local economy</li><li>• Mobility Improvement</li><li>• Smart Growth</li><li>• Greenspace and Recreation</li><li>• Job Creation</li><li>• Community Development</li></ul> | Strategies must be put in place to ensure that TOD doesn't lead to gentrification and displacement but instead increases equity outcomes. | Long                   | \$\$\$      |



| Action Description                                                                                                                                                                                                                                                                                                               | Additional Benefits                                                                                                                                        | Equity Considerations                                                                                                                                                               | Timeframe to Implement | Cost      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------|
| <b>Reduce Vehicle Miles Traveled (continued)</b>                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
| <b>T5. Reduce Single-Occupancy Vehicle Trips</b>                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
|  Assess methods to reduce single-occupancy vehicle trips made by municipal staff.                                                                                                                                                               | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Education</li> <li>• Air Quality</li> </ul>                                               |                                                                                                                                                                                     | Short                  | \$        |
| <b>T6. Direct Development</b>                                                                                                                                                                                                                                                                                                    |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
| Decrease the need for private vehicles by reducing sprawl by directing new development to areas where services are easily accessible and reducing minimum parking requirements.                                                                                                                                                  | <ul style="list-style-type: none"> <li>• Local Economy</li> <li>• Mobility Improvement</li> <li>• Smart Growth</li> <li>• Community Development</li> </ul> | Ensure decisions about where to direct development consider equity and pair these with programs and opportunities that support current residents.                                   | Medium                 | \$\$      |
| <b>Resilient Infrastructure</b>                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
| <b>T7. Protect Critical Infrastructure</b>                                                                                                                                                                                                                                                                                       |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
|  Protect critical infrastructure such as wastewater treatment (WWTP) and evacuation routes from climate change hazards.                                                                                                                         | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Community Development</li> </ul>                                                          | Biddeford's WWTP is located in an area with elevated social vulnerability, meaning that public health impacts from failures would be borne by more disadvantaged community members. | Long                   | \$\$\$    |
| <b>T8. Vulnerability Assessment</b>                                                                                                                                                                                                                                                                                              |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
| <br> Assess the vulnerability of transportation infrastructure to the impacts of heat, groundwater rise, and saltwater intrusion caused by sea level rise. | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Smart Growth</li> </ul>                                                                   |                                                                                                                                                                                     | Medium                 | \$\$      |
| <b>T9. Build Infrastructure Resilience</b>                                                                                                                                                                                                                                                                                       |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
|  Modify roads, culverts, and bridges to increase their resilience to flooding, sea level rise, and other climate hazards, including raising, relocating, and/or upsizing.                                                                     | <ul style="list-style-type: none"> <li>• Local Economy</li> <li>• Mobility Improvement</li> </ul>                                                          | Incorporate equity into decisions about where to invest in infrastructure upgrades.                                                                                                 | Long                   | \$\$\$    |
| <b>Support Electric Vehicles</b>                                                                                                                                                                                                                                                                                                 |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
| <b>T10. Encourage Transition to Electric Vehicles</b>                                                                                                                                                                                                                                                                            |                                                                                                                                                            |                                                                                                                                                                                     |                        |           |
| <br> Streamline permitting, install public EV chargers, require EV chargers in new development, and transition city fleets to EV.                          | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Smart Growth</li> </ul>                                                                   | Reduce barriers to EVs and EV charging stations that have historically benefitted wealthier community members.                                                                      | Short                  | \$ - \$\$ |

How We'll Measure Success



| Focus Area                    | Performance Indicator                                                                             |
|-------------------------------|---------------------------------------------------------------------------------------------------|
| Reduce Vehicle Miles Traveled | BSOOB ridership, number of routes, number of bus stops                                            |
|                               | Miles of "Complete Streets"                                                                       |
|                               | Miles driven in municipal vehicles                                                                |
|                               | Number of Density Bonus approvals                                                                 |
|                               | Reduce Vehicle Miles Traveled 25% by 2030                                                         |
| Resilient Infrastructure      | Initiate the identification of vulnerable critical infrastructure by 2026                         |
|                               | Assessment of vulnerable infrastructure (in partnership with Public Works) complete by 2026       |
| Support Electric Vehicles     | Number of EV charging stations in Biddeford                                                       |
|                               | Number of EVs registered in Biddeford                                                             |
|                               | Increase total vehicle miles traveled by Electric Vehicles 30% by 2030                            |
|                               | Increase total Vehicle Miles Traveled by Electric Vehicles replacing diesel vehicles 15% by 2030. |



Do you want to learn more?

See the full Transportation and Infrastructure matrix in the appendix to learn more about an action.



BSOOB has several electric buses.



# LAND USE AND NATURAL ENVIRONMENT

PROTECTING AND ENHANCING NATURAL  
RESOURCES WHILE DIRECTING DEVELOPMENT TO  
PROTECT VULNERABLE PEOPLE AND PLACES.

## Connection to Climate Change

Land use is how the physical world is modified or put to use for our purposes, while the natural environment includes all aspects of healthy and functioning ecosystems. How we use the land directly relates to how the natural environment is able to withstand and adapt to climate change impacts. We must ensure that Biddeford's land use policies and regulations protect the natural environment and encourage sustainable, healthy relationships with the land. In doing so our community will gain many resilience benefits, including cooling (through shade and evapotranspiration), reduction and filtration of stormwater runoff, and carbon sequestration— the removal of GHGs from the atmosphere.

### Our Goals

- Implement land use policies that foster sustainable food production and reduce the impact of development on the natural world.
- Commit city ordinances and plans to limiting our carbon footprint and to protecting the natural environment.

### Where We Stand

- Integrating climate resilience measures in zoning and development standards to address climate impacts
  - Adopting a model Low Impact Development (LID) stormwater ordinance
  - Establishing a minimum buffer requirement near waterways and wetlands
- Limiting growth and development in areas vulnerable to sea level rise and flooding
  - Biddeford is removing the Coastal Residential Zone from the growth areas in the Future Land Use Plan of the Biddeford Comprehensive Plan.
- Managing community forests and open space for long term resilience
  - Biddeford has an Open Space Plan from 2012 that guides conservation efforts.
- Partnering with local and regional land trusts for strategic land conservation and management of those lands
  - Biddeford works with the Biddeford Pool Land Trust and Saco Valley Land Trust.
- Managing and restoring the Thatcher Brook Watershed
- Biddeford has a management plan for the Thatcher Brook Watershed, which is the basis of several ongoing restoration projects. See the [story map here](#).



*Biddeford (Tide)Pool. PhotoVoice Contest 2023 Entry.*



*Mullein. PhotoVoice Contest 2023 Entry.*

## Where We Stand

- Educating the community about the value of trees and native, climate resilient, and sustainable landscaping
- Education and outreach led by Project Canopy and the Conservation Commission. The city also works with YardScapes.
- Supporting pollinators for ecosystem resilience
  - This year was the 5th annual Spring Pollinator Festival hosted by Biddeford Community Gardens.
  - Biddeford signed on to the Mayor's Monarch Pledge and undertook actions to promote pollinator habitat.
- Supporting local food systems
  - Biddeford Community Garden runs a thriving network of community gardens and programming to support local foods.
- Working to enable and incentivize climate resilient and compact, mixed-use development
  - Promoting infill development in downtown area
  - Ensuring zoning allows for mixed use development where appropriate
  - Working to promote housing diversity and affordability



*Mother's Forest. PhotoVoice Contest 2023 Entry.*

## How We'll Get There

### How to Read the Action Tables

- ★ Priority - Identified through public engagement
- Associated goal/action in Comprehensive Plan
- Potential Regional Action

#### Timeframe

Short = 1-2 years  
Medium = 3-4 years  
Long = 5+ years

#### Costs:

Low = \$  
Medium = \$\$  
High = \$\$\$

| Action Description                                                                                                                                                                                  | Additional Benefits                                                                                                                                                                                                                    | Equity Considerations                                                                                                   | Timeframe to Implement | Cost |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------|------|
| <b>Protect Natural Resources</b>                                                                                                                                                                    |                                                                                                                                                                                                                                        |                                                                                                                         |                        |      |
| <b>LN1. Sustainable Landscaping</b>                                                                                                                                                                 |                                                                                                                                                                                                                                        |                                                                                                                         |                        |      |
| ★ Create and enforce climate resilient and sustainable landscaping approaches, including eliminating the use of fertilizers, herbicides, and pesticides, especially in city parks and green spaces. | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Water Conservation</li> <li>• EducationWater and Air Quality</li> <li>• Greenspace and Recreation</li> <li>• Job Creation</li> <li>• Community Development</li> </ul> | Historically disadvantaged neighborhoods often have less tree canopy to cool properties and offset heat island effects. | Medium                 | \$   |

| Action Description                                                                                                                                                                                                                                      | Additional Benefits                                                                                                                                                                                                                                                    | Equity Considerations                                                                                                                              | Timeframe to Implement | Cost  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------|
| <b>Protect Natural Resources (continued)</b>                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                        |                                                                                                                                                    |                        |       |
| <b>LN2. Protect Vulnerable Areas</b>                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                        |                                                                                                                                                    |                        |       |
|  Conserve areas of the city that are vulnerable to climate hazards, as well as those that help to minimize climate risks through carbon storage and flood reduction.   | <ul style="list-style-type: none"> <li>• Education</li> <li>• Water and Air Quality</li> <li>• Greenspace and Recreation</li> </ul>                                                                                                                                    | The benefits of conservation may come at a cost to communities. Conserved areas should be identified, protected, and governed equitably.           | Long                   | \$ \$ |
| <b>LN3. Nature Based Solutions</b>                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                        |                                                                                                                                                    |                        |       |
|  Promote and enable "nature-based solutions," such as the restoration of sand dunes or wetlands, to protect shorelines and coastal property from flooding and erosion. | <ul style="list-style-type: none"> <li>• Cost Savings</li> <li>• Local Economy</li> <li>• Mun. Revenue Enhancement</li> <li>• Water Conservation</li> <li>• Education</li> <li>• Water Quality</li> <li>• Greenspace and Recreation</li> <li>• Job Creation</li> </ul> | Nature based solutions should be identified, implemented, and managed equitably.                                                                   | Long                   | \$ \$ |
| <b>LN4. Restoration of Natural Habitats</b>                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                        |                                                                                                                                                    |                        |       |
| Promote the restoration or enhancement of natural habitats for biodiversity and wildlife protection.                                                                                                                                                    | <ul style="list-style-type: none"> <li>• Water Conservation</li> <li>• Education</li> <li>• Water and Air Quality</li> <li>• Greenspace and Recreation</li> </ul>                                                                                                      | The benefits of habitat restoration may come at a cost to communities. Restoration projects should be identified, managed, and governed equitably. | Long                   | \$ \$ |
| <b>Sustainable and Resilient Development</b>                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                        |                                                                                                                                                    |                        |       |
| <b>LN5. Sustainable Food Systems</b>                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                        |                                                                                                                                                    |                        |       |
|  Promote and expand local and resilient food systems through sustainable practices such as actions that improve soil health and that store carbon.                   | <ul style="list-style-type: none"> <li>• Local Economy</li> <li>• Education</li> <li>• Smart Growth</li> </ul>                                                                                                                                                         | Resilient food systems must be accessible to all no matter their income or neighborhood.                                                           | Long                   | \$ \$ |
| <b>LN6. Mixed-Use Zoning</b>                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                        |                                                                                                                                                    |                        |       |
|  Implement zoning to allow a blend of residential and commercial uses in some areas of the city, in order to reduce sprawl and make neighborhoods more walkable.     | <ul style="list-style-type: none"> <li>• Local Economy</li> <li>• Mun. Revenue Enhancement</li> <li>• Education</li> <li>• Mobility Improvement</li> <li>• Smart Growth</li> <li>• Community Development</li> </ul>                                                    | The city must consider how investments can be paired with affordability to ensure equitable access to livable, walkable areas.                     | Medium                 | \$    |



| Action Description                                                                                                                                                                                                                                    | Additional Benefits                                                                                                                                                                                                                                                                            | Equity Considerations                                                                                                                                                                         | Timeframe to Implement | Cost      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------|
| <b>Sustainable and Resilient Development (continued)</b>                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                               |                        |           |
| <b>LN7. Direct Development</b>                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                               |                        |           |
| Direct development away from areas of the city that are exposed to climate-related risks, including sea level rise, erosion, and inland flooding.                                                                                                     | <ul style="list-style-type: none"> <li>• Mun. Revenue Enhancement</li> <li>• Smart Growth</li> <li>• Greenspace and Recreation</li> <li>• Community Development</li> </ul>                                                                                                                     | Evaluate potential policies and regulations for their impact on socially vulnerable and traditionally marginalized populations.                                                               | Long                   | \$ - \$\$ |
| <b>LN8. Land Use Ordinance Review</b>                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                               |                        |           |
|  Conduct a review of the city's land use ordinances and policies to identify changes needed to include climate resilience and sustainability measures and standards. | <ul style="list-style-type: none"> <li>• Mun. Revenue Enhancement</li> <li>• Water Conservation</li> <li>• Education</li> <li>• Mobility Improvement</li> <li>• Smart Growth</li> <li>• Water and Air Quality</li> <li>• Greenspace and Recreation</li> <li>• Community Development</li> </ul> | Review should explicitly incorporate equity, taking steps to avoid or "undo" unfair outcomes and mitigate the unequal ability to participate in or influence all parts of the zoning process. | Short                  | \$        |
| <b>LN9. Encourage Development in Appropriate Areas</b>                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                               |                        |           |
| Encourage development in appropriate areas that are already developed, have public services (e.g., water and sewer), and are less vulnerable to natural hazards.                                                                                      | <ul style="list-style-type: none"> <li>• Cost SavingsSmart GrowthGreenspace and RecreationCommunity Development</li> </ul>                                                                                                                                                                     | Can lead to the displacement of residents with lower incomes, especially if concentrated development results in increased demand.                                                             | Short                  | \$        |



Walmarshland. PhotoVoice Contest 2023 Entry.

## How We'll Measure Success



| Focus Area                            | Performance Indicator                                                                                               |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Protect Natural Resources             | City ordinance to reduce use of pesticides, insecticides, and herbicides                                            |
|                                       | Number of community members contacted with educational materials                                                    |
|                                       | Acres of land in conservation areas                                                                                 |
|                                       | Acres of preserved and revegetated wetlands                                                                         |
|                                       | Work with regional partners to identify conservation and climate resilience priorities by 2026                      |
|                                       | Number and type of non-native species removed                                                                       |
|                                       | Number of community gardens per resident                                                                            |
|                                       | Number of acres of productive farmland and forest land                                                              |
| Sustainable and Resilient Development | Average distance of new housing to critical services (food, schools, etc.)                                          |
|                                       | Area of newly designated Limited Growth Areas                                                                       |
|                                       | Area of Overlay districts that protect hazard areas from development                                                |
|                                       | Number of new housing units created in the three Main Street Revitalization District zones (MSRD-1, MSRD-2, MSRD-3) |
|                                       | Land Use Ordinance review completed                                                                                 |



### Do you want to learn more?

See the full Land Use and Natural Environment matrix in the appendix to learn more about an action.



# HEALTH, SAFETY, AND WELL BEING

ENSURING THE RESILIENCE OF OUR COMMUNITY  
TO CLIMATE-RELATED PUBLIC HEALTH HAZARDS  
WHILE INCREASING COMMUNITY WELL BEING.

## Connection to Climate Change

The impacts of climate change are heavily intertwined with public health and safety. Climate hazards like sea level rise, increasing tick populations, and increases in extreme heat will all affect our community, particularly our most vulnerable community members. We must ensure that Biddeford is prepared to respond to increasing public health hazards. We must also work to increase community resilience and meet all community members' needs for safe drinking water, housing, and green space.

### Our Goals

- Ensure the health and safety of everyone in the Biddeford community to climate change hazards, especially those who are most vulnerable.
- Ensure community resilience to climate change through the expansion of public resources and affordable housing.

### Where We Stand

- Maintaining a sustainable waste system that prioritizes reducing, reusing, and recycling waste
  - Partnered with We Compost It! to provide a free composting program at the Recycling Center for all Biddeford residents.
  - Implemented a Pay as You Throw trash system to reduce the amount of waste ending up in the trash
  - Revised the solid waste ordinance to allow for the revoking of recycling privileges to ensure a clean recycling stream
- Supporting residents during extreme temperatures
  - The City has partnered with Seeds of Hope to open a heating center (J. Richard Martin Community Center) and a cooling center (at Seeds of Hope)
- Preparing for extreme weather events
  - Biddeford is a part of a mutual aid agreement (police/fire/rescue/public works) with the communities of Saco, Arundel, Old Orchard Beach, Lyman, Kennebunk and Kennebunkport
  - Biddeford conducts emergency management tabletop exercises, like for ice storms and hurricanes.
- Supporting affordable housing
  - Biddeford had an Ad Hoc Housing Committee to address the pressing needs of new housing in the community.
  - Biddeford created the Diversity, Inclusion and Equity Committee



*Will These Trees Be Here Tomorrow?*  
PhotoVoice Contest 2023 Entry



*Downtown Biddeford is a heat island, but few bus stops have shade.*



## How We'll Get There

### How to Read the Action Tables

★ Priority - Identified through public engagement

● Associated goal/action in Comprehensive Plan

● Potential Regional Action

#### Timeframe

Short = 1-2 years

Medium = 3-4 years

Long = 5+ years

#### Costs:

Low = \$

Medium = \$\$

High = \$\$\$

| Action Description                                                                                                                                            | Additional Benefits                                                                                                                                                          | Equity Considerations                                                                                                      | Timeframe to Implement | Cost   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------|--------|
| <b>Community Resilience/Disaster Preparedness</b>                                                                                                             |                                                                                                                                                                              |                                                                                                                            |                        |        |
| <b>H1. Resilience Hubs</b>                                                                                                                                    |                                                                                                                                                                              |                                                                                                                            |                        |        |
| Establish a designated site to serve as a "resilience hub" that can provide critical services to residents during climate related emergencies or disruptions. | <ul style="list-style-type: none"> <li>Education</li> <li>Community Development</li> </ul>                                                                                   | Hubs should be in well-trusted community facilities. Hubs can serve as community gathering places and "community centers." | Medium                 | \$\$\$ |
| <b>Disaster Preparedness</b>                                                                                                                                  |                                                                                                                                                                              |                                                                                                                            |                        |        |
| <b>H2. Improve Disaster Planning</b>                                                                                                                          |                                                                                                                                                                              |                                                                                                                            |                        |        |
| ● Improve disaster planning and response to be better prepared for climate change risks, including early warning systems and community evacuation plans.      | <ul style="list-style-type: none"> <li>Education</li> </ul>                                                                                                                  | Ensure that public health outreach systems reach the most vulnerable community members.                                    | Long                   | \$\$   |
| <b>H3. Climate Hazard Training</b>                                                                                                                            |                                                                                                                                                                              |                                                                                                                            |                        |        |
| ● Provide emergency responders and medical providers with training about the types of illnesses that might occur as a result of climate hazards.              | <ul style="list-style-type: none"> <li>Education</li> </ul>                                                                                                                  | Climate hazards will have a disproportionate impact on already vulnerable community members.                               | Short                  | \$     |
| <b>H4. Public Health Outreach</b>                                                                                                                             |                                                                                                                                                                              |                                                                                                                            |                        |        |
| ● Conduct outreach about public health advisories for climate-related health impacts and weather events.                                                      | <ul style="list-style-type: none"> <li>Education</li> </ul>                                                                                                                  | Ensure that public health outreach systems reach the most vulnerable community members.                                    | Medium                 | \$     |
| <b>Health and Safety</b>                                                                                                                                      |                                                                                                                                                                              |                                                                                                                            |                        |        |
| <b>H5. Affordable Housing</b>                                                                                                                                 |                                                                                                                                                                              |                                                                                                                            |                        |        |
| ★ Encourage and support the creation of resilient, energy-efficient, and low-carbon affordable housing.                                                       | <ul style="list-style-type: none"> <li>Local Economy</li> <li>Mun. Revenue Enhancement</li> <li>Smart Growth</li> <li>Job Creation</li> <li>Community Development</li> </ul> | Affordable housing can protect tenants from rising costs and displacement.                                                 | Long                   | \$\$\$ |

| Action Description                                                                                                                                                                                             | Additional Benefits                                                                                                                    | Equity Considerations                                                                                                                                          | Timeframe to Implement | Cost      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------|
| <b>Health and Safety (continued)</b>                                                                                                                                                                           |                                                                                                                                        |                                                                                                                                                                |                        |           |
| <b>H6. Ensure Safe Drinking Water Supply</b>                                                                                                                                                                   |                                                                                                                                        |                                                                                                                                                                |                        |           |
| <p>★</p> <p>●</p> <p>Ensure the safety and quality of drinking water supplies, including through assessment and management of climate change impacts to septic systems and wells.</p>                          | <ul style="list-style-type: none"> <li>Water Conservation</li> <li>Water Quality Improvement</li> <li>Community Development</li> </ul> | Prioritize vulnerable and disadvantaged communities who have been historically been left out of decisions and opportunities for water infrastructure upgrades. | Medium                 | \$ - \$\$ |
| <b>H7. Shade Structure Ordinance</b>                                                                                                                                                                           |                                                                                                                                        |                                                                                                                                                                |                        |           |
| <p>★</p> <p>Develop an ordinance to require shade structures (covered bus stops, gazebos, etc.) on city-owned properties.</p>                                                                                  | <ul style="list-style-type: none"> <li>Greenspace and Recreation</li> </ul>                                                            | Access to shade for vulnerable community members is critical for preventing heat related illness.                                                              | Short                  | \$        |
| <b>H8. Tree Ordinance</b>                                                                                                                                                                                      |                                                                                                                                        |                                                                                                                                                                |                        |           |
| <p>★</p> <p>Develop an ordinance to increase tree canopy both on city-owned and private property.</p>                                                                                                          | <ul style="list-style-type: none"> <li>Greenspace and Recreation</li> </ul>                                                            | Tree canopy can reduce temperatures in vulnerable neighborhoods where copious hardscaping (concrete, asphalt) creates a heat island effect.                    | Short                  | \$        |
| <b>H9. Monitor Vector-Borne Diseases and Invasive Species</b>                                                                                                                                                  |                                                                                                                                        |                                                                                                                                                                |                        |           |
| <p>●</p> <p>Explore options for monitoring and managing pests, like ticks and mosquitoes, that are associated with increases in diseases (e.g. Lyme disease) using natural and ecologically sound methods.</p> | <ul style="list-style-type: none"> <li>Education and Awareness</li> </ul>                                                              | Vector-borne diseases more negatively impact younger and older community members and those without easy access to healthcare.                                  | Medium                 | \$\$      |





How We'll Measure Success



| Focus Area                                 | Performance Indicator                                                                         |
|--------------------------------------------|-----------------------------------------------------------------------------------------------|
| Community Resilience/Disaster Preparedness | Number of designated resilience hubs in operations; number of users                           |
| Disaster Preparedness                      | Number and types of preparedness plans in place                                               |
|                                            | Hold annual trainings with Fire/Rescue and PD by 2026                                         |
|                                            | Number of emergency responders trained for climate-related illnesses                          |
|                                            | Begin quarterly outreach and hazard-specific warnings by 2026                                 |
|                                            | Number of climate advisories distributed                                                      |
|                                            | Number of affordable housing units created                                                    |
|                                            | Number of private wells tested                                                                |
| Health and Safety                          | Number of shade structures                                                                    |
|                                            | Percent of transit stops with adequate shade structures                                       |
|                                            | Number of trees planted and monitored                                                         |
|                                            | Number of property owners contacted with educational materials on invasive and native species |
|                                            | Vector Borne disease rate reduction                                                           |



73% of survey respondents indicated they were "Most Concerned" about climate related health risks.



Do you want to learn more?

See the full Health, Safety, and Well Being matrix in the appendix to learn more about an action.



# LEADERSHIP AND SUPPORT

ENSURING OUR CITY HAS THE RESOURCES AND SUPPORT TO IMPLEMENT CLIMATE ACTIONS.

## Connection to Climate Change

Biddeford's City government will be instrumental in providing leadership, resources, and accountability to implement our CAP. The City will work to ensure that departments and community members have the support and information to achieve the goals laid out in this plan.

### Our Goals

- Ensure Biddeford City government has the funding, dedicated staff, and skills to address climate change effectively, efficiently, and equitably.
- Engage community members and regional partners to broaden the impact of resiliency actions.

### Where We Stand

- Working with regional/national partners to address climate change
  - Biddeford is an active member of ICLEI - Local Governments for Sustainability
  - Biddeford has partnered with UNE on climate related projects
- Expanding municipal capacity to address climate change
  - Biddeford has the Climate Task Force, a formal municipal committee that supports the city's climate action planning efforts
- Formally adopting climate change goals, policies, and strategies
  - Biddeford adopted a Climate Emergency Resolution in 2020
  - Biddeford signed on to the ICLEI Race to Zero in 2022 and formally adopted emissions reduction targets and goals
- Incorporating climate change into city plans, policies, and regulations
  - Biddeford incorporated climate change into the Comprehensive Plan update. This includes a chapter on climate change.



*Life on the Coast. PhotoVoice Contest 2023 Entry*



*Events like the PhotoVoice Contest are a great way to hear from community members.*

## How We'll Get There

### How to Read the Action Tables

- ★ Priority - Identified through public engagement
- Associated goal/action in Comprehensive Plan
- Potential Regional Action

#### Timeframe

Short = 1-2 years  
 Medium = 3-4 years  
 Long = 5+ years

#### Costs:

Low = \$  
 Medium = \$\$  
 High = \$\$\$

| Action Description                                                                                                                                    | Additional Benefits                                                                                                                                                                                                                                                                           | Equity Considerations                                                                                                                                                                                                     | Timeframe to Implement | Cost |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------|
| <b>Community Outreach</b>                                                                                                                             |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                           |                        |      |
| <b>LS1. Create Climate Commission</b>                                                                                                                 |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                           |                        |      |
| ★ Create a municipal Climate Commission made up of city residents to assist with the implementation of the Climate Action Plan.                       | <ul style="list-style-type: none"> <li>Cost Savings</li> <li>Local Economy</li> <li>Education</li> </ul>                                                                                                                                                                                      | The climate commission can weave equity considerations into all future climate actions to ensure that all people will benefit equally.                                                                                    | Short                  | \$   |
| <b>LS2. School Curricula</b>                                                                                                                          |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                           |                        |      |
| ★ Support local schools to include climate change and sustainability in school curricula.                                                             | <ul style="list-style-type: none"> <li>Education</li> </ul>                                                                                                                                                                                                                                   |                                                                                                                                                                                                                           | Short                  | \$   |
| <b>LS3. Climate Change Training</b>                                                                                                                   |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                           |                        |      |
| Provide climate change training for municipal boards, commissions, and committees.                                                                    | <ul style="list-style-type: none"> <li>Education</li> </ul>                                                                                                                                                                                                                                   |                                                                                                                                                                                                                           | Short                  | \$   |
| <b>Municipal Operations and Funding</b>                                                                                                               |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                           |                        |      |
| <b>LS4. Create Position of Sustainability Coordinator</b>                                                                                             |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                           |                        |      |
| ★ Create a municipal Office of Sustainability and position of Sustainability Coordinator, whose mandate will be to implement the Climate Action Plan. | <ul style="list-style-type: none"> <li>Cost Savings</li> <li>Local Economy</li> <li>Water Conservation</li> <li>Education</li> <li>Mobility Improvement</li> <li>Smart Growth</li> <li>Water Quality Improvement</li> <li>Greenspace and Recreation</li> <li>Community development</li> </ul> | A Sustainability Coordinator can weave equity considerations into all future climate actions to ensure that all people, regardless of age, race, income, etc., will benefit equally from progress made toward resiliency. | Short                  | \$\$ |

| Action Description                                                                                                                                                                                                  | Additional Benefits                                                                                                                                                                                                                                                                                                    | Equity Considerations                                                                                                                                                                                                     | Timeframe to Implement | Cost      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------|
| <b>Municipal Operations and Funding (continued)</b>                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                           |                        |           |
| <b>LS5. Establish Local Climate Funding</b>                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                           |                        |           |
| Establish local funding mechanisms to support implementation of the Climate Action Plan.                                                                                                                            | <ul style="list-style-type: none"> <li>Local Economy</li> <li>Education</li> <li>Water Quality Improvement</li> <li>Greenspace and Recreation</li> <li>Community development</li> </ul>                                                                                                                                | Evaluate potential policies for their impact on socially vulnerable populations. Consider how use of funds could perpetuate disparities. Ensure there is transparency and community input in the decision making process. | Medium                 | \$ - \$\$ |
| <b>LS6. Include Climate in Municipal Investments</b>                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                           |                        |           |
|  Incorporate climate resilience and carbon emission measures into planned investments for city-owned infrastructure and equipment. | <ul style="list-style-type: none"> <li>Cost Savings</li> <li>Smart Growth</li> <li>Community development</li> </ul>                                                                                                                                                                                                    | Evaluate potential policies for their impact on socially vulnerable populations. Consider how use of funds could perpetuate disparities. Ensure there is transparency and community input in the decision making process. | Medium - Long          | \$        |
| <b>LS7. Include Climate Considerations in Decision-Making</b>                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                           |                        |           |
| Incorporate future climatic conditions in land use planning and municipal policies.                                                                                                                                 | <ul style="list-style-type: none"> <li>Cost Savings</li> <li>Local Economy</li> <li>Mun. Revenue Enhancement</li> <li>Water Conservation</li> <li>Education Mobility Improvement</li> <li>Smart Growth</li> <li>Water Quality Improvement</li> <li>Greenspace and Recreation</li> <li>Community development</li> </ul> | Evaluate potential policies for their impact on socially vulnerable populations. Consider how use of funds could perpetuate disparities. Ensure there is transparency and community input in the decision making process. | Medium                 | \$ - \$\$ |
| <b>LS8. Build Municipal Capacity</b>                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                           |                        |           |
| Ensure municipal departments have the resources, guidance, and support to implement the Climate Action Plan.                                                                                                        |                                                                                                                                                                                                                                                                                                                        | Trainings for staff should include the ways that historically disadvantaged and vulnerable populations are more vulnerable to climate change impacts and should be incorporated with equity training.                     |                        | \$ - \$\$ |

## How We'll Measure Success



| Focus Area                       | Performance Indicator                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Community Outreach               | Climate Commission created and operational by early 2024                                                              |
|                                  | Hire an intern or AmeriCorps Volunteer to assist with CAP implementation                                              |
|                                  | Number of community engagement events conducted by 2026                                                               |
|                                  | Establish relationships with appropriate school staff by 2025 and create relevant curricula by 2026.                  |
|                                  | Number of teachers who incorporate climate and sustainability issues into lesson plans                                |
|                                  | Present annually to all boards and commissions by 2025                                                                |
|                                  | Create ongoing training materials and an online resource for boards and commissions by the end of 2026                |
|                                  | Number of commission, board and committee members engaged in climate training; Number of educational events conducted |
| Municipal Operations and Funding | Create Sustainability Coordinator Position by 2025                                                                    |
|                                  | Annual appropriations to new Climate Action Fund for climate action implementation                                    |
|                                  | Annual investment for Climate-related capital improvements                                                            |
|                                  | Amount of funding for climate action implementation from federal, state, or private sources                           |
|                                  | Number of state or regional climate initiatives undertaken                                                            |
|                                  | Report annually to staff and City Council on climate progress                                                         |



### Do you want to learn more?

See the full Leadership and Support matrix in the appendix to learn more about an action.



# CONCLUSION





# WHAT'S NEXT

One of our priority actions in our plan is to request that City Council create a new Climate Commission. If approved by Council, this commission will work with city staff, boards, committees, and commissions to oversee the implementation of the actions outlined here, specify a timeline to achieve these actions, and designate partners we need to make consequential progress.

We will also increase participation in regional action, policy development, and climate advocacy. Through the Southern Maine CAP Cohort, we've been working with the Towns of Kittery, Kennebunk, and Kennebunkport to identify potential regional actions on which our communities could collaborate and coordinate. Part of our work will be exploring ways these actions and others can be implemented with regional coordination and support.



## Potential Regional Strategies

### Buildings and Energy



- **Building Electrification (B2) and Building Weatherization (B3)** - Supported through a regional incentive program.
- **Risk Management (B7)** - Advocate regionally for flood disclosure requirements for property transactions.
- **Improve Grid Resilience (B12)** - Support regional-level planning in cooperation with utilities and state agencies to increase regional grid resilience.

### Transportation and Infrastructure



- **Public Transit (T1)** - Work regionally to expand transit connecting our communities.
- **Vulnerability Assessment (T8)** - SMPDC and regional transportation agencies could lead a regional assessment of transportation infrastructure vulnerability.
- **Encourage Transition to Electric Vehicles (T10)** - Coordinate regionally and with the state on the distribution of public EV charging stations.

### Land Use and Natural Resources



- **Sustainable Landscaping (LN1)** - Advocate regionally for statewide limits on residential use of fertilizers, pesticides, and herbicides, particularly in shoreland areas.

### Leadership and Support



- **School Curricula (LS2)** - Advocate regionally for inclusion of climate change and resiliency into core curricula requirements.
- **Climate Change Training (LS3)** - Work with SMPDC to develop and deliver climate change training that is applicable to municipal councils, boards, commissions, and committees throughout the region.

# LOOKING AHEAD

Southern Maine is a rapidly changing region, and Biddeford is no exception. With the development of new technologies, shifting populations, and a changing climate, it is vital that the actions and timelines we've laid out in this CAP are adaptable to future conditions. **Our CAP is a dynamic document that we will constantly refer to and revise when necessary and appropriate to determine the best path forward to make progress on our climate goals.** We will also hold ourselves accountable to report on our progress in meeting our milestones and targets.

**Pending Council approval of a Climate Commission, this commission will report annually to Council and city staff to provide progress made toward the goals and targets outlined in this plan.** Biddeford's Greenhouse Gas Emission Inventory will be updated every 2 to 4 years as recommended by ICLEI, and this plan will be updated and revised within 3 years of adoption to document accomplishments and adjust goals and actions as needed.

We would not have been able to create this plan without years of momentum-building climate initiatives in Biddeford. It is our hope that this momentum will carry forward and will bring the changes needed to make Biddeford a more resilient community for all. Success with this plan will depend on the time, effort, and other resources we can put toward achieving significant change. If each of us makes a small effort, we can more easily accomplish the work before us.

## How To Stay Involved

Stay up-to-date on the work we are doing on climate and the progress we make through the City of Biddeford's Climate Newsletter. We also will report our progress at [our.biddefordmaine.org](http://our.biddefordmaine.org), where you can offer suggestions and stay connected.





# APPENDICES





# BIDDEFORD

## CLIMATE CHANGE VULNERABILITY ASSESSMENT SUMMARY

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## INTRODUCTION

One of the first steps to understanding how communities can plan for and address climate change impacts is to assess climate hazards that are projected to impact an area as well as the things, people, and places that are vulnerable to those hazards. **Climate**

**vulnerability is commonly defined** as the product of **exposure** to climate hazards, **sensitivity** of the built, social, and natural systems to those hazards, and the **adaptive capacity** of those systems for responding to change and stressors (Figure 1). The more sensitive something or someone is to a hazard and the lower their adaptive capacity to respond to the hazard, the greater their

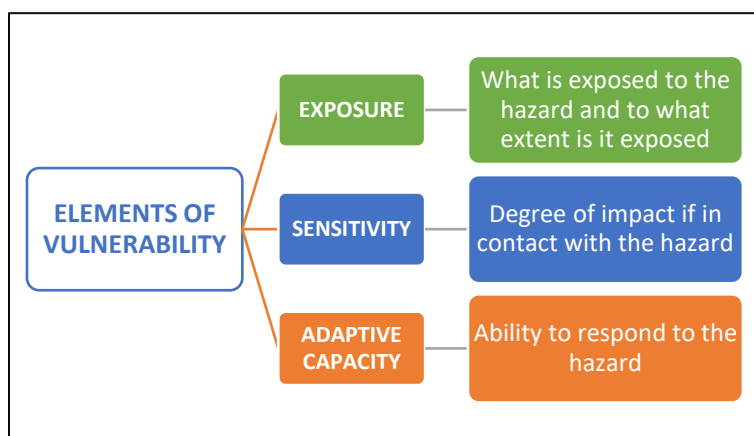


Figure 1. Diagram of the elements of vulnerability.

vulnerability (Figure 2). Vulnerability also increases as exposure to the hazard does.

Evaluating vulnerabilities, including what will be impacted by climate hazards, and to what extent those impacts will occur, provides a baseline for developing targeted strategies, measures, and solutions for reducing vulnerabilities.

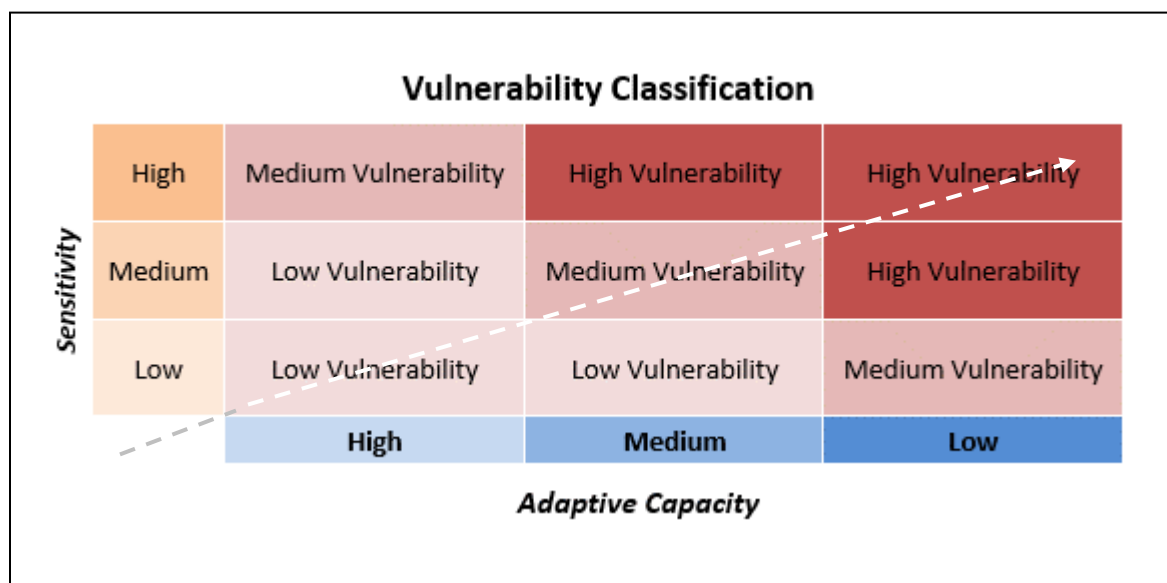


Figure 2. Higher sensitivity and lower adaptive capacity contribute to greater vulnerability. Figure adapted from NOAA 2022. Implementing the Steps to Resilience: A Practitioner's Guide.

This draft vulnerability assessment summary presents an overview of climate hazards and associated impacts and vulnerabilities for the community of Biddeford. The assessment uses local, regional, state, and national data pertaining to climate hazards, historical conditions, trends, and future projections to assess impacts of and local vulnerabilities associated with the following:

- Precipitation and extreme storms
- Flooding from sea level rise and storm surge
- Extreme temperatures
- Drought and wildfires
- Changing marine conditions

The assessment evaluates impacts of those hazards to the built, social, and natural environment; public health; and the economy. The ‘desktop’ vulnerability assessment generated quantitative-based information about climate hazard exposure within each Cohort community. Information about adaptive capacity and sensitivity, which is usually more qualitative in nature and not readily captured by state or national datasets or numeric data, as well as information about what/where/who is of greatest concern to the community, was gathered through Task Force input and community engagement.

### Key Takeaways

- Climate change will impact all facets of the community and compounding climate change vulnerabilities will impact all areas of life, including public health, natural areas, the local economy, municipal fiscal health, and community well-being.
- The impacts of climate change will not be felt evenly across the community and will not be uniformly distributed among population groups. Socially vulnerable and marginalized populations will be disproportionately affected by climate change as they generally have less capacity to prepare for, respond to, and recover from climate-related hazards and effects.
- Biddeford’s downtown area has the highest social vulnerability compared with all other areas of the community. This vulnerability is driven by the prevalence of people/households with low annual incomes, without a vehicle, no internet access, living alone, are disabled, renters, or are age 65+ and living alone.
- The downtown area also is designated as ‘disadvantaged’ by the US Council on Environmental Quality due to the area’s low life expectancy, elevated rates of asthma, and low household income relative to national conditions and co-occurring climate and/or environmental hazards, including heat and flooding. Biddeford is the only community in southern Maine with a designated ‘disadvantaged’ area and the designation carries priority for certain federal funding programs.
- Extreme heat and temperatures are increasing in Biddeford and areas of the community with existing social vulnerabilities, such as the downtown, are already urban heat islands. Increasing air temperatures will exacerbate existing

vulnerabilities, especially for the elderly, young, people with existing health conditions, and those with limited access to air conditioning, and will pose a risk to people and the natural environment.

- Coastal areas of Biddeford, especially Biddeford Pool, Fortunes Rocks, and Granite Point, as well as low-lying areas along the Saco River, are extremely vulnerable to the increasing impacts of flooding, storm surge, and sea level rise. Some of the areas most exposed to flooding also have a relatively high percentage of older individuals and structures built before modern building codes, making them more sensitive to flood hazards.
- Drought is becoming a hazard of increasing concern, particularly in the more rural regions where there could be negative impacts to private wells and agriculture and could lead to increased wildfire risk.
- Biddeford's power systems are increasingly vulnerable to extreme storms and flooding, both of which will be exacerbated by climate change.
- Increasing rates of vector borne diseases and incidents of extreme heat will negatively impact public health.

## **SOCIAL VULNERABILITY**

The impacts of climate change will not be felt evenly across the community and will not be uniformly distributed among population groups. The ability to adapt and respond to climate change varies widely based on individual and household resources and characteristics, as well as existing social inequities. Individuals who already have increased social vulnerability are at greatest risk of climate change and will be disproportionately affected by climate hazards, as they generally have lower capacity to prepare for, respond to, and recover from hazard events and disruptions. Socially vulnerable groups include children; older adults; people with existing health conditions; disabled individuals; households with lower or moderate incomes; those with less formal education; people of color; and those who have limited connectivity, either physically and/or digitally, to others and resources. Demographic information can help determine local populations' adaptive capacity, or the ability to adapt and respond to a disaster.

Age can be correlated with decreased adaptive capacity, in the case of the very young, or older populations. Generally, families with children require more time and space to evacuate, and people who are 17 or younger are more dependent on family or other networks than other age brackets. Some people who are 65 and older may also be dependent on family, friends, or organizations, and may face challenges anticipating the event or finding information on how and when to evacuate or adapt. The unique physical

and psychosocial challenges of the population ages 65 and over may impact their ability to prepare for, respond to, and recover from storms events.<sup>1</sup>

Maine is known to be one of the least diverse states in the country and demographic data collected from the 2021 American Community Survey supports that statistic. This highlights the need to pay specific attention to the minority populations that do live throughout the state, who may have cultural or language barriers to accessing information, resources, or accommodations. Gaps in resources, and access to those resources, leave many minority groups vulnerable to exclusion from adaptation based on economic factors.<sup>2</sup>

The coastal York County towns are among the wealthiest in the state, but they are not without low-moderate income households. Income is a significant indicator of social vulnerability with respect to natural hazards such as flooding. Households with lower income levels generally have a lower adaptive capacity to respond and adapt to natural hazards since someone with limited or no disposable income would have fewer resources to pay for evacuation, transportation, accommodation, and repair activities.

The following demographic information summarizes indicators of social vulnerability and adaptive capacity at the community level and US Census-designated block group level, which is the smallest geographic unit at which this demographic data is available. Information about the community's social vulnerability is supplemented and contextualized with information gathered from the Task Force and community members through project engagement efforts

### **Demographic Profile**

Figure 3 outlines 17 demographic indicators of social vulnerability at the community-wide and block group levels, which align closely with those used for the Maine Social Vulnerability Index (see also Map 2, Map 3, Map 4, Map 5, Map 6, Map 7, Map 8, and Map 9).<sup>3</sup> These data are from the 2021 American Community Survey (ACS), which is conducted by the U.S. Census Bureau. The 2021 ACS is the most current demographic data available because the results of the 2020 Decennial Census have not been released yet. Block groups are the smallest geographic unit for which the U.S. Census provides demographic data. Block groups are delineated based on population and contain between 600 to 3,000 people. There are a total of 19 block groups in Biddeford. The locations of Biddeford's 19 block groups are shown in Map 1.

---

<sup>1</sup> EPA. 2021. Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts. U.S. Environmental Protection Agency, EPA 430-R-21-003. [www.epa.gov/cira/social-vulnerability-report](http://www.epa.gov/cira/social-vulnerability-report)

<sup>2</sup> EPA. 2021. Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts. U.S. Environmental Protection Agency, EPA 430-R-21-003. [www.epa.gov/cira/social-vulnerability-report](http://www.epa.gov/cira/social-vulnerability-report)

<sup>3</sup> Johnson et al., 2018, A lifeline and social vulnerability analysis of sea level rise impacts on rural coastal communities



The ACS is conducted annually on an ongoing basis throughout the year to collect information about changing socioeconomic characteristics of communities. Unlike the Decennial Census which surveys every household, the ACS only surveys a portion of households in the community and uses the results to estimate demographic characteristics across the community. In small communities, like many of those along the coast of Maine, the accuracy of ACS estimates may be imperfect due to the small sample size. In larger communities the estimates tend to be more accurate because the sample size is more statistically robust. The ACS also surveys seasonal residents which can make it difficult to understand the characteristics of the year-round population in seasonal communities. The 17 demographic indicators can inform the development of strategic climate actions by providing important information about areas of the community that may be more socially vulnerable to the impacts of climate change. However, qualitative anecdotal information about the community gathered from the Task Force, community members, and City staff helps to refine demographic data and aid with interpretation of local social vulnerability information.<sup>4</sup>

Demographic data are presented at the population and household level. The U.S. Census Bureau defines a household as a group of people who live within the same housing unit regardless of whether or not they are related. A housing unit is a room or group of rooms that is designed to be separate living quarters such as a house, apartment, or condo.<sup>5</sup>

There are three income thresholds referenced in Figure 3. These thresholds were selected because they approximate the U.S. EPA climate change and social vulnerability income threshold (\$51,500), the 2021 State median income (\$64,767), and the 2021 York County median income (\$73,856).

### Key Takeaways

- Downtown Biddeford (block groups 4-14) is the most socially vulnerable area based on the 17 demographic indicators. This area has elevated social vulnerability across all indicators except for the percent of the block group population that is over the age of 65.
- The neighborhood around the downtown USPS Post Office (block group 5) has the highest percentage of the population and households within the block group that have a person with disabilities, are below the national poverty level, have an annual income below the EPA climate change and social vulnerability threshold, are below the County and State median incomes, have no vehicle, are living alone, and are age 65 or older living alone. This block group also has an elevated percentage of households with no internet access compared to the rest of the community.

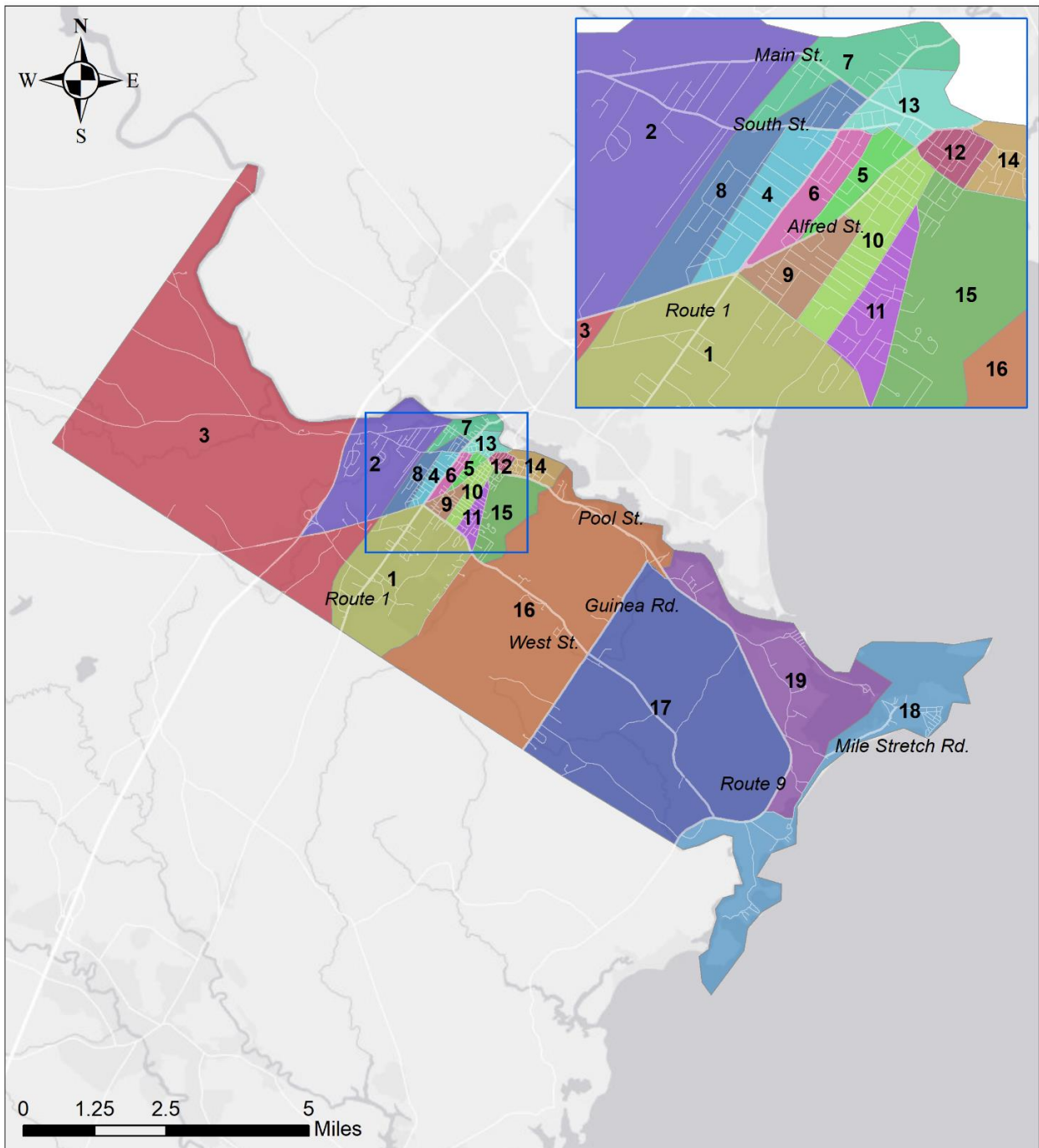
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<sup>4</sup> Johnson et al., 2018, A lifeline and social vulnerability analysis of sea level rise impacts on rural coastal communities

<sup>5</sup> U.S. Census Bureau, Subject Definitions: <https://www.census.gov/programs-surveys/cps/technical-documentation/subject-definitions.html#household>

- The neighborhood around Springs Island, east of Biddeford High School (block group 7) has an elevated percentage of households within the block group that have a person with disabilities, are below the national poverty level, single parent households, below the EPA climate change and social vulnerability income threshold, below the County and State median incomes, and have no vehicle or internet access compared to the rest of the community.
- The neighborhood around the old mill buildings (block group 13) has an elevated percentage of the population within the block group that are minorities, speak English less than well, have no high school diploma, and are unemployed compared to the rest of the community.
  - Local information provided by the Task Force highlighted the neighborhood around the old mill buildings (block group 13) as an area with rapidly changing demographics. Approximately 300 new upscale housing units have made this area much more affluent, and an additional 600 or so units will be built in the next 24-36 months.
- Across the entire community 32% percent of households have at least one person with disabilities, 41% are below the EPA climate change and social vulnerability income threshold, and the majority of households are below the County and State median incomes.

## U.S. Census Block Groups Biddeford



Data source: U. S. Census Bureau  
Map created by SMPDC

Map 1. Census block groups in Biddeford. Data source: U.S. Census Bureau 2021 American Community Survey.

Lowest Value

Highest Value

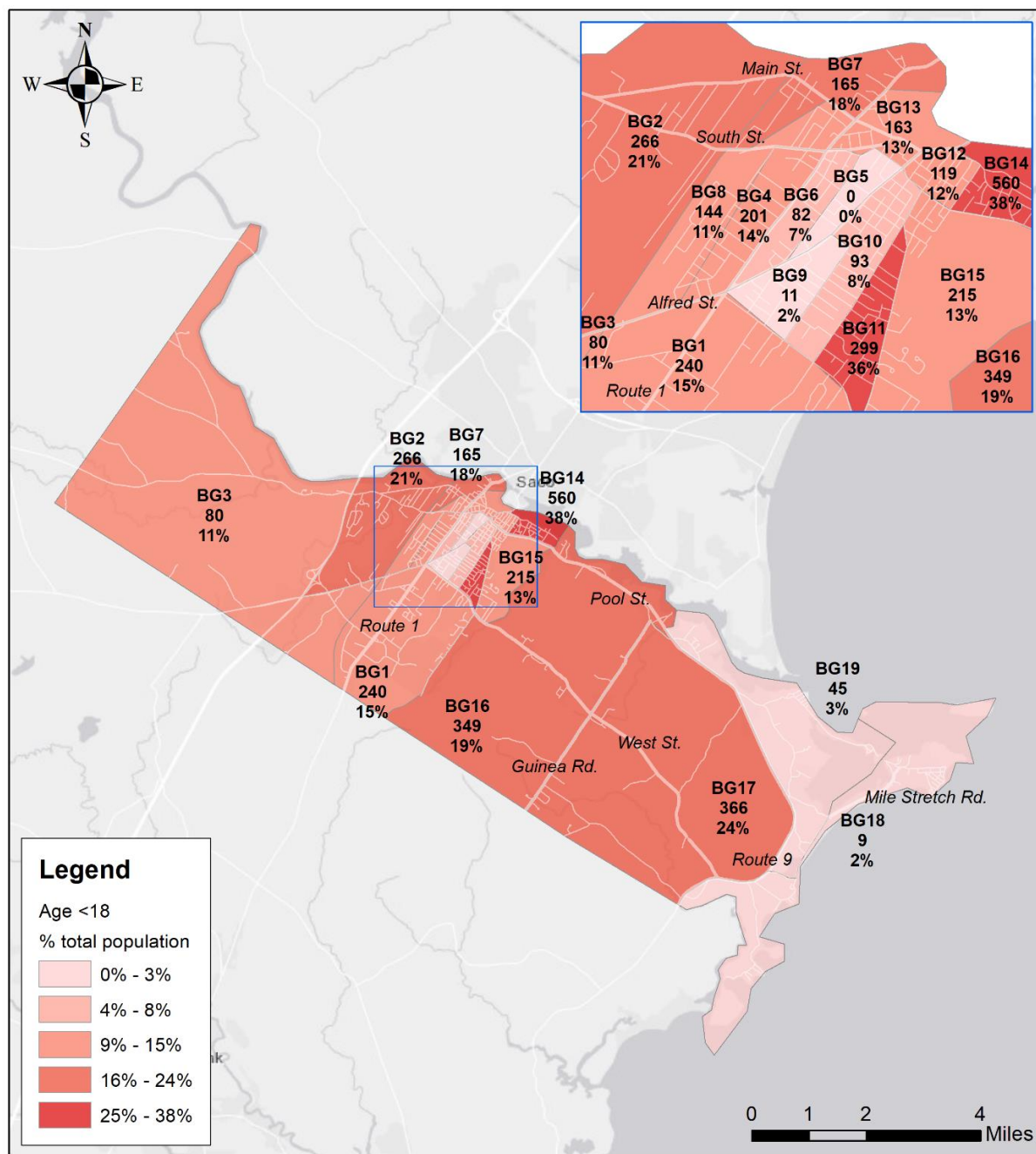
10

|                                 | Community wide | Block Groups |       |     |       |     |       |     |       |     |       |     |     |       |       |       |       |       |     |       |
|---------------------------------|----------------|--------------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-----|-------|-------|-------|-------|-------|-----|-------|
|                                 |                | 1            | 2     | 3   | 4     | 5   | 6     | 7   | 8     | 9   | 10    | 11  | 12  | 13    | 14    | 15    | 16    | 17    | 18  | 19    |
| Total Population                | 22,331         | 1,603        | 1,264 | 715 | 1,443 | 337 | 1,130 | 917 | 1,365 | 697 | 1,167 | 820 | 971 | 1,215 | 1,491 | 1,691 | 1,820 | 1,522 | 370 | 1,793 |
| Total Households                | 9,198          | 694          | 463   | 303 | 769   | 192 | 589   | 463 | 508   | 393 | 675   | 251 | 464 | 591   | 414   | 631   | 652   | 503   | 215 | 428   |
| Age <18                         | 3,407          | 240          | 266   | 80  | 201   | 0   | 82    | 165 | 144   | 11  | 93    | 299 | 119 | 163   | 560   | 215   | 349   | 366   | 9   | 45    |
| % total population              | 15%            | 15%          | 21%   | 11% | 14%   | 0%  | 7%    | 18% | 11%   | 2%  | 8%    | 36% | 12% | 13%   | 38%   | 13%   | 19%   | 24%   | 2%  | 3%    |
| Age 65+                         | 3,724          | 347          | 183   | 81  | 268   | 103 | 162   | 124 | 233   | 124 | 236   | 120 | 137 | 49    | 26    | 223   | 426   | 262   | 213 | 407   |
| % total population              | 17%            | 22%          | 14%   | 11% | 19%   | 31% | 14%   | 14% | 17%   | 18% | 20%   | 15% | 14% | 4%    | 2%    | 13%   | 23%   | 17%   | 58% | 23%   |
| Minority                        | 2,083          | 68           | 523   | 46  | 50    | 28  | 44    | 193 | 193   | 23  | 305   | 17  | 38  | 181   | 45    | 0     | 113   | 108   | 10  | 98    |
| % total population              | 9%             | 4%           | 41%   | 6%  | 3%    | 8%  | 4%    | 21% | 14%   | 3%  | 26%   | 2%  | 4%  | 15%   | 3%    | 0%    | 6%    | 7%    | 3%  | 5%    |
| Speaks English "Less than well" | 133            | 17           | 1     | 0   | 0     | 0   | 7     | 0   | 7     | 0   | 2     | 0   | 0   | 39    | 0     | 11    | 21    | 19    | 0   | 9     |
| % population 5+                 | 1%             | 1%           | 0%    | 0%  | 0%    | 0%  | 1%    | 0%  | 1%    | 0%  | 0%    | 0%  | 0%  | 3%    | 0%    | 1%    | 1%    | 1%    | 0%  | 1%    |
| No HS Diploma                   | 929            | 95           | 49    | 8   | 58    | 14  | 42    | 116 | 32    | 87  | 39    | 56  | 59  | 58    | 18    | 40    | 120   | 19    | 0   | 19    |
| % population 25+                | 6%             | 8%           | 6%    | 1%  | 5%    | 6%  | 4%    | 21% | 3%    | 13% | 4%    | 13% | 8%  | 7%    | 2%    | 4%    | 9%    | 2%    | 0%  | 2%    |
| 1+ Persons with a Disability    | 2,950          | 128          | 204   | 55  | 252   | 135 | 157   | 291 | 188   | 149 | 251   | 48  | 201 | 253   | 50    | 174   | 217   | 72    | 30  | 95    |
| % households                    | 32%            | 18%          | 44%   | 18% | 33%   | 70% | 27%   | 63% | 37%   | 38% | 37%   | 19% | 43% | 43%   | 12%   | 28%   | 33%   | 14%   | 14% | 22%   |
| Below Poverty Level             | 1,153          | 21           | 13    | 0   | 50    | 75  | 12    | 159 | 26    | 0   | 111   | 92  | 47  | 92    | 118   | 160   | 65    | 40    | 10  | 62    |
| % households                    | 13%            | 3%           | 3%    | 0%  | 7%    | 39% | 2%    | 34% | 5%    | 0%  | 16%   | 37% | 10% | 16%   | 29%   | 25%   | 10%   | 8%    | 5%  | 14%   |
| Unemployment                    | 602            | 8            | 0     | 91  | 0     | 0   | 17    | 0   | 115   | 1   | 0     | 55  | 41  | 113   | 58    | 34    | 53    | 11    | 0   | 5     |
| % population 16+                | 3%             | 1%           | 0%    | 14% | 0%    | 0%  | 2%    | 0%  | 9%    | 0%  | 0%    | 9%  | 5%  | 10%   | 6%    | 2%    | 3%    | 1%    | 0%  | 0%    |
| Income <\$50k                   | 3,779          | 226          | 74    | 86  | 284   | 185 | 202   | 345 | 229   | 71  | 470   | 94  | 279 | 425   | 153   | 145   | 134   | 147   | 110 | 120   |
| % households                    | 41%            | 33%          | 16%   | 28% | 37%   | 96% | 34%   | 75% | 45%   | 18% | 70%   | 37% | 60% | 72%   | 37%   | 23%   | 21%   | 29%   | 51% | 28%   |
| Income <\$60k                   | 4,761          | 291          | 106   | 96  | 347   | 185 | 222   | 426 | 247   | 182 | 494   | 141 | 356 | 549   | 219   | 296   | 148   | 168   | 110 | 178   |
| % households                    | 52%            | 42%          | 23%   | 32% | 45%   | 96% | 38%   | 92% | 49%   | 46% | 73%   | 56% | 77% | 93%   | 53%   | 47%   | 23%   | 33%   | 51% | 42%   |
| Income <\$75k                   | 5,714          | 395          | 171   | 117 | 504   | 185 | 400   | 442 | 260   | 253 | 537   | 141 | 374 | 549   | 311   | 348   | 191   | 192   | 115 | 229   |
| % households                    | 62%            | 57%          | 37%   | 39% | 66%   | 96% | 68%   | 95% | 51%   | 64% | 80%   | 56% | 81% | 93%   | 75%   | 55%   | 29%   | 38%   | 53% | 54%   |
| No Internet                     | 842            | 105          | 0     | 0   | 85    | 36  | 45    | 76  | 45    | 44  | 106   | 25  | 11  | 120   | 13    | 42    | 27    | 9     | 4   | 49    |
| % households                    | 9%             | 15%          | 0%    | 0%  | 11%   | 19% | 8%    | 16% | 9%    | 11% | 16%   | 10% | 2%  | 20%   | 3%    | 7%    | 4%    | 2%    | 2%  | 11%   |
| No Vehicle                      | 554            | 0            | 13    | 0   | 137   | 37  | 48    | 33  | 44    | 0   | 15    | 23  | 41  | 93    | 0     | 16    | 36    | 0     | 5   | 13    |
| % households                    | 6%             | 0%           | 3%    | 0%  | 18%   | 19% | 8%    | 7%  | 9%    | 0%  | 2%    | 9%  | 9%  | 16%   | 0%    | 3%    | 6%    | 0%    | 2%  | 3%    |
| Single Parent                   | 870            | 0            | 115   | 0   | 23    | 0   | 0     | 103 | 87    | 0   | 8     | 84  | 24  | 80    | 138   | 141   | 7     | 46    | 8   | 6     |
| % households                    | 9%             | 0%           | 25%   | 0%  | 3%    | 0%  | 0%    | 22% | 17%   | 0%  | 1%    | 33% | 5%  | 14%   | 33%   | 22%   | 1%    | 9%    | 4%  | 1%    |
| Living Alone                    | 2,636          | 202          | 90    | 45  | 316   | 125 | 203   | 188 | 29    | 218 | 289   | 60  | 190 | 207   | 63    | 110   | 102   | 17    | 87  | 95    |
| % total population              | 12%            | 29%          | 19%   | 15% | 41%   | 65% | 34%   | 41% | 6%    | 55% | 43%   | 24% | 41% | 35%   | 15%   | 17%   | 16%   | 3%    | 40% | 22%   |
| 65+ Living Alone                | 1,018          | 103          | 31    | 0   | 220   | 86  | 7     | 50  | 29    | 30  | 76    | 25  | 95  | 19    | 0     | 56    | 74    | 17    | 75  | 25    |
| % total population              | 5%             | 6%           | 2%    | 0%  | 15%   | 26% | 1%    | 5%  | 2%    | 4%  | 7%    | 3%  | 10% | 2%    | 0%    | 3%    | 4%    | 1%    | 20% | 1%    |

Figure 3. Demographic Profile Summary Table. Data source: U.S. Census Bureau 2021 American Community Survey

Biddeford – August 2023

## Demographics - Age 17 Years or Younger Biddeford

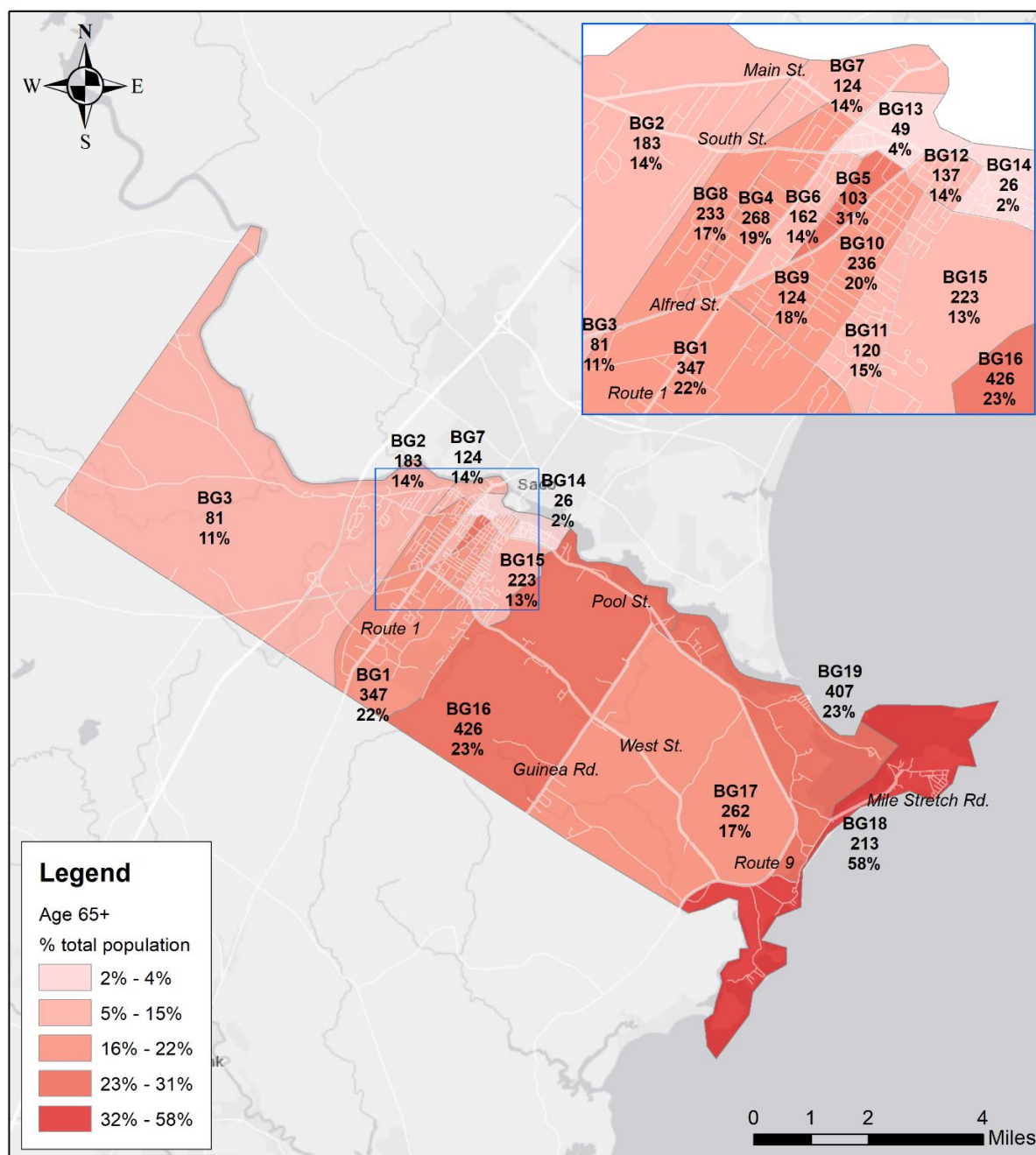


Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 2. Breakdown of the total population in Biddeford, by block group, that is 17 years old or younger. The block group is labeled (BG#) and includes the total number of individuals in the block group that are 17 years or younger and the percent of the total population within the block group that is 17 years or younger. Data source: U.S. Census Bureau 2021 American Community Survey



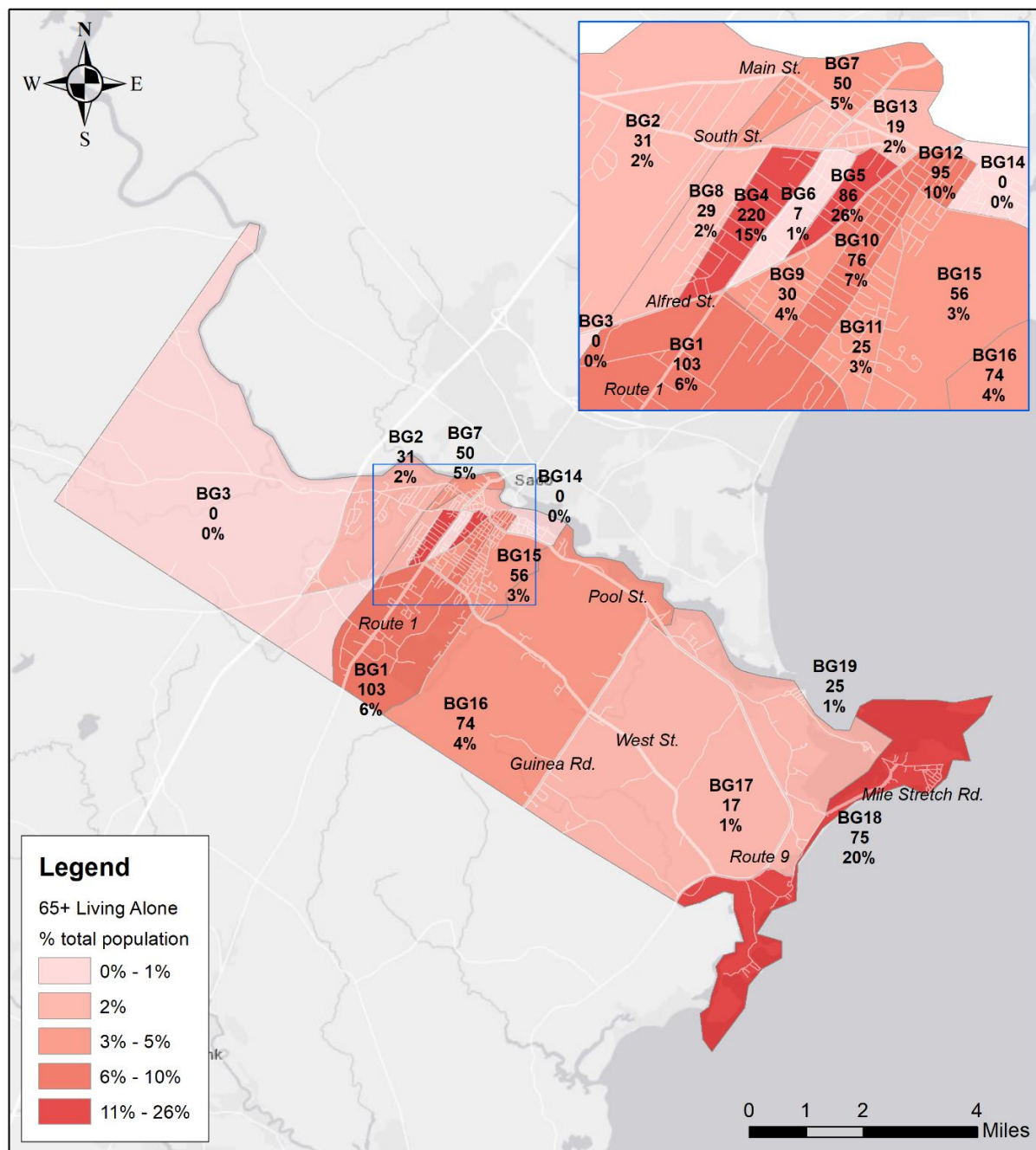
## Demographics - Age 65 Years or Older Biddeford



Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 3. Breakdown of the total population in Biddeford, by block group, that is 65 years or older. The block group is labeled (BG#) and includes the total number of individuals in the block group that are 65 years or older and the percent of the total population within the block group that is 65 years or older. Data source: U.S. Census Bureau 2021 American Community Survey.

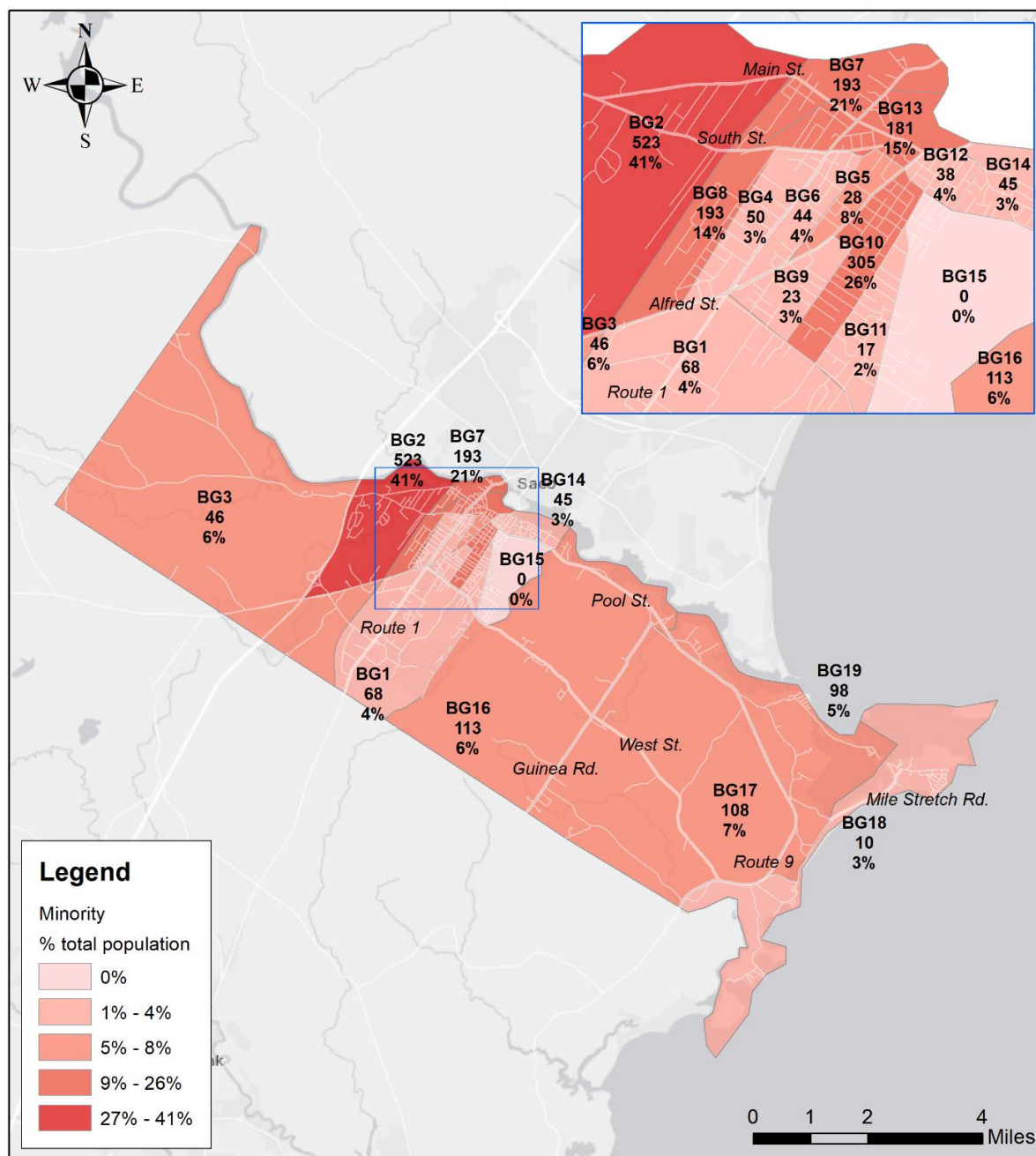
## Demographics - Age 65+ and Living Alone Biddeford



Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 4. Breakdown of the total population in Biddeford, by block group, that is 65 years or older and living alone. The block group is labeled (BG#) and includes the total number of individuals in the block group that are 65 years or older and living alone, and the percent of the total population within the block group that is 65 years or older and living alone. Data source: U.S. Census Bureau 2021 American Community Survey.

## Demographics - Minority Biddeford

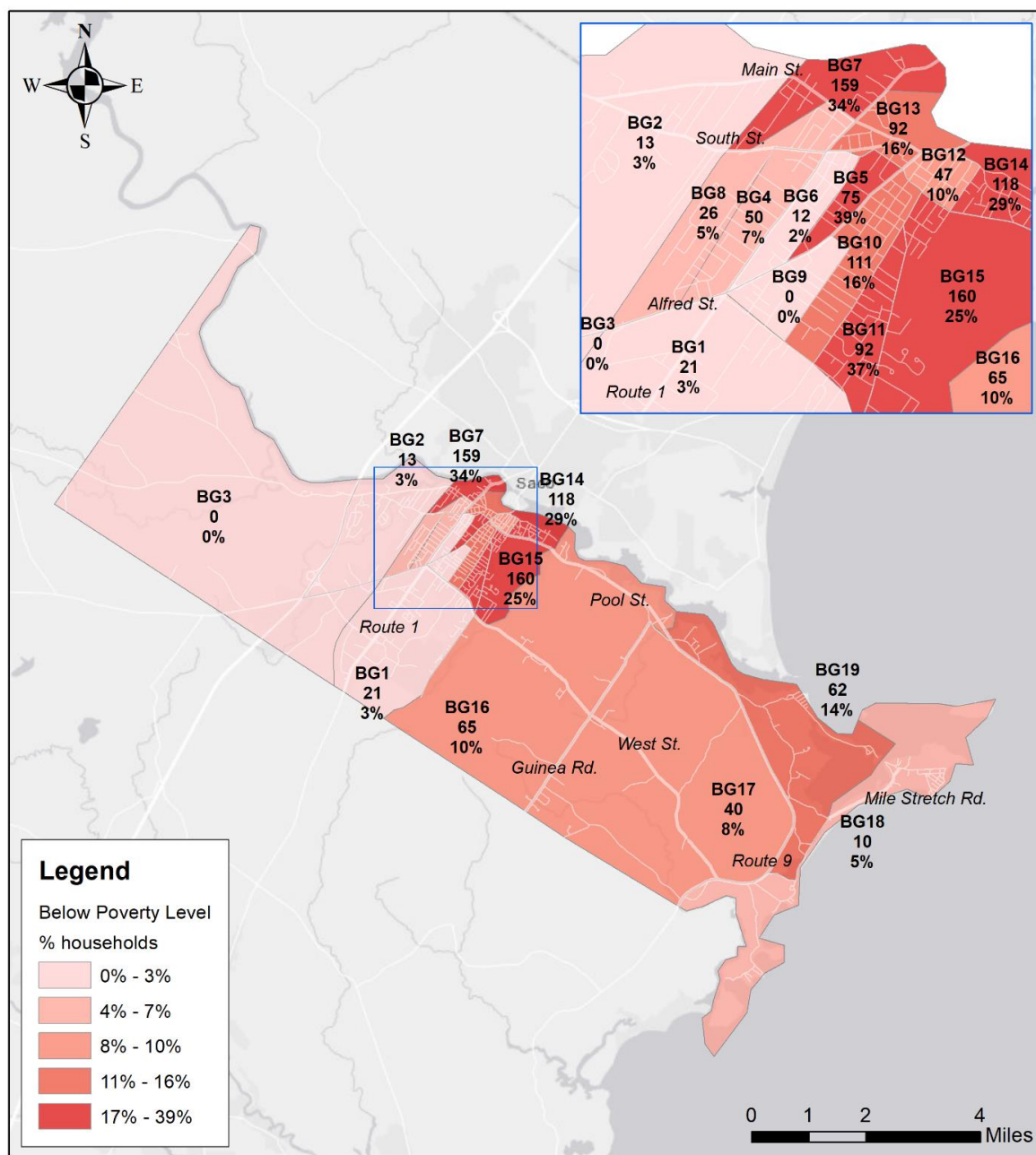


Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 5. Breakdown of the total population in Biddeford, by block group, that is a racial or ethnic minority (non-white). The block group is labeled (BG#) and includes the total number of individuals in the block group that are a racial or ethnic minority and the percent of the total population within the block group that is a racial or ethnic minority. Data source: U.S. Census Bureau 2021 American Community Survey.



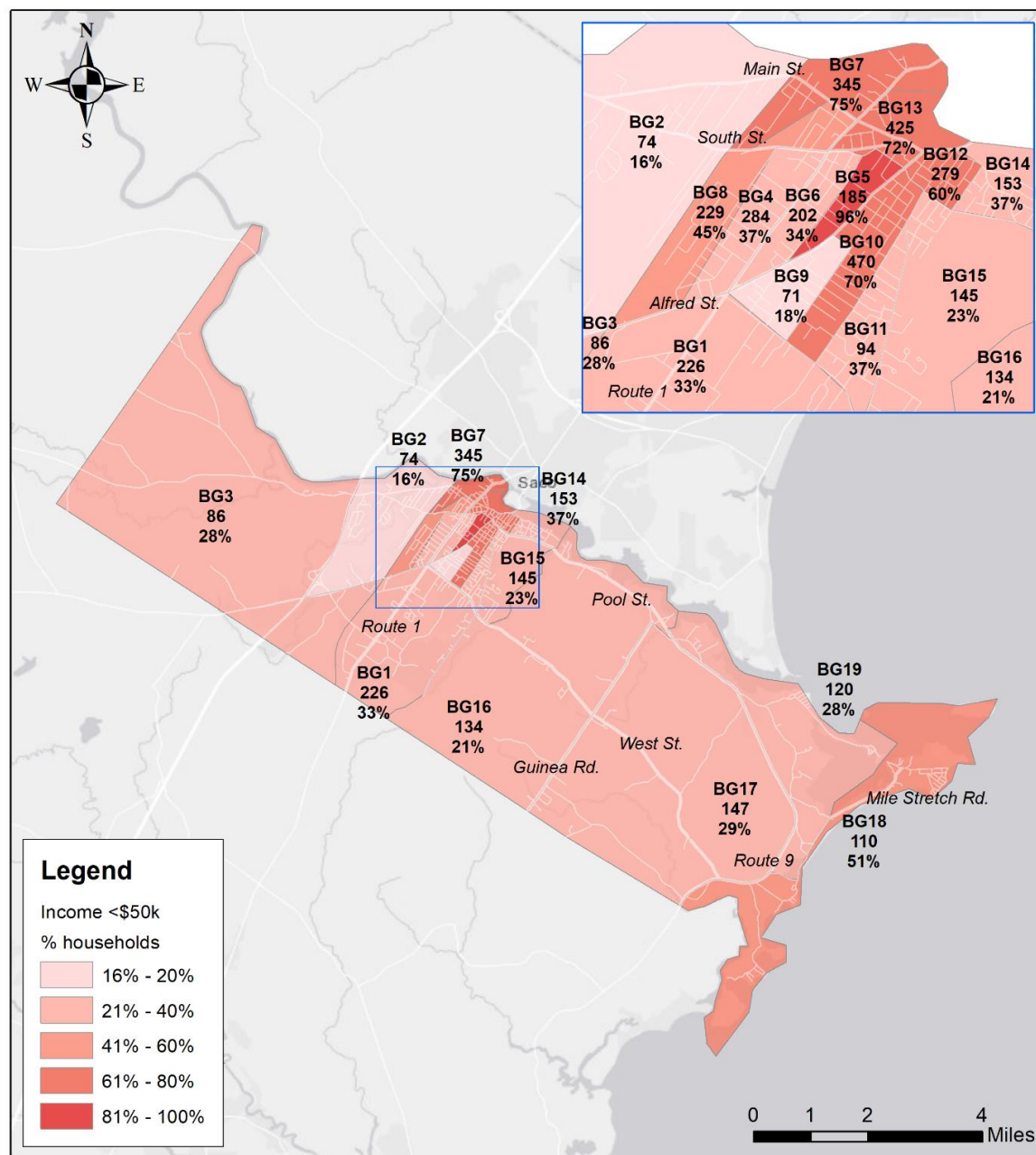
## Demographics - Below Poverty Level Biddeford



Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 6. Breakdown of households in Biddeford, by block group, that are below the national poverty level. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) and includes the total number of households in the block group that are below the national poverty level and the percent of households within the block group that are below the national poverty level. Data source: U.S. Census Bureau 2021 American Community Survey.

## Demographics - Income Below \$50,000 Biddeford

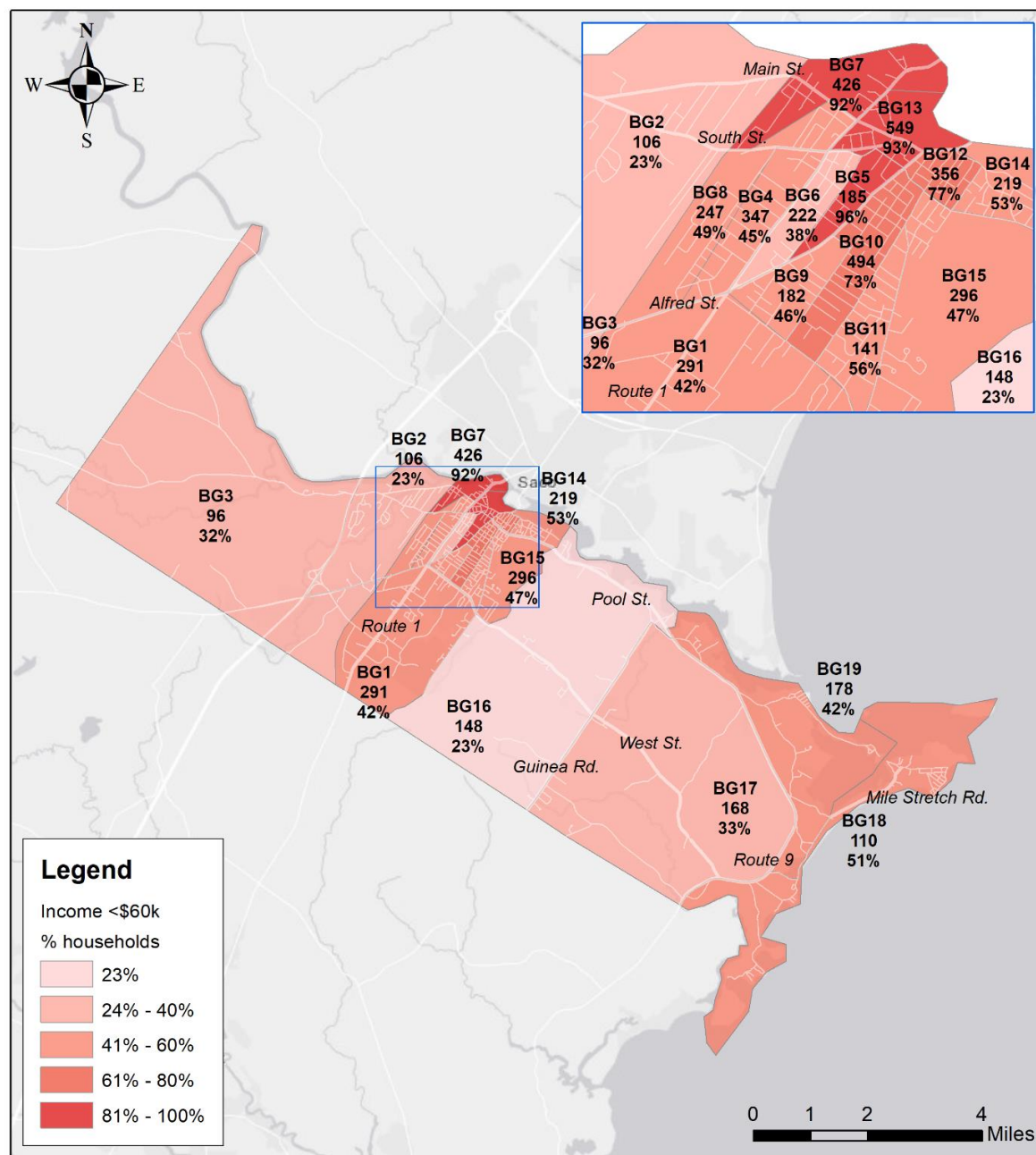


Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 7. Breakdown of households in Biddeford, by block group, that have an annual income below \$50,000. The US EPA climate change and social vulnerability income threshold is \$51,500. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) and includes the total number of households in the block group that have an annual income below \$50,000 and the percent of households within the block group that have an annual income below \$50,000. Data source: U.S. Census Bureau 2021 American Community Survey



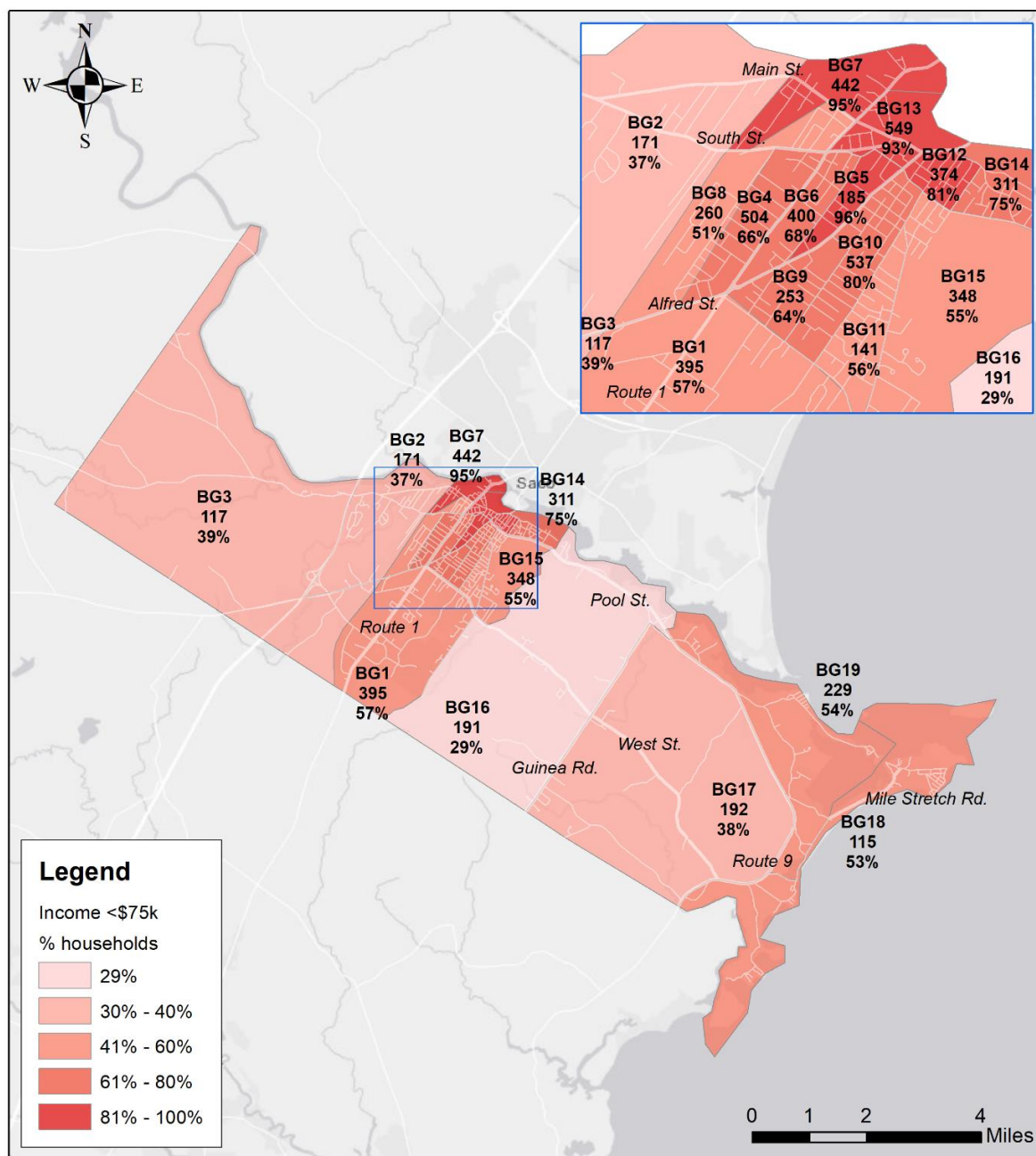
## Demographics - Income Below \$60,000 Biddeford



Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 8. Breakdown of households in Biddeford, by block group, that have an annual income below \$60,000. The 2021 Maine state median income was \$64,767. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) and includes the total number of households in the block group that have an annual income below \$60,000 and the percent of households within the block group that have an annual income below \$60,000. Data source: U.S. Census Bureau 2021 American Community Survey

## Demographics - Income Below \$75,000 Biddeford



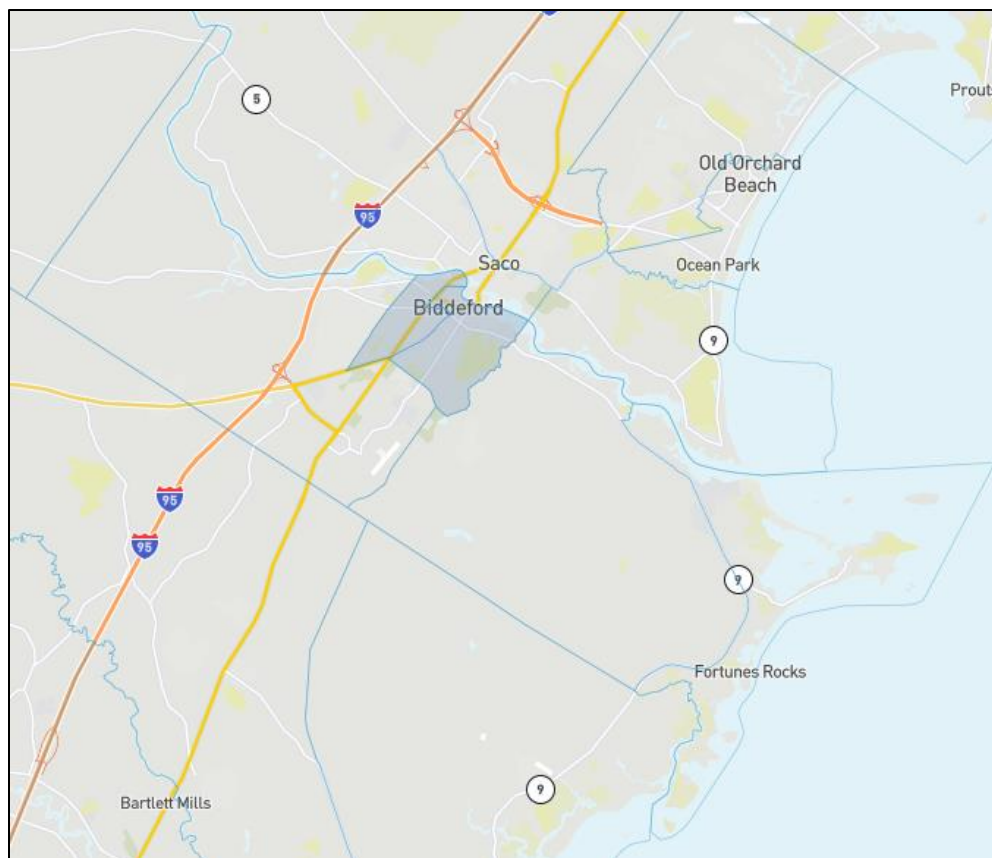
Data source: U.S. Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 9. Breakdown of households in Biddeford, by block group, that have an annual income below \$75,000. The 2021 York County median income was \$73,856. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) and includes the total number of households in the block group that have an annual income below \$75,000 and the percent of households within the block group that have an annual income below \$75,000. Data source: U.S. Census Bureau 2021 American Community Survey

*“Disadvantaged” Designation of Biddeford’s Downtown Area*

The Council on Environmental Quality developed a Climate and Economic Justice Screening Tool which combines environmental and climate hazard data with demographic data to identify where elevated hazards and social vulnerability occur. This tool used data at the census tract level, which is a larger geographic unit than block groups. Census tracts are statistical subdivisions of a county and contain between 1,200 to 8,000 people. The tool ranked census tracts at the national level based on indicators representing environmental, climate, health and other hazards as well as socioeconomic indicators of social vulnerability. Thresholds were established for each indicator to designate heightened hazards or social vulnerability. Census tracts are considered disadvantaged if they meet the threshold for at least one environmental, climate, or other hazard, and meet the threshold for social vulnerability.

**There are two census tracts in downtown Biddeford—containing block groups 4 through 15—that are identified as disadvantaged** (highlighted in blue in Map 10). **This area is designated as disadvantaged because of low life expectancy, elevated rates of asthma, and low household incomes.** This means that the downtown area of Biddeford has high health hazards co-occurring with elevated social vulnerability and is therefore overburdened and underserved compared to the rest of the country. Areas with disadvantaged designations will be given priority for federal funding through the [Justice40 Initiative](#).



Map 10. The heart of Biddeford's downtown is encompassed by the two highlighted census tracts, which the Council on Environmental Quality's Climate and Economic Justice Screening Tool identifies as disadvantaged.

## SUPPLEMENTAL COMMUNITY INFORMATION

Biddeford, along with the rest of Maine, is experiencing a housing affordability crisis. Access to affordable housing, especially for socially vulnerable populations, is a critical need that affects an individual's or household's exposure to climate hazards and adaptive capacity. In the last 20 years, Maine home prices have risen dramatically while household incomes have stagnated (Figure 4). As of 2021, the median home price in Biddeford was \$65,000 higher than the state-wide median home price, and the median income in Biddeford was \$7,414 lower than the state-wide median (Figure 5). MaineHousing calculates the Homeownership Affordability Index based on the ratio of the affordable home price at the median income to the median home price. An index of less than 1 indicates that households earning the median income cannot afford the median home price and housing is considered unaffordable. The 2021 index for Biddeford was 0.55, substantially lower than the County (0.72) and State (0.80) indices, indicating that homeownership is more unaffordable for residents in Biddeford compared to the rest of the County or State.

### Relative Increases in Income and Home Price (Maine)

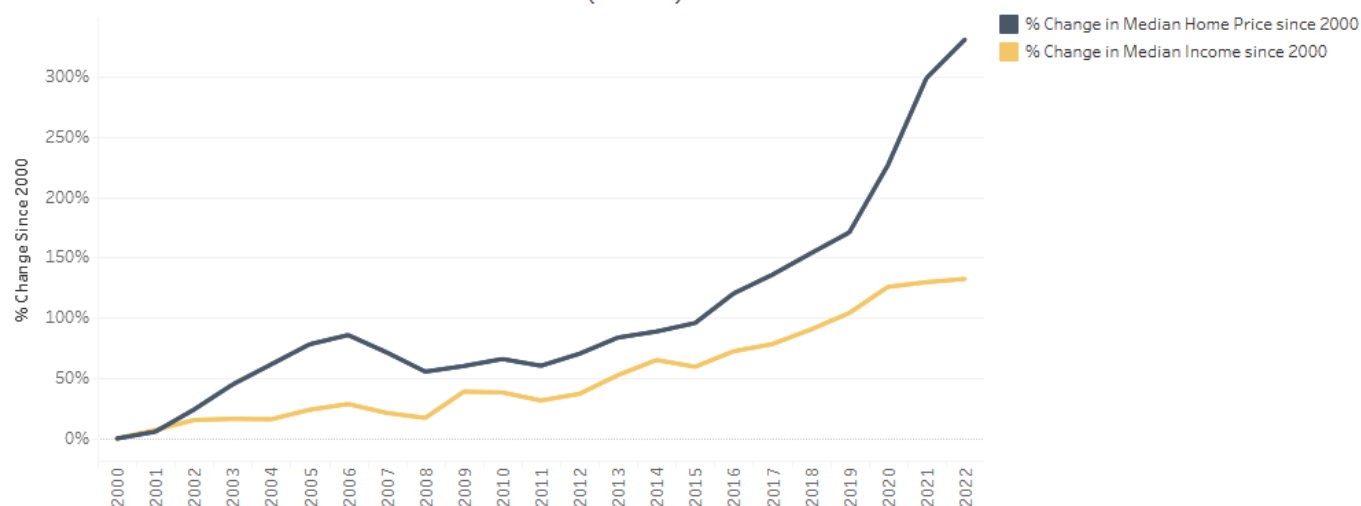


Figure 4. Long-term income trend across the state of Maine compared to the home price trend. The median home price has risen exponentially in the last 20 years while the median income has risen only slightly. The growing gap between incomes and home prices is one factor driving housing unaffordability in Maine. Figure from the [MaineHousing housing data dashboard](#).

| 2021 Homeownership Affordability                  |           |             |           |
|---------------------------------------------------|-----------|-------------|-----------|
|                                                   | Biddeford | York County | Maine     |
| Homeownership Affordability Index                 | 0.55      | 0.72        | 0.80      |
| Households Unable to Afford Median Home Price (%) | 77%       | 67%         | 62%       |
| Median Home Price                                 | \$360,000 | \$389,900   | \$295,000 |
| Home Price Affordable to Median Income            | \$199,090 | \$280,921   | \$236,223 |
| Median Income                                     | \$56,007  | \$72,883    | \$63,421  |
| Income Needed to Afford Median Home Price         | \$101,274 | \$101,157   | \$79,202  |
| Percentage of Unattainable Homes Sold             | 97%       | 79%         | 65%       |

Figure 5. Summary of 2021 home affordability indicators, including the Homeownership Affordability Index which is based on the ratio of the affordable price of a home at the median income to the median home price. An index of less than 1 indicates that households earning the median income cannot afford the median home price, and housing is considered unaffordable. As of 2021, the gap between median household income and housing prices was greater for Biddeford residents compared to the County and State. Data from the [MaineHousing housing data dashboard](#).

The Biddeford Affordable Housing Task Force published a report in late 2022 on housing conditions and recommendations for improving affordability.<sup>6</sup> The Task Force found that rental affordability has improved in recent years. The HUB rental affordability index<sup>7</sup> increased from 0.71 in 2017 to 0.97 in 2020 because the median income of Biddeford renters increased 52%. However, this was largely due to new residents with higher

<sup>6</sup> [Mayor's Affordable Housing Task Force Final Report and Recommendations, December 2022](#)

<sup>7</sup> The U.S. Department of Housing and Urban Development (HUB) rental affordability index is an indicator used to compare rental prices across communities. Affordability is defined as no more than 30% of a household's income going to housing costs. The index is the ratio of 30% of the media income to the median rental price. An index of less than one means an area is unaffordable.



incomes moving to the City rather than rising incomes among existing residents. The Task Force concluded that “long term Biddeford residents are struggling to continue to afford a home in our city, while new residents with higher salaries are moving into the community and taking over the rents of those who have been priced out.” Continuing gentrification in Biddeford could make it even more challenging for socially vulnerable populations to access affordable housing, impacting their ability to adapt to climate change.

### Climate Gentrification

Gentrification occurs when wealthier people move into a lower income area and change the character of the community, increase housing costs, and displace longtime residents. Climate gentrification, specifically, is caused by the influx of climate migrants leaving areas with higher climate risks and moving to areas with lower climate risks. Maine has the potential to become a destination for climate migrants because, despite the worrisome impacts of climate change, it is expected to be more hospitable than places like the Southeast, Texas, or Florida. The COVID-19 pandemic demonstrated what this future could look like, with over 34,000 people flocking to the State.<sup>8</sup> As a highly desirable, growing, and vibrant city, Biddeford could become a haven for climate migrants moving to Maine, exacerbating existing gentrification challenges affecting the City.

### Housing Characteristics

Map 11, Map 12, and Figure 6 show data about housing characteristics including multi-unit housing structures, mobile homes, and renter occupied homes. These characteristics are associated with elevated social vulnerability and/or reduced adaptive capacity. For example, renters and multi-unit households generally have less adaptive capacity than single family homeowners because they tend to have lower incomes/financial resources and have less ability to make property improvements. Additionally, multi-unit households are often occupied by renters, and landlords have little incentive to improve energy efficiency because energy costs are commonly borne by tenants. Mobile homes have a higher energy cost per square foot than site-built homes and are generally more vulnerable to the impacts of climate hazards. Rented, multi-unit, and mobile homes also tend to be associated with socially vulnerable populations (see Demographic Profile for a description of ACS data).

### Key Takeaways

- In the neighborhood around the old mill buildings (block group 13) 100% of households are renter occupied and 100% of housing units are multi-unit structures.
- Local information provided by the Task Force highlighted this neighborhood as an area with rapidly changing demographics. Approximately 300 new

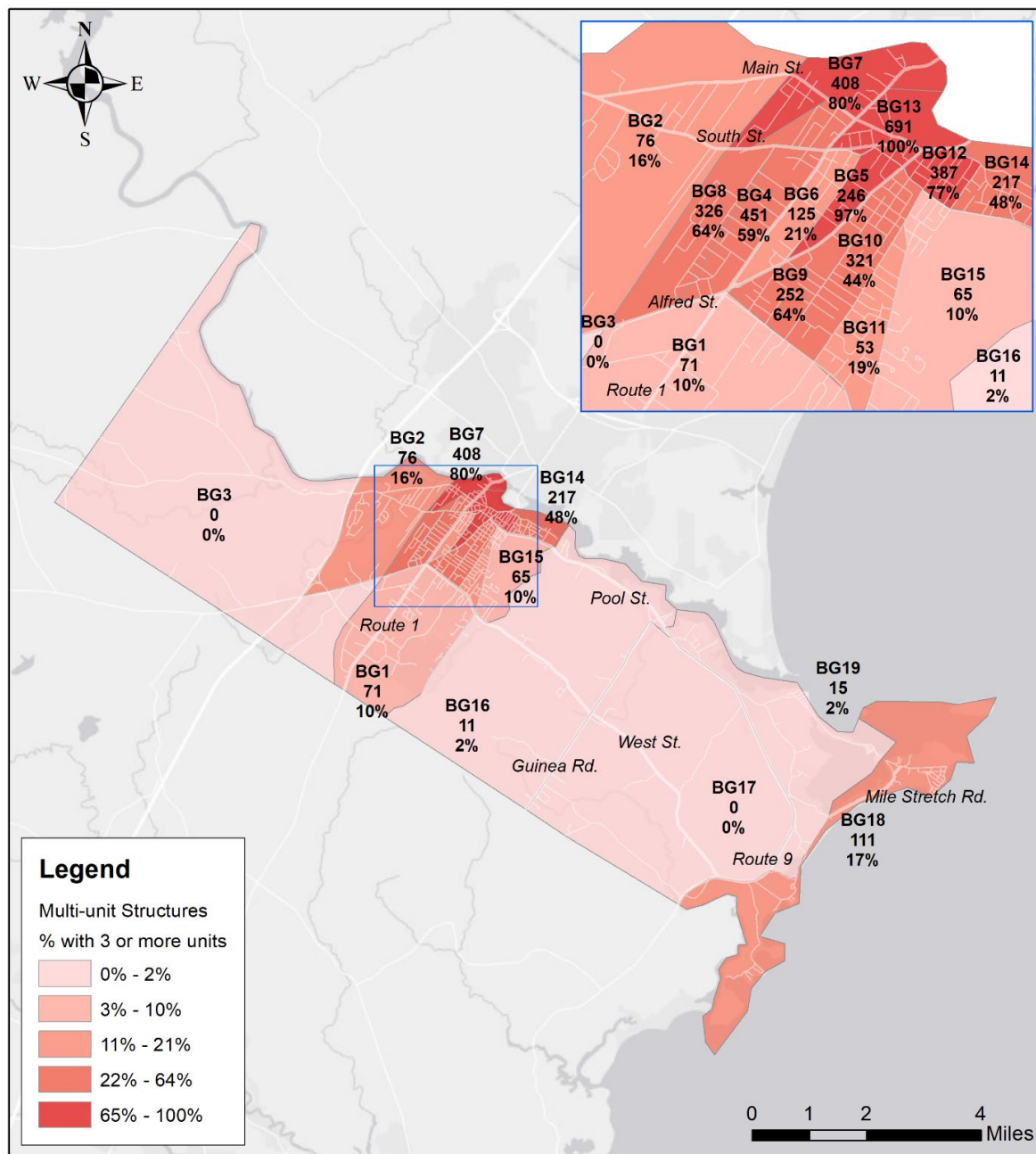
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<sup>8</sup> [The climate migrants are coming!... Maybe?, Maine Monitor, April 2023](#)

upscale housing units have made this area much more affluent, and an additional 600 or so units will be built in the next 24-36 months.

- Compared to the rest of the community, the downtown neighborhoods along Main Street (block groups 5, 7, 12, and 13) have elevated percentages of renter occupied households and multi-unit structures.
- Mobile homes are 1% of all housing units in Biddeford (88 units community wide) and are only present in the more rural neighborhoods outside of downtown (block groups 1, 3, and 16) and the neighborhood around Hannaford (block group 6). The highest number of mobile homes is located west of I-95 (block group 3).

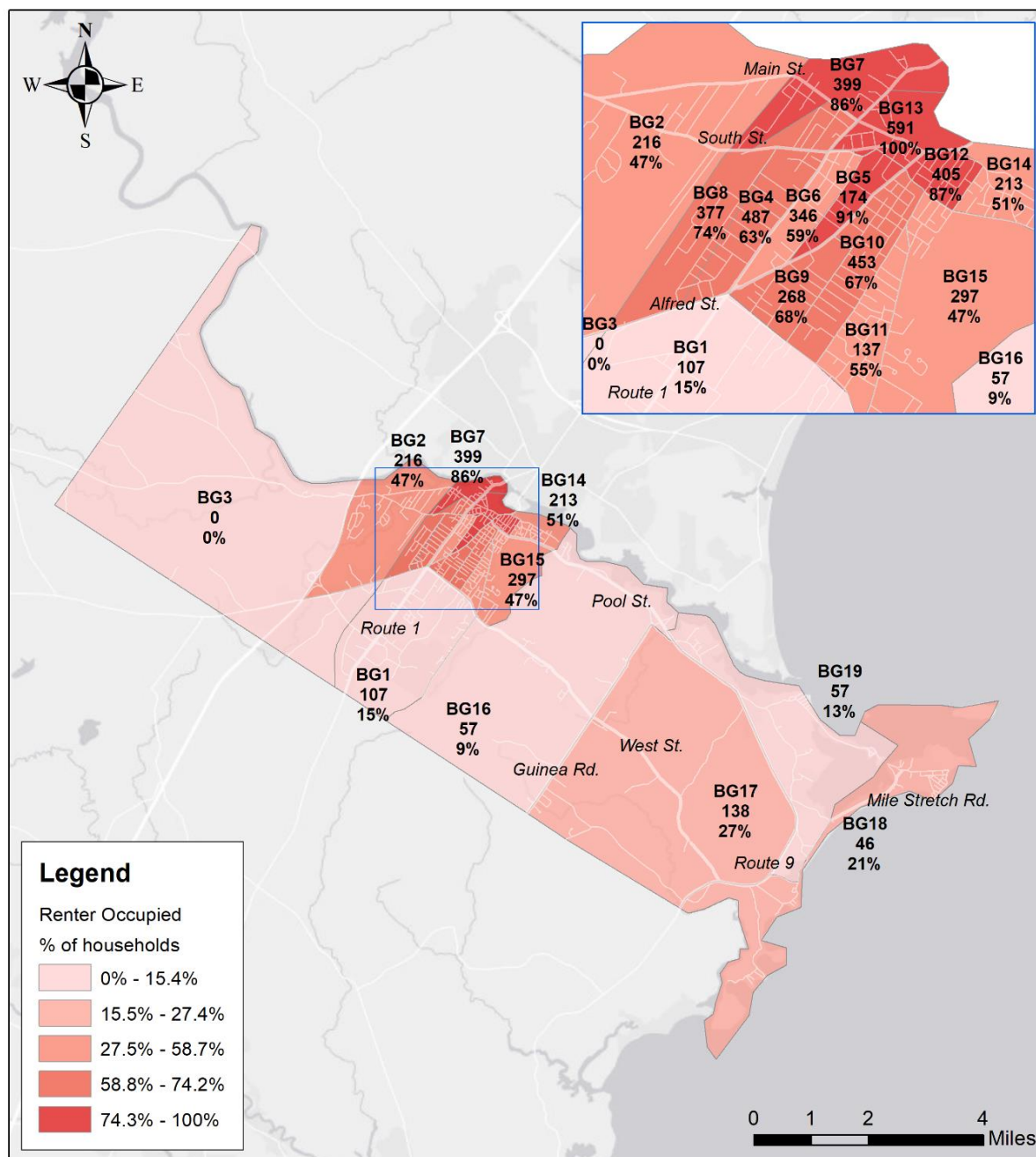
## Multi-unit Housing Structures Biddeford



Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 11. Breakdown of multi-unit (3 or more units) housing structures in Biddeford by block group. Housing units include occupied households as well as vacant units and represent the total housing stock in Biddeford. The block group is labeled (BG#) and includes the total number of multi-unit housing units in the block group and the percent of total housing units within the block group that are multi-unit. Data source: U.S. Census Bureau 2021 American Community Survey

## Renter Occupied Homes Biddeford



Data source: U.S. Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 12. Breakdown of renter occupied households in Biddeford by block group. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) and includes the total number of renter occupied households in the block group and the percent of households that are renter occupied within the block group. Data source: U.S. Census Bureau 2021 American Community Survey

| Community wide        |        | Block Groups |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |
|-----------------------|--------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|
|                       |        | 1            | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13   | 14  | 15  | 16  | 17  | 18  | 19  |
| Total Housing Units   | 10,350 | 733          | 463 | 331 | 769 | 253 | 589 | 507 | 508 | 393 | 731 | 272 | 505 | 691  | 454 | 656 | 652 | 503 | 635 | 705 |
| Total Households      | 9,198  | 694          | 463 | 303 | 769 | 192 | 589 | 463 | 508 | 393 | 675 | 251 | 464 | 591  | 414 | 631 | 652 | 503 | 215 | 428 |
| Renter Occupied       | 4,768  | 107          | 216 | 0   | 487 | 174 | 346 | 399 | 377 | 268 | 453 | 137 | 405 | 591  | 213 | 297 | 57  | 138 | 46  | 57  |
| % households          | 52%    | 15%          | 47% | 0%  | 63% | 91% | 59% | 86% | 74% | 68% | 67% | 55% | 87% | 100% | 51% | 47% | 9%  | 27% | 21% | 13% |
| Multi-unit            | 3,826  | 71           | 76  | 0   | 451 | 246 | 125 | 408 | 326 | 252 | 321 | 53  | 387 | 691  | 217 | 65  | 11  | 0   | 111 | 15  |
| % total with 3+ units | 37%    | 10%          | 16% | 0%  | 59% | 97% | 21% | 80% | 64% | 64% | 44% | 19% | 77% | 100% | 48% | 10% | 2%  | 0%  | 17% | 2%  |
| Mobile Homes          | 88     | 7            | 0   | 35  | 0   | 0   | 28  | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 18  | 0   | 0   | 0   |
| % total units         | 1%     | 1%           | 0%  | 11% | 0%  | 0%  | 5%  | 0%  | 0%  | 0%  | 0%  | 0%  | 0%  | 0%   | 0%  | 0%  | 3%  | 0%  | 0%  | 0%  |

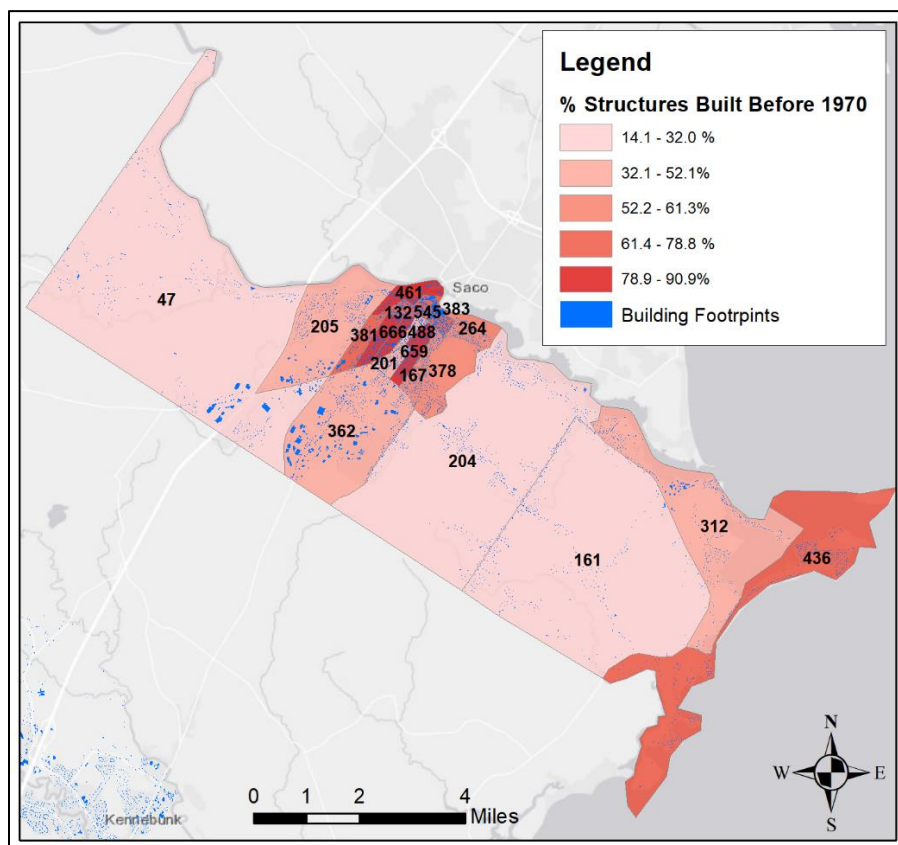
Figure 6. Community wide and block group level housing characteristics in Biddeford. Housing units include both occupied and vacant units and represent the total housing stock in Biddeford. Households do not include vacant housing units and represent occupied housing units only. Data source: U.S. Census Bureau 2021 American Community Survey



## Age of Buildings

Maine has one of the oldest housing stocks in the country. Older buildings tend to be less energy efficient, which is especially problematic during the winter and summer months when outdoor temperatures are at their extremes. Further, houses constructed before 1970 were built prior to the adoption of modern building codes and significant federal and state/local risk-reduction policies (National Flood Insurance Program (1968), Maine Shoreland Zoning (1971)). Older buildings are ideal targets for weatherization, energy efficiency upgrades, and resilience retrofits.

Map 13 shows the percentage of structures, at the block group level, built before 1970. In Biddeford, areas with the highest concentration of buildings constructed before 1970 are in the downtown area and along the coastline. These areas also have elevated social vulnerability based on demographic characteristics and are vulnerable to hazards, including coastal and riverine flooding, sea level rise, and urban heat islands. The concentration of older buildings in flood prone areas means that it is likely those structures are not built to modern codes and are not elevated above projected future flood levels, or even current flood levels.



Map 13. Percent and actual number of structures built before 1970 presented at the block group level. The block groups are color-coded by the percentage of structures built before 1970 and are labelled with the number of structures built before 1970. (Data source: year structures built: US Census American Community Survey; building footprints: Microsoft)

### Household Heating Fuel Types

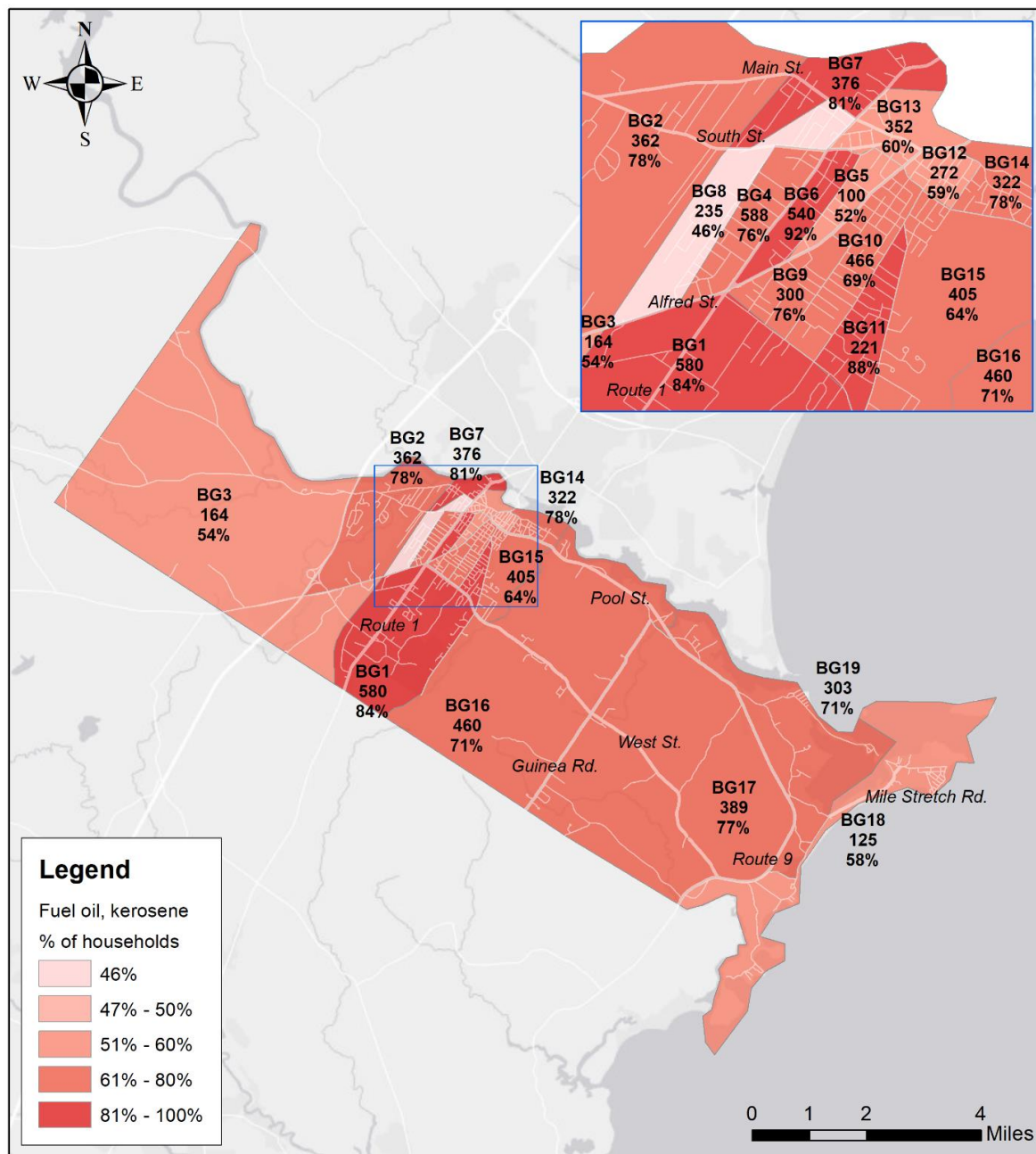
Household heating fuel data is from the 2021 American Community Survey. This section includes fuel oil, kerosene, propane, natural gas, and electricity used as households' primary heating sources. Additional heating sources such as wood burning stoves, pellet stoves, or bio-bricks are not included due to limited or non-existent data. Information about household heat pump usage and other sustainable alternatives is also not included due to data limitations.

Understanding heating fuel trends is important for evaluating the potential impacts of electrifying the heating sector to reduce greenhouse gas emissions. Electrification must be paired with electricity grid resilience measures to ensure that the grid can withstand increased electricity consumption as well as climate hazards such as flooding, high winds, high temperatures, and wildfires (see Extreme Storms & Precipitation: Power Outages for more information about these impacts). Map 14, Map 15, Map 16, Map 17, and Figure 7 show data about primary heating fuel types across Biddeford, which provides context about where fossil fuels are used most heavily and therefore where electricity consumption for heating is expected to increase.

### Key Takeaways

- The vast majority of households (74%) primarily heat their homes using fuel oil or kerosene followed by natural gas, propane, and electricity.
- The neighborhood around Hannaford (block group 6) has the highest percentage of households that heat their homes using fuel oil and kerosene, followed by the neighborhoods north of Biddeford Middle School (block group 11), around the Biddeford Municipal Airport (block group 1), and east of Biddeford High School (block group 7).
- The neighborhood around the downtown USPS Post Office (block group 5) has the highest percentage of households that use propane to heat their homes.
- The neighborhood east of May Street (block group 8) has the highest percentage of households that use natural gas to heat their homes, followed by the neighborhood around the downtown USPS Post Office (block group 5).
- The neighborhood east of May Street (block group 8) and the neighborhood around Clifford Park (block group 15) have the highest percentage of households that use electricity to heat their homes.

## Home Heating Fuel Type - Fuel Oil, Kerosene Biddeford

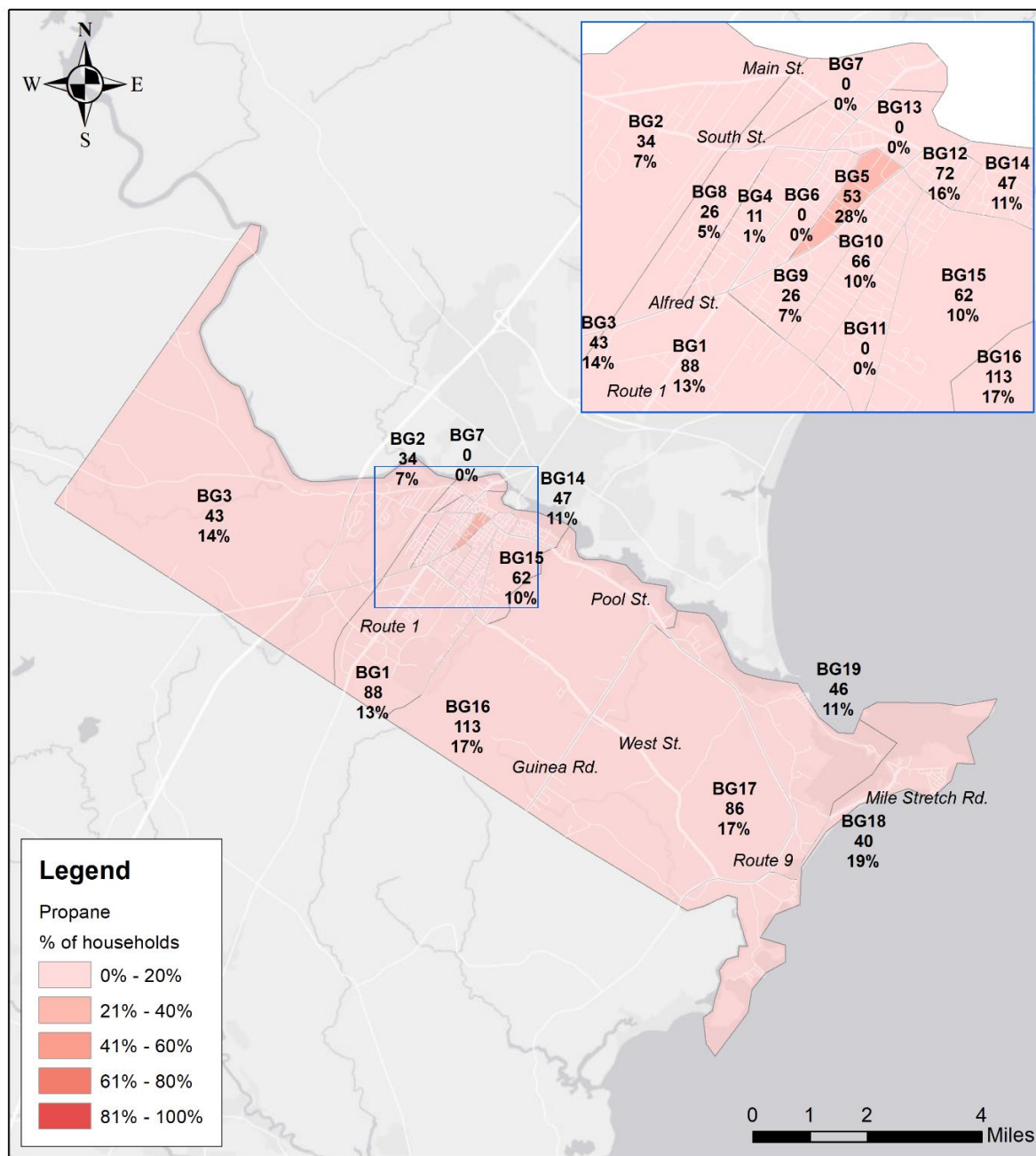


Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 14. Breakdown of households in Biddeford, by block group, that use fuel oil or kerosene for heating. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) and includes the total number of households within the block group that use fuel oil or kerosene for heating and the percent of households within the block group that use fuel oil or kerosene for heating. Data source: U.S. Census Bureau 2021 American Community Survey

Biddeford – August 2023

## Home Heating Fuel Type - Propane Biddeford



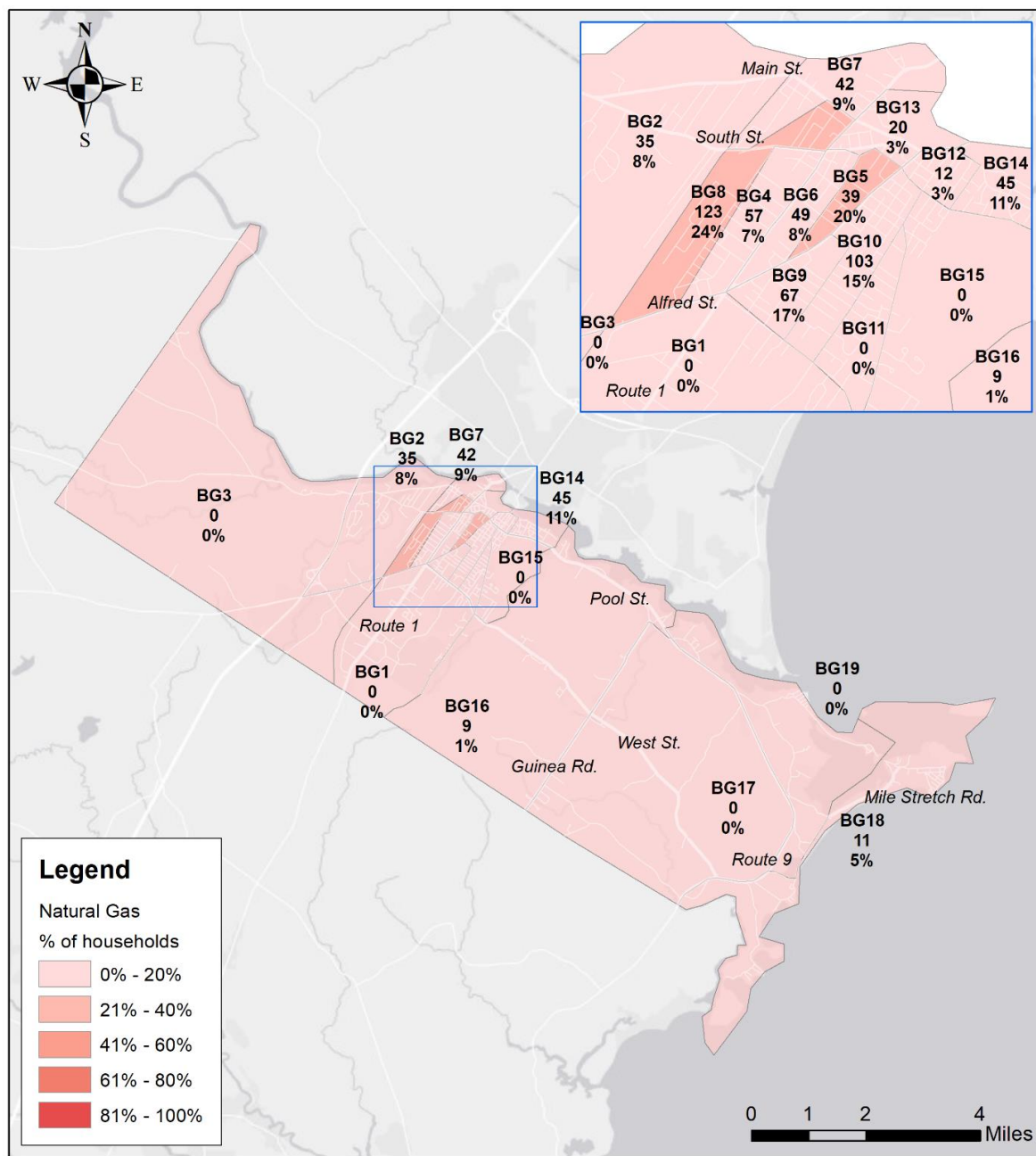
Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 15. Breakdown of households in Biddeford, by block group, that use propane for heating. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) as well as the total number of households within the block group that use propane for heating and the percent of households within the block group that use propane for heating. Data source: U.S. Census Bureau 2021 American Community Survey

Biddeford – August 2023



## Home Heating Fuel Type - Natural Gas Biddeford

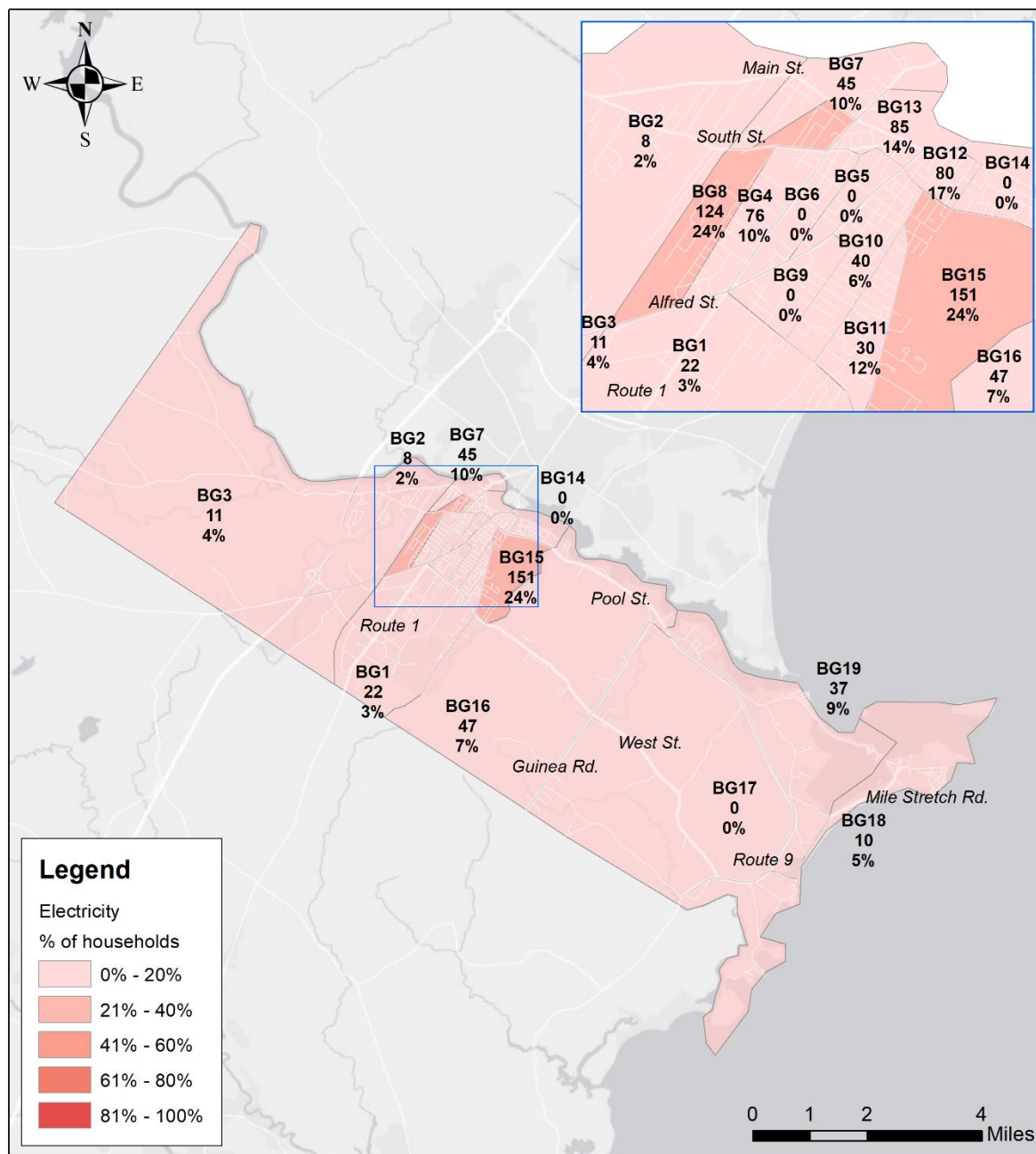


Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 16. Breakdown of households in Biddeford, by block group, that use natural gas for heating. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) as well as the total number of households within the block group that use natural gas for heating and the percent of households within the block group that use natural gas for heating. Data source: U.S. Census Bureau 2021 American Community Survey



## Home Heating Fuel Type - Electricity Biddeford



Data source: U.S Census Bureau 2021 American Community Survey  
Map created by SMPDC

Map 17. Breakdown of households in Biddeford, by block group, that use electricity for heating. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. The block group is labeled (BG#) as well as the total number of households within the block group that use electricity for heating and the percent of households within the block group that use electricity for heating. Data source: U.S. Census Bureau 2021 American Community Survey

Biddeford – August 2023

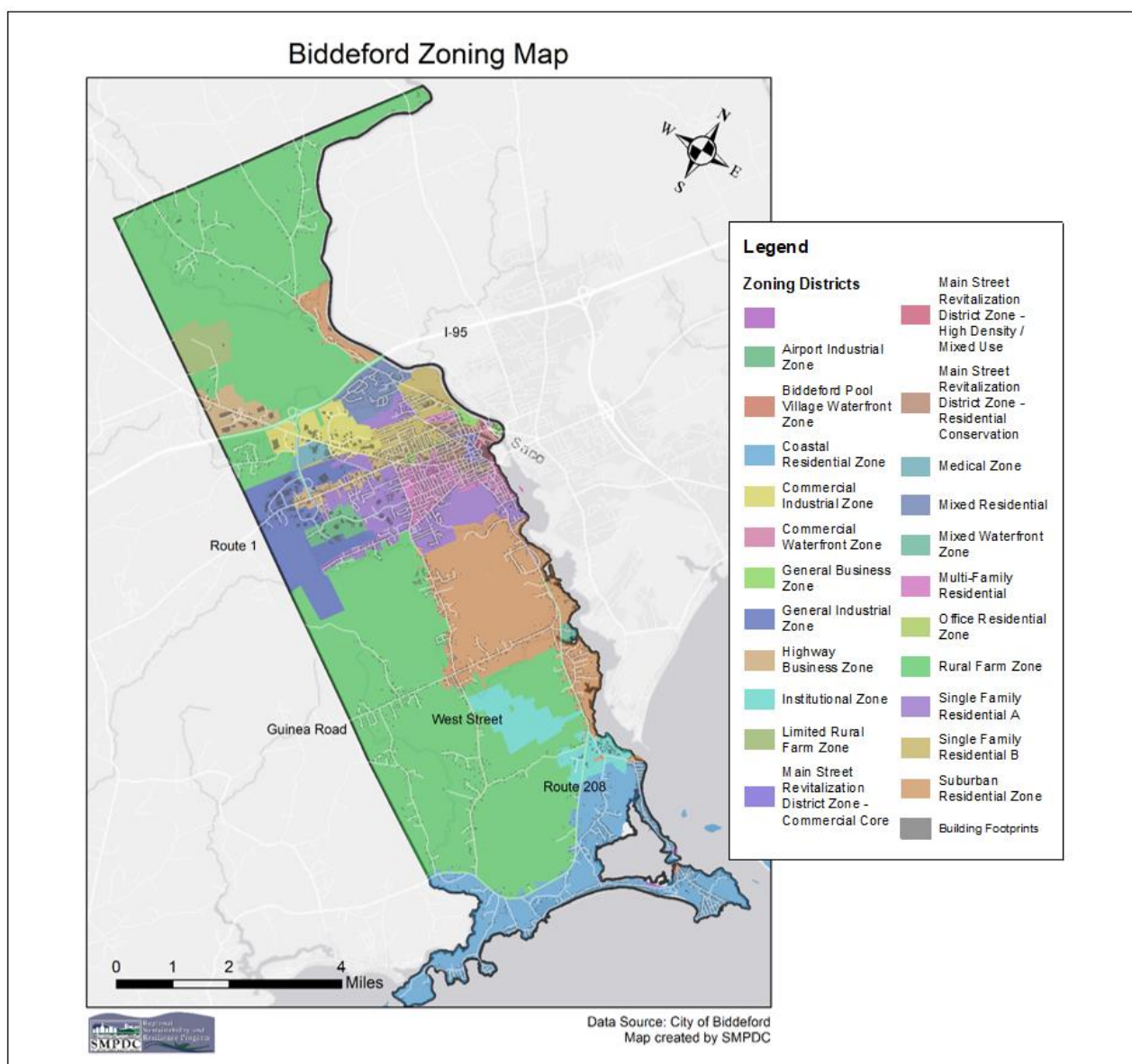


| Community wide     |       | Block Groups |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|--------------------|-------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                    |       | 1            | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  |
| Total Households   | 4,374 | 694          | 463 | 303 | 769 | 192 | 589 | 463 | 508 | 393 | 675 | 251 | 464 | 591 | 414 | 631 | 652 | 503 | 215 | 428 |
| Fuel oil, kerosene | 3,245 | 580          | 362 | 164 | 588 | 100 | 540 | 376 | 235 | 300 | 466 | 221 | 272 | 352 | 322 | 405 | 460 | 389 | 125 | 303 |
| % households       | 74%   | 84%          | 78% | 54% | 76% | 52% | 92% | 81% | 46% | 76% | 69% | 88% | 59% | 60% | 78% | 64% | 71% | 77% | 58% | 71% |
| Propane            | 281   | 88           | 34  | 43  | 11  | 53  | 0   | 0   | 26  | 26  | 66  | 0   | 72  | 0   | 47  | 62  | 113 | 86  | 40  | 46  |
| % households       | 6%    | 13%          | 7%  | 14% | 1%  | 28% | 0%  | 0%  | 5%  | 7%  | 10% | 0%  | 16% | 0%  | 11% | 10% | 17% | 17% | 19% | 11% |
| Natural gas        | 412   | 0            | 35  | 0   | 57  | 39  | 49  | 42  | 123 | 67  | 103 | 0   | 12  | 20  | 45  | 0   | 9   | 0   | 11  | 0   |
| % households       | 9%    | 0%           | 8%  | 0%  | 7%  | 20% | 8%  | 9%  | 24% | 17% | 15% | 0%  | 3%  | 3%  | 11% | 0%  | 1%  | 0%  | 5%  | 0%  |
| Electricity        | 286   | 22           | 8   | 11  | 76  | 0   | 0   | 45  | 124 | 0   | 40  | 30  | 80  | 85  | 0   | 151 | 47  | 0   | 10  | 37  |
| % households       | 7%    | 3%           | 2%  | 4%  | 10% | 0%  | 0%  | 10% | 24% | 0%  | 6%  | 12% | 17% | 14% | 0%  | 24% | 7%  | 0%  | 5%  | 9%  |

Figure 7. Community wide and block group level household heating fuel types in Biddeford. Households do not include vacant housing units, so this data is representative of occupied housing units in Biddeford. Data source: U.S. Census Bureau 2021 American Community Survey

## Zoning

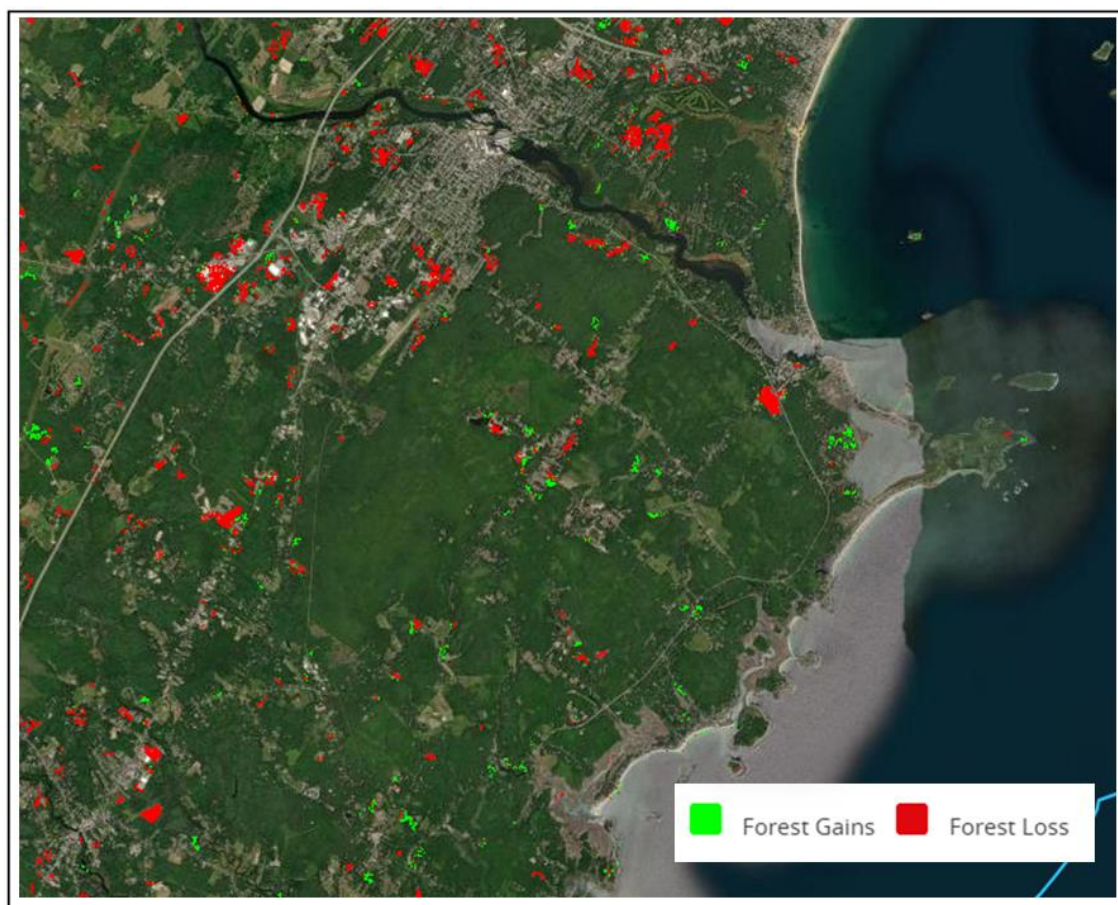
Local zoning will impact where in the community (*i.e.* particular geographic areas) certain types of development-related climate mitigation and adaptation strategies would likely have more impact due to where different types of development are allowed and what the standards are for those types of development. The zoning map below (Map 18) is provided for reference to show where areas zoned for commercial, industrial, and residential uses are located.



Map 18. Biddeford's adopted zoning map.

### Land Cover and Carbon Sequestration

Forests, wetlands, and grasslands store high amounts of organic carbon. Coastal wetlands are among the largest natural carbon sinks of all terrestrial ecosystems, particularly on a per unit area basis. Undisturbed forest soils also store substantial amounts of carbon. Certain land use activities can enhance carbon storage, such as soil health and conservation practices, whereas others can be a source of carbon release<sup>9</sup>. In built environments, carbon is stored in trees, grassy areas, gardens, and in wooden structures and are increasingly important for reducing carbon in the atmosphere. Changes in land cover, such as conversion of forest to developed land, impacts not only the health of the natural environment, but the carbon sequestration potential of land. Map 19 shows the change in forested land coverage in Biddeford from 1996 to 2016. Biddeford has experienced more forest loss than gain, especially in on the periphery of the downtown area.



Map 19. Changes in forested land cover from 1996 to 2016. Green areas indicate a transition of non-forested land to forested, while red areas indicate a transition from forested land to a different type of land cover (e.g., impervious, grassland, wetland, shrub-scrub habitat, etc.). Source: NOAA Coastal Change Analysis Program (C-CAP) Land Cover Atlas.

<sup>9</sup> State of Maine. 2022. Maine Soil Carbon Incentives Study Policy Recommendations.



## EXTREME STORMS & PRECIPITATION

### Key Takeaways

- Since 1895 annual precipitation in York County has increased 6.9 inches, and extreme precipitation events (greater than 2 inches in a day) have become more frequent. Future projections indicate that annual precipitation will likely continue to increase, and extreme precipitation events will become even more frequent.
  - Flooding events are the most common type of disaster in York County and the most destructive. In the last quarter century, flooding events have caused nearly \$45 million in property damage across coastal York County, and coastal floods alone have caused about \$22 million in property damage.
  - Downtown Biddeford is particularly vulnerable to flooding and stormwater overflow during extreme precipitation events because of a high degree of impervious surfaces.
    - This is also the area of highest social vulnerability in the community and where the oldest and most vulnerable buildings are located.
    - This area has already experienced significant damage from flooding associated with high flows of the Saco River. Notably, the riprap bank along the River in the Mill District was washed out during an extreme precipitation event in 2021 (**Error! Reference source not found.**).
  - The Biddeford Pool and Fortunes Rocks Beach also have a high degree of impervious surfaces and are more vulnerable to the combined impacts of extreme precipitation and coastal flooding during severe storms.
    - This area also has the highest concentration of residents who are 65+, many of whom are living alone. The buildings in this area are also older and more vulnerable compared to other parts of the City.
  - Rotary Park, an important recreational and open space asset for the community, is at risk of flooding from the 1% annual chance precipitation event.
  - Biddeford's aging electric grid is increasingly vulnerable to several climate impacts, including extreme storms and precipitation as well as increasing temperatures. This will likely result in more frequent and longer duration power outages in Biddeford that can pose serious risks for public health and safety.



### Background Info, Trends, & Projections

Storms and heavy rainfall are becoming more frequent and intense with climate change. From 1895 to 2022 total annual precipitation in York County increased 6.9 inches (Figure 9), which is slightly higher than the statewide trend of about 6 inches. Shifting weather patterns are causing more precipitation to fall as rain rather than snow,<sup>10</sup> and extreme precipitation events (greater than 2 inches in a day) are becoming even more frequent. Coastal communities like Biddeford are experiencing even more frequent extreme storms and precipitation events because of the influence of Atlantic storm tracks.<sup>11</sup> Hurricanes and tropical storms are tracking further northward and there is a high increase in the probability of lower category storms impacting the East Coast. A recent national study found that the Northeast is expected to see the largest increases in the annual probability of at least tropical storm wind conditions or higher, as hurricanes are expected to move further up the Atlantic coast in the future. This may have a significant impact on buildings that are not built to a code that considers the wind speeds they will likely face over the next 30 years.<sup>12</sup>



*Figure 8 A section of the stone riprap along the Saco River in the Biddeford Mill District was damaged during an extreme precipitation event and subsequent high River flows in late October 2021. Credit: A. Sherwin*

<sup>10</sup> ME Climate Council, Scientific Assessment of Climate Change and Its Effects in Maine, 2020: <http://climatecouncil.maine.gov/reports>

<sup>11</sup> University of Maine, Maine's Climate Future, 2020: <https://climatechange.umaine.edu/climate-matters/maines-climate-future/>

<sup>12</sup> First Street Foundation. 2023. Embargoed: The 7<sup>th</sup> National Risk Assessment: Worsening Winds

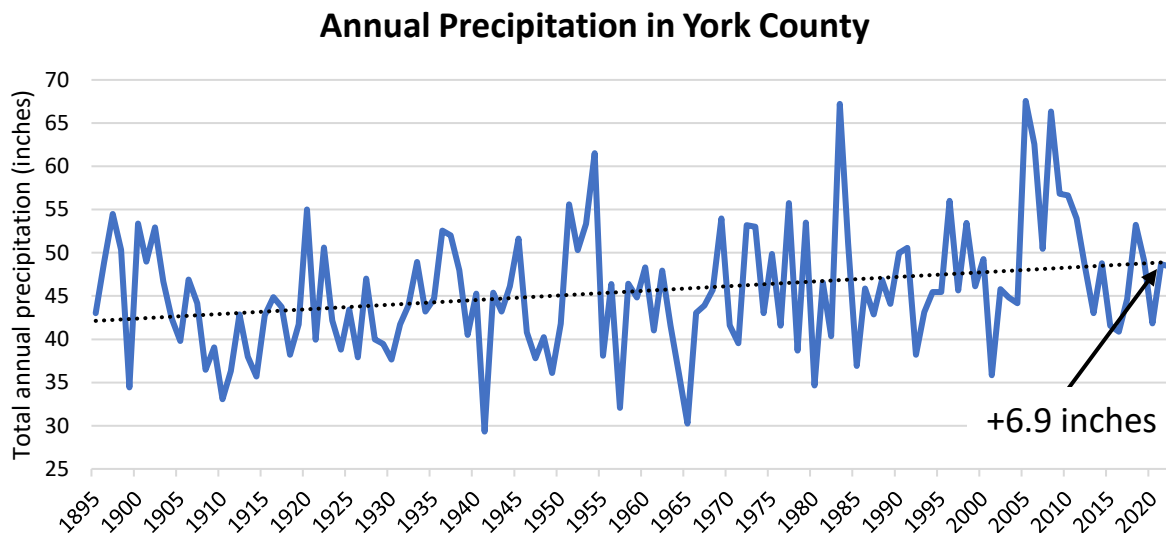


Figure 9. Total annual precipitation in York County from 1895 to 2022 based on monthly data from the [NOAA National Centers for Environmental Information](#). Over this time period total annual precipitation has increased by 6.9 inches.

Since 1970 there have been 34 federally declared disasters in York County related to storm events. Severe storms with heavy rains, strong winds, and coastal flooding have been the most common type of event and have occurred most frequently during the months of February and March followed by October.<sup>13</sup> NOAA maintains a database of all reported storm events, including storms that did not qualify for a disaster declaration. Since 1996 there have been a total of 361 storm events in coastal York County, and 122 events that caused significant property damage totaling about \$54 million (Figure 10). Flooding events, including coastal flooding, have caused nearly \$45 million in damage across the region and coastal flooding events alone have caused approximately \$22 million in damage.<sup>14</sup>

| Storm Events in Coastal York Co. from 1996-2022 |            |                     |
|-------------------------------------------------|------------|---------------------|
| Event Type                                      | Number     | Property Damage     |
| Coastal Flood                                   | 58         | \$21,659,000        |
| Flash Flood                                     | 8          | \$12,625,000        |
| Flood                                           | 10         | \$10,653,500        |
| Ice Storm                                       | 2          | \$7,930,000         |
| High/Strong Wind                                | 28         | \$537,500           |
| High Surf                                       | 8          | \$229,000           |
| Lightning                                       | 8          | \$145,000           |
| <b>TOTAL</b>                                    | <b>122</b> | <b>\$53,779,000</b> |

Figure 10. Cumulative storm events and property damage in coastal York County from 1996 to 2022 based on data from the [NOAA Storm Events Database](#)

<sup>13</sup> FEMA Disaster Declarations Summary, as of 2022: <https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v1>

<sup>14</sup> NOAA Storm Events Database, as of 2022: <https://www.ncdc.noaa.gov/stormevents/>

Recent notable storms include:

- December 23<sup>rd</sup> Storm, 2022 – The highest water level recorded at the Portland tide gauge was 13.72 ft MLLW, the third highest ever recorded. Heavy rainfall, high winds, and storm surge caused extensive power outages, coastal flooding, and property damage along the coast of Maine. Governor Mills requested a disaster declaration in February 2023, but FEMA has not made a determination yet.
- Flash flood, October 2021 – (Federally declared disaster) Biddeford reported 6.7 inches of rain in a 6-hour period. A stone embankment supporting the RiverWalk near the Pepperell Mill was washed away during the storm causing millions of dollars in damage. It also caused widespread power outages and flooded roads.<sup>15</sup>
- Nor'easters, March 2018 – (Federally declared disaster) Two nor'easters, only days apart, brought heavy rainfall, high storm surge, and high winds which caused severe coastal flooding and damage.<sup>16</sup>
- Patriot's Day Storm, April 2007 – (Federally declared disaster) High wind, waves, and coastal flooding caused severe damage to roads, bridges, and wastewater treatment plants as well as private homes and businesses. Extensive power outages left residents without electricity for days. The most extensive damage occurred along the coastline and was caused by flooding and storm surge.<sup>17</sup>
- Mother's Day Storm, May 2006 – Southern Maine received up to 16 inches of rain, exceeding precipitation amounts associated with the 100-year storm event and resulting in extensive flooding and damage.<sup>18</sup>

Historically, flooding has been the most common type of disaster in York County, particularly coastal flooding caused by nor'easters.<sup>19</sup> Storm tides cause extensive coastal flooding and occur when a storm surge coincides with an astronomical high tide. The highest water level recorded at the Portland tide gauge (the closest official NOAA tide gauge to Biddeford) occurred during the Blizzard of 1978 and exceeded 14 feet MLLW (Figure 11). The 2018 nor'easter and 2007 Patriot's Day Storm also caused storm tides within the top 20 water levels recorded at the Portland tide gauge. During the recent December 23<sup>rd</sup> storm (which is not included in Figure 11) a water level of 13.72 feet MLLW was recorded in Portland, about an inch lower than the 2018 nor'easter storm tide.<sup>20</sup> In Biddeford, coastal neighborhoods like the Biddeford Pool and Fortunes Rocks Beach have experienced the most severe coastal flooding impacts. In the future, as sea level rises and

<sup>15</sup> York County Emergency Management Agency, Hazard Mitigation Plan, 2022:

<https://www.yorkcountymaine.gov/emergency-management>

<sup>16</sup> SMPDC, Economic Resilience Planning for Coastal York County, 2022: <https://smpdc.org/coastal>

<sup>17</sup> York County Emergency Management Agency, Hazard Mitigation Plan, 2022:

<https://www.yorkcountymaine.gov/emergency-management>

<sup>18</sup> SMPDC, Tides, Taxes, and New Tactics, 2021: <https://smpdc.org/coastal>

<sup>19</sup> York County Emergency Management Agency, Hazard Mitigation Plan, 2022:

<https://www.yorkcountymaine.gov/emergency-management>

<sup>20</sup> NOAA Tides and Currents: <https://tidesandcurrents.noaa.gov/waterlevels.html?id=8418150>

storms become more frequent and intense, Biddeford can expect to see more damage from heavy rainfall, coastal flooding, and high winds.

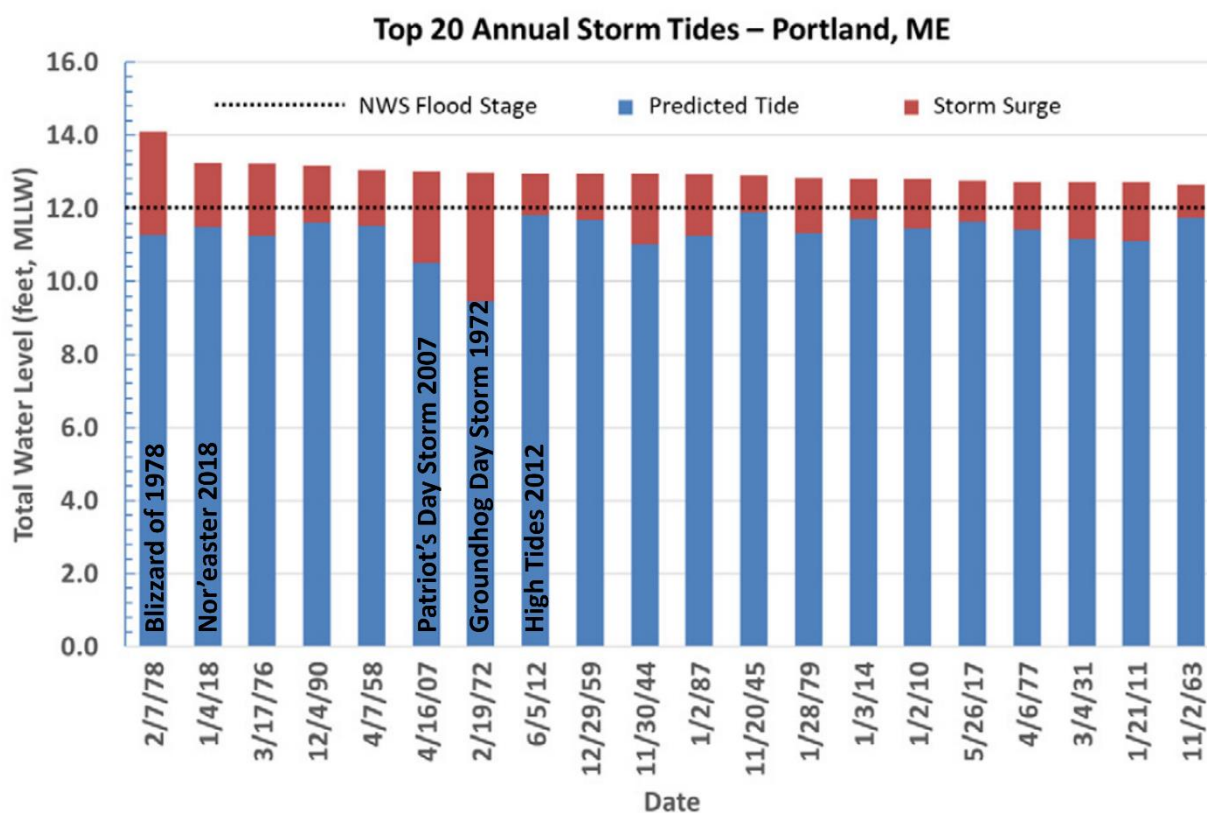


Figure 11. Major storm events and top 20 annual storm tides recorded at the Portland, ME tide gauge from 1912-2019. The National Weather Service Flood Stage of 12 feet MLLW is shown as a dashed line. This threshold indicates when elevated water levels begin to create a hazard to public safety, property, and infrastructure. Graph was created by Pete Slovinsky at the Maine Geological Survey for the [ME Climate Council, Scientific Assessment of Climate Change and Its Effects in Maine, 2020](#).

Intense storms and heavy precipitation can cause inland flooding along rivers and streams and exacerbate coastal flooding. Developed areas with lots of impervious surfaces such as roads, parking lots, sidewalks, and buildings experience more flooding during heavy rainfall because the water has nowhere to go. Stormwater systems can overflow because of limited capacity to handle high water volumes, causing runoff into lakes and rivers. Inland and urban flooding pose a threat to public safety, infrastructure, and property. Stormwater runoff also increases the risk of contaminated drinking water supplies and degraded water quality in coastal areas making it unsafe to swim.<sup>21</sup>

Like coastal flooding, inland and urban flooding may occur during winter nor'easters, but it also occurs during summer and fall tropical storms or intense thunderstorms. Flash floods

<sup>21</sup> York County Emergency Management Agency, Hazard Mitigation Plan, 2022: <https://www.yorkcountymaine.gov/emergency-management>

are historically uncommon in Maine, but in October 2021 a flash flood dropped 6.7 inches of rain on Biddeford in 6 hours. The resulting flash flood caused extensive damage, especially along the developed areas of the Saco River. Inland flooding is difficult to predict due to the complex interaction of factors that contribute to precipitation-based flooding conditions, but changing weather patterns and more frequent and intense hurricanes in the southern U.S. have the potential to cause more inland and urban flood events in coastal communities like Biddeford.<sup>22</sup>

Biddeford's proximity to the Saco River and its tributaries increases the community's risk of inland flooding. Biddeford's downtown is highly impervious as are the corridors along Alfred Road and Route 1 (Map 20). Downtown Biddeford also has the highest degree of social vulnerability compared to the rest of the community and is where the oldest and most vulnerable buildings are located. There is a higher degree of imperviousness adjacent to the Saco River along Pool Street, in the Biddeford Pool neighborhood, and along Fortunes Rocks Beach. Biddeford Pool and Fortunes Rocks Beach also have the highest concentration of residents who are 65+, many of whom are living alone, and the buildings are older and more vulnerable compared to the rest of City. The high degree of impervious surfaces in these downtown and coastal neighborhoods increases the risk of flooding and stormwater overflow from extreme precipitation events. In Biddeford Pool and Fortunes Rocks Beach, heavy rainfall coupled with a high degree of impervious surfaces can also exacerbate the impacts of coastal flooding. In the future, with more intense storms and extreme precipitation events these areas will be at a higher risk of flooding due to exposure to inland and coastal flood hazards, elevated social vulnerability, and older buildings.

Increasing precipitation and subsequent stormwater runoff could be particularly impactful for Thatcher Brook (Map 21). The Thatcher Brook Watershed covers an area of approximately 7 square miles, spanning the borders of Biddeford and Arundel, and draining into the Saco River. There are a variety of land-use types in this area from agricultural and forested lands to dense residential and commercial areas. Thatcher Brook is designated as an impaired water body by the Maine Department of Environmental Protection (MDEP) due to contamination from stormwater runoff. The high degree of impervious surfaces within and around the watershed (Map 20) increase stormwater runoff in this area. The City completed a Watershed Management Plan<sup>23</sup> in 2015 and is working with the York County Soil and Water Conservation District (YCSWCD) to restore the watershed. Increasing stormwater runoff from extreme precipitation events could hamper these efforts and make it increasingly difficult to restore water quality in Thatcher Brook.

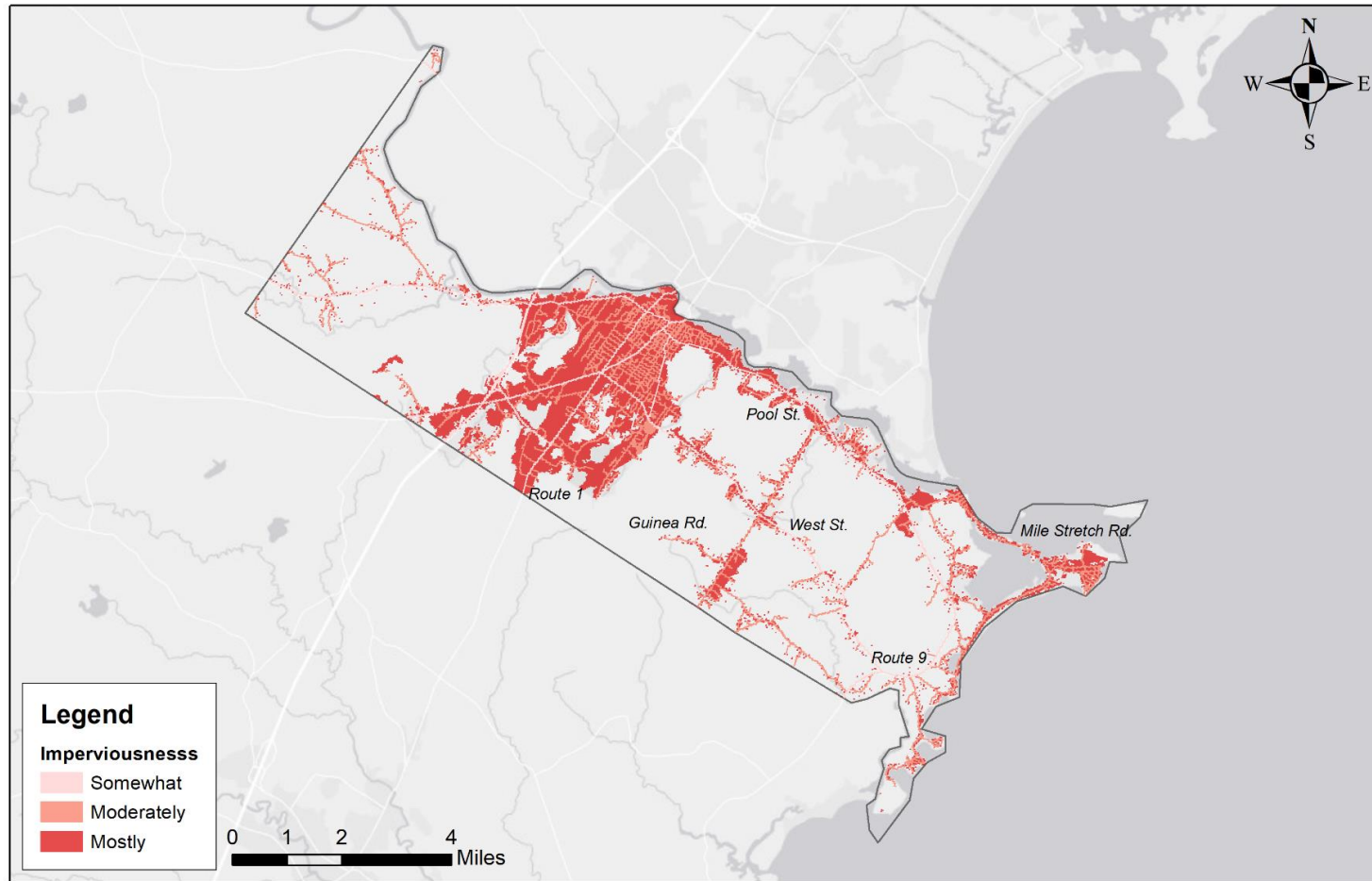
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<sup>22</sup> York County Emergency Management Agency, Hazard Mitigation Plan, 2022: <https://www.yorkcountymaine.gov/emergency-management>

<sup>23</sup> [Thatcher Brook Watershed Management Plan, City of Biddeford, 2015](#)



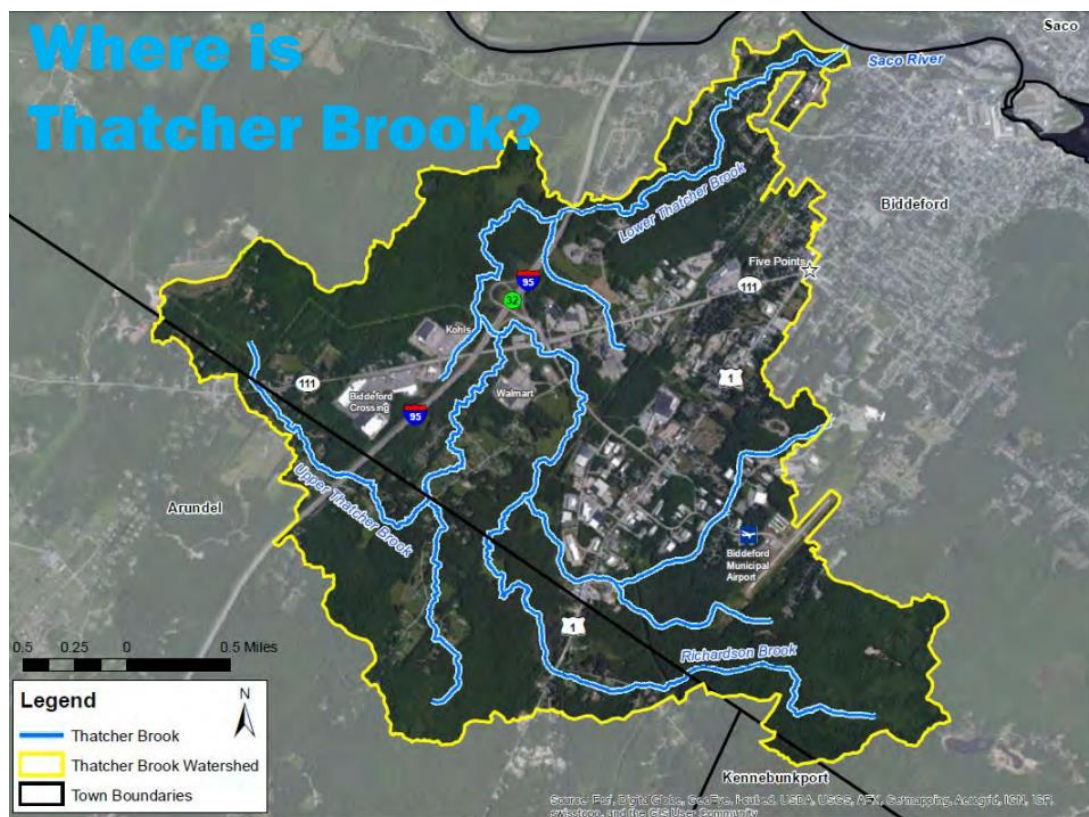
## Impervious Surfaces Biddeford



Data source: National Landcover Dataset (2019)  
Map created by SMPDC

Map 20. Impervious surfaces in Biddeford based on their level of imperviousness (somewhat, moderately or mostly impervious). Data is from the [2019 National Landcover Dataset](#).

*Biddeford – August 2023*



Map 21. The Thatcher Brook Watershed is located southwest of downtown Biddeford and extends into the northern part of Arundel. Map from the [Thatcher Brook Watershed Management Plan webpage](#).

## Power Outages and Electric Grid Resilience

The reliability of the electric grid is vital to the day-to-day well-being and quality of life of Biddeford’s community members, the City’s operations, and local economic activities. Breakdowns in grid operations and infrastructure result in power outages that can have significant impacts and hazards for a community. Power outages can jeopardize essential public safety services as well as drinking water and wastewater systems. Downed wires during power outages can make roads impassable or dangerous. Lack of heating/cooling and electricity during power outages puts vulnerable community members at risk. Homes and businesses also face significant costs due to power outages.

Biddeford is served by the ISO-New England Electric Grid, which oversees the day-to-day operation of New England's electricity grid. Grid components, including substations, transmission lines, and distribution lines, are owned by energy delivery service companies. In Biddeford the delivery service company is Central Maine Power, who provides Biddeford with electricity on several circuits that link Biddeford with the surrounding communities of Kennebunkport, Arundel, and Saco.

The New England electricity grid is aging and is characterized by an extensive network of older, lower-capacity transmission lines serving as feeder lines to transformers and other critical system components. It is also increasingly vulnerable to several climate impacts, including extreme storms and precipitation as well as increasing temperatures.

Currently, the greatest source of power outages in the broader region is storm events, including nor'easters, ice storms, snowstorms, and high wind events. A combination of high storm frequency, aging electric grid infrastructure, and an abundance of trees results in Maine having some of the worst power outages in the country. From 2015-2019 Maine had the highest average annual frequency of power outages per customer of any state (3.9 outages per year). Maine also had the second longest average duration of power outages per customer annually (14.1 hours), only behind Florida (14.6 hours).

Major weather events and storms significantly increase the duration of power outages, greatly impacting the number of hours Mainers spend without power. In 2020, a greater number of severe weather events meant that CMP customers experienced an average of 29.5 hours without power. However, in 2021 (a year with far fewer extreme weather events) CMP customers experienced only an average of 5.25 hours of power outages.

Currently, the leading cause of power outages in Biddeford is motor vehicle accidents (45% of all customer outage hours in 2021), followed by tree limbs falling on power lines due to high winds or heavy ice or snow loads on trees (30%). Tree limbs can cause outages by leaning on conductor lines, pulling lines down completely, or by damaging utility poles.<sup>24</sup>

In the future, increases in extreme storm frequency and duration will likely result in more power outages from downed lines, blown transformers, and other damage to regional grid infrastructure. Additional climate impacts will also strain grid infrastructure and cause power outages in the following ways:

- Increased likelihood of equipment breakdown from flooding of coastal and inland grid infrastructure from increases in storm surge and extreme precipitation events. In particular, substations can be significantly damaged by flooding. Substations are a key part of electrical power generation, transmission and distribution systems and often serve circuits that span multiple municipal jurisdictions. Flooding can damage substation components, leading to power outages and even fires. Also, during extreme storms, damage to roads and other infrastructure can prevent utility services from reaching and repairing sub-stations, prolonging power outages. The City of Biddeford is served by several CMP substations. One is located on Morin St. while another is located on Saco Island. While located close to the Saco River, the substation on Saco Island is well elevated and therefore unlikely to be at high risk of

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<sup>24</sup> Data supplied by Central Maine Power

flooding. Some of coastal Biddeford is served by a CMP substation located on School Street in Kennebunkport, which could be potentially vulnerable to extreme flooding of Grist Mill Pond due to extreme precipitation or storm surge.

- Reduction in the grid transmission capacity and increase in the risk of damage to transformers due to higher average temperatures and nighttime temperatures.
- Increased risk of physical deformation of powerlines, damage to transformers, and disruptions to service due to extreme high temperatures.
- Increased demand for electricity, due to both the electrification of other energy systems as well as increased average and peak cooling demand during warmer temperatures and longer, more frequent, and more severe heat waves.

Taken together, these impacts mean that the regional electric grid is extremely vulnerable to climate change, while at the same time electrification and electricity demand are going up. These vulnerabilities are exacerbated by aging grid infrastructure that has an increasingly limited capacity to take on more electricity transmission. At the same time, increases in average and extreme temperatures lead to greater health risks for Biddeford's vulnerable community members, which in turn amplifies the need for reliably electrified and conditioned spaces to ensure their safety.

## FLOODING: SEA LEVEL RISE AND STORM SURGE

### Key Takeaways

- Neighborhoods and infrastructure located around Biddeford Pool, Fortunes Rocks, Timber Point, and along the Saco River are vulnerable to flood hazards associated with climate change. As sea levels rise, and storms become more frequent and intense, these neighborhoods can expect more frequent coastal flooding events and associated damage to property, infrastructure, and the coastline. These areas also have elevated social vulnerability and a high percentage of structures built before 1970, meaning that they are likely not constructed to modern building codes increasing sensitivity to flooding.
- The Biddeford Pool area (block group 18) has the highest percentage of 65+ population (58%), with 20% of the people in that block group 65+ and also living alone. Additionally, 50% of the people in this block group have incomes less than \$50k. This suggests that community members most vulnerable to coastal flooding impacts are older, more likely to live alone, and potentially on a fixed income. These factors increase their sensitivity to storm impacts and also limit their adaptive capacity.
- Tourism activity driven by Biddeford's sandy beaches and a healthy coastline could decline as flooding becomes more frequent and the amount of dry beach decreases as sea level rises.
- As coastal properties become increasingly exposed to flooding, their market and assessed values could decline, reducing local tax revenues from affected parcels and potentially straining municipal fiscal health. \$391 million in assessed property value is vulnerable to flooding from storm surge associated with the 1% annual chance event plus 1.6 feet of sea level rise, representing 11.1% of the city-wide assessed property value.
- Road access to 56 parcels will be cut off by flooding with the 1.6 ft scenario and 260 will be cut -off with the 3.0 ft scenario, putting the people who live there and emergency access to them at risk.
- Route 208/Mile Stretch Road, a designated evacuation route, is vulnerable to sea level rise and is the only access route in and out of the Biddeford Pool neighborhood, which is an area of elevated social vulnerability based on the percentage of the population over the age of 65 living alone and percentage of households with an annual income of less than the state and county median income as well as the EPA climate change and social vulnerability income threshold.
- The Timber Point walking trail, an important recreational area for residents and visitors, is vulnerable to flooding from both the 1.6 ft and 3.0 ft scenarios.



- In Biddeford, future sea level rise will cause regular inundation of low-lying coastal areas during high tide, likely leading to contamination of groundwater aquifers and wells from saltwater intrusion, and increased erosion of sandy beaches, dunes, and salt marshes.
- Most coastal properties in Biddeford have private wells which are at risk of saltwater intrusion from rising seas, placing drinking water supplies for those homes at risk.
- The majority of engineered coastal structures (e.g., seawalls, riprap, etc.) along Ocean Avenue, Biddeford Pool, and the middle and southern portions of Hills Beach are vulnerable to overtopping by water from the 1% annual chance event.
- Areas along Biddeford Pool, Little River, and the mouth of the Saco River have been identified as being able to support future marsh migration.

### Background Info, Trends, & Projections

Sea level in Maine has been rising in the long-term, but over the past few decades the rate of rise has accelerated. That rise is increasing the frequency of nuisance or high tide flooding, with southern Maine seeing 4 times as many nuisance flooding events over the last decade compared with the average of the past 100-years<sup>25</sup>. According to a recent State assessment, there is a 67% probability that sea level will rise between 1.1 and 1.8 feet by 2050, and between 3.0 and 4.6 feet by the year 2100 under intermediate global greenhouse gas emissions scenarios, with higher sea level rise amounts possible<sup>25</sup>. With that rate of sea level rise, not accounting for increased intensity and frequency of storms, Maine will see a 15-fold increase in coastal flooding by 2050<sup>25</sup>. Those scenarios do not account for more intense rainfall that climate change is bringing to the region, which will exacerbate flood risk. With just 1.6 feet of sea level rise by 2050, it's estimated that cumulative damage costs caused by coastal flooding could be \$16.9-\$18.2 billion statewide<sup>26</sup>.

As sea level rises in the future, normal high tides will be higher and storms, and accompanying storm surge, will be more impactful, causing extensive coastal flooding to roads, homes, and businesses. Storm surge is the abnormal rise in ocean water level during a storm event, measured as the height of the water above the normal predicted astronomical tide. It is caused primarily by storm winds pushing ocean water onshore. This rise in water level can cause extreme flooding in coastal areas, especially when storm surge coincides with normal high tide. While future sea level rise will occur gradually over time, extreme storm events can cause damaging flooding episodically in the short-term.

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<sup>25</sup> Maine Climate Council, Scientific Assessment of Climate Change and Its Effects in Maine, 2020: <http://climatecouncil.maine.gov/reports>

<sup>26</sup> Eastern Research Group. 2020. Assessing the Impacts Climate Change May Have on the State's Economy, Revenues, and Investment Decisions: Volume 2, Cost of Doing Nothing Analysis. Prepared for the State of Maine. Governor's Office of Policy Innovation and the Future.

In addition to rising seas, storm surge, and more nuisance flooding events, southern Maine's coastal areas are seeing more frequent and intense precipitation events. Further, the intensity and frequency of precipitation is expected to increase in the future with climate change. Stormwater runoff from rainfall events combined with surge and future sea level rise will lead to more extensive flooding in coastal areas.

Coastal flooding threatens public health and safety by putting transportation corridors, evacuation routes and provision of emergency services at risk; disrupts economic activity through lost business and reductions in tourism; reduces property values; and imperils municipal revenue and budgets. Additionally, individuals who already have increased social vulnerability will be disproportionately affected by sea level rise and climate change as they have less capacity to prepare for, respond to, and recover from coastal hazard events.

Sea level rise threatens not only the landscape above ground, but also the below-grade environment. Along the coast, groundwater and saltwater are naturally separated by the seaward movement of groundwater. As seas rise, landward intrusion of seawater pushes groundwater levels up and shifts the interface of fresh groundwater and saltwater inland. Low-lying coastal communities and critical infrastructure are at risk of impacts including intrusion of saltwater into groundwater and drinking water resources, increased flooding from higher coastal water tables, and water damage to pavement from below. Potential impacts of unmitigated groundwater rise include:

- Water quality degradation
- Premature septic system failure
- Mobilization of hazardous waste
- Saltwater intrusion into drinking water supplies
- Wetland expansion, transition, or drowning
- Flooding due to higher coastal water tables
- Damage to pavement and other hardscape surfaces

To plan for sea level rise and associated impacts, the Maine Climate Council recommends an approach of committing to manage for a higher probability, lower risk scenario, but also preparing to manage for a lower probability, higher risk scenario. That concept involves building flexibility into designs and decisions so that adjustments can be made to address more extreme sea level rise. It accounts for some of the variability and uncertainty regarding global emissions reductions efforts and evolving science about potential future melting of land-based ice. The State recommends that Maine commit to manage for 1.5 feet of relative sea level rise by 2050, and 3.9 feet of sea level rise by the year 2100, but prepare to manage for 3.0 feet by 2050, and 8.8 feet by 2100, all in relation to 2000 local

sea level<sup>27</sup>. When planning for sea level rise, consideration should be given to the risk tolerance of different kinds of infrastructure. In other words, the intended lifespan, criticality, and exposure of infrastructure and assets to flood hazards should be considered when evaluating what sea level rise scenarios and planning horizons to account for in design and maintenance decisions.

In Biddeford, future sea level rise will cause regular inundation of low-lying coastal areas during high tide, leading to contamination of groundwater aquifers and wells from saltwater intrusion, and increased erosion of sandy beaches, dunes, and salt marshes.

This section presents assessment results of the impacts of modeled flooding from storm surge combined with sea level rise to represent what flooding from storm events could look like in the future<sup>28</sup>. The two flooding scenarios, listed below, align with the Maine Climate Council’s planning recommendation of committing to manage 1.5 feet of rise by 2050 and preparing to manage 3.0 feet by 2050.

Flooding scenarios used for assessment<sup>29</sup>:

- **Storm surge from 1% annual chance storm event (*i.e.* 100-year storm) + 1.6 feet of sea level rise**
- **Storm surge from 1% annual chance storm event + 3.0 feet of sea level rise**

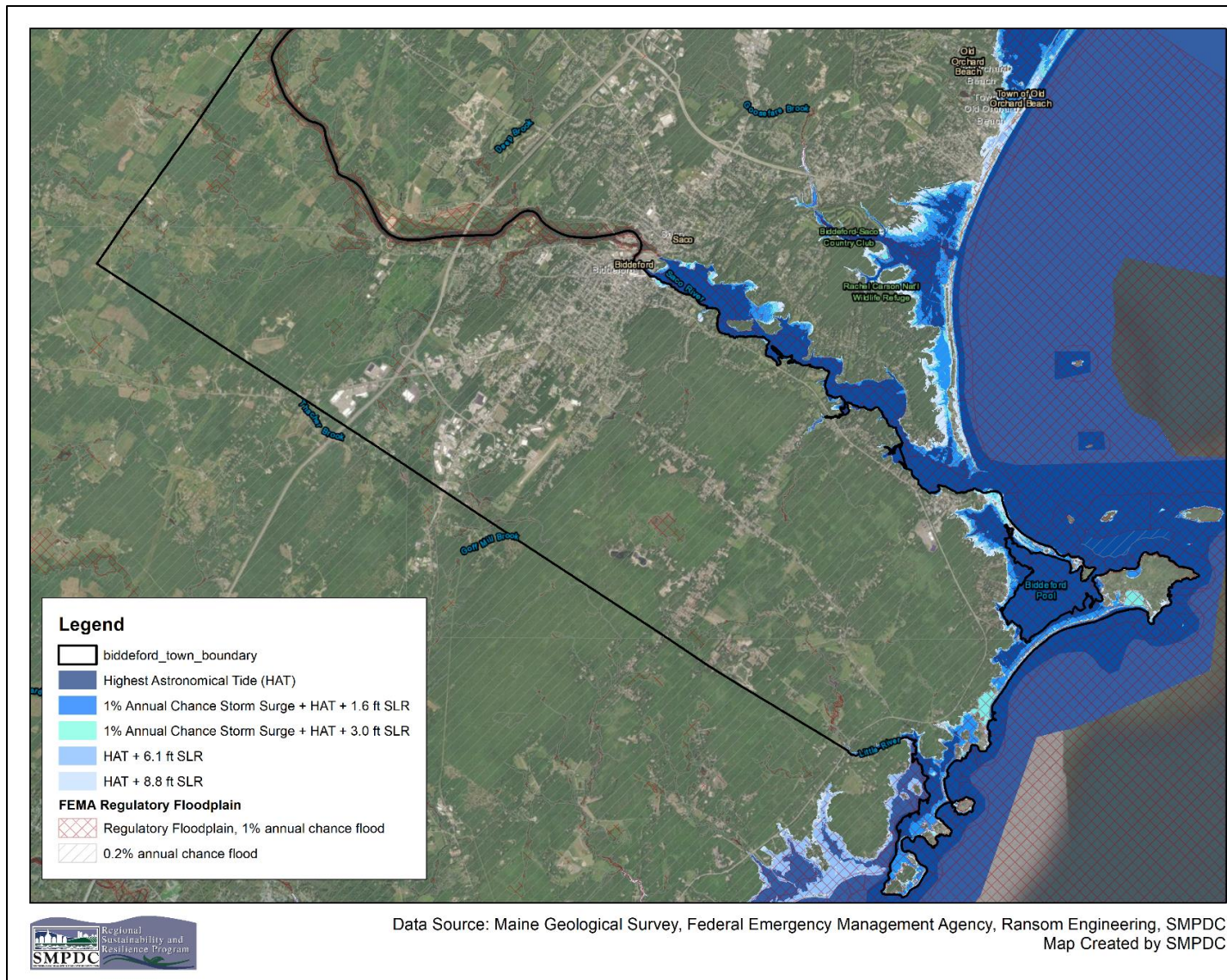
The assessment results presented below use the terms ‘vulnerable’, ‘impacted’, and ‘at-risk’ to describe impacts. All three terms mean that the parcel, asset, or area is touched by water under the given inundation scenario. It is important to note that the modeled flood scenarios show inundation at high tide, so not every area or thing that is directly impacted by the flood scenarios will be permanently inundated.

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<sup>27</sup> Maine Climate Council. 2020. Maine Won’t Wait: A Four-Year Plan for Climate Action.

<sup>28</sup> Southern Maine Planning and Development Commission. 2021. Coastal Assessment for Biddeford, Saco, and Old Orchard Beach.

<sup>29</sup> The sea level rise scenarios were developed by the Maine Geological Survey and do not account for wave action or precipitation. The storm surge values were provided by Ransom Consulting, LLC, and consist of storm surge and static wave set-up, without additional wave action due to crests or wave runup.



Map 22. Modeled inundation from sea level rise (SLR), storm surge, and the 1% annual chance storm event (Special Flood Hazard Area depicted on the FEMA-Issued Flood Insurance Rate Map).



## Property Impacts

Where and how we choose to develop land profoundly impacts the resilience of our community. Buildings located in areas exposed to natural hazards like flooding are at greater risk of climate change impacts. Biddeford's municipal budget, like most southern Maine coastal communities, is highly dependent on revenue from local property taxes and coastal development provides a substantial portion of the municipal tax base, generating vital funds that sustain community operations, services, and programs. However, it is that same development that is most susceptible to coastal flooding, placing residents, visitors, and municipal fiscal health at risk. Studies have shown that coastal hazards and climate change diminish the value of impacted properties<sup>30</sup>. Municipal fiscal health could be negatively impacted if coastal properties, which generate a large portion of local tax revenue, are exposed to flooding and if development in vulnerable areas continues. In addition, the coastal areas and resources, especially sandy beaches, which serve as the economic engine for towns, the region, and state are particularly vulnerable to storms and rising seas as increasing water levels reduce the area of dry beach available.

Map 26 shows the locations of buildings and facilities that are critical for community safety, function, and well-being, and the location of historic properties. It also shows parcels that are vulnerable to, or 'impacted' by, projected flooding from the two modeled scenarios.

- There are designated historic properties along the Saco River and in Biddeford Pool that are located in areas that are vulnerable to flood hazards, including sea level rise, storm surge, and flooding from the 1% annual chance event.
- Parcels that are expected to be impacted by flooding with the 1.6 ft sea level rise scenario total slightly more than \$391 million in assessed property value, representing 11.1% of the city-wide assessed property value (Figure 12).
- Road access to 56 parcels will be cut off by flooding with the 1.6 ft scenario and 260 will be cut off with the 3.0 ft scenario, putting the people who live there and emergency access to them at risk.
- Properties along Hills Beach, Biddeford Pool, Fletcher Neck, Fortunes Rocks Beach, Granite Point, and Timber Point are vulnerable to flooding from the open Ocean and the tidal Little River from both the 1.6 ft and 3.0 ft scenarios. These areas also have elevated social vulnerability and a high percentage of structures built before 1970, meaning that they are likely not constructed to modern building codes increasing sensitivity to flooding.
- The Timber Point walking trail, an important recreational area for residents and visitors, is vulnerable to flooding from both the 1.6 ft and 3.0 ft scenarios.

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<sup>30</sup> Shi, L., Varuzzo, A. M. (2020). *Surging seas, rising fiscal stress: Exploring municipal fiscal vulnerability to climate change*. Cities 100 (2020) 102658.



|                                     | Assessed<br>Parcel Value:<br>Only Land<br>Impacted | Assessed<br>Parcel Value:<br>Buildings &<br>Land Impacted | Total<br>Assessed<br>Value<br>Impacted | % of City-<br>Wide<br>Assessed<br>Value (2022) |
|-------------------------------------|----------------------------------------------------|-----------------------------------------------------------|----------------------------------------|------------------------------------------------|
| <b>Storm surge<br/>+ 1.6 ft SLR</b> | \$45,475,401                                       | \$345,621,800                                             | \$391,097,201                          | 11.1%                                          |
| <b>Storm surge<br/>+ 3.0 ft SLR</b> | \$47,957,468                                       | \$492,041,100                                             | \$539,998,568                          | 15.3%                                          |

Figure 12. Assessed value of parcels impacted by flooding from storm surge combined with sea level rise (Source: SMPDC. 2022 coastal economic resilience assessment, phase 2. Unpublished.)

### Infrastructure Impacts

Sea level rise threatens surface and subsurface infrastructure. Inundation of surface infrastructure can cause short-term disruptions due to road closures and limited access to infrastructure. It can also cause substantial damage to infrastructure, including pavement, culverts, stormwater infrastructure, and utility infrastructure. Higher water levels can reverse or reduce efficiency of stormwater drainage and wastewater outfall operations.

Along the coast, groundwater and saltwater are naturally separated by the seaward movement of groundwater. As seas rise, landward intrusion of seawater pushes groundwater levels up and shifts the interface of fresh groundwater and saltwater inland. Studies conducted in coastal New Hampshire show that sea level rise induced groundwater rise is projected to extend up to three to four times further inland than surface tidal water inundation from sea level rise<sup>31</sup>.

Low-lying coastal communities and important infrastructure are at risk of impacts including intrusion of saltwater into groundwater and drinking water resources, increased flooding from higher coastal water tables, and water damage to roadways and other infrastructure from below. Researchers are working to model and assess this phenomenon in New England to better understand coastal hazards stemming from sea level rise. No assessment has yet been completed for Biddeford, however, subsurface stormwater, transportation, and utility infrastructure; contaminated sites; septic systems; and drinking water wells in coastal areas will likely be negatively impacted by rising groundwater and saltwater intrusion. Rising groundwater can impede the ability of septic systems to function properly as the vertical separation between the groundwater table and leachfield is reduced. This can result in contamination from septic systems into groundwater and nearby surface waters. The U.S. Geological Survey (USGS) notes that if too much freshwater is pumped from an aquifer system, saltwater can migrate landward<sup>32</sup>. Wells located near the

<sup>31</sup> Knott, J.F.; Jacobs, J.M.; Daniel, J.S., and Kirshen, P., 2019. Modeling groundwater rise caused by sea-level rise in coastal New Hampshire. *Journal of Coastal Research*, 35(1), 143–157. Coconut Creek (Florida), ISSN0749-0208.

<sup>32</sup> U.S. Geological Survey. 2019. <https://www.usgs.gov/mission-areas/water-resources/science/saltwater-intrusion>

landward migrating freshwater/saltwater interface, saltwater could be contaminated from saltwater entering the well, threatening drinking water supplies. However, the USGS also notes that this is less likely to happen with residential wells and is a larger concern for municipal or community-size wells where pumping rates are much higher.

In Biddeford, most coastal areas in town have access to public water via either Maine Water or Kennebunk, Kennebunkport, and Wells Water District, limiting vulnerability of private drinking water wells from saltwater intrusion. The majority of coastal areas do not appear to be served by public sewer and likely have septic systems which could be vulnerable to failure due to rising groundwater.

- **Stormwater and sewer infrastructure:** Storm and sewer infrastructure vulnerable to flooding are located along Mile Stretch Road, Pool Street near the UNE campus, at the end of Lafayette Street, in the downtown area along the mill buildings adjacent to the Saco River, and at the wastewater treatment facility (Figure 13, Map 23).
  - The Yates Street pump station in Biddeford Pool is vulnerable to flooding from the 1.6 ft scenario.
  - The wastewater treatment plant is vulnerable to flooding the 3.0 ft scenario.
- **Water infrastructure:** Biddeford is served by Maine Water and public water infrastructure (mains, hydrants, etc.) around Biddeford Pool, especially along Hills Beach Road, Channel Cove Lane, and Oceanview Drive, are located in areas that are vulnerable to flooding from the 1.6 ft scenario.
- **Critical facilities:** the Biddeford Pool Fire Department is not exposed to flooding from the two modeled scenarios, but access from the Department to other locations along the coast is impacted by extensive flooding of Mile Stretch Road.
- Almost 25,000 linear feet of road are vulnerable to flooding from storm surge plus 1.6 feet of sea level rise. Vulnerable roads include **Route 208/Mile Stretch Road, Granite Point Road, Fortunes Rocks Road, Hills Beach Road and Timber Point Road**. Infrastructure such as culverts associated with the roads are also vulnerable. These road impacts make the coastal area of Biddeford particularly vulnerable to coastal flooding and sea level rise because they are the only access roads to their associated coastal neighborhoods and homes (Map 24). A complete list of roads impacted by both flooding scenarios can be found at the end of this section.
- **Route 208/Mile Stretch Road** is a designated evacuation route that is vulnerable to flooding. The road is projected to be flooded in the modeled scenario of storm surge plus 1.6 feet of sea level rise. Mile Stretch Road is the only access route in and out of the Biddeford Pool neighborhood, which is a block group of elevated social vulnerability based on the percentage of the population over the age of 65 living alone and percentage of households with an annual income of less than the state and county median income as well as the EPA climate change and social vulnerability income threshold.

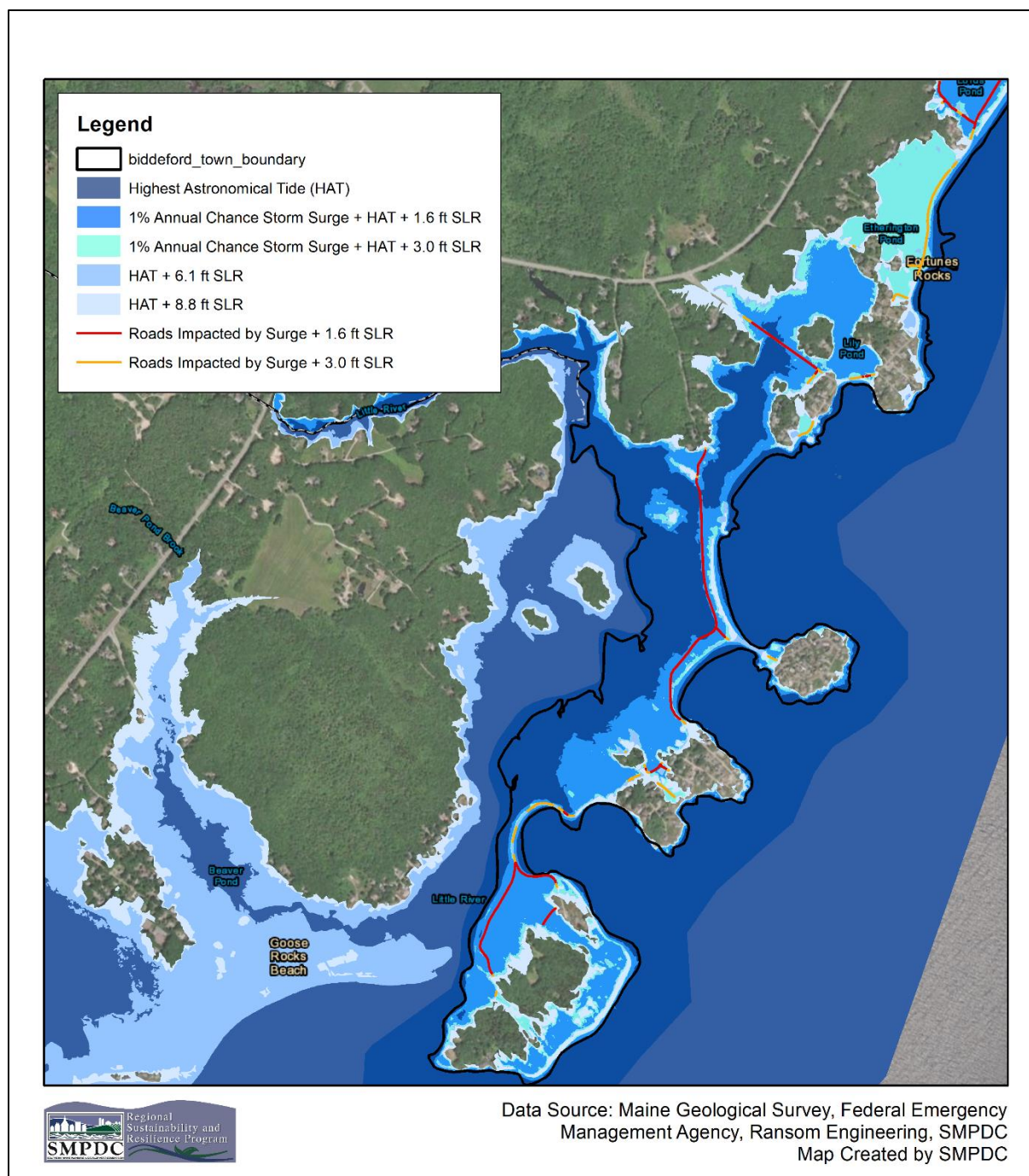
- There are three **tidal road crossings (culverts)** that are restrictions and vulnerable to sea level rise along the coast on Lilly Pond Road, Bridge Road, and Granite Point Road. There is also one on Pool Street near Tattle Corner.
- Some parcels around Biddeford Pool, including along Middle Beach, are served by public sewer, but parcels along Fortunes Rocks, Timber Point, the inland side of Biddeford Pool, Hills Beach, and the Saco River until almost to the downtown area do not appear to have public sewer. Septic systems in those areas could be vulnerable to failure due to rising groundwater.
- Based on an assessment by the Maine Geological Survey, coastal engineered structures (e.g., seawalls, bulkheads, jetties, etc.) in the following areas are vulnerable to overtopping by flooding from the modeled current 1% annual chance storm event, not including sea level rise.
  - Most rip-rap areas along Granite Point Road.
  - Most riprap in front of residential properties along Old Kings Highway.
  - The majority of structures along Fortunes Rocks Road.
  - Rip-rap along Bridge Road near its intersection with Mile Stretch and Fortunes Rocks Roads.
  - Most structures along the back marsh side of Mile Stretch Road and on the ocean side of residential properties.
  - The majority of structures along Ocean Avenue, Biddeford Pool, and the middle and southern portions of Hills Beach.

| Infrastructure Type    |                                                                      | Vulnerable to Surge + 1.6 ft SLR Scenario | Vulnerable to Surge + 3.0 ft SLR Scenario | Not vulnerable to 1.6 ft or 3.0 ft Scenarios |
|------------------------|----------------------------------------------------------------------|-------------------------------------------|-------------------------------------------|----------------------------------------------|
| <b>Storm and Sewer</b> | Wastewater Treatment Facility                                        | -                                         | Yes                                       | -                                            |
|                        | Pump Stations                                                        | 1<br>(Yates Street Pump Station)          | 1<br>(Yates Street Pump Station)          | 35                                           |
|                        | Gravity Force Mains                                                  | 13,121 ft                                 | 14,503 ft                                 | 628,158 ft                                   |
|                        | Other storm and sewer infrastructure points (manholes, grates, etc.) | 63                                        | 86                                        | 4,377                                        |

Figure 13. Storm and sewer infrastructure vulnerable to storm surge plus 1.6 feet and 3.0 feet of sea level rise. (SMPDC. 2022 coastal economic resilience assessment, phase 2. Unpublished)

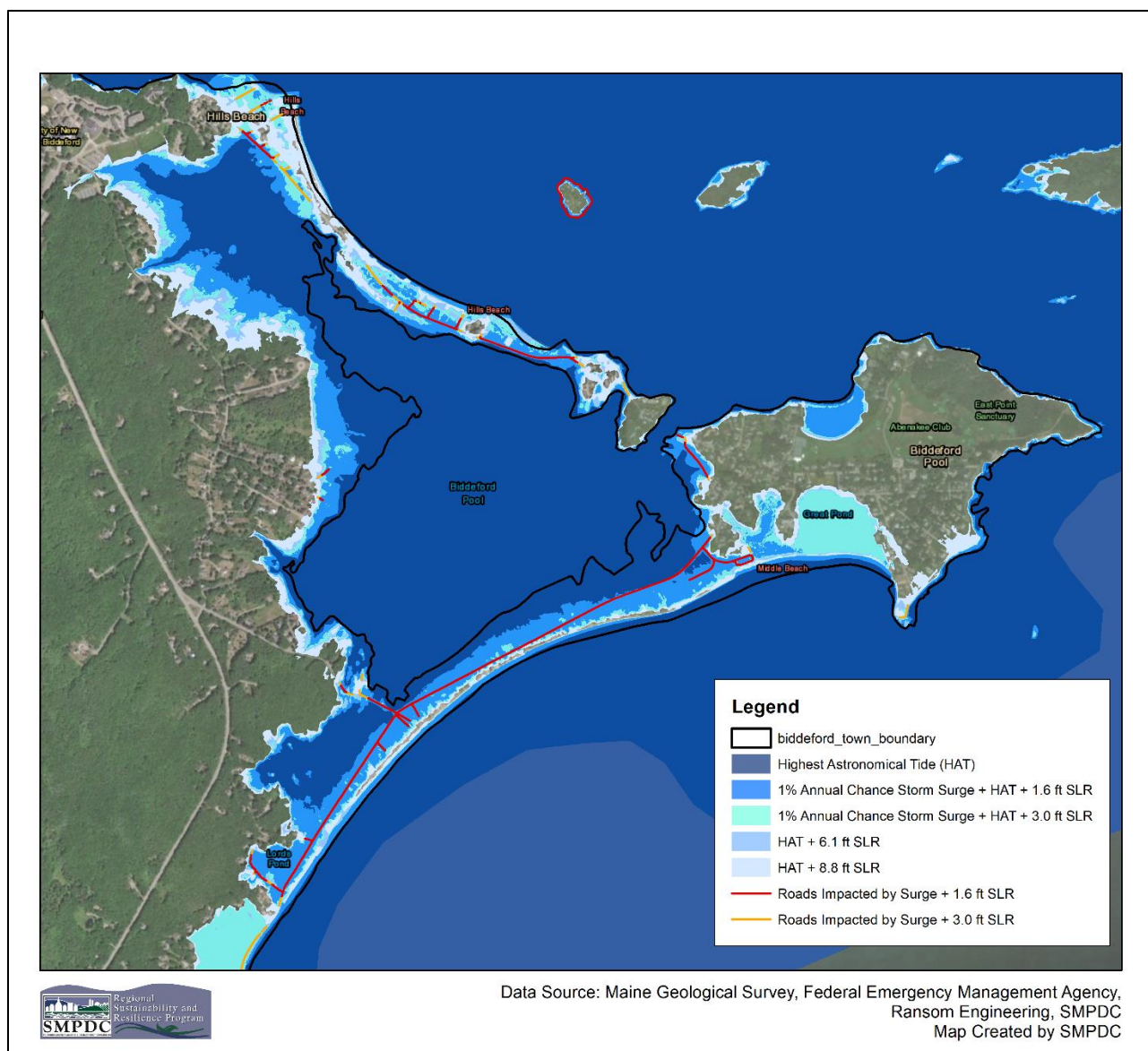


Map 23. Water, stormwater, and sewer infrastructure vulnerable to flooding. (Source: SMPDC. 2022 coastal economic resilience assessment, phase 2. Unpublished.)

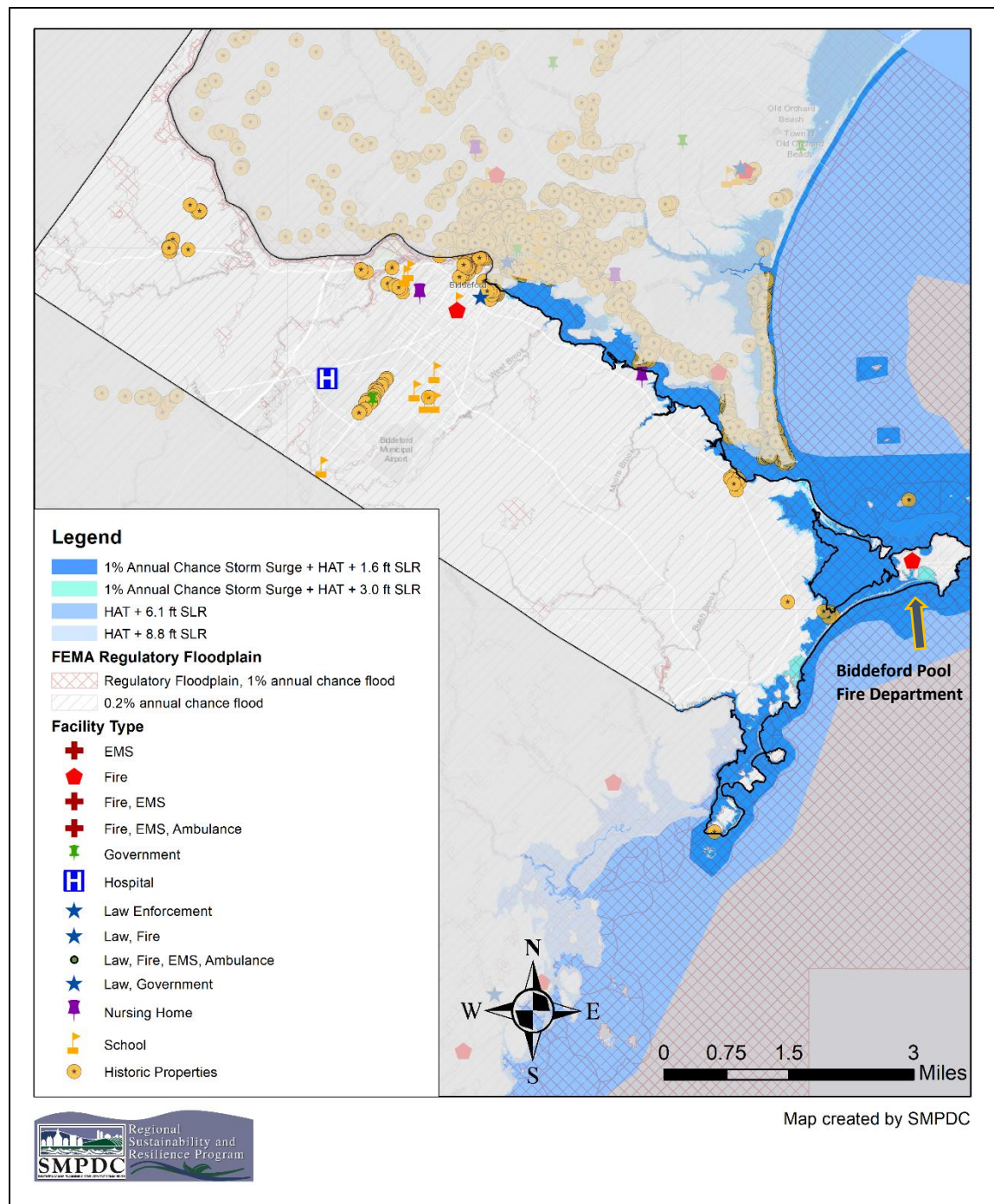


Map 24. Roads impacted by storm surge plus sea level rise. (Source: SMPDC. 2022 coastal economic resilience assessment, phase 2. Unpublished.)





Map 25. Roads impacted by storm surge plus sea level rise. (Source: SMPDC. 2022 coastal economic resilience assessment, phase 2. Unpublished.)



Map 26. Mapped locations of historic properties, emergency management and public health facilities, and schools. Parcels are color-coded based on if they are projected to be directly impacted by flooding from the 1%-annual chance event (e.g., the FEMA regulatory floodplain), 1.6 feet of sea level rise, and/or 3.9 feet of sea level rise. (Source: SMPDC EDA disaster grant study, phase 2)

| Road Name                  | Classification | Impacted by Storm Surge + 1.6 ft<br>Sea Level Rise | Impacted by Storm Surge + 3.0 ft<br>Sea Level Rise |
|----------------------------|----------------|----------------------------------------------------|----------------------------------------------------|
| Basket Is                  | Private        | ✓                                                  | ✓                                                  |
| Beach Ave                  | Local          | ✓                                                  | ✓                                                  |
| Beach House Ln             | Private        | ✓                                                  | ✓                                                  |
| Beach House Ln             | Local          | ✓                                                  | ✓                                                  |
| Beach Rose Way             | Private        | ✓                                                  | ✓                                                  |
| Brackett Point Rd          | Local          |                                                    | ✓                                                  |
| Breakwater Ave             | Local          |                                                    | ✓                                                  |
| Bridge Rd - Route 208      | Secondary      | ✓                                                  | ✓                                                  |
| Channel Cove Ln            | Private        | ✓                                                  | ✓                                                  |
| E Crescent Cove Ln         | Local          |                                                    | ✓                                                  |
| Edgewater Pl               | Private        | ✓                                                  | ✓                                                  |
| Elizabeth Rd               | Local          |                                                    | ✓                                                  |
| Elphis St                  | Local          |                                                    | ✓                                                  |
| Fortunes Rocks Rd          | Local          | ✓                                                  | ✓                                                  |
| Gilbert Pl                 | Private        | ✓                                                  | ✓                                                  |
| Golden Ave                 | Local          | ✓                                                  | ✓                                                  |
| Granite Point Rd           | Local          | ✓                                                  | ✓                                                  |
| Granite Point Rd           | Private        | ✓                                                  | ✓                                                  |
| Heather Ln                 | Private        | ✓                                                  | ✓                                                  |
| Heron Cv                   | Private        | ✓                                                  | ✓                                                  |
| Hills Beach Rd             | Local          | ✓                                                  | ✓                                                  |
| Island View Dr             | Local          |                                                    | ✓                                                  |
| Juniper Ln                 | Private        | ✓                                                  | ✓                                                  |
| Landing Way                | Private        | ✓                                                  | ✓                                                  |
| Leighton Point Ln          | Private        |                                                    | ✓                                                  |
| Lester B Orcutt Blvd       | Local          | ✓                                                  | ✓                                                  |
| Lily Pond Ave              | Local          |                                                    | ✓                                                  |
| Long Ave                   | Local          | ✓                                                  | ✓                                                  |
| Maddox Pond Rd             | Local          | ✓                                                  | ✓                                                  |
| Mile Stretch Rd - Rte. 208 | Secondary      | ✓                                                  | ✓                                                  |
| Ocean Ave                  | Local          |                                                    | ✓                                                  |
| Ocean Edge Ln              | Private        | ✓                                                  | ✓                                                  |
| Old Kings Hwy              | Local          |                                                    | ✓                                                  |
| Peter Pond Ln              | Private        | ✓                                                  | ✓                                                  |
| Pleasant Ave               | Local          | ✓                                                  | ✓                                                  |
| Private Way Ln             | Private        | ✓                                                  | ✓                                                  |
| Sand Dollar Hvn            | Private        | ✓                                                  | ✓                                                  |
| Sea Spray Dr               | Private        | ✓                                                  | ✓                                                  |
| Seabreeze Ave              | Local          | ✓                                                  | ✓                                                  |
| Seal Ln                    | Private        | ✓                                                  | ✓                                                  |
| Sky Harbor Dr              | Local          | ✓                                                  | ✓                                                  |
| Surf Ave                   | Private        | ✓                                                  | ✓                                                  |
| Thorndike Ave              | Local          | ✓                                                  | ✓                                                  |
| Timber Point Rd            | Private        | ✓                                                  | ✓                                                  |
| Yates St                   | Local          | ✓                                                  | ✓                                                  |

Figure 14. Roads vulnerable to storm surge plus 1.6 feet and 3.0 feet of sea level rise (Source: SMPDC. 2022 coastal economic resilience assessment, phase 2. Unpublished).

### Impacts to the Natural Environment

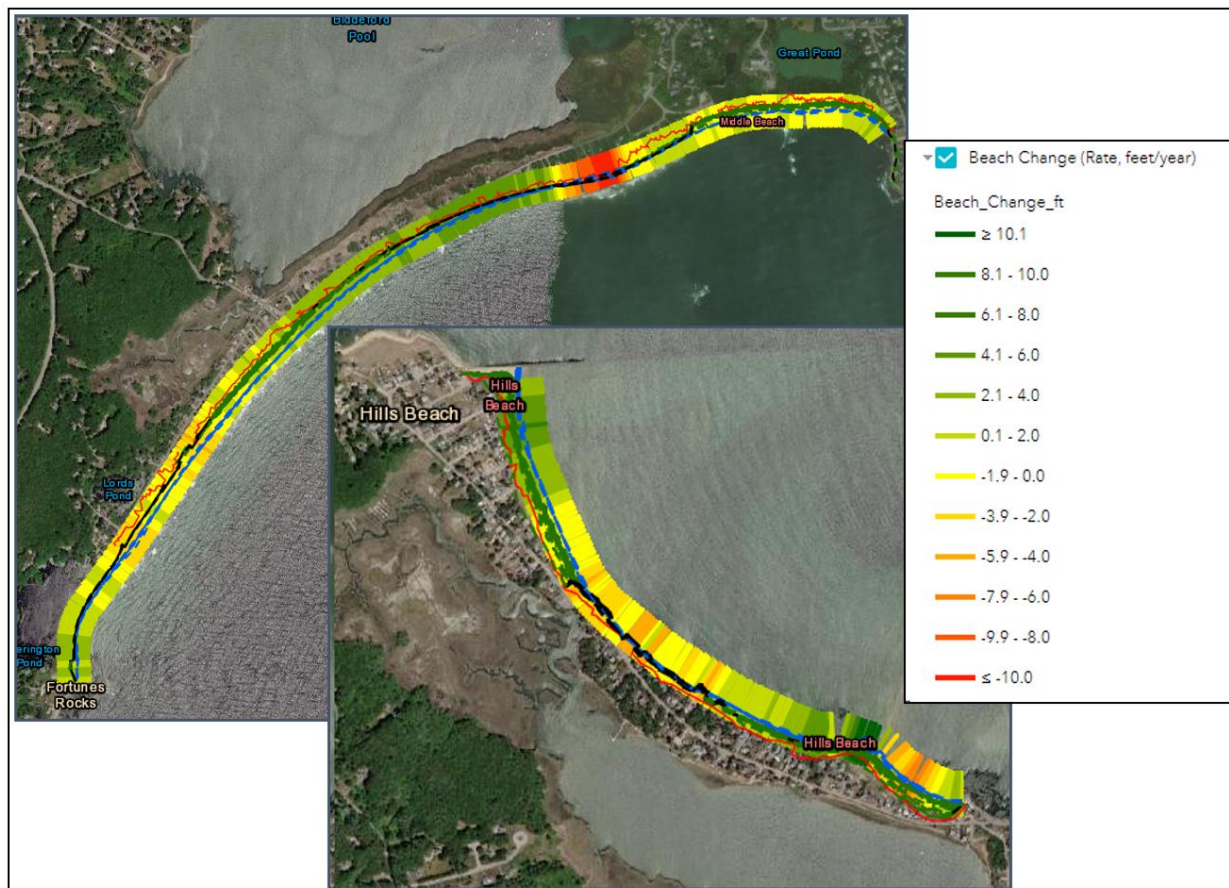
Rising seas and coastal storms threaten local beaches and dune systems through erosion and flooding. Hardened coastal structures, like seawalls, roads, and homes, prevent beach systems from migrating inland as ocean levels increase. Additionally, how beaches will fare with increased sea level is related to sediment supply, both sources and volumes of the supply. Sand and gravel for beaches can come from rivers, eroding bluffs, the offshore seafloor, or marine shells. Shorelines that have been engineered to prevent erosion, protect property, and stabilize the shoreline offer reduced sediment supply to beaches.

- With 1.6 ft of sea level rise, Biddeford’s dry beach width (distance from the mean high water to seawall or dune edge) is projected to decrease by 7.9 acres, or by roughly 47% from existing conditions. With 3.9 feet of sea level rise, the dry beach width is projected to decrease by 86%<sup>33</sup> (Map 27).
- Sea level rise is expected to lead to loss of coastal habitat. Along Biddeford’s coast, loss of dry beach will impact local species, including piping plovers and other shorebirds that use the beach for nesting.
- Monitoring data from the Maine Geological Survey show that Fortunes Rocks Beach, most of Middle Beach, and most of Hills Beach have been relatively stable in terms of measured beach width over the past several years (2016 – 2020). However, the middle segment of Middle Beach and middle and southern segments of Hills Beach have experienced erosion. Sea level rise will likely exacerbate erosion in areas already experiencing it and lead to additional erosion along all beach areas.

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<sup>33</sup> Maine Geological survey. 2021. Unpublished analysis of the impact of sea level rise on dry beach width of Maine’s sandy beaches.



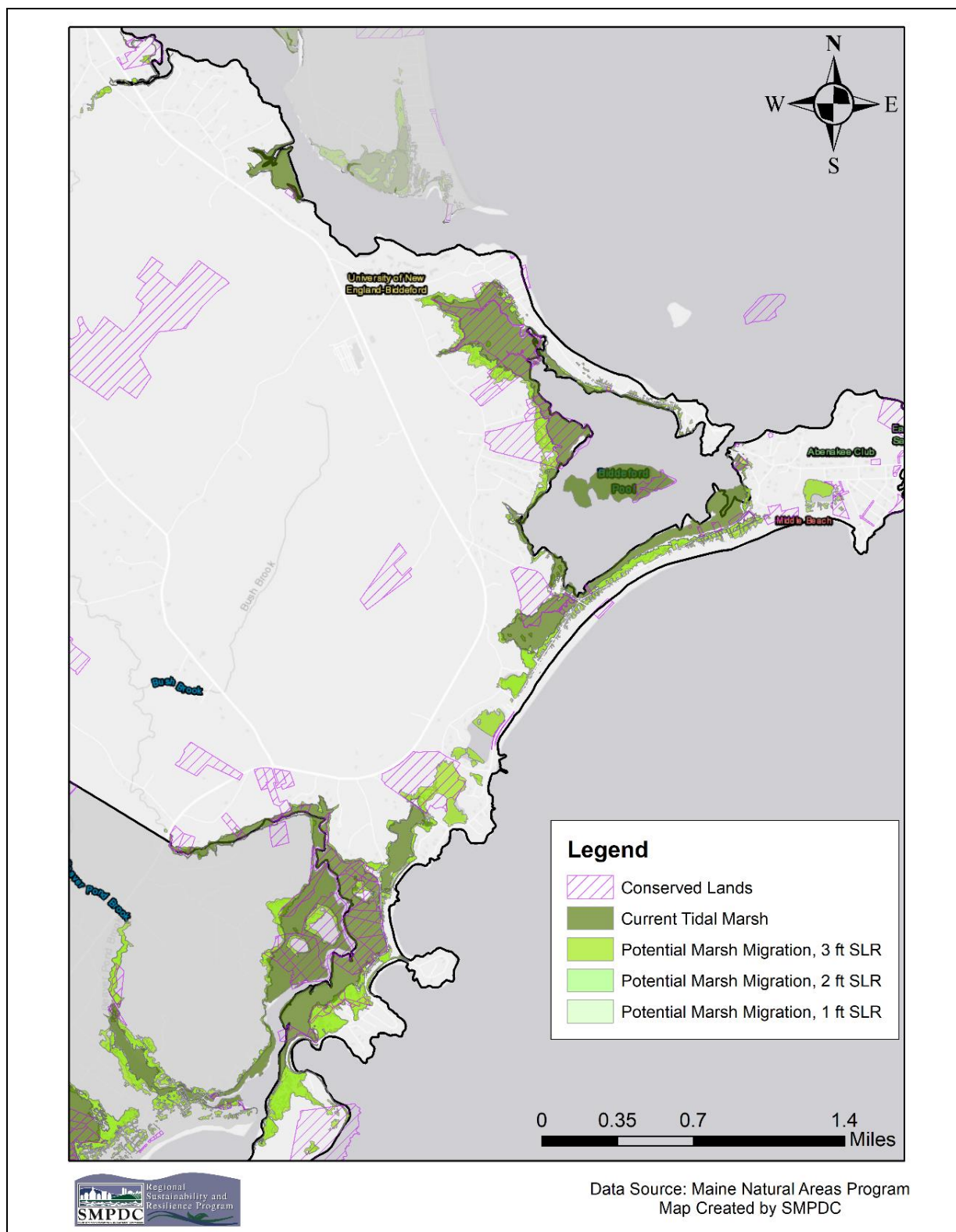


Map 27. Mapped shoreline change along Goose Rocks Beach. This map shows the rate of beach change, in feet per year, from data collected from 2016 through 2020. A positive value (green lines) represents a rate of beach growth, while a negative value (yellow/orange/red lines) represents a rate of beach loss. (Source: Maine Geological Survey. Maine Beach Mapping Program. Maine Beach Mapping viewer)

While sea level rise threatens inundation of the beach system, it also has the potential to facilitate the landward expansion, or migration, of tidal marshes. However, this landward migration can only occur if saltmarshes are healthy and there are not physical barriers, such as stonewalls, roads, or buildings, that inhibit marsh movement. The Maine Natural Areas Program (MNAP) has mapped areas that could support marsh migration with future sea level rise (Map 28). Protecting these areas will be crucial for ensuring the long-term viability of local tidal marshes, which provide tremendous natural benefits and services including wildlife habitat, flood control, and water quality protection.

- Areas along Biddeford Pool and Little River have been identified as being able to support future marsh migration. Some of those areas are adjacent to existing conserved lands, however, areas in the Granite Point area and Fortunes Rocks Beach could support migration and are not yet conserved.
- Several pocket areas along tidal portions of the Saco River have also been identified as being able to support future marsh migration.





Map 28. Existing conserved lands (purple) and areas that could support future migration of existing tidal marshes with future sea level rise. The areas are non-tidal lands within existing tidal estuaries that could be inundated and facilitate the development of new areas of tidal marsh if sea level rises by 1, 2, or 3.3 feet above current highest annual tide (HAT). (Source: Maine Natural Areas Program. Sea level rise scenarios are from the Maine Geological Survey.)

## EXTREME TEMPERATURES & AIR QUALITY

### Key Takeaways

- Maine's average annual temperature has increased by 3.2°F since 1895 and could warm an additional 2-4°F by 2050.
- Southern Maine is expected to experience roughly 4.5 times more 'extreme heat' days by the 2050s.
- Exposure to extreme heat is a significant public health concern and can be especially dangerous for older adults, infants, people with existing health conditions, and those who have limited access to air conditioning.
- Extreme heat will exacerbate the impacts of urban 'heat islands', the locations of which overlap with areas of socially vulnerable populations in Biddeford, such as in the downtown area.
- There are fewer days with below-freezing temperatures and snow cover, leading to an increase in pest outbreaks and prevalence of vector-borne diseases like Lyme disease.

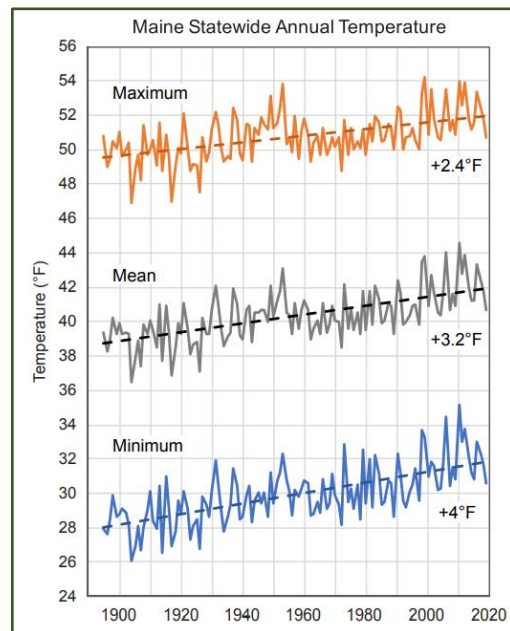


Figure 15. Maximum, mean, and minimum statewide annual temperatures from 1895 to 2019. (Source: MCC STS. 2020.)

### Background Information, Trends, & Projections

Climate change is causing increased temperatures and more frequent extreme temperature occurrences. In Maine, the average annual statewide temperature has increased by 3.2°F since 1895<sup>34</sup> (Figure 15). Winters are warming faster than other seasons, and coastal areas have warmed more than the interior of the State. Climate models project that Maine could warm an additional 2 to 4°F by 2050 and up to 10 °F by 2100 depending on global greenhouse gas emissions. Extreme heat days are expected to be 2 to 4 times more frequent in Maine by 2050, increasing the likelihood of heatwaves. Southern Maine is expected to experience roughly 3 times more 'extreme heat' days, where the heat index (a combination of temperature and relative humidity that approximates the 'felt' temperature) exceeds 95°F, as the early 2000s (Map 29)<sup>35</sup>. In addition to extreme heat,

<sup>34</sup> MCC STS. 2020. Scientific Assessment of Climate Change and Its Effects in Maine. A Report by the Scientific and Technical Subcommittee (STS) of the Maine Climate Council (MCC). Augusta, Maine. 370 pp.

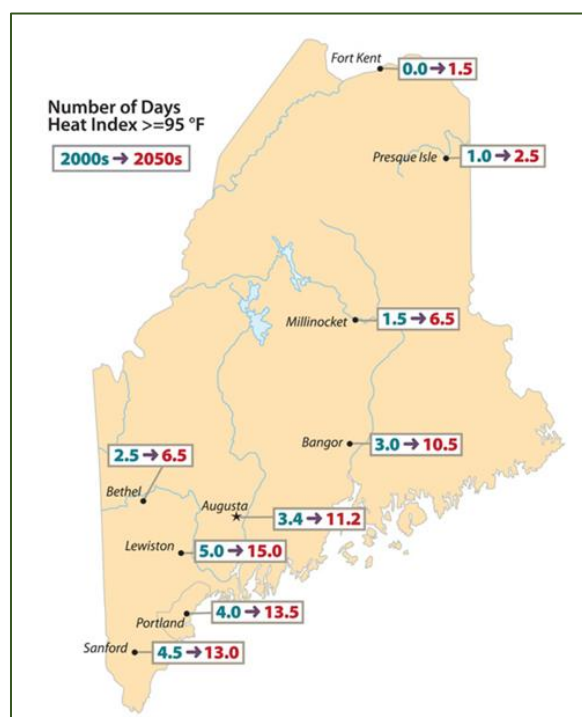
<sup>35</sup> Fernandez, I.J., Schmitt, C.V., Birkel, S.D., Stancioff, E., Pershing, A.J., Kelley, J.T., Runge, J.A., Jacobson, G.L. & Mayewski, P.A. (2015). Maine's Climate Future: 2015 Update. Orono, ME: University of Maine.

there is research showing that more short-term temperature variability and volatility may be happening as a result of climate change.

Five of the ten warmest years on record have occurred within the past ten years, based on average annual temperatures from National Weather Service (NWS) data collected between 1989 and January of 2023 in Kennebunkport, the NWS data collection station closest to Biddeford (Figure 16). The warmest average monthly temperatures for the summer months (June, July, and August) have also occurred within the past ten years and have been 3.1 – 4.3°F warmer than the monthly mean temperature (Figure 17). 2023 was the warmest January on record, with an average temperature of 31.9°, 8.5° warmer than the January mean temperature.

|                          | Year | Average Annual Temperature (°F) |
|--------------------------|------|---------------------------------|
| 1                        | 1989 | 49.9°                           |
| 2                        | 1998 | 49.0°                           |
| 3                        | 2021 | 47.8°                           |
| 4                        | 2010 | 47.7°                           |
| 5                        | 2012 | 47.6°                           |
| 6                        | 2020 | 47.2°                           |
| 7                        | 1999 | 47.0°                           |
| 8                        | 2006 | 47.0°                           |
| 9                        | 2022 | 46.8°                           |
| 10                       | 2016 | 46.7°                           |
| <b>1989-2023 Average</b> |      | <b>45.3°</b>                    |

Figure 16. The top ten warmest years based on average annual air temperatures measured in Kennebunkport, 1989 – January 2023. (Source: National Weather Service).



Map 29. Average number of days when the heat index is greater than or equal to 95°F at selected sites for 2000 – 2004 and 2050 – 2054. Predicted values derived from a 48-km downscale simulation of one ensemble member of the CCSM3 model for the IPCC A2 emissions scenario. Source: Fernandez et al. (2015). (Figure from MCC STS. 2020.)

| Month  | Year | Average Temperature (°F) | Mean Temperature (°F), 1989 - 2022 | Difference Between Mean and Average of Warmest Month |
|--------|------|--------------------------|------------------------------------|------------------------------------------------------|
| June   | 2021 | 65.7°                    | 61.6°                              | +4.1°                                                |
| July   | 2013 | 70.5°                    | 67.4°                              | +3.1°                                                |
| August | 2018 | 70.4°                    | 66.1°                              | +4.3°                                                |

Figure 17. The warmest average monthly temperatures of the three summer months and years in which they occurred compared with the mean monthly temperatures for those months measured in Kennebunkport, 1989 – January 2023. (Source: National Weather Service.)

### Urban Heat Islands

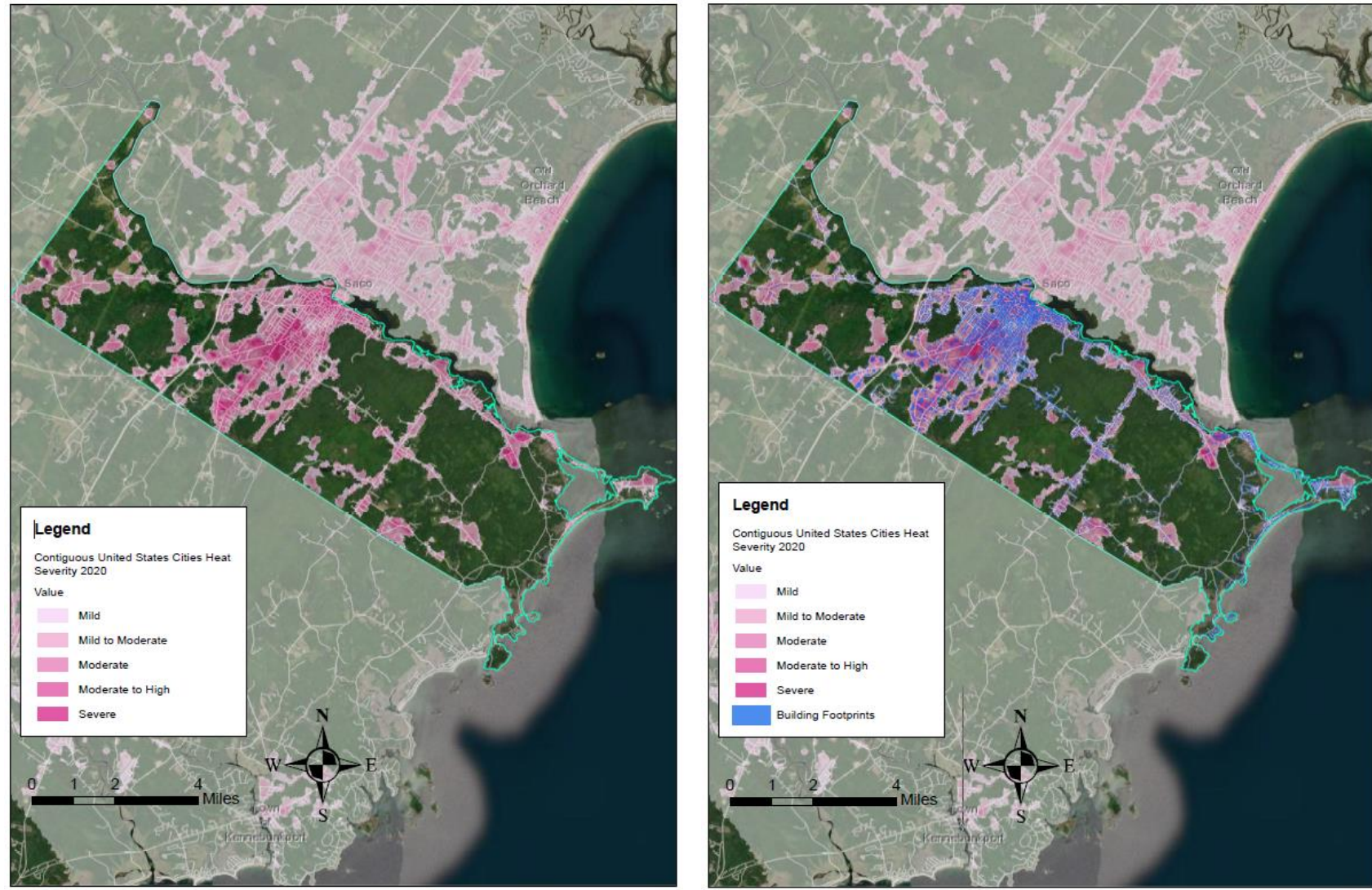
Extreme heat days in Maine will exacerbate the severity and impacts of “heat islands”, or areas with a lot of impervious surfaces, such as buildings and pavement, that absorb and re-emit heat. The Trust for Public Land notes that extreme heat exacerbated by urban heat islands can lead to increased respiratory difficulties, heat exhaustion, and heat stroke.

The two maps below (Map 30) show areas in Biddeford that are hotter than the average temperature for the community as a whole. The map on the right shows the location of building footprints in relation to heat islands. The maps show the relative heat severity measured on a scale of 1 to 5, with 1 being a relatively mild heat area (slightly above the mean for the city), and 5 being a severe heat area (significantly above the mean for the city). (*Heat island temperature data: 30-meter resolution based on data derived from Landsat 8 imagery band 10 (ground-level thermal sensor) from the summers of 2019 and 2020.*)

In Biddeford, areas in the downtown, along Route 208, Guinea Road, East Point/Biddeford Pool, and in the northwestern portion of the city are mapped as having elevated ground temperatures in relation to the rest of the community. The downtown and Biddeford Pool areas that are mapped as moderate to severe heat severity also have elevated social vulnerability and vulnerabilities to flood hazards. The northwestern portion of the city does not have a high concentration of buildings but has moderate to severe heat island severity. Knowing where areas of high heat are located can inform mitigation and adaptation strategies.



## Urban Heat Island Severity



Map 30. Urban heat island severity (left) overlaid with building footprints (right). A community cooling center is located at Seeds of Hope Neighborhood Center in downtown Biddeford. Heat island severity data source: Trust for Public Land. Map created by SMDPC

*Biddeford – August 2023*



## Public Health Impacts

Extreme heat is one of the most significant impacts of climate change on human health and is the leading cause of weather-related deaths across the United States. Exposure to extreme heat has been linked with a wide range of health issues, including heatstroke, heat exhaustion, impacts on kidney function, dehydration, fetal health, mental health, and exacerbation of pre-existing health conditions. Extreme heat is also linked with increased deaths and emergency department visits. From 2011 to 2015 and 2017 to 2019, York County had the second highest number of annual emergency department visits for heat-related illness across Maine, with Cumberland County seeing the highest numbers<sup>36</sup>.

Figure 18 shows peak emergency department visits for heat-related illnesses to hospitals in York County between 2018 and 2023, the years for which monthly data is available.

Residents of cooler climates, like Maine, are less physiologically adapted to extreme heat exposure, and experience disproportionate health effects on hot days when compared to residents of warmer climates. Additionally, the prevalence of air conditioning, one of the most effective tools for preventing heat illness, is significantly lower in Maine than in the rest of the region and the country<sup>37</sup>. Certain populations, including older adults, infants, pregnant women, and people who have chronic diseases or who are sick already may feel much worse or have serious problems in extreme heat. Further, people with limited access to air conditioning, outdoor laborers, and unhoused populations are also more vulnerable to the impacts of extreme heat. A survey conducted by the Maine Behavior Risk Factor Surveillance System found that in 2014, 70.8% of homes in York County had some form of air conditioning, the highest percentage of all Maine counties. However, as noted above, York County also had the second highest number of heat illness emergency department visits.

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<sup>36</sup> Maine Health Data Organization (MHDO). Data analyzed and display prepared by the Environmental Public Health Tracking Program. Data updated: 06/2021.

<sup>37</sup> MCC STS. 2020. Scientific Assessment of Climate Change and Its Effects in Maine. A Report by the Scientific and Technical Subcommittee (STS) of the Maine Climate Council (MCC). Augusta, Maine. 370 pp.

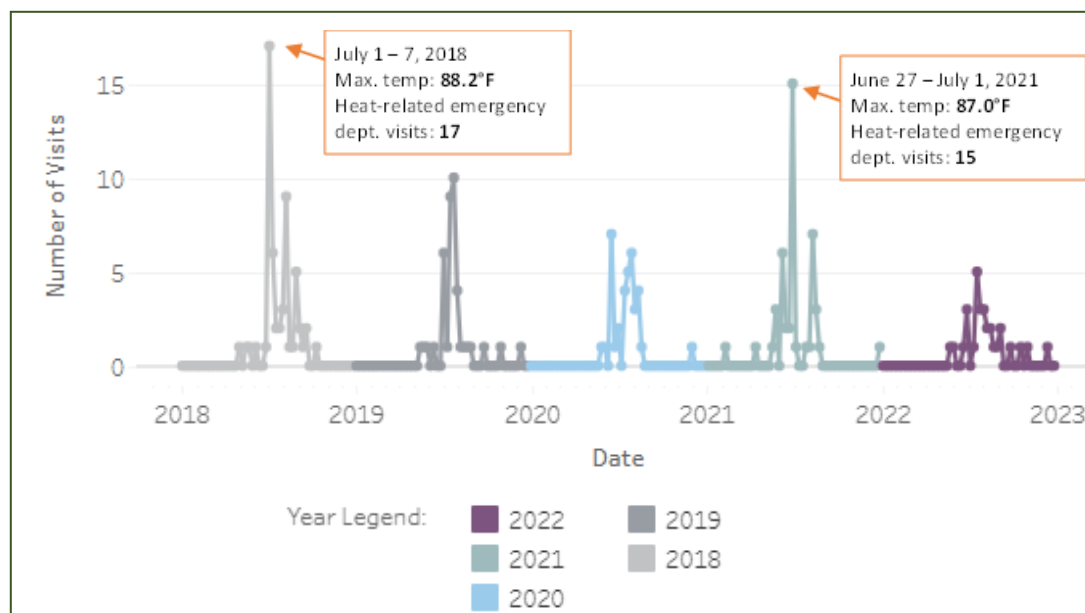


Figure 18. Number of heat illness visits to emergency departments in York County from 2018 to 2023. (Source: Maine Center for Disease Control and Prevention, Maine Tracking Network.)

Climate change can impact air quality and lead to worsening air pollution. Atmospheric warming associated with climate change has the potential to increase ground-level ozone in many regions, which may cause public health issues and present challenges for compliance with the ozone standards in the future. The impact of climate change on other air pollutants, such as particulate matter, is less certain, but research is underway to address these uncertainties.<sup>38</sup> Figure 19 shows the number of days in York County with an 8-hour average ozone concentration that exceeded the National Ambient Air Quality Standard of 0.070 ppm, established December 28, 2015. Previous standards were set at .075 ppm from 2008-2015 and .080 prior to 2008. Research for this assessment could find no cause of the relatively high number of exceedances between 2001 and 2007. An analysis by the Maine Department of Environmental Protection affirmatively demonstrates that Maine emissions are insignificant contributors to non-attainment of ozone for the 8-hour ozone air quality standards<sup>39</sup>. Regardless of the cause, individuals with existing health conditions, older populations, and children are especially vulnerable to poor air quality. Residents of Biddeford's downtown area may be especially vulnerable to poor air quality due to high rates of asthma.

<sup>38</sup> US Environmental Protection Agency. Air Quality and Climate Change Research webpage.

<sup>39</sup> State of Maine Clean Air Act Section 176A(a)(2) Petition. 2020.

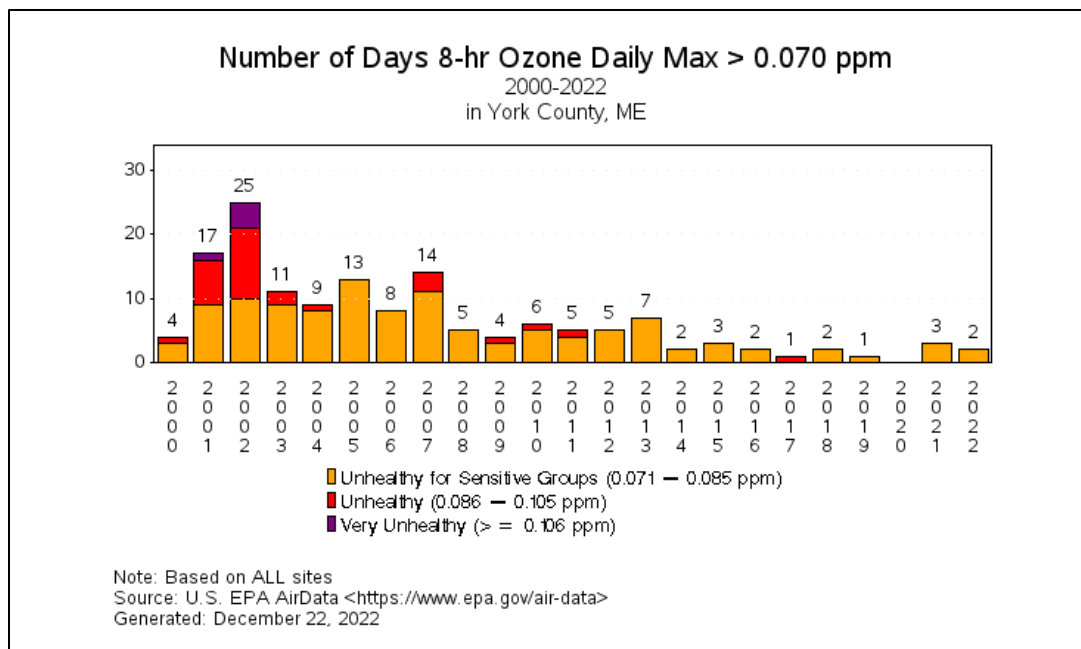


Figure 19. Number of days during which the 8-hour average ozone concentration exceeded national air quality standards. (Source: US EPA AirData portal)

The prevalence of tickborne diseases, including Lyme, anaplasmosis, and babesiosis, has increased in York County in recent years. Figure 20 shows that rates of all three diseases have increased since 2001. Figure 21 shows the incidence rate (per 100,000 people) of confirmed and probable cases of tickborne disease in Biddeford. Between 2016 and 2020, Biddeford had the second lowest rate of anaplasmosis and fourth lowest rate of Lyme of all York County communities.

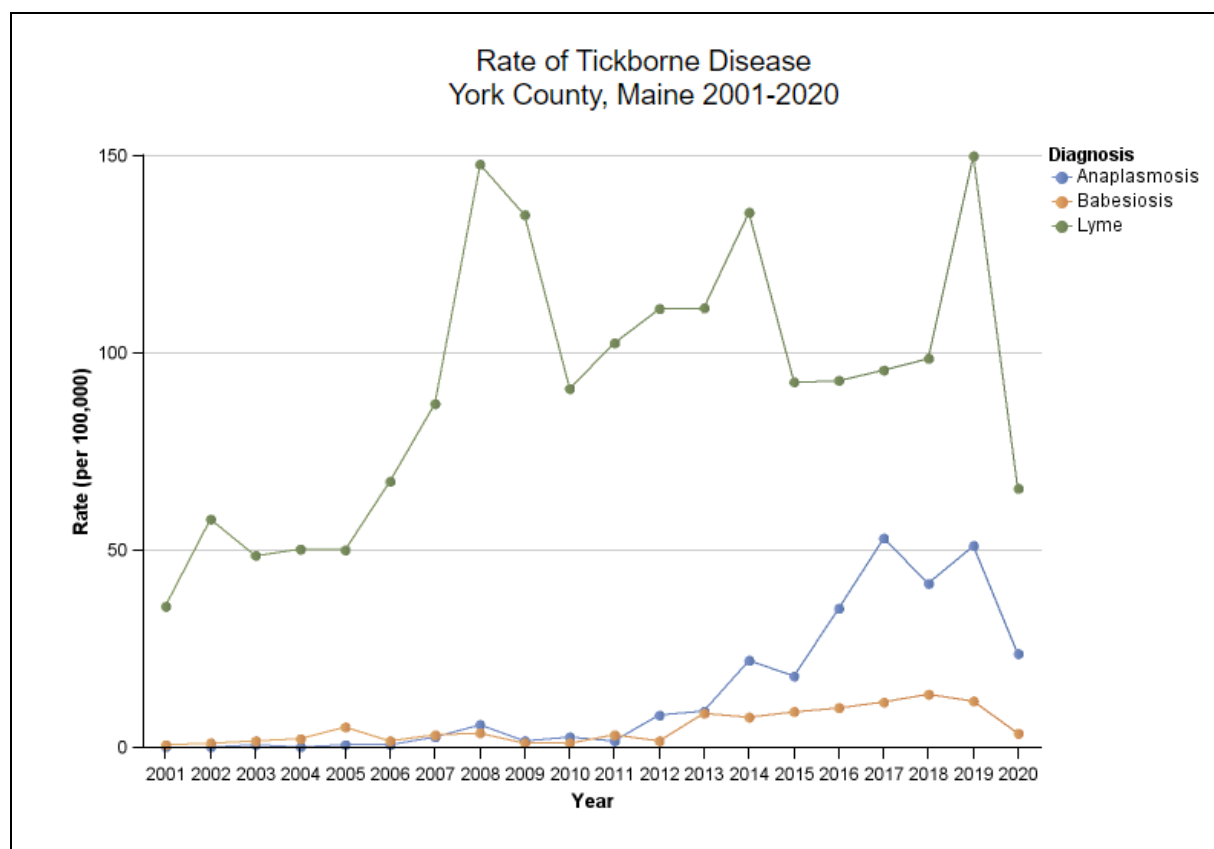


Figure 20. Annual incidence rate (per 100,000 people) of confirmed and probable cases of tickborne diseases of the population in York County. Maine CDC's Infectious Disease Program obtained these data through notifiable conditions surveillance based upon reports from healthcare providers, laboratories, and other healthcare partners. (Data Source: Maine CDC's Infectious Disease Program collected and analyzed population data from the U.S. Census Bureau to calculate state and county rates of tickborne disease. Maine CDC used population data from Maine CDC Data, Research, and Vital Statistics (DRVS) to calculate town-level rates of tickborne disease. The Maine Environmental Public Health Tracking Program prepared the data display. Data updated: 05/2021. Display updated: 05/2021.

| Rate and Number of Tickborne Diseases in Biddeford, 2016 - 2020 |              |            |      |
|-----------------------------------------------------------------|--------------|------------|------|
|                                                                 | Anaplasmosis | Babesiosis | Lyme |
| <b>Confirmed and probable cases</b>                             | 9            | 3          | 47   |
| <b>Rate (per 100,000 people)</b>                                | 8.3          | 2.8        | 43.1 |

Figure 21. Rate and number of confirmed and probable cases of tick-borne disease in Biddeford, 2016 -2020. (Source: Maine Center for Disease Control and Prevention. Infection Disease Program. Maine Tracking Network Data Portal.)

### Impacts to the Natural Environment

Increasing and shifting temperatures will impact the natural environment and Maine's wildlife and vegetation. Shorter winters, less snow, a rapid expansion of pests (e.g., winter ticks), presence of parasites previously only found further south, heat stress, more frequent and higher flooding of tidal marshes, invasive species, and changes in available prey species all threaten local species and natural areas. Increasing temperatures impact biodiversity and affect ranges where species can live. Scientists predict that 34%–58% of

species will go extinct given current climate change scenarios if they are unable to disperse to new locations, while 11–33% will still go extinct even if they can disperse to future areas that are within their current climatic niche. Rising temperature and shorter winters will impact Biddeford’s natural areas, vegetation, and wildlife, in addition to how the community interacts with those areas and species.

While Maine’s growing season has lengthened overall due to warming temperatures, some years have seen killing frosts in late spring and early fall. It is uncertain whether such events will become more or less frequent in the future, but the trend of longer growing seasons and warmer falls is expected to continue. Climate model projections indicate that in the future, it is likely that increased evaporation will dry surface soil layers, particularly in the warm season<sup>40</sup>. These changes will impact local agricultural activities as well as home gardeners.

## DROUGHT & WILDFIRES

### Key Takeaways

- Despite wetter conditions overall, changing precipitation patterns caused by climate change have contributed to the emergence of drought conditions in southern Maine in recent years.
  - There have been 4 periods of severe to extreme drought in York County since 2000, 3 of which have occurred in the last 7 years.
- Average annual snowfall across the state has decreased about 2 inches since 1895 because more precipitation is falling as rain rather than snow. Lower spring snowpack reduces aquifer recharge, contributing to the emergence of drought.
  - Historic snowfall data near Biddeford are limited but align with the statewide trend of decreasing annual snowfall amounts.
- Communities supplied by groundwater wells, rivers, or smaller lakes are at greater risk of water quantity and quality impacts from drought.
  - Streamflow levels in the Saco River, Biddeford's sole public water source, were historically low during the recent droughts.
  - There are 470 private wells in Biddeford and groundwater levels were historically low during all of the most recent droughts.
  - During the 2020 and 2022 droughts 45 and 15 dry wells were reported in York County respectively.

<sup>40</sup> MCC STS. 2020. Scientific Assessment of Climate Change and Its Effects in Maine. A Report by the Scientific and Technical Subcommittee (STS) of the Maine Climate Council (MCC). Augusta, Maine. 370 pp.



- Wildfire risk may increase with more frequent, severe, and intense droughts, and though the likelihood of wildfires may remain low, such an event could have major impacts on the community.
  - Wildfires occurred in Biddeford in 2002 and 2020 driven by drought conditions in those years.
  - Over the last several decades, Biddeford has been a hotspot for wildfire occurrences compared to the rest of the county.

### Background Info, Trends, & Projections

Annual precipitation in York County has increased 6.9 inches since 1895 (see EXTREME STORMS & PRECIPITATION) and is expected to continue to increase with climate change. Despite wetter conditions overall, changing precipitation patterns caused by climate change have contributed to the emergence of drought conditions in southern Maine in recent years.<sup>41</sup> During the winter, precipitation is increasingly falling as rain rather than snow. Average annual snowfall across the state has decreased about 2 inches since 1895, and reduced snowpack depth has been even more pronounced in southern, coastal areas.<sup>42</sup> Spring snowmelt recharges freshwater aquifers, so less snowpack in the spring diminishes spring recharge and results in a lower water table. Low rainfall during the spring and summer along with higher-than-average temperatures can further deplete the water table, increasing the risk of summer and fall droughts.<sup>43</sup>

In the last few years Maine has experienced some of the driest periods in over a century. The driest May to September period since 1895 occurred during the 2020 drought, and September 2020 was the driest month since 1895.<sup>44</sup> In York County, there have been four periods of severe to extreme drought since 2000, which occurred during the summer and fall months of 2001-2002, 2016, 2020, and 2022. There was also an extended period of moderate drought in 2015 (Figure 22).

- 2001-2002: 73%-100% of the county was in a severe drought for 28 weeks from the end of October to May 2002
- 2016: 67%-100% of the county was in a severe drought for 22 weeks from August to December, and 95% of the county was in an extreme drought for 4 weeks from the end of September to mid-October
- 2020: 74%-100% of the county was in a severe drought for 12 weeks from September to December, and 70%-76% of the county was in an extreme drought for 6 weeks from late September to the end of October
- 2022: 66% of the county was in a severe drought for 4 weeks in August

<sup>41</sup> ME Drought Task Force Report, 10/6/2022: <https://www.maine.gov/mema/hazards/drought-task-force>

<sup>42</sup> University of Maine, Maine's Climate Future, 2020: <https://climatechange.umaine.edu/climate-matters/maines-climate-future/>

<sup>43</sup> ME Drought Task Force Report, 10/6/2022: <https://www.maine.gov/mema/hazards/drought-task-force>

<sup>44</sup> ME Climate Council, Maine Climate Science Update 2021: <http://climatecouncil.maine.gov/reports>

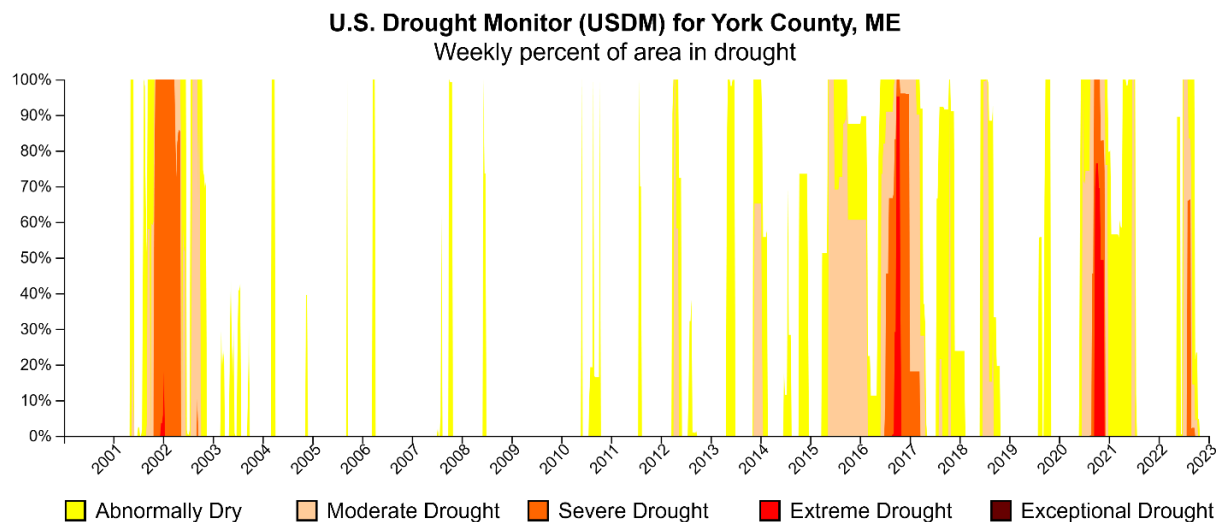


Figure 22. Drought conditions in York County from 2000 to 2022. Four severe to extreme droughts have occurred over the last 20 years and have been more frequent in the past decade. Data source: [U.S Drought Monitor](#).

There is limited data for snowfall and snowpack depth in Biddeford. From 1994 to 2017, snowpack depth was recorded at the Tannery Waste Pits site in Saco and reported to the Maine Geological Survey as part of the Maine Cooperative Snow Survey (Figure 23). Historically, March was the snowiest month in this area. Though data are limited in more recent years, a snowpack depth of 0 inches was reported in February 2012 and April 2017.

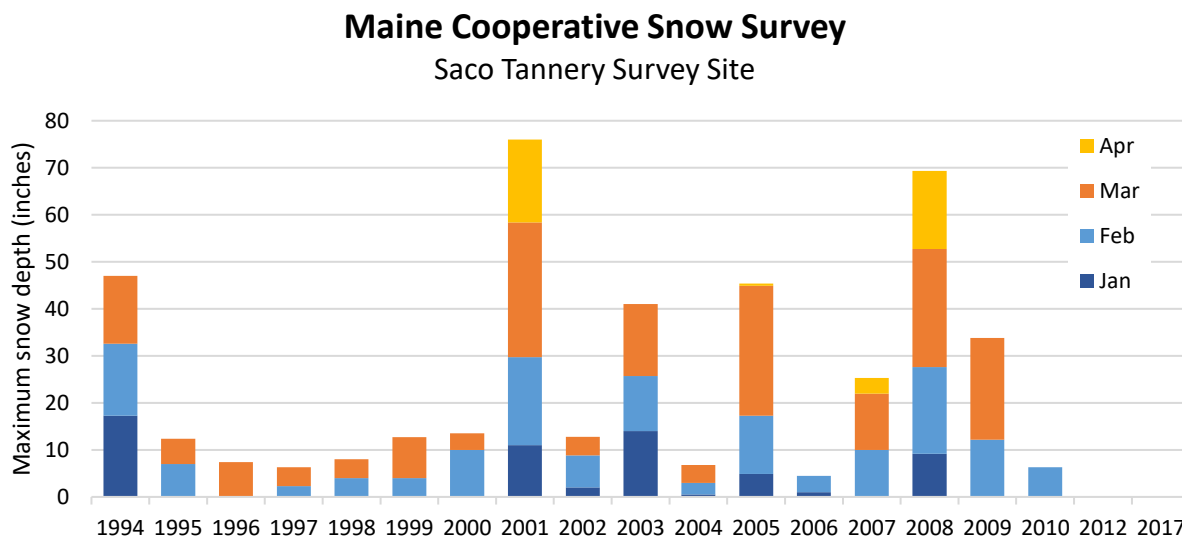


Figure 23. Maximum snow depth at Saco Tannery Survey Site, 1994-2017. Data source: Maine Geological Survey Cooperative Snow Survey

Combined snowfall amounts in Biddeford during the winters of 2020-21 and 2021-22 were about 2-4 feet less than the previous 30 years, based on data from the Maine Drought Task Force. The snowfall deficit over these two winters resulted in reduced spring snowpack

depth and aquifer recharge and contributed to the emergence of a summer and fall drought in 2022.<sup>45</sup> As future precipitation patterns in southern Maine continue to shift towards more rain and less snow, the risk of drought will likely increase.

### Water Supply Impacts

Intense and prolonged droughts have the potential to diminish surface and groundwater supplies and degrade water quality.<sup>46</sup> Communities supplied by groundwater wells, rivers, or smaller lakes are at greater risk of water quantity and quality impacts from drought.<sup>47</sup> The City of Biddeford is serviced by the Biddeford and Saco Division of the Maine Water Company, and the Saco River is the sole source of Biddeford's public water supply.<sup>48</sup>

The United States Geological Survey (USGS) monitors daily streamflow conditions in the Saco River. Since 2000, the lowest recorded streamflows occurred in September 2002, October 2016, and September 2020, coinciding with the three most prolonged and intense droughts in the region.<sup>49</sup>

To date, it does not appear that the Biddeford and Saco Division of the Maine Water Company has experienced significant water quality or quantity issues because of drought.<sup>50</sup> However, the Maine CDC Drinking Water Program received reports of low water quantity from public water suppliers during the 2022 summer drought.<sup>51</sup> Additionally in the summer of 2022, the public water supply in Berwick, sourced by the Salmon Falls River, contained elevated levels of manganese due to low water levels, making it unsafe for children to drink.<sup>52</sup> In the future, more frequent, prolonged, or intense droughts have the potential to cause similar types of issues with Biddeford's public water supply.

Drought can also impact water quantity and quality in private wells. There are a total of 470 private wells in Biddeford (259 wells have location data and are displayed in Map 31), and 93% of these wells are for domestic use.

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<sup>45</sup> ME Drought Task Force Report, 10/6/2022: <https://www.maine.gov/mema/hazards/drought-task-force>

<sup>46</sup> ME Climate Council, Maine Climate Science Update 2021: <http://climatecouncil.maine.gov/reports>

<sup>47</sup> Casco Bay Estuary Partnership, Climate Trends in Casco Bay, 2015:

<https://www.cascobayestuary.org/publication/climate-trends-in-the-casco-bay-region/>

<sup>48</sup> Maine Water Company, Biddeford and Saco 2021 Water Quality Report:

<https://www.mainewater.com/water-quality/water-quality-report>

<sup>49</sup> USGS Streamflow monitoring data: <https://waterdata.usgs.gov/monitoring-location/01066000/#parameterCode=00065&period=P7D>

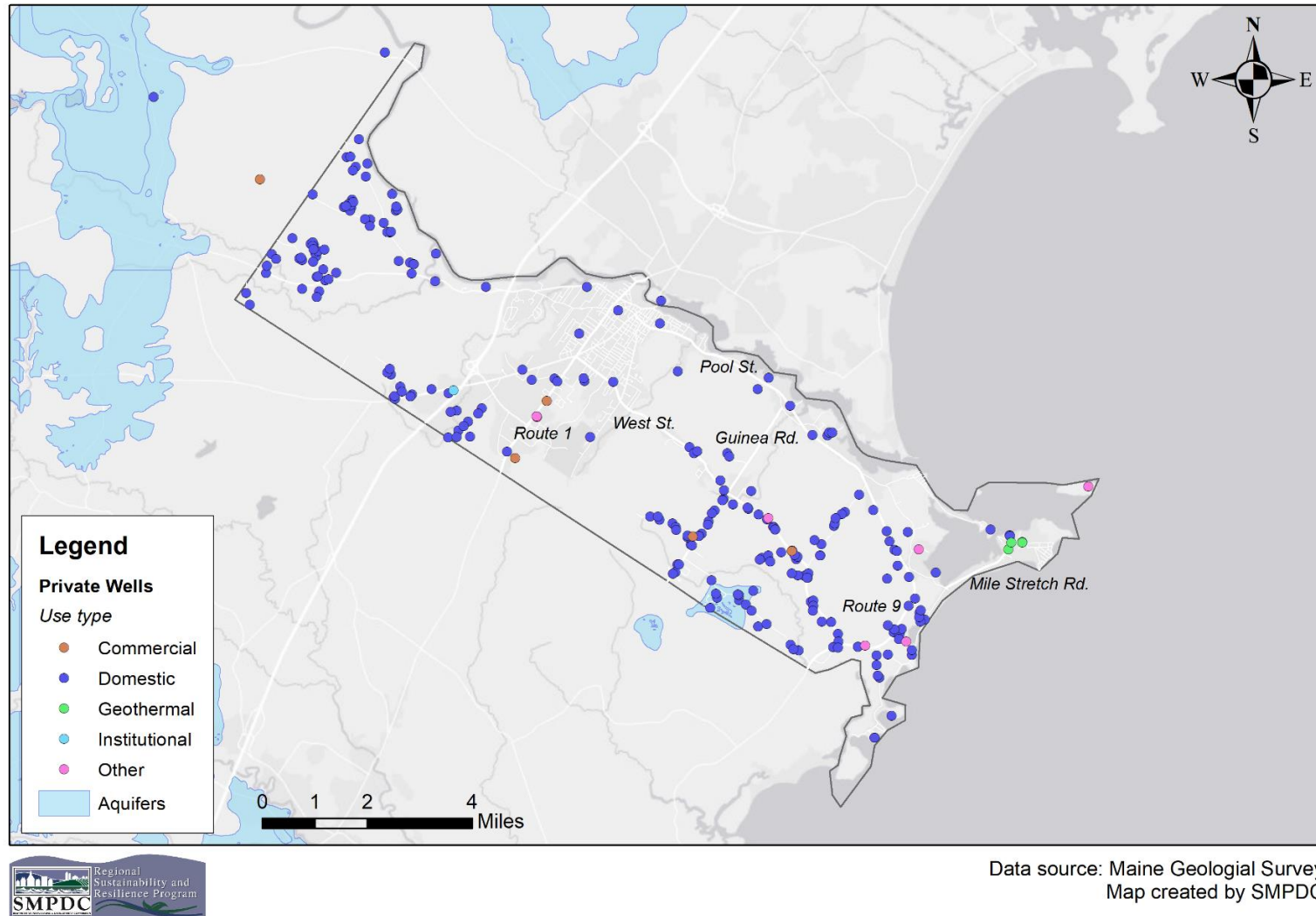
<sup>50</sup> EPA Safe Drinking Water Information System:

[https://ordspub.epa.gov/ords/sfdw/f?p=SDWIS\\_FED\\_REPORTS\\_PUBLIC:PWS\\_SEARCH::::PWSID:ME0090170](https://ordspub.epa.gov/ords/sfdw/f?p=SDWIS_FED_REPORTS_PUBLIC:PWS_SEARCH::::PWSID:ME0090170)

<sup>51</sup> ME Drought Task Force Report, 8/4/2022: <https://www.maine.gov/mema/hazards/drought-task-force>

<sup>52</sup> Maine Public, 8/4/2022: <https://www.mainepublic.org/environment-and-outdoors/2022-08-04/berwick-issues-drinking-water-advisory-due-to-ongoing-drought-conditions>

## Location of Aquifers and Private Wells Biddeford



Map 31. Location of aquifers and private wells in Biddeford, and well use type. Data source: Maine Geological Survey

*Biddeford – August 2023*

The USGS monitors groundwater levels in York County at an index well in Sanford (Figure 24). Since 2000, the lowest recorded groundwater levels occurred in November 2002, October 2015, and October 2016, coinciding with the 2002 and 2016 severe droughts and the 2015 moderate drought. Groundwater levels were also low in October 2020, coinciding with the 2020 drought.

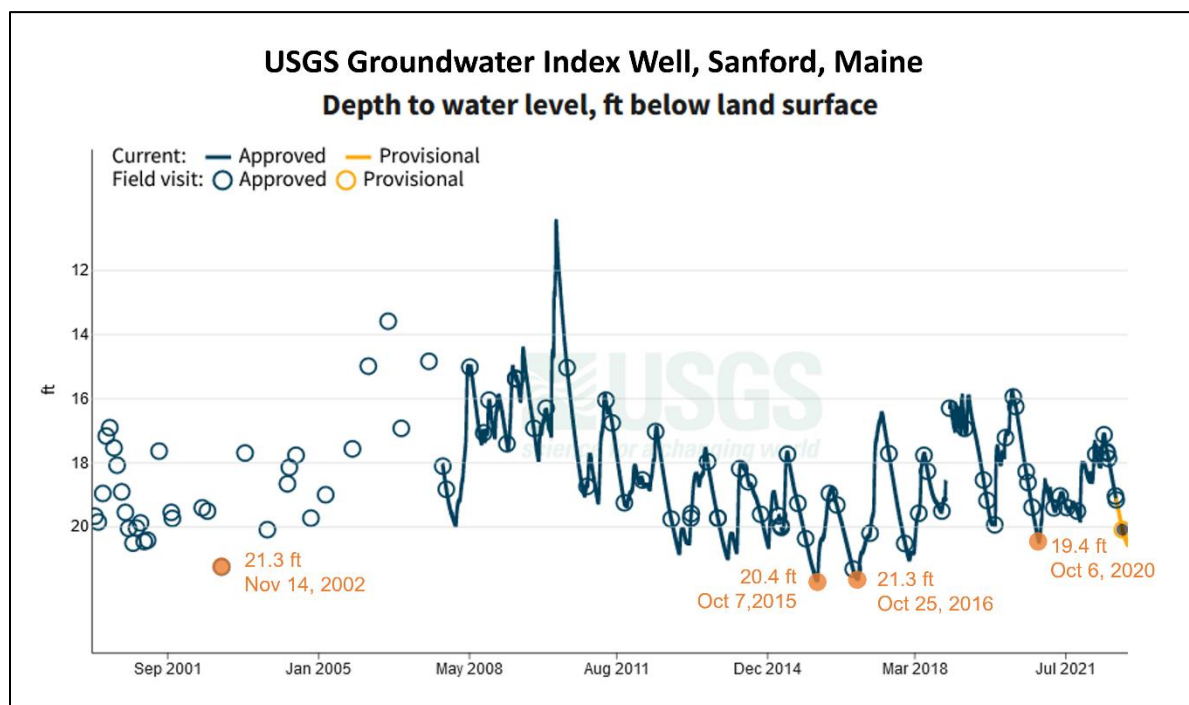


Figure 24. Groundwater levels in York County measured at an index well in Sanford, 2001-2021. Data source. United States Geological Survey

Since 2020, the Maine Drought Task Force has collected data about wells that run dry due to drought (Figure 25). In 2020, 45 wells in York County ran dry compared to 2 in 2021, and 15 in 2022. Though these data are limited, they correlate with the intensity of the 2020 drought compared to the 2022 drought. In the future, more frequent, prolonged, or intense droughts could pose a risk to the hundreds of homeowners and businesses in Biddeford who rely on groundwater wells as their water source.

| Maine Dry Well Survey |      |      |      |
|-----------------------|------|------|------|
| Year                  | 2020 | 2021 | 2022 |
| York County           | 45   | 2    | 15   |

Figure 25. Number of dry wells in York County in 2020, 2021, and 2022. Data source: Maine Emergency Management Agency



## Impacts to the Natural Environment

Some of the environmental impacts of drought are listed in Figure 26.

| Damage to animal species                                                                                                                                                                                                          | Damage to plant communities                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• lack of feed and drinking water</li> <li>• disease</li> <li>• loss of biodiversity</li> <li>• migration or concentration</li> <li>• degradation of fish and wildlife habitats</li> </ul> | <ul style="list-style-type: none"> <li>• loss of biodiversity</li> <li>• loss of trees from urban landscapes and wooded conservation areas</li> <li>• Increased number and severity of fires</li> <li>• Reduced soil quality</li> </ul> |

Figure 26. Environmental impacts of drought. Data source: 2018 York County Hazard Mitigation Plan, Pennsylvania

Although wildfire risk may seem small in Maine compared to the western U.S., wildfires do occur and are often associated with periods of drought. In 1947, drought induced wildfires burned over 200,000 acres across the state.<sup>53</sup> The Maine Drought Task Force reported a higher number of wildfires in 2020, compared to 2021 and 2022, coinciding with the long, intense drought that summer and fall (Figure 27).<sup>54</sup>

| Maine Wildfire Occurrences |       |      |      |
|----------------------------|-------|------|------|
| Year                       | 2020  | 2021 | 2022 |
| Annual total               | 1,154 | 650  | 624  |

Figure 27. Number of wildfires statewide in 2020, 2021, and 2022. Data source: Maine Drought Task Force 10/6/2022 Report

In Biddeford specifically, increased wildfire frequency and severity was associated with the 2002 and 2020 droughts. There were two large wildfires during the summer of 2002 which destroyed about 10 acres.<sup>55</sup> More recently, in April 2020 a large wildfire burned about 20 acres of wooded area and took 3 hours to get under control.<sup>56</sup> Over the last several decades, Biddeford has been a hotspot for wildfire occurrences compared to the rest of the county (Map 32).<sup>57</sup> In the future, more frequent, prolonged, or intense droughts have the potential to increase the risk of wildfires, posing a threat to Biddeford's natural environment and public safety.

<sup>53</sup> York County Emergency Management Agency, Hazard Mitigation Plan, 2022:

<https://www.yorkcountymaine.gov/emergency-management>

<sup>54</sup> ME Drought Task Force Report, 10/6/2022: <https://www.maine.gov/mema/hazards/drought-task-force>

<sup>55</sup> York County Emergency Management Agency, Hazard Mitigation Plan, 2022:

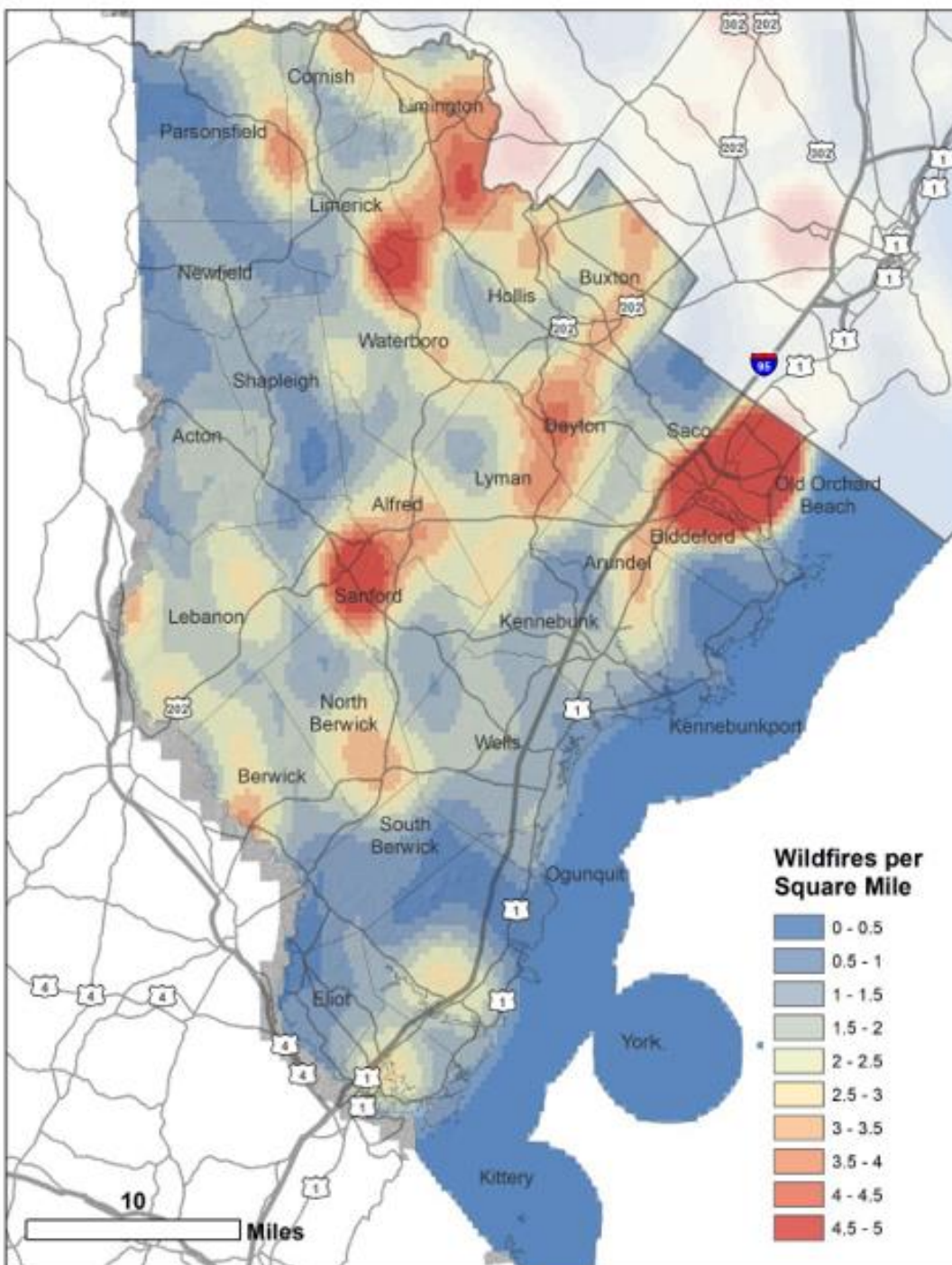
<https://www.yorkcountymaine.gov/emergency-management>

<sup>56</sup> Portland Press Herald: <https://www.pressherald.com/2020/04/06/wildfires-rage-across-maine-on-monday/>

<sup>57</sup> York County Emergency Management Agency, Hazard Mitigation Plan, 2022:

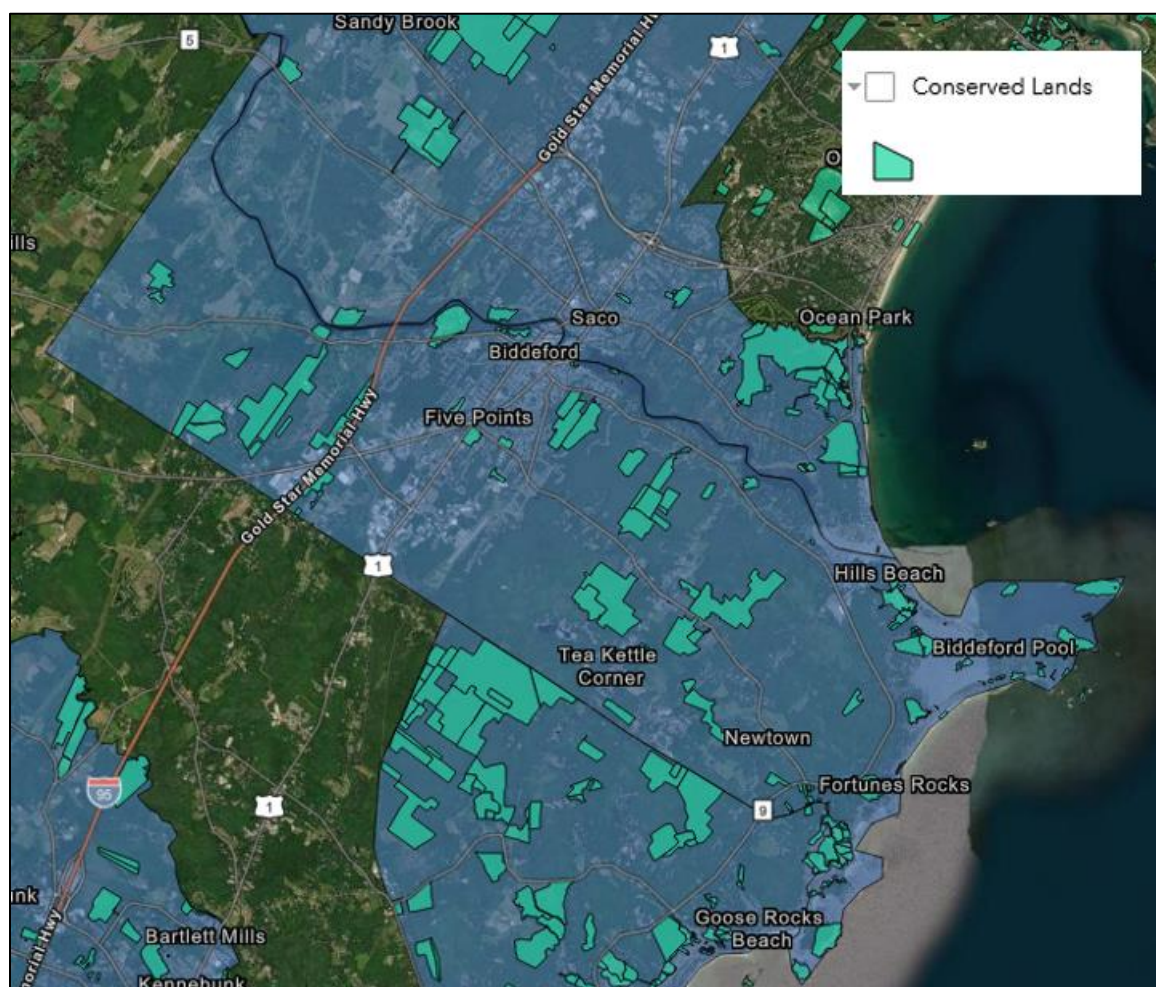
<https://www.yorkcountymaine.gov/emergency-management>

## Wildfire Occurrences in York County 1992-2018



Map 32. Wildfire occurrence in York County per square mile, 1992-2018. Data source: York County Emergency Management Agency, Hazard Mitigation Plan, 2022: <https://www.yorkcountymaine.gov/emergency-management>

The Maine Natural Areas Program inventories land parcels owned by federal, state, municipal, and non-profit entities that have conservation easements. There are several pockets of conserved land in Biddeford (Map 33). These conserved areas are managed by the City, Saco Valley Land Trust, Maine Coast Heritage Trust, Blandings Park Wildlife Sanctuary, and the USFWS Rachel Carson National Wildlife Refuge. The richest habitat areas are in the forested Blandings Park Wildlife Sanctuary near Tattle Corner, and the marsh habitats near Hills Beach and Fortunes Rocks that are part of the National Wildlife Refuge. In the future, more frequent, prolonged, or intense droughts have the potential to damage these critical habitat areas.



Map 33. Conserved lands in Biddeford are indicated by the green polygons. Data source: Maine Natural Areas Program. Map source: Climate Ready Coast Southern Maine

### Agricultural Impacts

Drought can impact agricultural operations due to shifts in the growing season, crop losses, and increased costs associated with irrigation. During the 2022 drought, the Maine Drought Task Force reported that farmers had to irrigate their crops, increasing their



operational costs.<sup>58</sup> In both 2020 and 2022, the Farm Services Administration issued emergency declarations for York County as a result of prolonged, severe drought conditions.<sup>59</sup> Even if farmers have irrigation systems, water supply can still be an issue. The Maine Department of Environmental Protection restricts irrigation withdrawals when stream and river levels fall below a certain threshold.<sup>60</sup>

Biddeford is known for its vibrant downtown and historic textile industry, but the City has a strong agricultural heritage as well. At least half of Biddeford is zoned for rural farm use and a number of operating farms grow vegetables and raise animals like alpacas and goats. In 2018, Engine, a local community development organization, launched a local foods initiative to create opportunities for local farms and increase access to healthy, local foods for disadvantaged groups. In the future, more frequent, prolonged, or intense droughts have the potential to reduce local farmers' production, increase their costs, and disrupt the local food system and economy.

## CHANGING MARINE CONDITIONS

### Key Takeaways

- In the last 40 years, ocean temperatures have risen faster in the Gulf of Maine than almost anywhere else in the world. Ocean temperatures will likely rise 1.5°F by 2050, and Maine's marine ecosystem will resemble present day conditions in southern New England.
  - There is limited commercial fishing and aquaculture activity in Biddeford, however the individuals who rely on these industries are vulnerable to the economic impacts of changing marine conditions.
- Ocean and coastal acidification are expected to worsen due to higher amounts of carbon dioxide in the atmosphere and more frequent precipitation events.
- The dynamics of harmful algal blooms (HABs) in Maine have shifted in recent years and could continue to change in the future, posing new threats to public health.
- Eelgrass is an important nursery habitat for commercially important species and is an indicator species for overall ecosystem health.
  - Eelgrass habitat is present in Biddeford at the mouth of the Biddeford Pool and around the Beach Island rock outcropping.

<sup>58</sup> ME Drought Task Force Report, 8/4/2022: <https://www.maine.gov/mema/hazards/drought-task-force>

<sup>59</sup> Cumberland County Emergency Management Agency, Hazard Mitigation Plan, 2022: <https://www.cumberlandcounty.org/231/Hazard-Mitigation>

<sup>60</sup> Maine DEP Press Release: <https://www.maine.gov/dep/news/news.html?id=8535391>

- Between 2010 and 2021, the extent and density of the eelgrass bed at the mouth of the Biddeford Pool diminished suggesting a decline in water quality, potentially because of increased stormwater runoff.
- Invasive European green crabs may have contributed to the decline in eelgrass habitat.
- The eelgrass bed around Beach Island expanded in the last decade, potentially due to improved water quality because of better stormwater management practices or other ecosystem drivers.
- In the future, more frequent and intense precipitation and increasing invasive species have the potential to decimate eelgrass habitat, reducing the localized carbon sink and coastal resilience benefits.

### Background Info, Trends, & Projections

Southern Maine is located in the Gulf of Maine which stretches from Cape Cod to Nova Scotia. Since 1982, ocean temperatures in the Gulf of Maine have risen 96% faster than the rest of the world's oceans due to rising air temperatures and shifting ocean currents caused by climate change.<sup>61</sup> Marine species ranges are shifting northward following colder ocean temperatures. Lobster stocks in Long Island Sound and southern New England have collapsed, and as ocean temperatures continue to warm, Maine's lobster resource could be facing a similar future. Warming waters have also allowed invasive species like European green crabs, Asian shore crabs, and tunicates to proliferate. Future projections indicate that by 2050 ocean temperatures in Maine will likely rise 1.5°F, and the marine ecosystem will resemble present day conditions in southern New England.<sup>62</sup>

The oceans are also becoming more acidic. As carbon dioxide builds up in the atmosphere from the burning of fossil fuels, some of that carbon dioxide is absorbed into the ocean. Dissolved carbon dioxide changes the chemical conditions of the water, making it more acidic. In coastal areas, ocean acidification is exacerbated by nutrient rich runoff which can trigger algal blooms. As the blooms die off and decay, the water becomes more acidic. Ocean and coastal acidification primarily impact shellfish species like scallops, oysters, clams, and mussels, all of which are commercially harvested in Maine. Both ocean and coastal acidification are expected to worsen in the future with increasing fossil fuel emissions and increasing and intensifying rainfall events.<sup>63</sup>

It is also hypothesized that warming waters and shifting currents due to climate change are changing the dynamics of harmful algal blooms (HABs) in Maine. Every summer Maine experiences a "red tide" when a toxin producing phytoplankton species blooms. Shellfish

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<sup>61</sup> <https://www.gmri.org/stories/gulf-of-maine-warming-update-summer-2021/>

<sup>62</sup> University of Maine, Maine's Climate Future, 2020: <https://climatechange.umaine.edu/climate-matters/maines-climate-future/>

<sup>63</sup> ME Climate Council, Scientific Assessment of Climate Change and Its Effects in Maine, 2020: <http://climatecouncil.maine.gov/reports>



become contaminated with the toxin and, when eaten, can cause Paralytic Shellfish Poisoning. In recent years, Maine has experienced blooms of new HAB species that have different impacts on human health and the ecosystem. Currently, it is unclear how HAB dynamics may shift with climate change, but coastal Maine communities face an uncertain future regarding the public health, economic, and ecosystem impacts of HABs.

### **Habitat Shifts and Carbon Sinks**

Eelgrass beds are critical marine habitat for commercially important species such as fish and shellfish. It is also vital to estuarine ecosystem functions because it provides nursery habitat for many species. Eelgrass is sensitive to sediment loading and pollutants often caused by poor stormwater and wastewater management. Invasive species including the European green crab and various tunicate species can decimate eelgrass habitat, uprooting plants and smothering growth. As a result, eelgrass habitat loss is generally indicative of poor watershed management practices and declining ecosystem health.<sup>64</sup>

Eelgrass habitat in southern Maine was most recently surveyed in 2021 by the Maine Department of Environmental Protection and was previously surveyed in 2010 by the Maine Department of Marine Resources. Based on these two surveys, eelgrass habitat is present in Biddeford at the mouth of the Biddeford Pool and around the Beach Island rock outcropping (Map 34). Between 2010 and 2021, the extent and density of the eelgrass bed at the mouth of the Biddeford Pool diminished. The area directly northeast of the outflow channel was especially impacted. Conversely, the extent and density of the eelgrass bed around Beach Island increased over this time period.

These changes suggest that water quality in the Biddeford Pool may have declined over the last decade, potentially due to increasing stormwater runoff or declining stormwater management practices. Invasive European green crabs may have also contributed to this habitat loss. Substantial eelgrass habitat losses were observed in Casco Bay between 2012 and 2013 coinciding with a rapid increase in the green crab population.<sup>65</sup> The status of the green crab population in southern Maine is not as well understood but their impact is likely a compounding factor. On the southeast side of the Pool, stormwater management practices may have improved, improving water quality and allowing the Beach Island eelgrass bed to flourish. This habitat growth could also be the result of other ecosystem drivers such as a lack of green crabs.

In the future, extreme precipitation events are expected to become more frequent and intense which will likely present new and increasing stormwater and wastewater management challenges, potentially threatening the health of Biddeford's eelgrass beds. The Biddeford Pool also has a high degree of impervious surfaces (see Extreme Storms &

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<sup>64</sup> Piscataqua Region Estuaries Partnership: <https://preestuaries.org/eelgrass/>

<sup>65</sup> Casco Bay Estuary Partnership, Eelgrass Beds Decline as Green Crab Numbers Explode, 2015: [https://www.cascobayestuary.org/wp-content/uploads/2015/10/Indicator\\_Eelgrass.pdf](https://www.cascobayestuary.org/wp-content/uploads/2015/10/Indicator_Eelgrass.pdf)

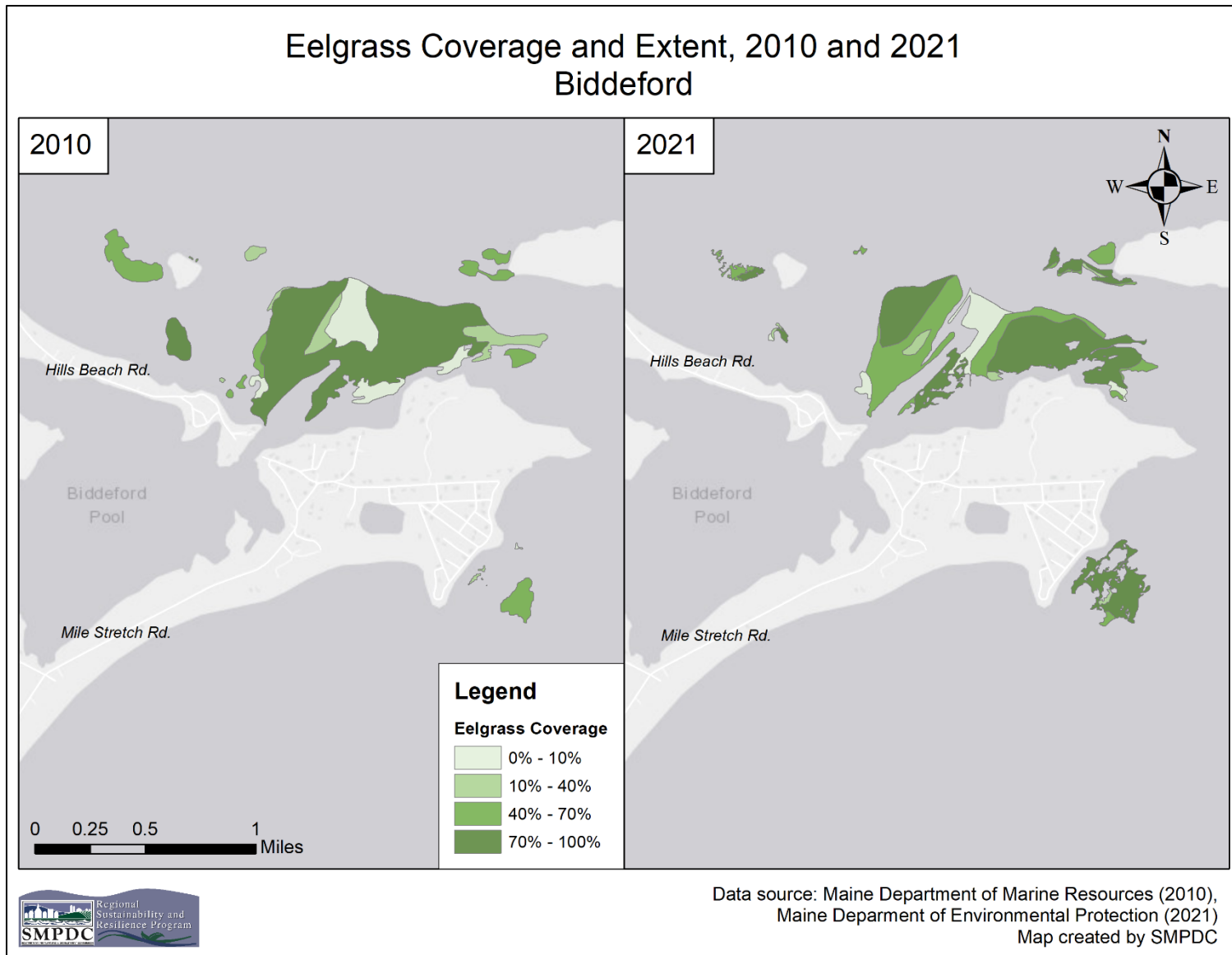
Precipitation Map 20), which increases runoff during heavy rainfall events, further stressing eelgrass habitat. Additionally, warming ocean temperatures favor green crab population growth which may contribute to future eelgrass habitat loss.<sup>66</sup>

There is evidence that eelgrass beds can serve as carbon sinks, absorbing carbon dioxide from the water and locally reducing the influence of ocean and coastal acidification. The vegetation also stabilizes sediments and reduces wave action which has the potential to buffer coastlines against intense coastal storms. For these reasons, eelgrass habitat is not only important for the role it plays in ecosystem functions, but also for the climate mitigation and resilience benefits it provides. These valuable ecosystem services emphasize the importance of protecting this vulnerable habitat.<sup>67</sup>

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<sup>66</sup> ME Climate Council, Scientific Assessment of Climate Change and Its Effects in Maine, 2020: <http://climatecouncil.maine.gov/reports>

<sup>67</sup> ME Climate Council, Scientific Assessment of Climate Change and Its Effects in Maine, 2020: <http://climatecouncil.maine.gov/reports>



Map 34. Distribution and coverage of eelgrass habitat in Biddeford in 2010 and 2021 based on surveys conducted by the Maine Department of Marine Resources and the Maine Department of Environmental Protection. These data indicate the location of potential carbon sinks as well as marine ecosystem shifts over time.

*Biddeford – August 2023*

## Economic Impacts

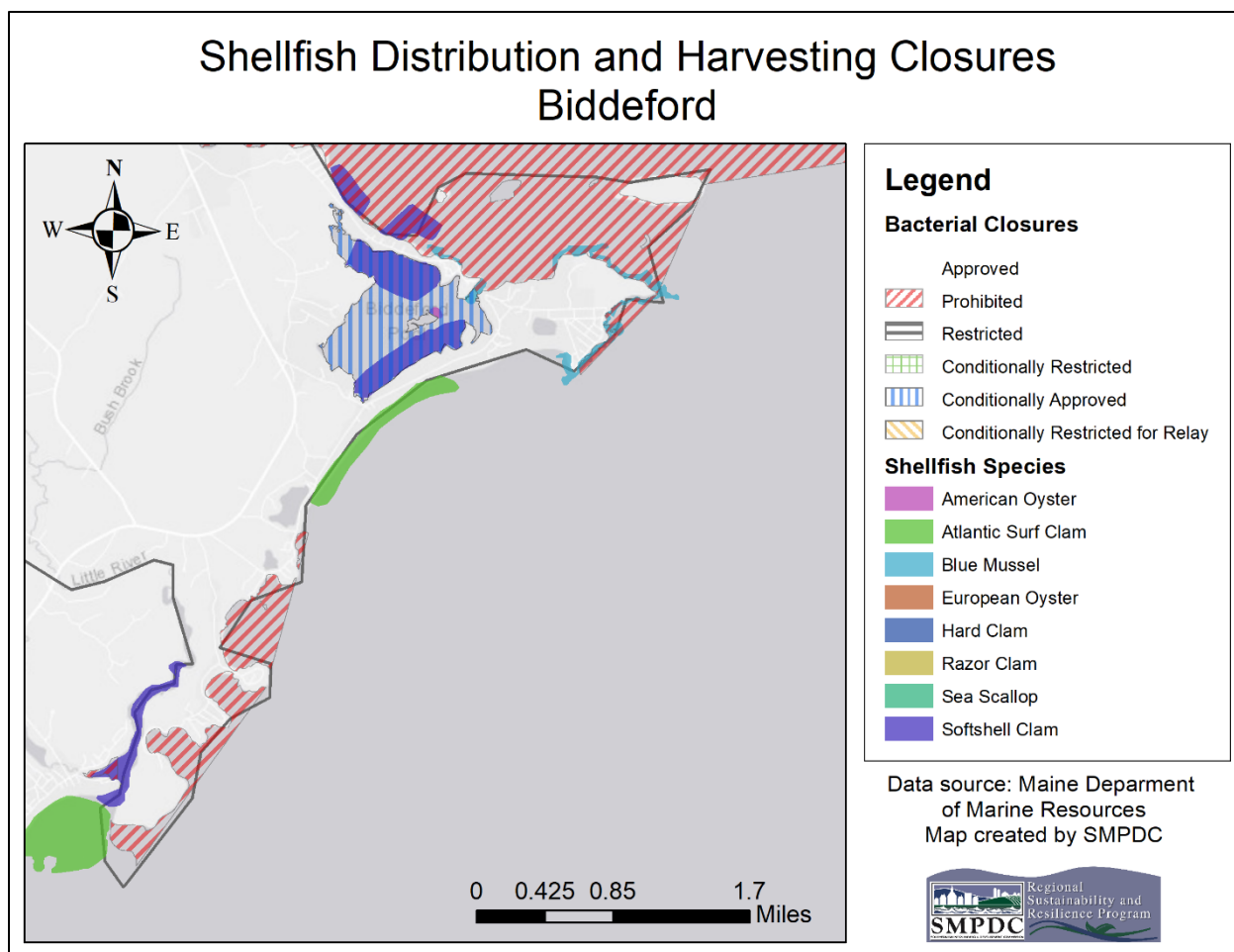
In 2022, there were a total of 36 commercial fishing licenses held in Biddeford and 74 non-commercial licenses<sup>68</sup> (Figure 28). The majority of these licenses are for harvesting lobster and crab, or fish. Individuals who rely on these fisheries for their livelihoods, especially lobster, may experience economic impacts as species' ranges shift with climate change. Recreational fishing opportunities for non-commercial license holders may also be impacted, representing a significant cultural loss for the community.

| Commercial and Non-Commercial Fishing Licenses |                    |
|------------------------------------------------|--------------------|
| Commercial                                     | Number of Licenses |
| Lobster/crab                                   | 13                 |
| Fishing                                        | 12                 |
| Shellfish                                      | 6                  |
| Green crab                                     | 3                  |
| Elver                                          | 1                  |
| Scallop dragger                                | 1                  |
| <i>Total</i>                                   | <i>36</i>          |
| Non-Commercial                                 |                    |
| Saltwater fishing                              | 43                 |
| Lobster/crab                                   | 30                 |
| Menhaden                                       | 1                  |
| <i>Total</i>                                   | <i>74</i>          |

Figure 28. Commercial and non-commercial fishing licenses in Biddeford. Data source: Maine Department of Marine Resources

In 2010, the Maine Department of Marine Resources (DMR) conducted a survey of shellfish habitat across the state. Based on that survey, there are several pockets of softshell clams, blue mussels, and surf clams in Biddeford (Map 35). However, shellfish harvesting is prohibited along much of Biddeford's coastline because of poor water quality. Fortunes Rocks Beach is open for harvesting and the Pool is conditionally approved, which means DMR will allow harvesting under certain conditions. As a result, wild shellfish harvesting is limited in Biddeford and there are only a handful of commercial license holders. The community is therefore less economically vulnerable to the impacts of climate change on shellfish species. However, warmer waters and ocean acidification have the potential to impact these species which are a critical part of the marine ecosystem.

<sup>68</sup> Maine Department of Marine Resources. 2022 fishing license data.



Map 35. Distribution of shellfish species based on a survey conducted by the Maine Department of Marine Resources in 2010. Areas that are prohibited or restricted for shellfish harvesting based on poor water quality from bacterial contamination are also indicated. Data source: Maine Department of Marine Resources

In the last decade, aquaculture has exploded in Maine, particularly in southern Maine where the impacts of the declining lobster fishery have been felt more acutely. Aquaculture is viewed as a more climate resilient alternative to wild harvest fisheries like lobster. Currently, aquaculture activity is sparse in Biddeford. Shellfish aquaculture is likely limited by the harvesting closures along Biddeford's coastline. The University of New England holds the only Limited Purpose Application License in Biddeford waters. Their kelp farm is located off Woods Island and is for scientific and educational purposes. Two of the state's few farmed seaweed processors are based in Biddeford. Their businesses could be impacted by shifting marine conditions across Maine, as well as the impacts of climate hazards on their facilities and operations.



# BIDDEFORD

## BASELINE GREENHOUSE GAS EMISSIONS & 2030 FORECAST

### 2019 BASELINE GREENHOUSE GAS INVENTORY

One of the first steps in developing emissions reduction goals, targets, and strategies is selecting a baseline year against which future greenhouse gas (GHG) emissions will be compared. For this climate action planning process, 2019 will serve as the baseline year. The baseline GHG inventory identifies the major sources of emissions in Biddeford, enabling the city to identify areas to focus emission reduction efforts, establish goals and track progress towards those goals, and facilitate decision-making about future policies and strategies.

#### Key Terms

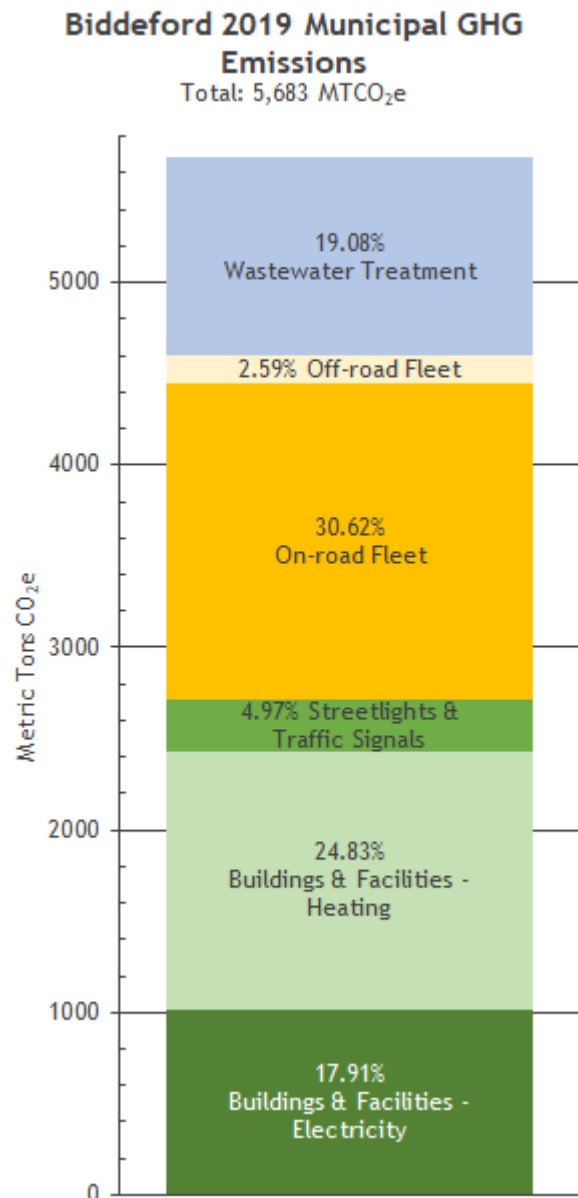
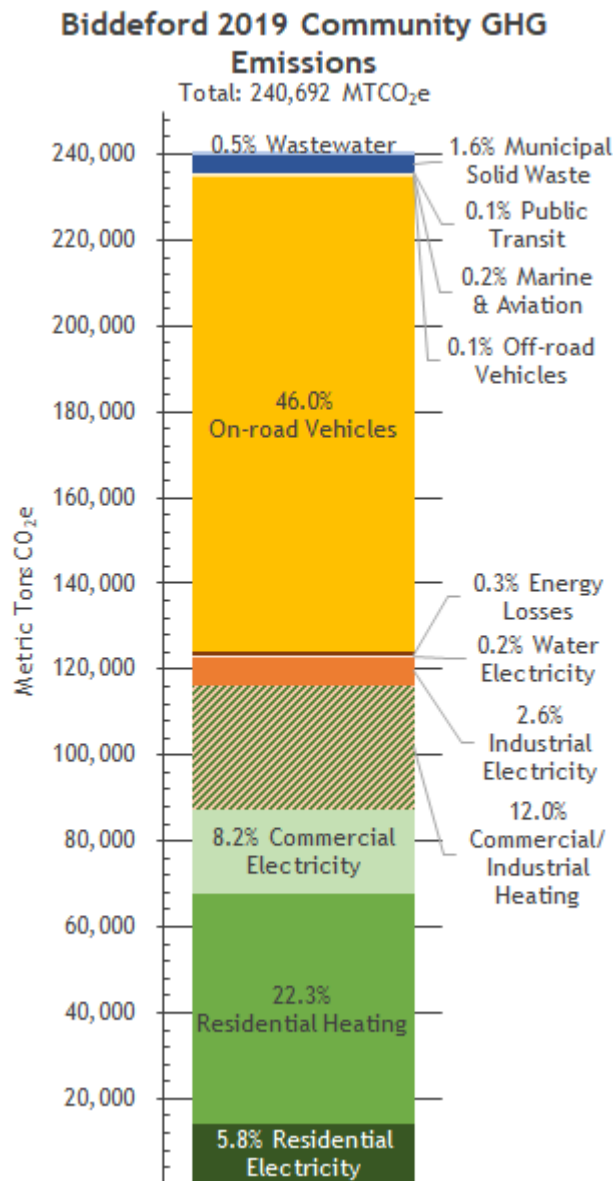
- *Community-wide GHG Inventory:* Accounts for GHG emissions produced by Biddeford's residents, workforce, visitors, and the economy. Municipal emissions are included in the community-wide inventory.
- *Municipal GHG Inventory:* Accounts for GHG emissions produced by the City of Biddeford's municipal operations which include municipal buildings, vehicles, and employee activities. Municipal GHG emissions are a component of community-wide emissions.
- *MTCO<sub>2e</sub>:* Metric tons (MT) of carbon dioxide equivalent (CO<sub>2e</sub>) is a metric used to compare the emissions from various GHGs based on their global-warming potential, by converting amounts of other GHGs to the equivalent amount of carbon dioxide with the same global warming potential.

#### Emissions Sources

In Biddeford, GHG emissions are produced by four sectors, each of which can be broken down into specific subsectors.

- *Transportation:* Includes emissions from all on-road transportation sources, including passenger vehicles, commercial vehicles, and public transit. It also includes emissions from off-road transportation, marine vessels, and aviation.

- **Heating & Electricity - Industrial:** Includes emissions from the generation of electricity that is used to power manufacturing, industrial, and municipal water facilities, the burning of fossil fuels used to heat those facilities, as well as energy losses associated with electricity distribution.
- **Heating & Electricity - Residential & Commercial:** Includes emissions from the generation of electricity that is used to power commercial and residential buildings and the burning of fossil fuels used to heat those buildings.
- **Waste:** Includes emissions from septic tanks, the Biddeford Wastewater Treatment Plant, and the incineration of all trash generated by residential and commercial activity in the community that is sent to the EcoMaine waste-to-energy plant.



# KEY TAKEAWAYS FROM THE GHG INVENTORY

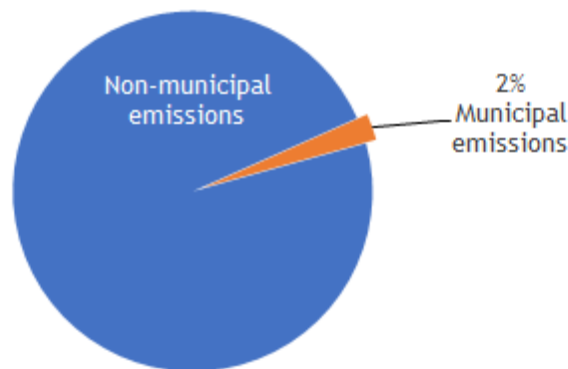
## Community-wide emissions trends

- The largest source (46%) of estimated community-wide GHG emissions is on-road fuel use from passenger and commercial vehicles.
- The second largest source (22.3%) of estimated community-wide emissions is heating residential buildings, 80% of these emissions are produced by burning fuel oil to heat homes and the remaining 20% are produced by burning propane, kerosene, natural gas, and wood.

## Municipal emissions trends

- Municipal GHG emissions are a small subset of community-wide emissions, accounting for 2% of estimated community-wide emissions.
- Strategies focused on reducing municipal emissions will have less impact than those focused on community-wide emissions, however, balancing feasibility and impact is an important part of strategy prioritization.
- There is great value in municipalities leading by example and adopting emissions reduction strategies that address the largest sources of municipal emissions (i.e. wastewater treatment, vehicle fleet, or building energy).
- 42.74% of estimated municipal emissions are produced by heat and electricity consumption in municipal buildings and facilities.

Breakdown of Biddeford Community-wide Emissions



## BUSINESS AS USUAL GHG EMISSIONS FORECAST

ICLEI USA developed the Business as Usual (BAU) forecast by projecting community-wide emissions in 2030 based on the 2019 baseline inventory and anticipated demographic and economic changes. The BAU forecast provides the basis for developing goals, strategies, and targets addressing emissions reductions. The forecast was developed for the primary sectors in the GHG inventory which include heating and electricity from the residential, commercial, and industrial sectors as well as transportation.

### Indicators for greenhouse gas emissions forecasting

For the purposes of ICLEI USA's initial analysis, 2030 community-wide and municipal emissions were estimated based on the following indicators. If Biddeford is interested and has access to more localized data sources, ICLEI USA can refine the forecast further.

- ICLEI USA used the projected **annual population growth rate of 0.55% for Biddeford** to estimate emissions trends in the residential, commercial and transportation sectors.
- Municipal GHG emissions will likely fall by 2030 due to more renewable energy on the electricity grid and more rigorous fuel efficiency standards for vehicles.
- GHG emissions from the New England electricity grid are expected to fall by 2030 because the states have adopted ambitious renewable energy targets and **Renewable Portfolio Standards (RPS)**<sup>1</sup>. ICLEI USA used Maine's RPS requirements to estimate 2030 electricity emissions.
- Emissions from vehicle fuel use are projected to decline as a result of the **Federal Corporate Average Fuel Economy (CAFE) standards** adopted by the Biden Administration, which will increase fuel efficiency 8% annually for model years 2024-2025 and 10% for model year 2026.

### Changes in emissions through 2030

Without taking any additional action at the community or municipal level, **Biddeford's community-wide GHG emissions are expected to fall 23% by 2030** driven by 1) increasing renewable energy sources on the electricity grid as a result of state targets and RPSs, and 2) decreasing transportation emissions due to CAFE fuel efficiency standards and electric vehicle

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<sup>1</sup> **Renewable Portfolio Standard (RPS)** is a state legislative mandate to increase production of electricity from renewable sources such as wind, solar, biomass and other alternatives to fossil and nuclear electric generation. Maine, Massachusetts, Vermont, Rhode Island, and Connecticut have all made commitments requiring that electricity suppliers produce 60%-100% of electricity from renewable sources by 2030.

expansion. Market forces are also expected to contribute to an overall decline in GHG emissions globally. Emissions from the burning of fossil fuels to heat buildings in the residential and commercial sectors will likely stay relatively flat, with some efficiency improvements keeping pace with population growth.

## OVERVIEW OF CLIMATE GOALS & EMISSIONS TARGETS

Having established baseline emissions and projected BAU 2030 emissions, the next step is to identify specific goals and emissions reduction targets to include in the Climate Action Plan. Climate goals and emissions reduction targets provide a tangible objective to guide climate action and a benchmark to track progress. Goals and targets should have clear baseline and target dates. For example, the target could be a 60% reduction in emissions by 2030 compared to the 2019 baseline. Goals can reference carbon neutrality,<sup>2</sup> climate neutrality,<sup>3</sup> or net-zero.<sup>4</sup> Goals and targets can also specifically address the types of GHG gases (e.g. carbon dioxide, methane, etc.) or the sources of emissions (e.g. transportation or residential energy).

Globally, 195 countries, including the U.S., signed the Paris Agreement, committing to keep the rise in global temperatures below 2.7°F (1.5°C). The United Nations Intergovernmental Panel on Climate Change (IPCC) estimates that we must reduce global emissions by 50% by 2030 and achieve climate neutrality by 2050 to reach this goal. The U.S. and Maine have set national and state-wide climate goals and emissions reduction targets in an effort to uphold our Paris Agreement commitment.

### National targets

- Paris Agreement commitment to keep the rise in global temperatures below 2.7°F (1.5°C)
- Reduce GHG emissions to 50% below 2005 levels by 2030

### Maine targets

- 80% of electricity produced by renewables by 2030 (Maine RPS)
- 100% of electricity produced by renewables by 2050 (Maine RPS)

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<sup>2</sup> **Carbon neutrality** is the net balance between activities that emit carbon dioxide and carbon sinks that absorb carbon dioxide from the atmosphere (e.g. soil formation, forests, eelgrass beds, saltmarshes).

<sup>3</sup> **Climate neutrality** refers to the emission and mitigation of all greenhouse gases (GHGs) – not just carbon dioxide. Much like carbon neutrality, climate neutrality can be achieved by emitting GHGs at an equal rate to their removal from the atmosphere.

<sup>4</sup> **Net-zero** means cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions counterbalanced by carbon sinks such as soil formation, forests, and saltmarshes.



- Achieve carbon neutrality by 2045
- Reduce overall GHG emissions to 45% below 1990 levels by 2030 and 80% by 2050

Meeting national and state climate goals and reduction targets requires municipal and community action. Additionally, equitably reducing global emissions by 50% requires high-emitting, wealthy nations like the U.S. to reduce their emissions by more than 50%. ICLEI USA projects that U.S. industries, communities, and individuals need to reduce GHG emissions by 60-65% to equitably achieve the Paris Agreement goals. ICLEI USA analyzed 138 community GHG Inventories, demonstrating that it is possible for most U.S. communities to reduce per-capita emissions by 63% or more by 2030.<sup>5</sup>

To go above and beyond existing commitments, *ICLEI USA suggests that Biddeford could reduce community-wide GHG emissions 63% by 2030 by implementing ambitious but realistic emissions reduction strategies.* Such an ambitious emissions reduction is achievable for Southern Maine communities. According to ICLEI USA's high-level analysis, a 63% reduction in emissions by 2030 could be met by:

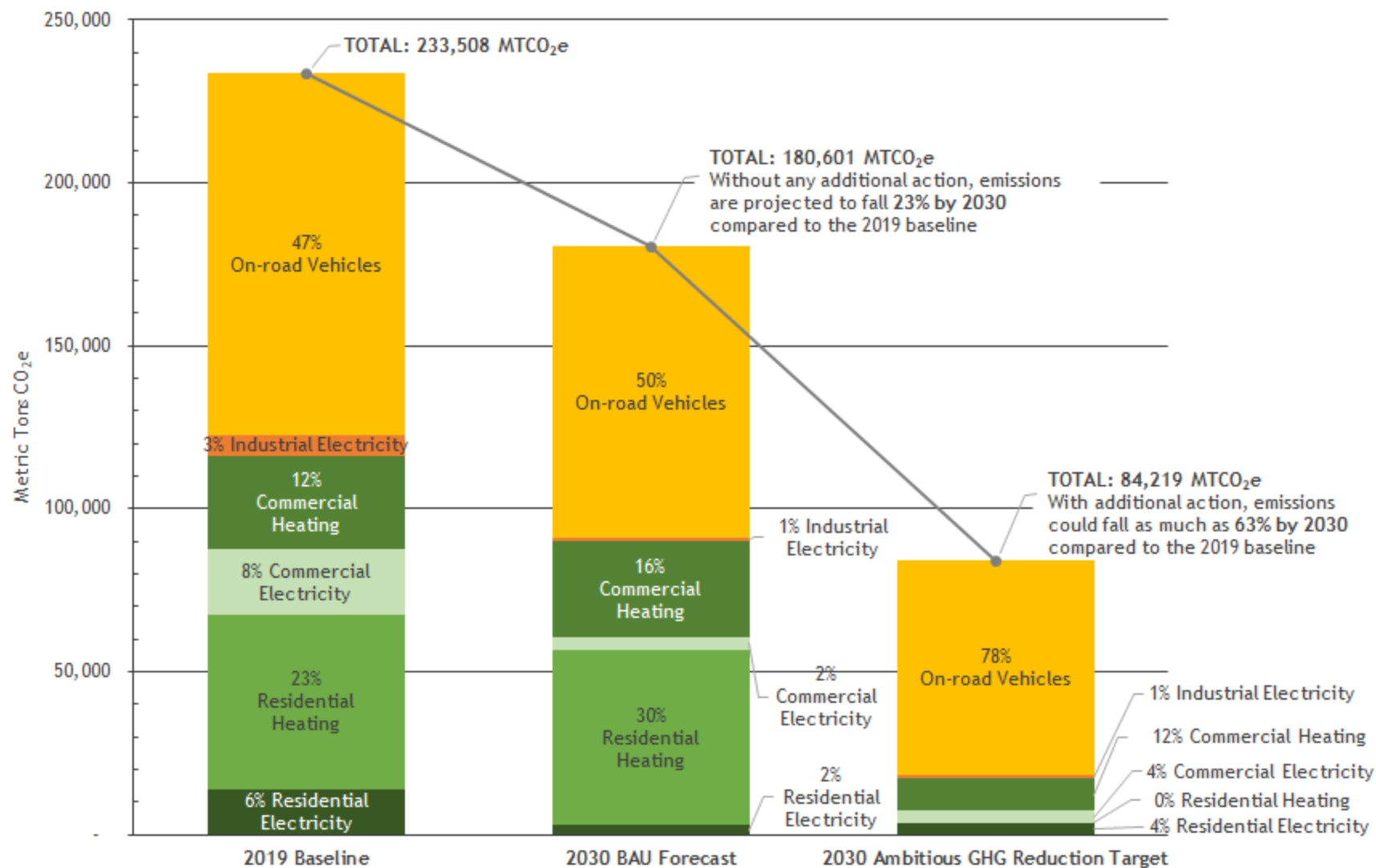
- Reducing vehicle miles traveled (VMT) by 5%
- Increasing Electric Vehicle (EV) VMT to 22.5% of total VMT
- Increasing commercial and residential building energy efficiency for new and renovated buildings
- Increasing current residential and commercial building energy efficiency
- The electrification of current and new commercial and residential buildings

A more detailed analysis is presented in the *High Impact Action Analysis Summary Report*.

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<sup>5</sup> [Analysis of U.S. Local Government Science-Based Targets and Pathways to Achieve Them in the Race to Zero](#)

# **Biddeford Primary Sectors 2030 GHG Emissions Forecast Under the Business as Usual (BAU) and Ambitious GHG Reduction Target Scenarios**



# MUNICIPAL STRATEGIES FOR REDUCING GHG EMISSIONS

Once goals and targets are established, the next step is to begin to identify strategies to reduce emissions. There are many strategies Biddeford can use to reduce GHG emissions. The challenge is not figuring out what to do, but rather accelerating the change already taking place globally, nationally, and regionally to bring benefits to Biddeford. Below are examples of strategies that are being employed in Maine and other communities to meet ambitious climate goals.

## Reducing vehicle miles traveled (VMT) - By promoting and facilitating transit systems as well as bicycle and pedestrian networks

- *Encourage residents and visitors to walk and bike.*
  - Regional employment hubs like Biddeford can collaborate with employers and transit systems to provide alternative transportation options. The city can also encourage employers to participate in regional initiatives like the biannual [Way 2 Go Maine](#) commuting challenge.
- *Adopt and implement a [Complete Streets Policy](#) and/or land use and development policies that reduce the need for driving and encourage the use of public transit, cycling, and walking.*
  - The City of Portsmouth has a [Complete Streets program](#) for all road upgrades.

## Electric vehicles (EV) - Support the electrification of the transportation system

- *Lead by example by electrifying the public fleet*
  - Beginning in 2035, [75% of school bus acquisitions by municipalities must be electric or zero emission school buses](#). Today, Maine municipalities can participate in the [EPA Clean School Bus Program](#). In 2022, Wells-Ogunquit, Dayton, and RSU 57 received a total of seventeen school bus rebates. Each school system is eligible for rebates up to \$375,000 per electric bus and \$20,000 of charging infrastructure per bus.
- *Adopt ordinances to require or encourage EV charging infrastructure, including at multifamily dwellings, businesses, and public parking areas.*
  - SMPDC's [Municipal Electric Vehicle Readiness Toolkit](#) includes a Model EV Infrastructure Ordinance that municipalities can adapt to meet their community's needs.

### Energy efficiency - Encourage and promote energy efficiency for residents and businesses

- *Support community weatherization programs to improve residential energy efficiency, particularly for low-income and vulnerable residents.*
  - Community groups and nonprofits like [WindowDressers](#) and [York County Community Action](#) offer programs to help homeowners increase energy efficiency.
- *Adopt 'stretch codes' setting higher standards for energy efficiency than IECC or MUBEC*
  - Adopting municipal regulations such as the [State of Maine Energy Stretch Code \(IECC 2021\)](#) can help drive residential and commercial energy efficiency. The [Cities of Portland and South Portland](#) have both adopted the Maine Energy Stretch Code.

### Electrify heating - Help residents and businesses reduce fuel oil dependence and high energy costs

- *Encourage the adoption of heat pumps to reduce fossil fuel use in homes in businesses*
  - Efficiency Maine provides rebates for [heat pump](#) and [heat pump water heater](#) installation. Municipalities can educate residents and businesses about these opportunities, offer their own rebate programs ([like South Portland](#)), or implement a community bulk purchasing program with a vendor (such as [Portland's Electrify Everything Campaign](#)).

### Renewable energy - Enable and support development of and access to zero carbon energy

- *Adopt codes and permitting practices that support and incentivize renewable energy systems in the community*
  - The Town of Topsham joined [SolSmart](#), a technical assistance program that helps local governments make it faster, easier, and more affordable for residents and businesses to go solar. The town created an online permitting checklist and reviewed local zoning codes to identify restrictions that prohibit solar PV development.
  - [SolarAPP](#) (Solar Automated Permit Processing) is a no-cost software system from the National Renewable Energy Laboratory (NREL) to streamline rooftop solar permits. The city of San Jose, California increased approved permits by 600% when they switched to SolarAPP.
- *Develop renewable energy capacity targeting underutilized public properties*

- The City of Sanford is using EPA Brownfields funds to clean up the [site of a circuit board recycling facility](#). Once decontaminated, the site will be turned into a solar farm.
- *Provide access to [Community solar](#) for businesses, and residents to reduce their monthly electricity bill and support more solar on the New England electricity grid.*
  - The solar energy generated by the City of Sanford's Brownfield solar farm will be applied to the [Virtual Sanford Renewable Energy Corridor](#). Energy that is created will be slated for use by developers in the downtown mill district, providing an additional incentive for redevelopment.

#### **Reduce emissions AND increase community resilience**

- Implement [solar + storage](#) located at key locations (community centers, schools, police and fire departments) to provide resilience to storms and emergency events that cause power outages.
- Increased energy efficiency in homes, particularly those of the most vulnerable residents, increases public health and residents' resilience to power outages, heat waves, and cold spells.
- Focus mixed use and transit-oriented development in zones away from vulnerable areas to both reduce vehicle miles traveled and promote adaptation, especially when combined with conservation of ecosystems that increase resilience to flooding and sea level rise such as saltmarshes.



# BIDDEFORD COMPLETE STRATEGY MATRIX

BIDDEFORD CLIMATE ACTION PLAN  
OCTOBER 2023



# BUILDINGS AND ENERGY

- ★ = Priority action – Identified through public engagement
- = Associated goal/action in Comprehensive Plan
- = Potential regional action

Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years  
Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                             | Equity Considerations                                                                                                                                                                                                                                                                                                                   | Co-Benefits                                                                                                                                                                                                                                                                                                                                                             |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Timeframe | Metrics |                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                |                                                                                                                                                                                                                                                                                                                                         | Cost Savings                                                                                                                                                                                                                                                                                                                                                            | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |           |         |                                                                                                                                                                                                      |
| Building Electrification                                                                                                       |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                         |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |           |         |                                                                                                                                                                                                      |
| B1. Renewable Energy <i>Encourage and incentivize small scale renewable energy installation, such as rooftop solar panels.</i> |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                         |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |           |         |                                                                                                                                                                                                      |
| ★                                                                                                                              | To encourage the development of rooftop and small scale solar in the community, municipalities can work to reduce the barriers to solar energy (such as prohibitive or unclear ordinances) and to accelerate the development of local solar energy markets (by streamlining the permitting process).                                    | Efforts to promote roof-top solar tend to be targeted toward wealthier homeowners. Communities that prioritize distributed solar generation should consider how their efforts could cater to lower income homeowners and renters by connecting low-income homeowners to programs with reduced upfront costs and by promoting solar development on multi-unit dwellings. | ●                     | ●                 |                    |                       | ●                    |              |                     |                         |              | ●                         |      | \$        | Medium  | Permits issued for rooftop solar installations at residential buildings; Renewable Energy Ratio (ratio of energy provided from renewable sources as a percentage of total energy used in a facility) |
| B2. Building Electrification <i>Shift existing buildings &amp; new construction to all-electric heating and appliances.</i>    |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                         |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |           |         |                                                                                                                                                                                                      |
| ●                                                                                                                              | Create a program to shift single family homes and larger buildings from fossil fuel heating to all-electric heating and cooling via air-source and ground-source heat pumps, aligning with the LD166 goal of installing 100,000 new heat pumps in the state within 5 years and in an effort to get ahead of conversions to natural gas. | A local or regional electrification incentive program could prioritize low income homeowners, multi-unit rental properties, and homes using fuel oil and provide significant technical assistance to program participants to reduce barriers to heat pump adoption.                                                                                                     | ●                     | ●                 |                    |                       | ●                    |              |                     | ●                       |              | ●                         |      | \$\$      | Medium  | Percent of residential buildings using heating oil, gas, or coal<br><br>Target: Electrify 15% of existing housing units using heating oil and propane per year.                                      |

★ = Priority action

● = Associated goal/action in Comprehensive Plan

● = Potential regional action

Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                                                                                                                                                              | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Co-Benefits                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|------------|---------|----------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Cost Savings                                                                                                                                                                                                                                                                                                                                                                                                                                            | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |                                                                                                    |
| Building Energy Efficiency                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                    |
| B3. Energy Efficiency Increase efficiency of large buildings and rental properties through local ordinances and standards: standards to increase efficiency over time, programs to track and disclose energy consumption, and efficiency standards for rentals. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                    |
| ★                                                                                                                                                                                                                                                               | Efficiency standards for rentals ensure that landlords upgrade the efficiency of their residential properties as a prerequisite for renting a property. Rental buildings consume, on average, 20 percent more energy per square foot than owner-occupied buildings. Much of this disparity stems from the so-called “split incentive problem.” Landlords have little incentive to improve home efficiency when they do not pay energy bills, and tenants have little incentive to make improvements to a home when they may not be present to reap the full benefits of that investment. In addition, these poorly- performing homes are disproportionately occupied by low-income residents, people of color, and other underserved communities—the constituents who can least afford to pay exorbitant energy bills. | Many policies to address home energy efficiency have helped only a small fraction of homes nationwide and often disproportionately benefit white people and wealthy people. However, rental efficiency standards can help improve quality of life and affordability for renters. By reducing home energy costs, particularly for the worst-performing rental units, these standards can mitigate unfair burdens for a city’s most vulnerable residents. | ●                     |                   |                    |                       | ●                    |              |                     | ●                       |              | ●                         |      | \$\$       | Medium  | Target: Perform energy efficiency retrofits to 15% of existing commercial square footage per year. |
| B4. Maine 'Stretch Code' Adoption Adopt the most up-to-date building codes (also known as "stretch codes") to help new buildings to be more efficient.                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                    |
| ●                                                                                                                                                                                                                                                               | Adopting the Maine “Stretch” Code is one way municipalities can require new buildings to be more energy efficient. A stretch energy code is an alternative to the base energy code (in Maine, MUBEC) to achieve greater energy efficiency and cost-effectiveness in new buildings. The state of Maine has adopted IECC 2021 as the official Stretch code for Maine communities. Stretch codes only help new buildings be more efficient, not already built ones.                                                                                                                                                                                                                                                                                                                                                       | While there are upfront costs associated with higher energy efficiency buildings, these costs are compensated by lower energy use and energy expenditures. More energy efficient homes are also healthier homes, with better air quality and moisture control.                                                                                                                                                                                          |                       | ●                 |                    |                       |                      |              |                     | ●                       |              | ●                         |      | \$\$       | Short   | IECC Code in Use                                                                                   |

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● = Potential regional action

Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                                                                                                       | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Co-Benefits                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                        |                        |                        |                        |                        |                        |                         |                        |                           | Cost                   | Time Frame             | Metrics                |                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|---------------------------|------------------------|------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Cost Savings                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Support Local Economy  | Municipal Revenue      | Water Conservation     | Education & Awareness  | Mobility Improvement   | Smart Growth           | Water & Air Quality    | Greenspace & Recreation | Job Creation           | Community (re)development |                        |                        |                        |                                                                                                                                                                                                                                                                                   |
| Building Energy Efficiency (continued)                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |                        |                        |                        |                        |                        |                        |                         |                        |                           |                        |                        |                        |                                                                                                                                                                                                                                                                                   |
| B5. Building Weatherization Create a program to help single family homes increase energy efficiency through weatherization efforts, such as improved insulation, sealing leaks, or improved ventilation. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |                        |                        |                        |                        |                        |                        |                         |                        |                           |                        |                        |                        |                                                                                                                                                                                                                                                                                   |
| <div><div></div></div>                                                                                                                                                                                   | <p>The Inflation Reduction Act of 2022 provides significant new federal tax credits and deductions to help Americans to make their homes and buildings more energy-efficient to help reduce energy costs while reducing demand as we transition to cleaner energy sources. New federal income tax credits are available through 2032 providing up to \$3,200 annually to lower the cost of energy efficient home upgrades by up to 30 percent. A local or regional weatherization program could provide awareness, education, and technical assistance to homeowners about these and Efficiency Maine incentives.</p> | <p>Because many weatherization incentives are targeted towards homeowners, weatherization programs have the possibility of leaving out renters or non-tax payers from the program benefits. Weatherization programs should be designed to support these community members as well (either through non tax-based funding or programs targeting multi-unit dwellings). They should also be designed to work with York County Community Action's low income weatherization program.</p> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div>  | <div><div></div></div> | <div><div></div></div>    | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <p>Number of efficiency audits conducted;<br/>Number of Biddeford applicants for YCCAC Weatherization Program;</p> <p>Target: Perform energy efficiency retrofits to 15% of existing housing stock using heating oil, propane, and electricity for heating per year.</p> <p>.</p> |
| B6. Municipal Energy Efficiency Increase municipal energy efficiency through energy audits, renewable energy installation, and energy efficiency measures for all city owned properties and buildings.   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |                        |                        |                        |                        |                        |                        |                         |                        |                           |                        |                        |                        |                                                                                                                                                                                                                                                                                   |
| <div><div></div></div>                                                                                                                                                                                   | <p>Maine municipalities are often faced with budget pressures and high operating costs to maintain older municipal buildings that house town offices, public works garages, fire stations, and wastewater treatment facilities. Energy efficiency is a great way for municipalities to save energy and money, and improve comfort, safety, and maintenance costs. There are many sources of funding for municipal energy efficiency improvements including Efficiency Maine, the Community Resilience Partnership (CRP) grants, and new federal funding.</p>                                                          | <p>Municipal energy efficiency measures may support equity by ensuring that energy efficiency improvements target buildings that provide public services to vulnerable community members (i.e. community centers, schools, senior centers, warming/cooling centers).</p>                                                                                                                                                                                                             | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <div><div></div></div>  | <div><div></div></div> | <div><div></div></div>    | <div><div></div></div> | <div><div></div></div> | <div><div></div></div> | <p>Number of energy audits conducted;<br/>Number of rooftop solar installations;<br/>Annual expenditures for energy</p>                                                                                                                                                           |

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| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Equity Considerations                                                                                                                                                                                                                                                                                      | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost | Time Frame | Metrics |                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|------|------------|---------|------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                            | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation |      |            |         | Community (re)development                                                                            |
| Building Resilience                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                            |              |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |         |                                                                                                      |
| B7. Risk Management Reduce climate risks to buildings through improved information, education, and action, including: requiring hazard disclosures for property transactions, increasing awareness of adaptation options, and encouraging actions to manage flood risks.                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                            |              |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |         |                                                                                                      |
| Encourage real estate professionals, developers, and prospective property buyers to disclose and/or be made aware of local coastal hazards pertaining to property during the property transaction process. Municipal staff can be encouraged to share available local climate hazard information with property owners and/or prospective buyers when they come into city hall to discuss a property. Tenants should also be made aware of coastal hazards when renting property.                                                    | Risk reduction measures can prevent upfront costs for low income residents.                                                                                                                                                                                                                                |              |                       |                   |                    | ●                     |                      |              |                     |                         |              |      | \$         | Short   | Number of property owners in hazard areas contacted; number of prospective buyers contacted.         |
| B8. Limit Reconstruction & Encourage Relocation Increase municipal energy efficiency through energy audits, renewable energy installation, and energy efficiency measures for all city owned properties and buildings.                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                            |              |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |         |                                                                                                      |
| Placing regulatory limits on rebuilding structures damaged by natural hazards can mitigate future risk, damage, and expenses. Limits can follow a tiered system that allows for limited rebuilding (e.g., permitted only a certain number of times), completely prohibit rebuilding, or allow reconstruction with conditions, such as advanced resilient design standards. (Example: limit replacement or reconstruction of a structure that is 'substantially damaged' by storm impacts to one time for any single lot of record). | Restrictions on re-building must account for equity considerations. Will the cost of rebuilding with resilience measures pose a burden on disadvantaged community members? Will support be provided to ensure that community members can relocate or rebuild with resilience despite the associated costs? | ●            |                       |                   |                    |                       |                      | ●            |                     | ●                       |              |      | \$         | Long    | Number of permits issued for reconstruction in hazard areas; Number of permits issued for relocation |



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| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Building Resilience (continued)

**B9. Resilient Design Standards** *Encourage or require new and redeveloped buildings to include sustainable and resilient design measures, especially in flood-prone areas.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                     |   |  |  |  |  |   |  |  |  |   |    |       |   |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|--|--|--|---|--|--|--|---|----|-------|---|
| ● | Encourage, incentivize, or require new and redeveloped buildings to incorporate sustainable and resilient design measures for buildings. Examples of measures include elevating structures above projected flood levels that account for future sea level rise; underground or covered parking; minimizing impervious surfaces; amending maximum building height standards to accommodate elevation of structures (i.e. freeboard) above projected flood levels; requiring consideration of sea level rise projections and impacts in development applications and review of those applications; and adopting resilient design guidelines for coastal and marine businesses. | Do the design standards represent a cost burden on vulnerable or disadvantaged community members? What supports could be put in place to ensure that disadvantaged community members are not harmed by this action? | ● |  |  |  |  | ● |  |  |  | ● | \$ | Short | — |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|--|--|--|---|--|--|--|---|----|-------|---|

**B10. Critical Facility Resilience** *Increase the resilience of critical facilities such as our wastewater treatment facility through risk reduction or relocation.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |  |  |  |   |  |  |  |  |  |   |        |      |                             |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|--|--|---|--|--|--|--|--|---|--------|------|-----------------------------|
| ● | Ensuring critical facilities are operational and accessible at all times is vital for protecting the health, safety, and wellbeing of the community. This strategy is likely appropriate for the Biddeford Wastewater Treatment Facility and Biddeford Pool Fire Station. While the fire station is not expected to be directly impacted by flooding from sea level rise, access to and from the station is expected to be negatively impacted by road flooding from 1.6 ft of sea level rise combined with storm surge. Investigating flood protection measures and/or relocation of the fire station could enhance the flood resilience of the facility and its operations. | — |  |  |  | ● |  |  |  |  |  | ● | \$\$\$ | Long | Create Plan by end of 2024. |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|--|--|---|--|--|--|--|--|---|--------|------|-----------------------------|

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| Action Description                                                                                                                                         | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Co-Benefits                                                                                                                                                                                                                                                                                                                 |                       |                   |                    |                       |                      |              |                     |                         |              | Cost | Time Frame | Metrics |                           |                                                                                                                                                            |
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|                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Cost Savings                                                                                                                                                                                                                                                                                                                | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation |      |            |         | Community (re)development |                                                                                                                                                            |
| Energy Resilience                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                             |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |         |                           |                                                                                                                                                            |
| B11. Maintain Power at Critical Facilities <i>Develop and implement a plan for maintaining power at critical facilities during power outages.</i>          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                             |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |         |                           |                                                                                                                                                            |
|                                                                                                                                                            | Municipalities can develop and implement a power resilience plan by 1) partnering with the local utility, 2) identifying critical municipal and community facilities (i.e. hospitals and healthcare facilities, police, fire stations, community centers, water and wastewater facilities, and airports), 3) assessing power loads, 4) identifying and implementing energy efficiency measures, and 5) identifying and implementing backup power solutions (such as solar + storage, batteries, microgrids, etc). | Efforts to maintain power at municipal facilities should target those facilities that provide public services to vulnerable community members, such as police stations, healthcare facilities, emergency services and community center.                                                                                     | ●                     |                   |                    |                       | ●                    |              |                     |                         |              | ●    |            | \$\$\$  | Long                      | Assess needs for critical facilities by 2027.                                                                                                              |
| B12. Improve Grid Resilience <i>Work with power companies and state agencies to advocate for efforts to improve the resilience of the electrical grid.</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                             |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |         |                           |                                                                                                                                                            |
| ●                                                                                                                                                          | Extended power outages from extreme weather events pose a substantial risk to community members and businesses. The municipality or the larger region could work with CMP to identify frequency, duration, and location of power outages, their causes, and work together to find solutions for increasing grid resilience.                                                                                                                                                                                       | Power outages have disproportionate negative effects on vulnerable populations, especially people with disabilities, older people, and people with serious health conditions who rely on equipment powered by electricity, such as motorized wheelchairs, elevators, refrigerated medications, oxygen generators, and more. |                       | ●                 |                    |                       | ●                    |              |                     |                         |              | ●    |            | \$-\$   | Long                      | Identify frequency, duration, location, and causes of power outages in Southern Maine by 2026. Work with regional partners, including Central Maine Power. |



# TRANSPORTATION AND INFRASTRUCTURE

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Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                             | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Co-Benefits                                                                                                                                                                                                                                         |                       |                   |                    |                       |                      |              |                     |                         |              | Cost | Time Frame | Metrics     |                           |                                                                    |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|------|------------|-------------|---------------------------|--------------------------------------------------------------------|
|                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Cost Savings                                                                                                                                                                                                                                        | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation |      |            |             | Community (re)development |                                                                    |
| Reduce Vehicle Miles Traveled                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                     |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |             |                           |                                                                    |
| T1. Public Transit <i>Expand access to and use of public transit services.</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                     |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |             |                           |                                                                    |
| <div><div>★</div><div>●</div></div>                                            | Biddeford is already working with BSOOB to expand use of public transit. Biddeford also developed a Transit Oriented Development Plan with Saco and GPCOG. Pgs 68-71 of the plan detail strategies to Increase use of transit, including: Develop welcoming bus stops, adopt innovative customer service technology, increase frequency and hours of operation, implement transit-supportive roadway improvements, involve the community, consider bus route redesign and microtransit options, transition to electric vehicles, support Downeaster improvement, and plan for rapid transit. | Although public transit does not serve a large portion of the population in these communities, public transit is an essential public service, especially for more vulnerable community members such as those without a vehicle and older residents. | ●                     | ●                 |                    |                       |                      | ●            |                     | ●                       |              |      |            | \$\$-\$\$\$ | Medium                    | BSOOB Ridership; Number of BSOOB routes; Number of BSOOB bus stops |

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| Action Description                                                                                                                                                            | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Co-Benefits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |                                       |
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|                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Cost Savings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |                                       |
| Reduce Vehicle Miles Traveled (continued)                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                       |
| T2. Increase Walkability <i>Improving the “walkability” of our city’s roadways through a safe, comfortable, and convenient network of pedestrian walkways.</i>                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                       |
| ★                                                                                                                                                                             | Improving the “walkability” of our roadways and communities with safe, comfortable, and convenient walkways makes it possible to convert more short trips to walking, reducing VMT. The strategy can include: Maintain streets and sidewalks for efficiency and safety; Create Safe Routes ordinance to require or incentivize the creation of safe routes on private properties; Adopt a 'Complete Streets' policy, or similar.                                                                                                                                                                                                                      | Alternative transportation options are vital for households with one or no cars. Walking and bicycling to school is more common among children from low-income and minority households. For older adults, children, and people with disabilities, access to safe and comfortable walking infrastructure allows for greater independence and reduces reliance on cars. Investments in pedestrian infrastructure should consider who is most likely to benefit from that investment, and should direct resources to those portions of the community that would have the greatest equity outcomes. | ●                     |                   |                    |                       | ●                    |              |                     | ●                       | ●            |                           |      | \$\$\$     | Long    | Number of miles of "Complete Streets” |
| T3. Increase Bikeability <i>Improve the “bikeability” of our city’s roadways with safe, comfortable, and convenient networks of bikeways and bike-related infrastructure.</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                       |
| ★                                                                                                                                                                             | Improving the “bikeability” of our roadways and communities with safe, comfortable, and convenient bikeways makes it possible to convert more short trips to bicycling, reducing VMT. The strategy can include: Identify gaps in pedestrian and the bicycle networks and barriers to active modes of travel; Develop and implement a bicycle and pedestrian plan to improve connectivity in the community and beyond; collaborate with regional partners to connect on-and off-road bicycle facilities with existing and planned regional trail networks. It can also include strategies to increase access to bicycles, such as a bikeshare program. | Investments in bicycle infrastructure should consider who is most likely to benefit from that investment, and should direct resources to those portions of the community that would have the greatest equity outcome                                                                                                                                                                                                                                                                                                                                                                            | ●                     |                   |                    |                       | ●                    |              |                     | ●                       | ●            |                           |      | \$\$\$     | Long    | Number of miles of "Complete Streets" |

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| Action Description                                                                                                                                               | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Co-Benefits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |                                    |
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|                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Cost Savings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |                                    |
| Reduce Vehicle Miles Traveled (continued)                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                    |
| T4. Transit-Oriented Development <i>Concentrate housing, business, and leisure activities within easy walking distance to public transit in new development.</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                    |
| ★                                                                                                                                                                | Transit-oriented Development (TOD) is an approach to development that maximizes the amount of residential, business, and leisure space within an easy walk of public transit. The goal is to promote sustainable growth by increasing walkability and transit use while reducing reliance on private vehicles. Actions can include using Tax Increment Financing (TIF) districts to direct development to transit locations and requiring high levels of accessibility and connectivity for pedestrians, bicycles, and motor vehicles in all new development and significant redevelopment. The Biddeford Saco Transit Oriented Development Plan includes strategies to support transit oriented development including: Align Zoning To Support Higher Density Transit Oriented Development Principles, Leverage The Saco Transportation Center As A Community Anchor, and Advance Development And Investment Through Public-Private Partnerships. | The high demand for housing adjacent to transit can make TOD homes inaccessible to people with lower incomes, while the rapid appreciation sparked by new transit investments can lead to gentrification and displacement, countering equity goals. TOD can have an explicit commitment to achieve equity goals through dedicated strategies that ensure low-income residents and residents of color benefit from – and are not displaced by – the new development. With strategies in place to preserve and expand affordable housing, protect tenants from rising costs and displacement, connect residents to jobs and economic opportunities, stabilize and support small and local businesses, TOD can also increase equity outcomes. | ●                     | ●                 |                    |                       |                      | ●            | ●                   |                         | ●            | ●                         | ●    | \$\$\$     | Long    | —                                  |
| T5. Reduce Single-Occupancy Vehicle Trips <i>Assess methods to reduce single-occupancy vehicle trips made by municipal staff.</i>                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                    |
| ●                                                                                                                                                                | Create programs and incentives to encourage municipal staff utilize all means of alternative transportation (i.e. active mobility, public transit, carpooling. Also, develop citywide Travel Demand Management (TMD) plans to focus the TDM-specific activities of the municipality. May include a description of current city activities, how these fit into state and regional plans and efforts, and a set of specific implementation objectives for the next several years.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ●                     |                   |                    |                       | ●                    |              |                     | ●                       |              |                           |      | \$         | Short   | Miles driven in municipal vehicles |



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Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years  
 Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Reduce Vehicle Miles Traveled (continued)

**T6. Direct Development** Decrease the need for private vehicles by reducing sprawl through directing new development to areas where services are easily accessible and reducing minimum parking requirements.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |   |  |  |  |   |   |  |  |  |   |      |        |                         |
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| Development patterns directly influence where and how much community members, employees, and visitors must drive. Directing development to areas of service and increasing density directly reduces sprawl. It can be combined with efforts to increase walkability and bikeability to reduce driving overall. Strategies to direct development include incentives to promote infill development, allow for mixed use development where appropriate, and supporting brownfield redevelopment. | Infill development may skew towards investment in parcels that provide a greater return on investment, which can exacerbate patterns of underinvestment in other areas. In other cases, infill development in historically underinvested areas can lead to the displacement of residents with lower incomes, especially if concentrated development results in an increased demand for residential and commercial spaces. To encourage equitable benefits for current residents and businesses, communities can implement affordable housing programs and policies, workforce development opportunities, and partnerships with local groups to ensure that infill developments benefit residents and local partners. Brownfield redevelopment in particular provides an opportunity to address environmental injustices, increase community assets, and improve conditions that impact the quality of life in historically underserved areas. |  | ● |  |  |  | ● | ● |  |  |  | ● | \$\$ | Medium | Density bonus approvals |
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Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |

## Resilient Infrastructure

### T7. Protect Critical Infrastructure *Improving the “walkability” of our city’s roadways through a safe, comfortable, and convenient network of pedestrian walkways.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |  |  |  |  |  |  |  |  |  |   |        |      |                                                                        |
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| ● | Ensuring these critical assets are operational and accessible in the face of climate hazards is vital for emergency response and for protecting the health, safety, and wellbeing of community members. Take steps to protect critical assets (water, sewer, etc.) and other structures that will be impacted by sea level rise, storm surge, flooding and extreme weather events associated with climate change. Coordinate with the local water and sewer districts to incorporate climate change resilience and sustainability principles in management and decision-making and ensure they are planning for future conditions such as extreme precipitation events and coastal flooding that can overwhelm stormwater systems, exacerbate flooding, and cause significant damage. Ensure that drinking water sources are adequately protected to improve drought resilience. Both water and sewer directly impact public health. Planning for and adapting to future climate change conditions can help to minimize the indirect public health impacts of climate change. Some of Biddeford’s stormwater and sewer infrastructure, including the wastewater treatment facility, and water infrastructure are located in areas at risk of flooding from storms and sea level rise. Infrastructure-specific assessments and adaptation planning should occur to provide the City with a better understanding of risks, vulnerabilities, and protection measures. The City should partner with Maine Water to assess vulnerabilities. | Upgrades to infrastructure should consider how upgrades will impact utility rate payers, as responsibility and the burden of trying to repair and rehabilitate aging infrastructure has traditional fallen on the backs of local ratepayers. For this reason, community involvement is critical in the decision making process. Biddeford’s WWTP is located near the downtown in an area with elevated social vulnerability, meaning that public health impacts due to infrastructure failures would be born by more disadvantaged community members. | ● |  |  |  |  |  |  |  |  |  | ● | \$\$\$ | Long | Initiate identification of vulnerable critical infrastructure by 2026. |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |  |  |  |  |  |  |  |  |  |   |        |      |                                                                        |

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Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                                                                                                           | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |                                                                                                                                                                  |
| Resilient Infrastructure (continued)                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                                                                                  |
| T8. Vulnerability Assessment Assess the vulnerability of transportation infrastructure to the impacts of heat, groundwater rise, and saltwater intrusion caused by sea level rise.                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                                                                                  |
| <div><div></div><div></div></div>                                                                                                                                                                            | Extreme heat, groundwater rise caused by sea level rise, and saltwater intrusion can impact and degrade critical infrastructure above and below ground, shortening its lifespan and increasing maintenance costs. Assess impacts of heat, groundwater rise, and saltwater intrusion caused by sea level rise on local transportation infrastructure to better understand how climate change might impact important infrastructure assets and plan for appropriate upgrades. | —            | ●                     | ●                 |                    |                       |                      |              | ●                   | ●                       |              | ●                         | ●    | \$\$       | Medium  | The Sustainability Commission, in partnership with Public Works will complete an assessment of transportation infrastructure by 2026.                            |
| T9. Build Infrastructure Resilience Modify roads, culverts, and bridges to increase their resilience to flooding, sea level rise, and other climate hazards, including raising, relocating, and/or upsizing. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                                                                                  |
| <div><div></div></div>                                                                                                                                                                                       | With a better understanding of what key travel routes are at risk of flooding, municipalities can plan to prioritize detours and alternative routes that both redirect traffic to safety and prioritize access to key economic centers. Roads at risk of coastal flooding include Mile Stretch Road, Hills Beach Road, Yates Street, Bridge Road, Maddox Pond Road, Fortunes Rocks Road, Granite Point Road, Timber Point Road, and Beach House Lane                        | —            |                       | ●                 |                    |                       |                      |              | ●                   |                         |              |                           |      | \$\$\$     | Long    | The sustainability Commission, in partnership with Public Works and engineering will develop a plan to identify vulnerable roads, bridges, and culverts by 2026. |

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 Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                                                                          | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Co-Benefits                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |                   |                    |                       |                      |              |                     |                         |              | Cost | Time Frame | Metrics |                           |                                                                                                                                                                                                                                                                            |
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|                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Cost Savings                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation |      |            |         | Community (re)development |                                                                                                                                                                                                                                                                            |
| Support Electric Vehicles                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |         |                           |                                                                                                                                                                                                                                                                            |
| T10. Encourage Transition to Electric Vehicles Streamline permitting, install public EV chargers, require EV chargers in new development, and transition city fleets to EV. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                   |                    |                       |                      |              |                     |                         |              |      |            |         |                           |                                                                                                                                                                                                                                                                            |
| ★<br>●                                                                                                                                                                      | Municipalities that manage their own electrical permitting and inspections are responsible for ensuring the safe installation of EV charging stations (EVCS). According to EVCS providers, expensive, complex, protracted, and/or non-uniform permitting and inspection procedures are a significant barrier to charger installations. Delays and confusion can result in residents and businesses giving up on EVCS installations. In Maine, the state has not yet issued any guidance on how municipalities should be permitting and inspecting EV charging stations. To encourage and expedite EVCS installations, permitting and inspection processes should be designed to: 1. Clarify the requirements for EV charging stations; 2. Simplify the permitting and inspection process; 3. Ensure permitting fees do not place a significant cost burden onto the EVCS owner; 4. Provide training to Code Enforcement staff on EV charging station installations. | Unequal access to EV charging infrastructure can be a limiting factor to community adoption. Low- and moderate-income drivers have less access to charging-enabled off street parking. Municipalities can design permitting processes to reduce barriers to EV charging station installation, including installation costs. Currently EVs can be cost prohibitive for lower income folks so in the current market EV charging infrastructure tends to support higher income populations. | ●                     |                   |                    |                       |                      |              | ●                   |                         |              |      |            | \$\$\$  | Short                     | Number of EVCS located in Biddeford; Number of EVs registered in Biddeford<br><br>Targets:<br>Increase total Vehicle Miles traveled by Electric Vehicles 30% by 2030.<br>Increase total Vehicle Miles Traveled by Electric Vehicles replacing diesel vehicles 15% by 2030. |



# LAND USE AND NATURAL ENVIRONMENT

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Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     | Cost                    | Time Frame   | Metrics                   |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |

## Protection of Natural Resources

**LN1. Sustainable Landscaping** Create and enforce climate resilient and sustainable landscaping approaches, eliminating the use of fertilizers, herbicides, and pesticides, especially in city parks and green spaces.

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                      |   |  |  |   |   |  |   |   |   |   |    |        |                                                                                                                                                                      |
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| ★ | Create and enforce climate resilience and sustainable landscaping approaches. Draft zoning standards that require or incentivize new development and redevelopment to increase the amount of landscaping, open space, and tree canopy in neighborhoods that currently have less of these site design features. Manage municipal landscaped areas using natural products and low-impact practices. Promote native, climate resilient, and sustainable landscaping initiatives community wide by connecting residents to plants and information | Historically disadvantaged and vulnerable neighborhoods often have less tree canopy to cool properties and offset heat island effects, which make many of these neighborhoods significantly warmer than others and creates health challenges for older adults and persons experiencing disabilities. | ● |  |  | ● | ● |  | ● | ● | ● | ● | \$ | Medium | Number of trees planted and monitored; city expenditures on pesticides, insecticides, and herbicides; number of property owners contacted with educational materials |
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| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Protection of Natural Resources (continued)

**LN2. Protect Vulnerable Areas** Conserve areas of the city that are vulnerable to climate hazards, as well as those that help to minimize climate risks through carbon storage and flood reduction.

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                         |  |  |  |   |   |  |  |   |   |  |  |   |   |                                                                                                                                                                                        |
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| ● | Strengthen ecosystem resilience by preserving climate-threatened natural areas such as wetlands, riparian areas, and headwater streams, as well as those areas that provide carbon sequestration, through zoning or other regulations. Conserve, revegetate, and reconnect floodplains and buffers in riparian areas. Possible measures: Enact and enforce policies (such as a wetland impact assessment requirement) that preserve and restore functioning wetlands. Partner with local and regional land trusts for strategic land conservation and management of those lands. Participate in a watershed protection program and coordinate with watershed communities on stormwater management and watershed protection measures. Apply land use regulations, like shoreland zoning standards, to wetlands that are smaller than state threshold of 10 acres. | The benefits of conservation may come at a cost to communities. Conserved areas should be identified, protected, and governed equitably |  |  |  | ● | ● |  |  | ● | ● |  |  | — | — | Acres in conservation areas; Acres of preserved wetlands; Acres of re-vegetated areas. Work with regional partners to identify conservation and climate resilience priorities by 2026. |
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| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Protection of Natural Resources (continued)

**LN3. Nature Based Solutions** *Promote and enable "nature-based solutions", such as the restoration of sand dunes or wetlands, to protect shorelines and coastal property from flooding and erosion.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |   |   |   |  |   |   |   |  |      |      |                                                                                                  |
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| ● | Nature-based solutions (NBS) are sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience. These solutions use natural features and processes to combat the effects of climate change, improve water quality, and protect coastal property from flooding and erosion. They offer an alternative to traditional 'hard' or 'gray' infrastructure approaches and provide monetary and non-monetary benefits to people and the environment. Ensure local land use regulations enable the use of NBS and promote the use of NBS on public and private property. Conduct education to property owners about NBS for shoreline stabilization and climate resilience measures they can implement on their own properties. Examples of NBS include vegetation and/or geotextiles, dune restoration, wetland restoration, thin layer deposition, wetland enhancement, living shorelines, beach nourishment, and soft armoring. | Nature based solutions projects should incorporate equity throughout: 1. Ensure that design governance and implementation processes are inclusive and transparent. 2. Tackle root causes of marginalization, inequality and injustice at all stages. 3. Limit the creation of economic and non-economic losses, and avoid the unjust redistribution of risks and costs. 4. Prioritize interventions for the most at-risk places and communities. | ● | ● | ● | ● | ● |  | ● | ● | ● |  | \$\$ | Long | Non-native species removed; acres of wetlands preserved; Sea berm installation in coastal areas. |
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**LN4. Restoration of Natural Habitats** *Promote the restoration or enhancement of natural habitats for biodiversity and wildlife protection.*

|  |                                                                                                                                                                                                                                                                                            |                                                                                                                                                   |  |  |  |   |   |  |   |   |  |  |      |      |                                                                                                                                                                                                                            |
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|  | Healthy ecosystems and the biological diversity they support are a source of food, water, medicine, shelter and other material goods. They also provide ecosystem services – the cleaning of air and water – which sustain life and increase resiliency in the face of mounting pressures. | The benefits of habitat restoration may come at a cost to communities. Restoration projects should be identified, managed, and governed equitably |  |  |  | ● | ● |  | ● | ● |  |  | \$\$ | Long | Number of non-native species removed; Number of native trees planted; Number of wildlife corridors created. Work with regional partners to identify and prioritize most important areas to restore for habitat protection. |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|---|---|--|---|---|--|--|------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |

## Sustainable and Resilient Development

**LN5. Sustainable Food Systems** *Promote and expand local and resilient food systems through sustainable practices such as actions that improve soil health and that store carbon.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |   |  |  |   |  |   |  |  |  |  |      |      |                                                                                              |
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| ★ | Food production systems and eating habits are major contributors to climate change, and it is impossible to meet our climate targets unless a shift occurs. Eating more plant-based foods will reduce our carbon footprint in no uncertain terms. Because greenhouse gas emissions occur at every step of food production, growing food locally will reduce emissions attributed to storing and transporting food for local consumption. Regenerative agriculture restores soil health and promotes carbon sequestration, increasing ecosystem resilience and creating localized carbon sinks. Regenerative farming practices can also be used to by fruit and vegetable farmers. | — | ● |  |  | ● |  | ● |  |  |  |  | \$\$ | Long | Number of community gardens per resident<br><br>Acres of productive farmland and forest land |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|--|--|---|--|---|--|--|--|--|------|------|----------------------------------------------------------------------------------------------|

**LN6. Mixed-Use Zoning** *Implement zoning to allow a blend of residential and commercial uses in some areas of the city, in order to reduce sprawl and make neighborhoods more walkable.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                           |  |   |   |  |  |   |   |  |  |   |    |        |                                                                                                                                                               |
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| ★ | Land use regulations, such as zoning ordinances and building codes that determine the location and type of development permitted in an area, impact the natural environment and resilience of a community. Policies that promote higher-density, mixed-use developments with access to public infrastructure, along with energy-efficiency improvements to older structures being redeveloped, can reduce greenhouse gas emissions. Enable and incentivize climate resilient and compact, mixed-use development in appropriate areas to reduce environmental impacts, increase housing affordability, and enhance community resilience to climate change | Growth and investment in the downtown area have led to gentrification in Biddeford and a housing affordability crisis. The city needs to consider how investments can be paired with affordability to ensure equitable access to livable, walkable areas. |  | ● | ● |  |  | ● | ● |  |  | ● | \$ | Medium | Number of new or upgraded sidewalks created; Miles of bike lanes created; Average distance of new housing to critical services (food shopping, schools etc.). |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|---|--|--|---|---|--|--|---|----|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|

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 Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Sustainable and Resilient Development (continued)

**LN7. Direct Development** Direct development away from areas of the city that are exposed to climate-related risks, including sea level rise, erosion, and inland flooding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                |  |  |   |  |  |  |   |  |   |  |   |        |      |                                                                                                                                     |
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| Where and how communities accommodate growth, development, and redevelopment profoundly affects vulnerability of people and property, as well as the quality and health of water, beaches, and coastal wetlands. Investigate use of regulatory and policy mechanisms to discourage development in areas exposed to climate hazards and toward more suitable and less vulnerable locations. Actions could include both regulatory (zoning and land use regulations) and non-regulatory measures. Examples include prohibition of new development in hazard areas; erosion-based setbacks; development setbacks from hazard areas; transfer of development rights (TDR); rolling easements; incentivizing and encouraging development in areas that have low exposure to hazards and are appropriate for density. Consider adopting zoning overlay district(s) to help protect buildings and people from climate hazards. The overlay(s) should include development standards and regulations that aim to increase the resilience of development to climate hazards and promote sustainable development approaches. | Evaluate potential policies and regulations for their impact on socially vulnerable and traditionally marginalized populations |  |  | ● |  |  |  | ● |  | ● |  | ● | \$\$\$ | Long | Number of square miles newly designated Limited Growth Areas; Area of Overlay districts that protect hazard areas from development. |
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● = Associated goal/action in Comprehensive Plan

● = Potential regional action

Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Sustainable and Resilient Development (continued)

**LN8. Land Use Ordinance Review** *Conduct a review of the city's land use ordinances and policies to identify changes needed to include climate resilience and sustainability measures and standards*

|   |                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                           |  |  |   |   |   |   |   |   |   |   |    |       |                                                   |
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| ● | Municipal land use planning and regulations are indispensable tools for enhancing local climate resilience and sustainability. Maine's home rule status offers valuable opportunities for municipalities to adopt creative, innovative, and flexible land use solutions that address coastal hazards, promote energy efficiency, reduce GHG e | Any substantial review of land use ordinances should also incorporate equity. Equity in zoning means that those who write, administer, or enforce zoning regulations take clear steps to avoid or "undo" unfair outcomes and mitigate the unequal ability to participate in or influence all parts of the zoning process. |  |  | ● | ● | ● | ● | ● | ● | ● | ● | \$ | Short | Milestone:<br>Completed land use ordinance review |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---|---|---|---|---|---|---|---|----|-------|---------------------------------------------------|

**LN9. Encourage Development in Appropriate Areas** *Encourage development in appropriate areas that are already developed, have public services (e.g., water and sewer), and are less vulnerable to natural hazards*

|  |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                  |   |  |  |  |  |  |   |  |   |  |   |    |       |                                                                                                                                                            |
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|  | Consider incentives for infill development in appropriate areas, such as areas close to goods and services, including downtown and village centers outside of flood hazard areas. These can be paired with requirements for energy efficiency, and sustainable and resilient design. | Infill development in historically underinvested areas can lead to the displacement of residents with lower incomes, especially if concentrated development results in an increased demand for residential and commercial spaces | ● |  |  |  |  |  | ● |  | ● |  | ● | \$ | Short | Number of density bonus approvals;<br>Number of new housing units created in the three Main Street Revitalization District zones (MSRD-1, MSRD-2, MSRD-3). |
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# HEALTH, SAFETY, AND WELL BEING

★ = Priority action – Identified through public engagement

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● = Potential regional action

Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Community Resilience/Disaster Preparedness

**H1. Resilience Hubs** Establish a designated site to serve as a "resilience hub" that can provide critical services to residents during climate-related emergencies or disruptions.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |   |  |  |  |  |  |   |        |        |                                                                      |
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| In the event of a disruption, the Hub will provide community members with critical services, including access to electricity, food and water, shelter, health and medical supplies, information, and logistical coordination with partner groups that provide post-disruption support. The Resilience Hub will reduce the burden on local emergency response teams, improve access to public health initiatives, foster greater community cohesion, and increase the effectiveness of community-centered institutions and programs. | Resilience Hubs can help to shift power to communities and enable them to plan, react, and recover without reliance on local government. In addition to being designed and managed by the community, hubs are meant to be in well-trusted, well-utilized community facilities that serve the needs of the community more broadly than temporary emergency shelters do. Hubs can also enhance social cohesion because they can be designed to serve as community gathering places and "community centers" |  |  |  |  | ● |  |  |  |  |  | ● | \$\$\$ | Medium | Number of designated resilience hubs in operations; number of users. |
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 ● = Associated goal/action in Comprehensive Plan  
 ● = Potential regional action

Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years  
 Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                                                                                          | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Co-Benefits                                                                                                                                                                                                  |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Cost Savings                                                                                                                                                                                                 | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |                                                                                                                                                                                            |
| Disaster Preparedness                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                                                                                                            |
| H2. Improve Disaster Planning <i>Improve disaster planning and response to be better prepared for climate change risks, including early warning systems and community evacuation plans.</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                                                                                                            |
| ●                                                                                                                                                                                           | For every \$1 invested in hazard mitigation, communities save \$6 in avoided future disaster costs. Disaster preparedness is key to a quick, safe, effective recovery after an event. Enhance resilience by taking steps now to prepare for hazards and emergency events. Actions include: developing a storm debris management plan; developing an extreme temperatures emergency plan with strategies that increase use of cooling centers by residents; assessing and monitoring wildfire risk, creating a Coordinated Climate and Health Response Team to address climate health and disaster risks in the community; and establishing a network for pre- and post-storm coordination. | Public health systems should be designed to ensure that they are reaching the most vulnerable community members. This may involve community members without access to internet, cellphones, television, etc. |                       |                   |                    |                       | ●                    |              |                     |                         |              |                           |      | \$\$       | Long    | Number of preparedness plans in place;<br>Number of resilience hubs                                                                                                                        |
| H3. Climate Hazard Training <i>Provide emergency responders and medical providers with training about the types of illnesses that might occur as a result of climate hazards</i>            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                                                                                                            |
| ●                                                                                                                                                                                           | Work with local fire and rescue departments to provide training about climate related illnesses, including heat exhaustion, cardiovascular and pulmonary stressors, and vector-borne diseases. When first responders can recognize and treat these illness, people will be more likely to receive appropriate care. It also allows these departments to plan more strategically for climate related events such as heatwaves, droughts, or pest infestations.                                                                                                                                                                                                                              | Increasing climate hazards will have a disproportionate impact on already vulnerable community members.                                                                                                      |                       |                   |                    |                       | ●                    |              |                     |                         |              |                           |      | \$         | Short   | Milestone: Create training materials, hold trainings at least once annually with Fire/Rescue and PD by 2026. Metric: Number of emergency responders trained for climate-related illnesses. |

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| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Disaster Preparedness (continued)

### H4. Public Health Outreach *Conduct outreach about public health advisories for climate-related health impacts and weather events.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                              |  |  |  |  |   |  |  |  |  |  |  |    |        |                                                                                                                                                                                                                                           |
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| ● | Publicize and amplify public health advisories for climate related health and weather events such as air quality advisories, extreme heat or cold events, extreme storms, power outages, waterborne disease outbreaks, harmful algal blooms, and vector borne disease trends. Use the town's existing lines of communication (website, social media, neighborhood forums, direct contact of at-risk residents, etc.) | Public health systems should be designed to ensure that they are reaching the most vulnerable community members. This may involve community members without access to internet, cellphones, television, etc. |  |  |  |  | ● |  |  |  |  |  |  | \$ | Medium | Milestone: Create outreach materials and begin doing quarterly outreach by 2026, with hazard-specific outreach/warnings as appropriate. Metric: Number of climate advisories distributed, whether through social media or direct contact. |
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## Health and Safety

### H5. Affordable Housing *Encourage and support the creation of resilient, energy-efficient, and low-carbon affordable housing.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                     |  |   |   |  |  |   |  |  |   |   |        |      |                                             |
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| ★ | The recommendations of the Mayor's Affordable Housing Task Force includes: 1. Create or preserve ninety (90) units of affordable rental units per year for five years, with half of the units targeted to serve the 40% to 80% median income community and a desired goal of having at least half the units being created by new construction; 2. Rehabilitate at least sixty-five (65) rental units per year for the next three years so that the units are healthy homes and lead free. | Creation of affordable housing can protect tenants from rising costs and displacement and increase equity outcomes. |  | ● | ● |  |  | ● |  |  | ● | ● | \$\$\$ | Long | Number of affordable housing units created. |
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Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |

## Health and Safety (continued)

**H6. Ensure Safe Drinking Water Supply** *Ensure the safety and quality of drinking water supplies, including through assessment and management of climate change impacts to septic systems and wells.*

|        |                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                             |  |  |  |   |  |  |  |   |  |   |        |        |                                |
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| ★<br>● | Partner with Maine Water to establish and implement a program to protect drinking water sources and ensure safe and reliable drinking water supply. Prioritize vulnerable neighborhoods and replace lead service lines for drinking water consumption. Monitor and protect water quality in private wells and create resilient water utilities through conservation, demand management, technology, and operations efficiency | Any program should prioritize vulnerable and disadvantaged communities who have historically been left out of decisions and opportunities for water infrastructure upgrades |  |  |  | ● |  |  |  | ● |  | ● | \$\$\$ | Medium | Number of private wells tested |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|---|--|--|--|---|--|---|--------|--------|--------------------------------|

**H7. Shade Structure Ordinance** *Develop an ordinance to require shade structures (covered bus stops, gazebos, etc.) on city-owned properties.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |   |  |  |    |       |                                                                                     |
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| ★ | Require shade structures on all properties local governments own. Shade structures can include gazebos, trees, covered outdoor facilities, and transit stops. Full shade canopies have the greatest reduction potential for surface and perceived temperatures. Shade structures provide relief for residents, pets, and wildlife during extreme heat events. Transit stops should be prioritized; shade structures serve the added benefit of protecting people from inclement weather | Shade is an essential component of public health. It encourages people to walk and leave their car behind. Access to shade for the vulnerable in our society – children, outdoor workers, the elderly and the homeless – is critical for preventing heat related illness. |  |  |  |  |  |  |  | ● |  |  | \$ | Short | Number of shade structures; Percent of transit stops with adequate shade structures |
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Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                                                                                                                                                           | Equity Considerations                                                                                                                                                                                                                                                                                                  | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|------------|---------|------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                        | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |                                                                                                      |
| Health and Safety (continued)                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                        |              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                      |
| H8. Tree Ordinance <i>Develop an ordinance to increase tree canopy both on city-owned and private property.</i>                                                                                                                                              |                                                                                                                                                                                                                                                                                                                        |              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                      |
| ★                                                                                                                                                                                                                                                            | Adopt tree ordinance that requires planting of native trees and other climate-resilient and native vegetation in locations where they make a direct, positive impact on the community or act as a buffer to filter air and water, limit storm runoff, and stabilize soil.                                              |              |                       |                   |                    |                       |                      |              |                     |                         | ●            |                           |      | \$         | Short   | Number of trees planted and monitored                                                                |
| H9. Monitor Vector-Borne Diseases and Invasive Species <i>Explore options for monitoring and managing pests, like ticks and mosquitoes, that are associated with increases in diseases (e.g. Lyme disease) using natural and ecologically sound methods.</i> |                                                                                                                                                                                                                                                                                                                        |              |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                                                                      |
| ●                                                                                                                                                                                                                                                            | Explore options for monitoring and managing pests, like ticks and mosquitoes, that are associated with increases in diseases (e.g. Lyme disease) using natural and ecologically sound methods. Conduct outreach and education to property owners and provide user-friendly guidance about invasive and native species. |              |                       |                   |                    | ●                     |                      |              |                     |                         |              |                           |      | \$\$       | Medium  | Number of property owners contacted with educational materials; Vector Borne disease rate reduction. |





# LEADERSHIP AND SUPPORT

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Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Community Outreach

**LS1. Create Climate Commission** *Create a municipal Climate Commission made of up city residents to assist with the implementation of the Climate Action Plan.*

|   |                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                   |   |   |  |  |   |  |  |  |  |  |  |    |       |                                                                                                                                        |
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| ★ | Created by city ordinance, this commission would collaborate with municipal, public, and private sectors to collectively guide and track climate action. This commission will actively engage community members in local climate sustainability and resilience issues. | A climate commission can weave equity considerations into all future climate actions to ensure that all people, regardless of age, race, income, etc., will benefit equally from progress made toward resiliency. | ● | ● |  |  | ● |  |  |  |  |  |  | \$ | Short | Hire Intern or AmeriCorps Volunteer to assist with CAP implementation.<br><br>Milestone: Created and operational by beginning of 2024. |
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| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Community Outreach (continued)

### LS2. School Curricula *Support local schools to include climate change and sustainability in school curricula.*

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |  |  |  |   |  |  |  |  |  |  |    |       |                                                                                                                                                                                                                                              |
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| ★ | Climate change and sustainability are sometimes incorporated into science courses, however these issues intersect with all subject areas. Work with the school district and teachers to develop new classes or adapt existing classes to bring climate, sustainability, and resilience to the classroom. Ensuring that the next generation has an understanding of these issues will promote sustained engagement and give them the skills they need to navigate the challenges in their futures. | — |  |  |  | ● |  |  |  |  |  |  | \$ | Short | <p>Milestone: Establish relationships with appropriate school staff by end of 2025. Create relevant curricula by the end of 2026.</p> <p>Metric: Number of teachers who incorporate climate and sustainability issues into lesson plans.</p> |
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### LS3. Climate Change Training *Provide climate change training for municipal boards, commissions, and committees.*

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |  |  |  |   |  |  |  |  |  |  |    |       |                                                                                                                                                                                                                                                                                                                                                            |
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|  | Community members play a key role in creating a culture of sustainability and resilience by taking action in their own homes and businesses and by providing support and input into municipal initiatives. Biddeford can enable individual and community action by actively engaging City commissions, boards, and committees on local climate, sustainability, and resilience issues through education events, the city website, and other communication outreach. | — |  |  |  | ● |  |  |  |  |  |  | \$ | Short | <p>Milestones: Present in person to the council and all boards and commissions at least once by the end of 2025; Create ongoing training materials available in an online resource by the end of 2026.</p> <p>Metrics: Number of commission, board and committee members engaged in climate training. Number of educational events conducted annually.</p> |
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 Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                                                                                                        | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Co-Benefits                                                                                                                                                                                                                                                                                                                                                                                                           |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics |                                                   |
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|                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Cost Savings                                                                                                                                                                                                                                                                                                                                                                                                          | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |         |                                                   |
| Municipal Operations and Funding                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                   |
| LS4. Create Position of Sustainability Coordinator    Create a municipal Office of Sustainability and position of Sustainability Coordinator, whose mandate will be to implement the Climate Action Plan. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                   |
| ★                                                                                                                                                                                                         | The Sustainability Coordinator will oversee the development of climate adaptation and mitigation solutions and creates policy to put solutions into action. This position collaborates with residents and businesses, and local, regional, state, and federal partners. This commission will actively engage community members in local climate sustainability and resilience issues.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A Sustainability Coordinator can weave equity considerations into all future climate actions to ensure that all people, regardless of age, race, income, etc., will benefit equally from progress made toward resiliency.                                                                                                                                                                                             | ●                     | ●                 |                    | ●                     | ●                    | ●            | ●                   | ●                       | ●            |                           | ●    | \$\$       | Short   | Milestone: Created by the end of 2024.            |
| LS5. Establish Local Climate Funding    Establish local funding mechanisms to support implementation of the Climate Action Plan.                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |         |                                                   |
|                                                                                                                                                                                                           | Establish a municipal fund and make annual appropriations to the fund and invest the assets to grow the fund over the long-term. This approach provides a significant funding source to supplement more conventional methods, such as bonding and grants. Incorporate elements of accountability into funding programs so that funds are being used to maximize community benefits. Consider establishing a Tax Increment Finance (TIF) District to support local climate resilience projects. A TIF is an economic development tool for capturing the projected increase in tax revenue that is created by a development within a defined area and reinvests those funds into public improvements and development projects for that benefit the zone and increase resilience to coastal hazards. Enact impact fees on new and redevelopment projects to help financially support climate change adaptation and mitigation action within the community. | Evaluate potential policies and regulations for their impact on socially vulnerable and traditionally marginalized populations. Explicitly consider how use of funds (what, where, who, etc.) could perpetuate disparities and/or provide an imbalance of benefits to less vulnerable people/populations. Ensure there is transparency and community input in the decision making process to allow for accountability |                       | ●                 |                    |                       | ●                    |              |                     | ●                       | ●            |                           | ●    | \$-\$      | Medium  | Annual appropriations to new Climate Action Fund. |

- ★ = Priority action – Identified through public engagement  
 ● = Associated goal/action in Comprehensive Plan  
 ● = Potential regional action

Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years  
 Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description                                                                                                                                                                     | Equity Considerations                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Co-Benefits                                                                                                                                                                                                                                                                                                                                                                                                           |                       |                   |                    |                       |                      |              |                     |                         |              |                           | Cost | Time Frame | Metrics       |                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------|------------|---------------|----------------------------------------------------------------------------------|
|                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Cost Savings                                                                                                                                                                                                                                                                                                                                                                                                          | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |      |            |               |                                                                                  |
| Municipal Operations and Funding (continued)                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |               |                                                                                  |
| LS6. Include Climate in Municipal Investments <i>Incorporate climate resilience and carbon emissions measures into planned investments for city-owned infrastructure and equipment</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                   |                    |                       |                      |              |                     |                         |              |                           |      |            |               |                                                                                  |
| ★                                                                                                                                                                                      | Accounting for environmental conditions of tomorrow in today's decision-making is not only necessary for ensuring safe and vibrant communities now and into the future, it is also a wise investment of limited municipal funds. However, capacity limitations, strapped municipal budgets, and insufficient information about cumulative costs of storm response and repair have hindered progress on municipal planning and action aimed at addressing growing natural hazards. | Evaluate potential policies and regulations for their impact on socially vulnerable and traditionally marginalized populations. Explicitly consider how use of funds (what, where, who, etc.) could perpetuate disparities and/or provide an imbalance of benefits to less vulnerable people/populations. Ensure there is transparency and community input in the decision making process to allow for accountability | ●                     |                   |                    |                       |                      |              | ●                   |                         |              |                           | ●    | \$         | Medium – Long | Amount of funding obtained from federal, state, or private funding opportunities |

★ = Priority action – Identified through public engagement

● = Associated goal/action in Comprehensive Plan

● = Potential regional action

Timeframe: Short = 1-2 years, Medium = 3-4 years, Long = 5+ years

Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High

| Action Description | Equity Considerations | Co-Benefits  |                       |                   |                    |                       |                      |              |                     |                         |              | Cost                      | Time Frame | Metrics |
|--------------------|-----------------------|--------------|-----------------------|-------------------|--------------------|-----------------------|----------------------|--------------|---------------------|-------------------------|--------------|---------------------------|------------|---------|
|                    |                       | Cost Savings | Support Local Economy | Municipal Revenue | Water Conservation | Education & Awareness | Mobility Improvement | Smart Growth | Water & Air Quality | Greenspace & Recreation | Job Creation | Community (re)development |            |         |

## Municipal Operations and Funding (continued)

### LS7. Include Climate Considerations in Decision Making *Incorporate future climatic conditions in land use planning and municipal policies.*

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |   |   |   |   |   |        |        |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|--------|--------|---|
| <p>Municipal and regional planning and policy documents form the foundation for local decision-making, regulation, and ordinances. Most land use policies and regulations in place today were designed for environmental conditions of the past, and need to be updated to account for increasing risk and changing conditions to protect development, people, and municipal expenditures. Similarly, municipal policies often do not account for climate change. These policies govern the day to day operations of the municipality, so considering the intersection with climate change aligns short term and long term decision making with resilience and sustainability goals. Incorporating climate resilience and sustainability in all short- and long-term municipal decision-making and policy documents and plans, including the Comprehensive Plan, can help a community ensure that decisions, regulations, and policies are supporting local climate change goals and priorities. Coordinating with the County Emergency Management Agency can ensure inclusion of local climate hazards and areas of concern/vulnerability in the County Hazard Mitigation Plan, elevating the significance of those hazards and areas on a regional scale and offering opportunities for hazard mitigation funding.</p> | <p>Evaluate potential policies and regulations for their impact on socially vulnerable and traditionally marginalized populations. Explicitly consider how use of funds (what, where, who, etc.) could perpetuate disparities and/or provide an imbalance of benefits to less vulnerable people/populations. Ensure there is transparency and community input in the decision making process to allow for accountability.</p> | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | \$\$\$ | Medium | — |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|---|--------|--------|---|

### LS8. Build Municipal Capacity *Ensure municipal departments have the resources, guidance, and support to implement the Climate Action Plan*

|                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |        |                |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--------|----------------|---|
| <p>Municipal departments carry out the day to day operations of the community. To ensure these day to day operations align with long-term climate goals, the departments must be provided with the staff, resources, and training they need to adjust their activities accordingly .</p> | <p>Trainings for staff should include the ways that historically disadvantaged and vulnerable populations are more vulnerable to climate change impacts and should be incorporated with equity training</p> |  |  |  |  |  |  |  |  |  |  |  | \$\$\$ | Short - Medium | — |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--------|----------------|---|





## City Council

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**Meeting Date:** November 21, 2023

**Meeting Time:** 6:00 pm

**Agenda Item No:** 10.h.

**Item Description:** 2023.142 Approval/ Amendment Code of Ordinances, Part III: Section 11 – Establishment of Zones, V Attachment 2, Notes for Table B; establish new regulations to include Subsection T - “Street Frontage Reduction Ordinance”.

**Submitted by:** David C.M. Galbraith, Acting Planning & Development Director

**Supporting Information/Documentation:**

1. City Council Order
2. Street Reduction Ordinance memorandum to the Planning Board
3. Table B with proposed amendments shown in-line

**Key Terms:**

N/A

**Executive Summary:**

The proposed Ordinance contains new language within Table B which allows for the reduction of street frontage requirements on a one time basis.

**Detailed Review:**

The proposed Ordinance came about at the July 18th City Council meeting there was a Committee of the Whole discussion item presented, related to reducing frontage requirements, from 100-ft to 90-ft, in certain areas of the city, to allow increased housing stock. This item was again discussed at the City Council meeting of September 5, 2023, where Staff presented draft Ordinance language which resulted in the Council forwarding the item to the Planning Board. The proposed Ordinance contains new language within Table B which allows for the reduction of street frontage requirements on a one time basis. The proposed language is shown below in [blue underline](#).

[T. Street Frontage Reduction Ordinance: Street frontage requirements may be relaxed in the Suburban Residential 1 \(SR1\), R1-A, R1B, R-2 and R-3 Zoning Districts providing the following:](#)

1. [Lots of record, in existence prior to \(insert adoption date\) may be divided, one time, to create an additional buildable house lot, providing both lots meet at least 90% of the required street frontage requirements for the particular zoning district.](#)

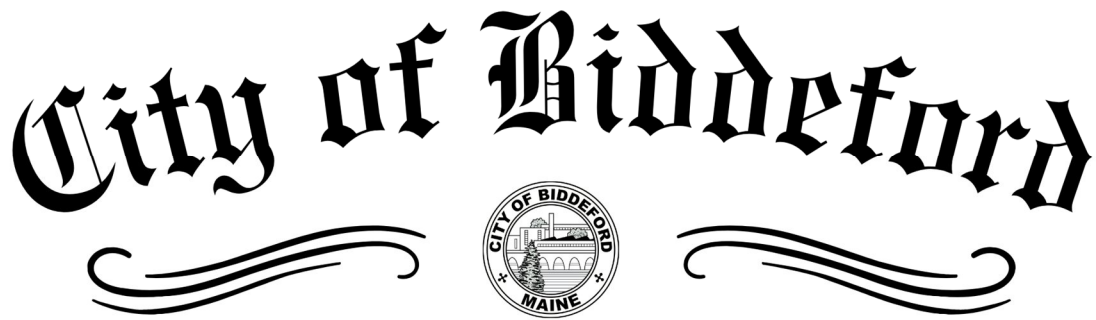
2. Both properties shall meet all other dimensional requirements within the particular zoning district where the lot is located.
3. This Ordinance does not apply to any new subdivisions where 3 or more lots are being or have been created.

***Funding Source:***

Not applicable.

***Planning Board / Staff Recommendation:***

The proposed Street Frontage Reduction Ordinance is another tool being recommending for adoption as it seeks to increase the City's supply of housing. The Planning Board forwarded the proposed text amendment to the City Council with a recommendation for adoption, as proposed. This will be the first reading of this item.



2023.142

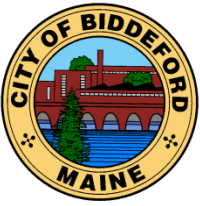
IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023

**BE IT ORDAINED**, by the City Council of the City of Biddeford, Amend Part III: Code of Ordinances, Amendment to the City Code of Ordinances Section 11 – Establishment of Zones, V Attachment 2, Notes for Table B to establish new regulations to include Subsection T - “Street Frontage Reduction Ordinance” be amended by adding the text below, highlighted in blue underline as follows:

T. Street Frontage Reduction Ordinance: Street frontage requirements may be relaxed in the Suburban Residential 1 (SR1), R1-A, R1-B, R-2 and R-3 Zoning Districts providing the following:

1. Existing lots of record in existence prior to (insert 2<sup>nd</sup> reading date) may be divided, one time, to create an additional buildable lot providing both lots meet at least 90% of the required street frontage requirements for the particular zoning district.
2. Both properties shall meet all other dimensional requirements within the particular zoning district where the lot is located.
3. This Ordinance does not apply to any new subdivisions where 3 or more lots are being created.

Attest by: \_\_\_\_\_



# CITY OF BIDDEFORD

## Planning and Development Department

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### **Planning Board – Staff Report**

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director / City Planner

DATE: October 25, 2023

**RE: Case # 2023.42 Street Frontage Reduction Ordinance / Amendment to Table B – Notes**

MEETING DATE: November 1, 2023

#### 1. Amendment History / Overview:

At the July 18th City Council meeting there was a Committee of the Whole discussion item presented, related to reducing frontage requirements, from 100-ft to 90-ft, in certain areas of the city, to allow increased housing stock. This item was again discussed at the City Council meeting of September 5, 2023, where Staff presented draft Ordinance language which resulted in the Council forwarding the item to the Planning Board. This item was introduced to the Board on September 20th as a “discussion item”. It was most recently discussed at the October 18th meeting. Regretfully, at that meeting there was confusion regarding the exact text being reviewed by the Board as the Staff report had not been included in the Board’s packet. The Board “Tabled” the Proposed amendment until the November 1, 2023, meeting.

The purpose of the proposed Ordinance would allow existing lots with excess frontage to create an additional residential lot providing the parent parcel and the divided parcel each provide 90% of the required frontage. As an example, if a property is required under the City’s dimensional standards to have 100 feet of frontage and the lot had 180 + feet of frontage the property could be divided, to create an additional buildable lot, providing each of the lots has a minimum of 90 feet of frontage. This frontage reduction, and lot creation, would be permitted only on existing lots of record, and not permitted in subdivisions creating more than one new lot. As drafted, the proposed Ordinance amendment would apply to lots within the Suburban Residential 1 (SR1), R1-A, R1-B, R-2 and R-3 zoning districts. Staff is recommending a text amendment to Table B of the City’s Land Use Ordinance which would include new text, which would include the following underlined language, which are highlighted in [blue underline](#):

**Case # 2023.42 Street Frontage Reduction Ordinance / Amendment to Table B – Notes**  
**Planning Board Hearing Date: November 1, 2023**

T. Street Frontage Reduction Ordinance: Street frontage requirements may be relaxed in the Suburban Residential 1 (SR1), R1-A, R1B, R-2 and R-3 Zoning Districts providing the following:

1. Lots of record, in existence prior to (*insert adoption date*) may be divided, one time, to create an additional buildable house lot, providing both lots meet at least 90% of the required street frontage requirements for the particular zoning district.
2. Both properties shall meet all other dimensional requirements within the particular zoning district where the lot is located.
3. This Ordinance does not apply to any new subdivisions where 3 or more lots are being or have been created.

Attached is the entire “Notes for Table B” section of the Ordinance, where the proposed amendments, if adopted, would be located within the Ordinance. This document includes **new text** as blue underlined. There are no proposed text deletions. The only item proposed to be modified to said “Notes...” is Item “T” and including numbers 1-3 (shown above).

**Staff Recommendation:**

Staff requests that the Planning Board forward a positive recommendation for adoption of this amendment to the City Council.

**ATTACHMENTS**

1. Attachment # 1: Street Frontage Reduction Ordinance, Amendment



**ESTABLISHMENT OF ZONES**  
**Draft Ordinance Amendments to the City Code of Ordinances**  
**Section 11 – Establishment of Zones, V Attachment 2, Notes for Table B**  
**Text Amendment: Frontage Reduction Ordinance**

**ESTABLISHMENT OF ZONES**

**BIDDEFORD CODE**

**NOTES for Table B:**

N/A: Not allowed.

\* A new structure may be permitted to be built with less than the required setback, provided that the following are met:

1. The setback will be equal to the average front yard setback of the existing houses on the immediately adjacent lots; and
2. The setback shall be-at least 15 feet; and
3. These provisions shall apply only along existing residential streets which were developed prior to the enactment of the present front yard setback requirements.

\*\* The Building Inspector may allow a lessening of setback requirement for access structures, as necessary, to facilitate reasonable handicapped accessibility. This provision shall apply to existing structures only. Any access structure built under this provision shall be temporary to facilitate the handicapped or disabled occupant and shall be removed when no longer needed.

+ Maximum height is exclusive of chimneys, antennae, and roof-mounted, building-integrated, building mounted or architectural wind systems when attached to a structure. Chimneys and antennae shall not be higher than 12 feet above the structure. Roof-mounted, building-integrated, building-mounted or architectural wind systems shall not be higher than 15 feet above the maximum allowed building height in the zone.

A. Minimum land area per dwelling unit.

B. In order to promote condominium forms of housing and affordable housing in close proximity to downtown and services, in the R-1-A, R-1-B, R-2, R-3, OR, and MSRD-2 Zoning Districts, the density requirements may be relaxed as follows:

1. Redevelopment of existing structures:

- a. The Planning Board, or other appropriate approval authority, shall consider granting a density bonus of one residential unit for every 650 square feet of living space within an existing structure, provided the applicant presents redevelopment/renovation plans to the Code Enforcement Officer demonstrating how the redevelopment project will result in the number of residential units with two or more bedrooms being at least, if not more than, the number of units with two or more bedrooms before the density bonus was granted.
- b. If the project is provided a density bonus, the Code Enforcement Officer shall document the allowable density and number of units, in writing, for the Code Enforcement Office files.
- c. An applicant provided a density bonus for rental housing shall enter into a contractual agreement with the City of Biddeford requiring that at least 30% of the additional units created shall be leased such that they do not exceed 80% of the fair market rent (FMR) per bedroom size, as established annually by the U.S. Department of Housing and Urban Development (HUD). The contractual agreement shall

**ESTABLISHMENT OF ZONES**  
**Draft Ordinance Amendments to the City Code of Ordinances**  
**Section 11 – Establishment of Zones, V Attachment 2, Notes for Table B**  
**Text Amendment: Frontage Reduction Ordinance**

be recorded at the York County Registry of Deeds, a copy of which shall be provided to the Code Enforcement Office prior to the issuance of any building permits. Rent-restricted units will be annually monitored by the Planning and Development Department for contract compliance.

2. Condominium conversions/development:

- a. A property may be proposed for redevelopment/renovation from apartments into condominiums in accordance with 1 above.
- b. An applicant provided a density bonus for condominiums shall enter into a contractual agreement with the City of Biddeford obligating them to complete the project as condominiums to be offered for sale upon or before completion of the project in return for receiving the density bonus. The contractual agreement shall be recorded at the York County Registry of Deeds, a copy of which shall be provided to the Code Enforcement Office prior to the issuance of any building permits.
- c. The applicant agrees that if the project is converted to condominiums, said units shall not be sold for a price that exceeds 125% of the York County median home price affordable to median-income households as set annually by HUD for the City of Biddeford.

C. Applies only to dwelling units. All other uses shall have a minimum of 10,000 square feet.

D. (Reserved)

E. All buildings and structures shall be set back at least 50 feet from any zone in which residential dwellings are an allowed use, except as otherwise provided in this table.

F. (Reserved)

G. (Reserved)

H. Roadside stands may be 10 feet from the major access road.

I. This is the density limit for the expansion of existing residential dwelling units.

J. Applies to all uses.

K. Hospital height limit shall be 110 feet.

L. Does not apply to cluster development.

M. The number of accessory structures shall meet setback requirements; and shall be limited to no more than three per lot; and shall not exceed the height of the primary structure; and any plumbing, if necessary, shall be limited to a utility sink. Structures associated with bona fide working agricultural uses are not subject to these limits.

N. Any use not serviced by a public water supply must show evidence that it is serviced by a potable water supply meeting minimum state standards for safe drinking water.

**ESTABLISHMENT OF ZONES**  
**Draft Ordinance Amendments to the City Code of Ordinances**  
**Section 11 – Establishment of Zones, V Attachment 2, Notes for Table B**  
**Text Amendment: Frontage Reduction Ordinance**

- O. Any residential structures in existence prior to December 20, 1990, may be expanded or added to as long as they meet minimum setbacks (from major access, 40 feet; from other streets, 25 feet; from side and rear property lines, 10 feet).
- P. The location of new or expanded buildings and structures including the replacement of existing buildings in the Institutional Zone shall conform to the approved Institutional Master Plan and the following dimensional standards:
1. Maximum height. The maximum height of buildings in the Institutional Zone shall be 35 feet, 50 feet, or 65 feet depending upon in which building height subdistrict the building is located. The building height subdistricts and maximum building heights are shown on the Institutional Zone Subdistrict Map dated September 6, 2001, and described in boundary descriptions prepared by an independent registered land surveyor licensed to practice in the State of Maine which are made a part of this ordinance. Notwithstanding the maximum building height provision, the tallest point of any building or structure, including appurtenant structures, in the Institutional Zone shall not exceed 115 feet above sea level based upon the national geodetic vertical datum (NGVD), unless a higher elevation is mandated as part of a state or federal environmental approval or permit.
  2. Minimum building setbacks from public streets. All buildings in the Institutional Zone shall conform to the following minimum setbacks from public streets:
    - South side of Hills Beach Road from intersection with Old Pool Road east to a point 250 feet west of the zone boundary/property line: 25 feet.
    - South side of Hills Beach Road from a point 250 feet west of the zone boundary/property line east to the zone boundary: 50 feet with a provision that it can be reduced to 25 feet if replacement buildings at the housing park are located further from the wetland.
    - North side of Hills Beach Road from intersection with Old Pool Road east to the zone boundary: 50 feet.
    - Both sides of Hills Beach Road from intersection with Old Pool Road west to the zone boundary at Route 9: 50 feet with a provision that it can be reduced to 25 feet when a Hills Beach bypass is built that conforms to the following standards and is approved as part of the Institutional Master Plan.
    - Both sides of Old Pool Road: 50 feet.
    - Both sides of Pool Road (Route 9): 50 feet.
    - Both sides of Newtown Road: 40 feet.
    - Both sides of the Hills Beach bypass road when built: 50 feet.

The reduced setback along the westerly portion of Hills Beach Road shall be effective only if a Hills Beach bypass road has been constructed that meets the following standards:

**ESTABLISHMENT OF ZONES**  
**Draft Ordinance Amendments to the City Code of Ordinances**  
**Section 11 – Establishment of Zones, V Attachment 2, Notes for Table B**  
**Text Amendment: Frontage Reduction Ordinance**

- a. The road shall be designed and located to allow traffic to Hills Beach to travel directly from Route 9 to the approximate vicinity of the intersection of Old Pool Road and Hills Beach Road without using campus roads.
  - b. The intersection with Route 9 will be located at an appropriate location for this use.
  - c. The road shall be designed as a limited access facility with not more than one curb cut on each side providing campus access through internal campus streets. These curb cuts shall be in addition to any intersections with public streets or roads.
  - d. No buildings or parking lots shall have direct access to or from the bypass road.
  - e. A landscaped street buffer shall be established as provided for in Section 43 of Article VI.
3. Minimum building setback from the perimeter of the Institutional Zone. All buildings shall be setback a minimum of 50 feet from the external boundary of the Institutional Zone where such zone boundary abuts a Suburban Residential (SR-1), Coastal Residential (CR), or Rural-Farm (R-F) Zone. The area along the zone boundary shall be maintained as a landscaped buffer in accordance with the provisions of Article VI, Section 12.
4. Maximum lot coverage. The maximum lot coverage shall be as follows:
- a. Within the area south of Route 9 and west of the Newtown Road: 10%.
  - b. Within the area South of Route 9 and east of the Newtown Road: 30%.
  - c. Within the area North of Route 9: No maximum except as provided for in 5, Restricted Development Areas.
5. Restricted development areas. Within the areas identified as “No Build Zones” on the Institutional Zone Subdistrict Map dated September 6, 2001, and described in boundary descriptions prepared by an independent registered land surveyor licensed to practice in the State of Maine which are made a part of this ordinance, the following additional requirements shall apply:
- a. No new buildings, parking, roads, or access drives shall be constructed except for the construction of a Hills Beach bypass road and connections to the bypass road from existing public streets.
  - b. Existing buildings, parking, roads, and access drives may be maintained and may be improved with Planning Board approval but may not be relocated or expanded except as provided for in a.
  - c. The existing student housing park located on the south side of the Hills Beach Road may be replaced with new low-impact academic or support facilities. Lowimpact is defined as meeting the following standards:
    - The replacement has been approved as part of the institutional master plan.
    - The total footprint area of all replacement buildings and structures shall not exceed 14,400 square feet.

**ESTABLISHMENT OF ZONES**  
**Draft Ordinance Amendments to the City Code of Ordinances**  
**Section 11 – Establishment of Zones, V Attachment 2, Notes for Table B**  
**Text Amendment: Frontage Reduction Ordinance**

- The amount of non-vegetated area after redevelopment shall be not more than the amount of non-vegetated area existing at the time of adoption of this provision.
  - No buildings, structures, parking, or other impervious surfaces shall be located closer to any adjacent wetland or the external boundary of the Institutional Zone than the existing facilities being replaced and, where possible, the setback from wetlands shall be increased.
  - The architectural design of the low-impact academic or support facilities shall be compatible with the adjacent residential character, consistent with the approved University Master Plan Architectural Design Standards, and shall be limited to a maximum height of 35 feet.
  - The low-impact academic or support facilities shall have no greater impact on the adjacent wetlands, than did the development existing at the time of the approval of the 2003-2007 Master Plan (approved May 7, 2003), as demonstrated by a wetlands delineation plan and stormwater management plan submitted as part of the application for site plan approval.
  - The low-impact academic or support facilities shall have no greater light intrusion, noise or traffic impact (both vehicular and pedestrian) on adjacent residential properties, than did the development existing on the site at the time of the approval of the 2003-2007 Master Plan (approved May 7, 2003), as demonstrated by a noise mitigation plan and traffic study submitted as part of the application for site plan approval.
- d. No new athletic fields or athletic facilities shall be constructed.
- e. Existing athletic fields may be maintained and improved but may not be expanded. Improvements to the existing fields shall be limited to items such as fencing, buffering, portable grandstands, scoreboards, lighting, temporary rest room facilities, storage sheds with less than 300 square feet of floor area, and similar facilities.
- f. The areas not currently used for athletic fields, parking or the student housing park shall be maintained as naturally vegetated areas and shall not be converted to lawns or other improved open space. Existing vegetation shall be maintained subject to sound management practices relative to cutting, thinning, pruning, and similar activities.
- Q. Existing nonconforming lots or structures may be considered for conversion to nonresidential uses allowed in the OR Zone, provided that neither structure nor lot are made more nonconforming as a result of the conversion.
- R. The setback may be reduced to the average of the lots immediately adjacent to the lot, as determined by the Code Enforcement Officer.
- S. The Building Inspector may allow a lessening of setback requirements, to no less than 10 feet, for utility buildings and structures to facilitate utility infrastructure improvements. Any such buildings or structures built under this provision shall be removed when no longer used for such necessary utility infrastructure.

[T. Street Frontage Reduction Ordinance: Street frontage requirements may be relaxed in the Suburban Residential 1 \(SR1\), R1-A, R1B, R-2 and R-3 Zoning Districts providing the following:](#)



**ESTABLISHMENT OF ZONES**  
**Draft Ordinance Amendments to the City Code of Ordinances**  
**Section 11 – Establishment of Zones, V Attachment 2, Notes for Table B**  
**Text Amendment: Frontage Reduction Ordinance**

1. Lots of record, in existence prior to (insert adoption date) may be divided, one time, to create an additional buildable house lot, providing both lots meet at least 90% of the required street frontage requirements for the particular zoning district.
2. Both properties shall meet all other dimensional requirements within the particular zoning district where the lot is located.
3. This Ordinance does not apply to any new subdivisions where 3 or more lots are being or have been created.



## City Council

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**Meeting Date:** November 21, 2023

**Meeting Time:** 6:00 pm

**Agenda Item No:** 10.i.

**Item Description:** 2023.143) Approval/Accessory Dwelling Units (ADU) Ordinance Amendment – City of Biddeford, Code of Ordinances, Part III: Land Development Regulations, Article VI - Performance Standards, Section 78 - Accessory Dwelling Units, Amendment to Section B.1.a.

**Submitted by:** David C.M. Galbraith, Acting Planning & Development Director / City Planner

**Supporting Information/Documentation:**

1. City Council Order
2. Section 78 - Accessory Dwelling Units, Amendment to Section B.1.a.
3. Staff Memo to the Planning Board outlining the amendments.

**Key Terms:**

Accessory Dwelling Unit (ADU): An accessory dwelling unit (ADU) is a smaller, independent residential dwelling unit located on the same lot as a stand-alone (i.e., detached) single-family home.

**Executive Summary:**

This proposed Ordinance amendment is to modify the City's existing Accessory Dwelling Unit (ADU) Ordinance and bring it into compliance with LD2003.

**Detailed Review:**

The City's existing ADU Ordinance prohibits ADU's within the City's Coastal Residential (CR) zoning district but LD2003 requires that in all residential zoning districts ADU's must be allowed. This proposed Ordinance amendment is to modify the City's existing Accessory Dwelling Unit (ADU) Ordinance and bring the City into compliance with LD2003. The proposed amendment is shown below in its entirety and includes *deleted text* in ~~red strikethrough~~ or *added text* as blue underlined.

**B. Procedural requirements.**

**1. Review procedure:**

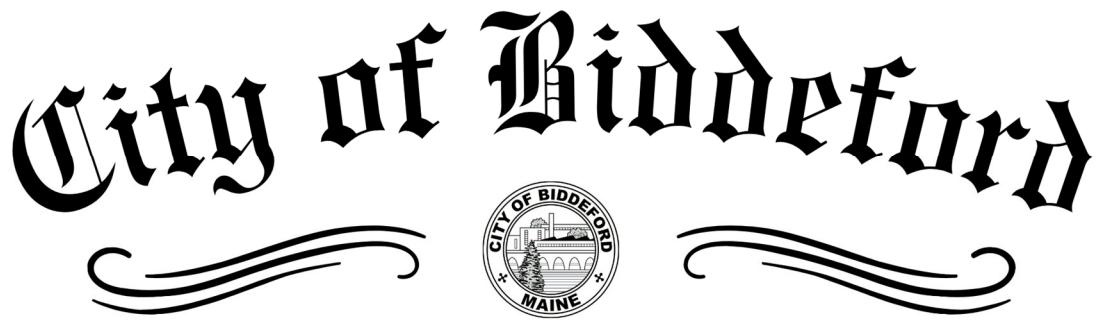
- a. One ADU is permitted per residentially zoned parcel (See Article V, Table A, Table of Land Uses.), except within the ~~Coastal Residential (CR) Zone, including the RP and LR overlay district.s within the CR Zone, where ADUs are not permitted.~~ ADUs are also permitted on nonresidentially zoned parcels containing a single nonconforming (as to use) dwelling unit which was in existence as of January 1, 2017. All ADUs shall comply with standards contained within Article XIV – Shoreland Zoning Ordinance. A permit for an ADU may be issued by the Code Enforcement Office so long as all of the standards in this section are met.

***Funding Source:***

Not applicable.

***Planning Board / Staff Recommendation:***

The proposed Ordinance amendment is to modify the City's existing Accessory Dwelling Unit (ADU) Ordinance and bring the City into compliance with LD2003. The proposed Amendment is being forwarded to the City Council, from the Planning Board, with a recommendation for adoption as written.



2023.143

IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023

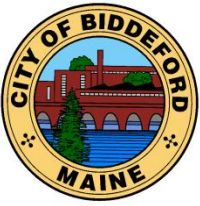
**BE IT ORDAINED**, by the City Council of the City of Biddeford, Amend Part III: Land Development Regulations, Article VI - Performance Standards, Section 78 - Accessory Dwelling Units, Section B.1.a. be amended within the context of the entire Ordinance by adding and ~~deleting~~ text as follows:

**B. Procedural requirements.**

**1. Review procedure:**

**a.** One ADU is permitted per residentially zoned parcel (See Article V, Table A, Table of Land Uses.), except within the ~~Coastal Residential (CR) Zone, including the RP and LR overlay district. s within the CR Zone, where ADUs are not permitted.~~ ADUs are also permitted on nonresidentially zoned parcels containing a single nonconforming (as to use) dwelling unit which was in existence as of January 1, 2017. All ADUs shall comply with standards contained within Article XIV – Shoreland Zoning Ordinance. A permit for an ADU may be issued by the Code Enforcement Office so long as all of the standards in this section are met.

**Attest by:**\_\_\_\_\_



# CITY OF BIDDEFORD

## Planning and Development Department

David C.M. Galbraith  
Deputy Director/City Planner  
205 Main Street  
P.O. Box 586  
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[David.Galbraith@biddefordmaine.org](mailto:David.Galbraith@biddefordmaine.org)

### **Planning Board – Staff Report**

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director / City Planner

DATE: November 8, 2023

RE: **Accessory Dwelling Unit (ADU) Ordinance Amendment: City Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) and Table A “Table of Land Uses” – Second Hearing.**

MEETING DATE: November 15, 2023

#### 1. Overview:

This item was last discussed with the Planning Board at the 11-1-2023 regular Board meeting. At that time the Board was in favor of forwarding a positive recommendation to the City Council to adopt the proposed Ordinance Amendment. At this time Staff is seeking the Board approve the second reading of the amendment with a positive recommendation for Council adoption. The City's Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs), and “Table A – Table of Land Uses” both currently prohibit accessory structures from locating within the Coastal Residential (CR) Zoning District. To comply with State Law LD 2003, Staff is proposing the following Ordinance Amendments:

- A. Modify Table of Land Uses to add “P” which stands for “Permitted” within the Coastal Residential (CR) column, for Accessory Dwelling Unit row.
- B. Amend the City's Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) to modify Section B.1.a. Text deletions are illustrated in ~~Red strike thru~~ and text additions are shown in Blue Underline.

#### ***B. Procedural requirements.***

##### ***1. Review procedure:***

***a. One ADU is permitted per residentially zoned parcel (See Article V, Table A, Table of Land Uses.), except within the ~~Coastal Residential (CR) Zone, including the RP and LR~~ overlay districts ~~within the CR Zone, where ADUs are not permitted~~... ADUs are also permitted on nonresidentially zoned parcels containing a single nonconforming (as to use) dwelling unit which was in existence as of***



**Accessory Dwelling Unit (ADU) Ordinance Amendment: City Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) and Table A “Table of Land Uses”.**

**Planning Board Hearing Date: November 15, 2023 – Second Hearing**

*January 1, 2017. All ADUs shall comply with standards contained within Article XIV – Shoreland Zoning Ordinance. A permit for an ADU may be issued by the Code Enforcement Office so long as all of the standards in this section are met.*

Below is a link to the City’s existing Accessory Dwelling Unit (ADU) Ordinance.

<https://ecode360.com/32261933#32261933>

Attached proposed amendment to Table A, to list ADU’s as a “Permitted” use. Also attached is Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) illustrating the proposed Ordinance modifications to Section B.1.a. within the context of the entire Ordinance. Text deletions are illustrated in ~~Red strike-thru~~ and text additions are shown in Blue Underline.

**Staff Recommendation:**

Staff requests that the Planning Board forward a positive recommendation for adoption of this amendment to the City Council to bring this Ordinance into compliance with LD2003.

**ATTACHMENTS**

1. Attachment # 1: Amendment to Table A, to list ADU’s as a “Permitted” use in the Coastal residential (CR) zoning district and to allow duplexes as a “Conditional Use” within the Coastal Residential (CR) zoning district.
2. Attachment #2: Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) with proposed Ordinance modifications to Section B.1.a. within the context of the entire Ordinance.

## Section 78 **Accessory dwelling units (ADUs).**

[Added 3-7-2017 by Ord. No. 2017.16]

### **A. Purpose and intent.** The intent of permitting ADUs is to:

1. Provide older homeowners with a means of obtaining rental income, companionship, security, and services, thereby enabling them to stay more comfortably in homes and neighborhoods they might otherwise be forced to leave;
2. Add moderately priced rental units to the housing stock to meet the needs of smaller households and make housing units available to moderate income households who might otherwise have difficulty finding housing;
3. Develop housing units in single-family neighborhoods that are appropriate for households at a variety of stages in their life cycle;
4. Provide housing units for persons with disabilities;
5. Protect stability, property values, and the residential character of a neighborhood.

### **B. Procedural requirements.**

#### **1. Review procedure:**

- a. One ADU is permitted per residentially zoned parcel (See Article V, Table A, Table of Land Uses.), except within the ~~Coastal Residential (CR) Zone, including the RP and LR~~ overlay districts ~~within the CR Zone, where ADUs are not permitted~~. ADUs are also permitted on nonresidentially zoned parcels containing a single nonconforming (as to use) dwelling unit which was in existence as of January 1, 2017. [All ADUs shall comply with standards contained within Article XIV – Shoreland Zoning Ordinance.](#) A permit for an ADU may be issued by the Code Enforcement Office so long as all of the standards in this section are met.

[Amended 6-20-2017 by Ord. No. 2017.57]

- b. The Code Enforcement Office shall conduct the administrative review of all applications for an ADU. All findings and decisions of the Code Enforcement Office shall be final except where subject to appeal to the Zoning Board of Appeals as provided in Article IX of the Biddeford Land Development Regulations.

#### **2. Application fee required:**

- a. In addition to all applicable building, electrical, plumbing, etc., permit fees, ADU applications shall cost a nonrefundable fee of \$200.

### **C. Use and dimensional regulations.**

1. The Code Enforcement Office may issue a building permit authorizing the installation and use of an ADU within an existing or new owner-occupied, single-family dwelling, attached to an

existing or new owner-occupied, single-family dwelling, or in a detached structure on a single-family home lot only when the following conditions are met:

- a.** The unit will be a complete, separate housekeeping unit containing both kitchen and bath.
- b.** Only one ADU may be created within a single-family house or house lot.
- c.** ADUs may be created on lots meeting the minimum lot size for a single-family dwelling in the zoning district or on legally nonconforming lots as of January 1, 2017.
- d.** ADUs shall not be intended for sale and shall remain in common ownership with the principal dwelling unit.
- e.** All ADUs shall have a gross floor area of at least 300 square feet.
- f.** The gross floor area of an ADU (including any additions) shall not be greater than 35% of the gross floor area of the principal dwelling unit or 900 square feet, whichever is greater.
- g.** Once an ADU has been added to a single-family residence or lot, the ADU shall never be enlarged beyond the 35% of the gross floor area of the principal dwelling unit or the 900 square feet allowed by this ordinance.
- h.** Rooftop decks are not permitted.
- i.** Balconies shall not face interior side lot lines.
- j.** An ADU may not have more than two bedrooms.
- k.** The construction of any ADU must be in conformity with all applicable federal, state and local laws, ordinances and regulations.
- l.** One off-street parking space is required for an ADU unless legal on-street parking or publicly supplied off-street parking is located within 1,000 feet. Tandem parking is permitted.
- m.** Internal ADUs shall also comply with the following:
  - i.** Internal ADUs shall not result in additional entrances facing a public street on the primary structure.
  - ii.** Any stairways leading to the internal ADU shall be enclosed.
- n.** Attached ADUs shall also comply with the following:
  - i.** Attached ADUs shall not result in additional entrances facing a public street on the primary structure.

- ii. Any stairways associated with an attached ADU shall be enclosed.
- iii. The primary exterior materials of an attached ADU shall match the primary exterior materials of the principal structure.

**o.** Detached ADUs shall also comply with the following:

- i. Not less than 10% of the total area of the facade of a detached accessory dwelling unit facing an alley or public street shall be windows.
- ii. Exterior stairways shall be allowed, provided that the finish of the railing matches the finish or trim of the detached accessory dwelling unit. Raw or unfinished lumber shall not be permitted on an exterior stairway.

- 2.** In order to encourage the development of housing units for disabled and handicapped individuals and persons with limited mobility, the Code Enforcement Office may allow reasonable deviation from the stated conditions where necessary to install features that facilitate access and mobility for disabled persons.

**D.** Occupancy requirements.

- 1.** The owner(s) of the residence in which the ADU is created must continue to occupy either the ADU or the principal dwelling unit.
- 2.** If an owner is unable or unwilling to fulfill the requirement to occupy either the ADU or the principal dwelling unit, the owner shall remove those features of the ADU that make it a dwelling unit.
- 3.** An ADU may not be occupied by more than three people.

**E.** Administration and enforcement.

- 1.** It shall be the duty of the Code Enforcement Office to administer and enforce the provisions of this ordinance.
- 2.** No building shall be constructed or changed in use or configuration until the Code Enforcement Officer has issued a permit. ADUs shall not be occupied until a certificate of occupancy has been issued by the Code Enforcement Office.



## City Council

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**Meeting Date:** November 21, 2023

**Meeting Time:** 6:00 pm

**Agenda Item No:** 10.j.

**Item Description:** 2023.144) Amendment/Code of Ordinances, Part III: Land Development Regulations Section 11 – Establishment of Zones, V Table A – to allow Accessory Dwelling Units (ADU) as “permitted” Use duplexes as a “Conditional Use”.

**Submitted by:** David C.M. Galbraith, Acting Planning & Development Director / City Planner

**Supporting Information/Documentation:**

1. City Council Order
2. Section 11 – Establishment of Zones, V Table A – to allow Accessory Dwelling Units (ADU) as “permitted” Use duplexes as a “Conditional Use”.
3. Staff Memo to the Planning Board outlining the amendments.

**Key Terms:**

Accessory Dwelling Unit (ADU): An accessory dwelling unit (ADU) is a smaller, independent residential dwelling unit located on the same lot as a stand-alone (i.e., detached) single-family home.

**Executive Summary:**

This proposed Ordinance amendment is to modify the City’s existing Table of Land Uses – Table A into compliance with LD2003.

**Detailed Review:**

The City’s existing ADU Ordinance currently prohibits ADU’s within the City’s Coastal Residential (CR) zoning district but LD2003 requires that ADU’s must be allowed within all residential zoning districts. Therefore, the City’s Table of Land Uses – Table A, needs to be amended to allow ADU’s as a Permitted or “P” in Table A. Similarly, the amendment also proposes to list duplexes as a “Conditional use”, or “C” within the Table. This amendment is required under LD2003, as the law considers a duplex a single-family house with a second or “accessory unit”.

The proposed amendments to “Table A” listing ADU’s as a P for “Permitted” and duplexes as a “Conditional Use”, identified as “C” within the Coastal Residential (CR) zoning district to conform to LD 2003 as shown on the attached Table A with text changes shown as [blue underline](#).

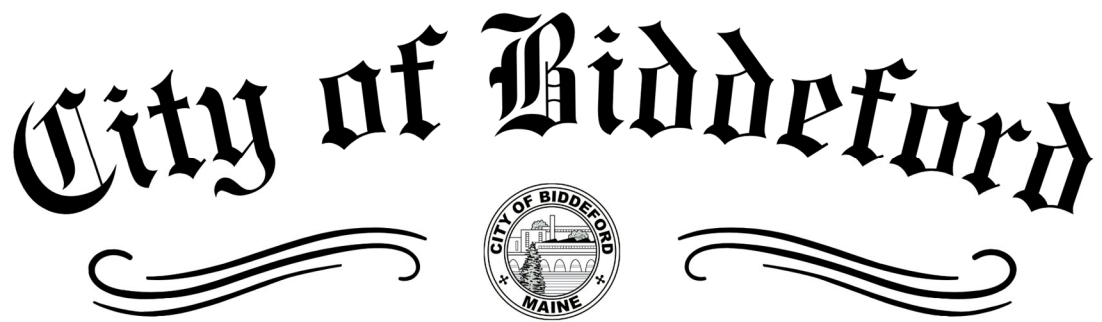
**Funding Source:**

Not applicable.

**Planning Board / Staff Recommendation:**

The proposed amendments to “Table A” listing ADU’s as a P for “Permitted” use in the Coastal Residential (CR) zoning district and duplexes as a “Conditional Use”, identified as “C” within the Coastal Residential (CR) zoning district will bring Table A into conformance with LD 2003. The proposed Amendment is being forwarded to the City Council, from the Planning Board, with a recommendation for adoption as written.





**2023.144**

**IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023**

**BE IT ORDAINED**, by the City Council of the City of Biddeford, Part III: Code of Ordinances, Article V – Establishment of Zones, Table A – Table of Land Uses be amended to list ADU’s as a P for “Permitted” use in the Coastal Residential (CR) zoning district and to allow duplexes as a “Conditional Use”, identified as “C” within the Coastal Residential (CR) zoning district to conform to LD 2003 as shown on the attached Table A with text changes shown as [blue underline](#).

**Attest by:**\_\_\_\_\_

V Attachment I City of Biddeford Table A

Table of Land Uses

[Amended 2-2-2010 by Ord. No. 2009.98; 8-3-2010 by Ord. No. 2010.70; 9-21-2010 by Ord. No. 2010.93; 6-21-2011 by Ord. No. 2011.36;

6-21-2011 by Ord. No. 2011.37; 4-3-2012 by Ord. No. 2012.24; 4-16-2013 by Ord. No. 2013.24; 3-18-2014 by Ord. No. 2014.16; 9-6-2016 by Ord. No. 2016.74; 1-17-2017 by Ord. No. 2016.87; 6-20-2017 by Ord. No. 2017.57; 1-

16-2018 by Ord. No. 2018.3; 1-16-2018 by Ord. No. 2018.5; 6-5-2018 by Ord. No. 2018.44; 10-2-2018 by Ord. No. 2018.110; 3-5-2019 by Ord. No. 2019.15; 3-5-2019 by Ord. No. 2019.16]

KEY:

\* Subject to Article VI, Performance Standards, of this ordinance. P Permitted use.

Not permitted.

C Conditional use. See Article VII for specific standards. A Accessory use.

|                                                                                      | Article VI<br>Section* | SR-1 | CR | R-1-A | R-1-B | R-2 | R-3 | B-1 | B-2 | I-1 | I-2 | I-3 | W-1 | W-2 | W-3 | R-F | LR-F | M | IN <sup>20</sup> | OR | MSRD-1 <sup>7,8</sup> | MSRD-2 | MSRD-3 |
|--------------------------------------------------------------------------------------|------------------------|------|----|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---|------------------|----|-----------------------|--------|--------|
| <b>Residential uses:</b>                                                             |                        |      |    |       |       |     |     |     |     |     |     |     |     |     |     |     |      |   |                  |    |                       |        |        |
| Accessory dwelling units* 27                                                         | 78                     | P    | P  | P     | P     | P   | P   |     |     |     |     |     | P   |     | P   | P   |      |   |                  | P  |                       | P      |        |
| Accessory structure*                                                                 | 2                      | P3   | P3 | P3    | P3    | P3  | P3  | P   | P   | P   | P   | P   | P   | P   | P   | P   |      |   | P                | P  | P                     | P      | P      |
| Boarding, rooming house*                                                             | 10                     |      |    |       |       | C   | C   |     |     |     |     |     |     |     |     |     |      |   |                  |    | C                     | C      |        |
| Bed-and-breakfast*                                                                   | 9                      |      | C  |       |       | C   |     |     |     |     |     |     | C   |     |     |     |      |   |                  | C  | P                     | C      | P      |
| Cluster development*                                                                 | 18                     | C    | C  | C     | C     | C   | C   |     |     |     |     |     |     |     |     | C17 |      |   |                  |    | C                     |        |        |
| Congregate housing*                                                                  | 19                     |      |    |       |       | C   | C   |     |     |     |     |     |     |     |     | C   |      |   |                  | C  | P                     | C      | P      |
| Duplex/2-family                                                                      | 24                     | C    | C  |       |       | P   | P   |     |     |     |     |     |     |     | P   | C   |      |   |                  | P  |                       | P      |        |
| Home occupation*                                                                     | 38                     | C    | C  | C     | C     | C   | C   | C   |     |     |     |     |     | C   | C   | C   |      |   |                  | C  | C                     | C      | C      |
| Manufactured housing*                                                                |                        |      |    |       |       |     |     |     |     |     |     |     |     |     |     |     |      |   |                  |    |                       |        |        |
| Mobile home park*                                                                    |                        |      |    |       |       |     |     |     |     |     |     |     |     |     |     |     |      |   |                  |    |                       |        |        |
| Multifamily dwelling*                                                                | 47                     |      |    |       |       | P   | P   | P   |     |     |     |     |     | P1  | P   |     |      |   |                  | C  | P                     | P      | P      |
| Planned unit development*                                                            | 73                     |      |    |       |       | C   | C   |     |     |     |     |     |     |     |     |     |      |   |                  | C  | C                     | C      | C      |
| Single-family dwelling 11                                                            | 2                      | P    | P  | P     | P     | P   | P   |     |     |     |     |     | P   |     | P   | P   |      |   |                  | P  |                       | P      |        |
| <b>Commercial uses:</b>                                                              |                        |      |    |       |       |     |     |     |     |     |     |     |     |     |     |     |      |   |                  |    |                       |        |        |
| Adult business                                                                       | 3                      |      |    |       |       |     |     |     | C17 |     |     |     |     |     |     |     |      |   |                  |    |                       |        |        |
| Amusement center*                                                                    | 5                      |      |    |       |       |     |     | C   | C   |     |     |     |     |     |     |     |      |   |                  |    | C                     |        | C      |
| Art gallery                                                                          |                        |      | C  |       |       |     |     | P   |     |     |     |     |     |     | C   | C   |      |   |                  | C  | P                     | C      | P      |
| Art studio                                                                           |                        |      | C  |       |       |     |     | P   |     |     |     |     |     |     | C   | C   |      |   |                  | C  | P                     | P      | P      |
| Auto body shops                                                                      |                        |      |    |       |       |     |     |     |     | C   |     | C   |     |     |     |     |      |   |                  |    |                       |        |        |
| Automobile graveyard,<br>automobile recycling business,<br>junkyard*                 | 7                      |      |    |       |       |     |     |     |     | C   |     |     |     |     |     |     | C    |   |                  |    |                       |        |        |
| Automobile repair, sales                                                             |                        |      |    |       |       |     |     |     | P   | P   |     | C   |     | P   | P   |     |      |   |                  |    |                       |        | C      |
| Boat building, repair, marine<br>services, sales, boat livery,<br>marina, yacht club |                        |      |    |       |       |     |     | P   | P   |     |     | C   | P   | P   | P   |     |      |   |                  |    | C                     |        |        |

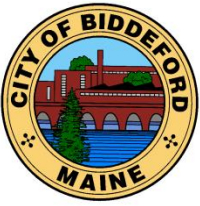
|                                                                                    | Article VI<br>Section* | SR-1 | CR | R-1-A | R-1-B | R-2 | R-3 | B-1 | B-2 | I-1 | I-2 | I-3 | W-1 | W-2 | W-3 | R-F | LR-F | M   | IN <sup>20</sup> | OR | MSRD-1 <sup>7,8</sup> | MSRD-2 | MSRD-3 |
|------------------------------------------------------------------------------------|------------------------|------|----|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------------------|----|-----------------------|--------|--------|
| Building materials retail sales                                                    |                        |      |    |       |       |     |     | P   | P   | P   |     | P   |     |     |     | C   |      |     |                  |    | C                     |        | P      |
| Carwash*                                                                           | 14                     |      |    |       |       |     |     | C   | C   | C   |     | A   |     |     |     |     |      |     |                  |    |                       |        | C      |
| Commercial gardening,<br>commercial greenhouse*                                    | 17                     | C    | C  | C     | C     |     |     |     | P   |     |     |     |     |     |     | P   |      |     |                  |    |                       |        |        |
| Commercial recreation*                                                             | 18                     |      |    |       |       |     |     | C   | C   | C   |     | C   |     |     |     | C   |      |     |                  |    | P                     |        | P      |
| Commercial school*                                                                 | 53                     |      |    |       |       |     |     | P   | P   |     |     | P   |     |     |     |     |      |     |                  |    | P                     |        | P      |
| Drugstore/medical supply                                                           |                        |      |    |       |       |     |     | P   | P   |     |     | P   |     |     |     |     |      | P   |                  |    | P                     |        | P      |
| Financial institution                                                              |                        |      |    |       |       |     |     | P   | P   | C   |     | P   |     |     |     |     |      |     | C19              |    | P                     |        | P      |
| Firewood processing*                                                               | 33                     |      |    |       |       |     |     |     |     |     |     |     |     |     |     | P   | P    |     |                  |    |                       |        |        |
| Fisheries processing, storage*                                                     | 34                     |      |    |       |       |     |     |     |     |     |     |     | P   |     |     |     |      |     |                  |    |                       |        |        |
| Funeral parlor                                                                     |                        |      |    |       |       |     |     | P   | P   | P   |     | P   |     |     |     |     |      |     |                  |    |                       |        | P      |
| Gasoline service station*                                                          | 36                     |      |    |       |       |     |     | P   | P   | P   |     | C   |     |     |     | C   |      |     |                  |    |                       |        |        |
| Hotel/motel*                                                                       | 40                     |      |    |       |       |     |     | P   | P   | P   |     | P   |     | P   |     |     |      |     |                  |    | P                     |        | P      |
| Indoor theater                                                                     |                        |      |    |       |       |     |     | P   | P   | P   |     | P   |     |     |     |     |      |     |                  |    | P                     |        | P      |
| Kennel, veterinary hospital*                                                       | 42                     |      |    |       |       |     |     |     | P   | P   |     | P   |     |     |     | P   |      |     |                  |    |                       |        |        |
| Medical marijuana dispensaries                                                     |                        |      |    |       |       |     |     |     |     |     |     | C23 |     |     |     |     |      |     |                  |    |                       |        |        |
| Medical marijuana growing<br>facilities                                            |                        |      |    |       |       |     |     |     |     | C23 | C23 |     |     |     |     |     |      |     |                  |    |                       |        |        |
| Neighborhood convenience<br>store/service                                          |                        | C4   | C4 | C4    | C4    | P   | P   | P   | P   |     |     | P   |     |     |     | P   |      |     |                  |    | P                     | C      |        |
| Off-street loading and parking lot<br>and facilities, commercial<br>parking garage | 49                     |      |    |       |       | C   | P   | P   | P9  | P   |     | A   | P   | P   | P   | C   |      |     |                  |    | P                     | C      | P      |
| Offices, business and<br>professional*                                             | 52                     |      |    |       |       |     |     | P   | P   | P   | P   | P   |     | P   | P   |     |      | P10 |                  | C  | P                     | C      | P      |
| Planned unit developments*                                                         | 73                     |      |    |       |       |     |     | C   | C   |     |     |     |     |     |     |     |      |     |                  |    | C                     |        | C      |
| Publishing, printing                                                               |                        |      |    |       |       |     |     | P   | P   | P   | P   | P   |     |     |     |     |      |     |                  | C  | P                     |        | P      |
| Restaurant*                                                                        | 56                     |      |    |       |       |     |     | P   | P   | P   |     | P   | P   | P   | P   | C   |      | C   |                  |    | P                     |        | P      |
| Retail store                                                                       |                        |      |    |       |       |     |     | P   | P   | P   |     | P   | P   | P   | P   | C   |      | C   |                  |    | P                     |        | P      |
| Sawmill*                                                                           | 33                     |      |    |       |       |     |     |     |     |     |     |     |     |     |     | C   | C    |     |                  |    |                       |        |        |
| Services                                                                           |                        |      |    |       |       |     |     | P   | P   | P   |     | P   | P   | P   | P   | C   |      | C   |                  | C  | P                     |        | P      |
| Shopping center                                                                    |                        |      |    |       |       |     |     | C   | C   | C   |     | C   |     |     |     |     |      |     |                  |    | C                     |        | P      |
| Telecommunications facilities                                                      | 71                     |      |    |       |       |     |     |     |     |     |     | C   |     |     |     | C   | C    |     |                  |    |                       |        |        |
| Wholesale business                                                                 |                        |      |    |       |       |     |     |     | P   | P   | P   | P   |     |     |     |     |      |     |                  |    |                       |        | P      |
| <b>Industrial uses:</b>                                                            |                        |      |    |       |       |     |     |     |     |     |     |     |     |     |     |     |      |     |                  |    |                       |        |        |
| Air transportation related use                                                     |                        |      |    |       |       |     |     |     |     |     | C   |     |     |     |     |     |      |     |                  |    |                       |        |        |

|                                                | Article VI<br>Section* | SR-1 | CR | R-1-A | R-1-B | R-2 | R-3 | B-1 | B-2     | I-1 | I-2 | I-3 | W-1 | W-2 | W-3 | R-F | LR-F | M | IN <sup>20</sup> | OR  | MSRD-1 <sup>2,8</sup> | MSRD-2 | MSRD-3 |
|------------------------------------------------|------------------------|------|----|-------|-------|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|------|---|------------------|-----|-----------------------|--------|--------|
| Air transportation dependent use*              |                        |      |    |       |       |     |     |     |         | C   | C   |     |     |     |     |     |      |   |                  |     |                       |        |        |
| Airport                                        | 4                      |      |    |       |       |     |     |     |         | C   | C   |     |     |     |     |     |      |   |                  |     |                       |        |        |
| Bulk oil terminal*                             | 41                     |      |    |       |       |     |     |     |         | C   |     |     |     |     |     |     |      |   |                  |     |                       |        |        |
| Contractor's storage yard                      |                        |      |    |       |       |     |     |     |         | C   | C   |     |     |     |     | C   | C    |   |                  |     |                       |        |        |
| Demolition disposal*                           | 23                     |      |    |       |       |     |     |     |         |     |     |     |     |     |     |     | C    |   |                  |     |                       |        |        |
| Experimental research and testing laboratory   | 29                     |      |    |       |       |     |     |     | C       | C   | C   | C   |     |     |     |     |      | C | C19              |     |                       |        | C      |
| Light manufacturing*                           | 41                     |      |    |       |       |     |     |     | C       | P   | P   | P   |     |     |     |     |      |   |                  |     |                       |        | P      |
| Light trucking dependent industry*             | 41                     |      |    |       |       |     |     |     | C       | P   | P   | C   |     |     |     |     |      |   |                  |     |                       |        | P      |
| Manufacturing*                                 | 41                     |      |    |       |       |     |     |     |         | C   | C   | C   |     |     |     |     |      |   |                  |     |                       |        | P      |
| Planned unit developments*                     | 73                     |      |    |       |       |     |     |     |         | C   | C   | C   |     |     |     |     |      |   |                  |     |                       |        | C      |
| Resource recovery facility                     |                        |      |    |       |       |     |     |     |         |     |     |     |     |     |     |     |      |   |                  |     |                       |        |        |
| Recycling facilities                           | 76                     |      |    |       |       |     |     |     |         | C   | C   |     |     |     |     |     |      |   |                  |     |                       |        |        |
| Redemption centers                             |                        |      |    |       |       |     |     |     | C       | P   |     |     |     |     |     |     | P    |   |                  |     |                       |        | C      |
| Storage of bulk gaseous fuels*                 | 41                     |      |    |       |       |     |     |     |         | P   | P   | P   |     |     |     |     |      |   |                  |     |                       |        |        |
| Transportation facilities                      |                        |      |    |       |       |     |     |     |         | P   |     | C14 | P   |     | P   |     |      |   |                  |     |                       |        | P      |
| Trucking, distribution terminal*               |                        |      |    |       |       |     |     |     | C       | P   | P   | C   |     |     |     |     |      |   |                  |     |                       |        |        |
| Warehousing and storage*                       | 60                     |      |    |       |       |     |     |     | P       | P   | P   | A   |     |     |     |     |      |   |                  |     |                       |        | C      |
| Self-storage facilities*                       | 60                     |      |    |       |       |     |     | C16 | C25, 26 | P   |     | C   |     |     |     |     |      |   |                  |     | C                     | C      | C      |
| <b>Educational, institutional public uses:</b> |                        |      |    |       |       |     |     |     |         |     |     |     |     |     |     |     |      |   |                  |     |                       |        |        |
| Addiction treatment facility 22                |                        |      |    |       |       |     |     |     |         |     |     |     |     |     |     |     |      | C |                  |     |                       |        |        |
| Church, synagogue*                             |                        | C    | C  | C     | C     | C   | C   |     | C       |     |     |     |     |     |     | C   |      | C |                  |     | C                     | C      | C      |
| Civic, convention centers                      |                        |      |    |       |       |     |     | C   | C       |     |     | C   |     |     |     |     |      |   |                  |     | C                     |        | C      |
| Community centers, clubs                       |                        |      |    |       |       | C   | C   | C   | C       |     |     | C   |     |     |     |     |      |   |                  |     | C                     | C      | C      |
| Day-care center, adult                         | 22                     | C    | C  | C     | C     | C   | C   | C   | P       | P   | P   | P   |     |     |     | C   |      | C |                  |     | C                     | C      | C      |
| Day-care home, adult                           | 22                     | C    | C  | C     | C     | C   | C   | C   | C       |     |     |     |     | C   | C   | C   | C    | C |                  |     | C                     | C      | C      |
| Day-care home, children's                      | 22                     | C    | C  | C     | C     | C   | C   | C   | C       |     |     |     |     |     |     | C   | C    | C |                  |     | C                     | C      | C      |
| Day-care center, children's                    | 22                     | C    | C  | C     | C     | C   | C   | C   | C       | C   | C   | C   |     |     |     | C   | C    | C |                  |     | C                     | C      | C      |
| Essential services                             | 27                     | C    | C  | C     | C     | C   | C   | C   | C       | C   | C   | C   | C   | C   | C   | C   | C    | C | C                | C   | C                     | C      | C      |
| Fire, police station                           |                        |      |    |       |       | C   | C   | P   | P       |     |     | P   |     |     |     | C   |      |   |                  | C19 | P                     | C      |        |
| Group homes, hospice                           | 19                     | C    | C  | C     | C     | P   | P   | P   | P       |     |     |     |     |     |     | C   |      |   |                  |     | C                     | C      | P      |
| Hospital*                                      | 39                     |      |    |       |       |     |     |     |         |     |     |     |     |     |     |     |      | P |                  |     |                       |        | P      |
| Municipal use                                  | 47.1                   | C    | C  | C     | C     | C   | C   | P   | P       | P   | P   | P   | P   | P   | P   | C   | C    | P |                  | C   | P                     | C      | P      |
| Museum, library                                |                        |      | C  |       |       |     |     | P   | P       |     |     | C   |     |     |     | C   |      | P | C19              |     | P                     | C      | P      |
| Nursing home*                                  | 39                     | C    |    |       |       | P   | P   |     |         |     |     |     |     |     |     | C   |      | C |                  |     | C                     | C      | C      |
| Public and private schools*                    | 53                     |      |    | C     | C     | P   | P   |     | C       |     |     |     |     |     |     | P   |      | C |                  |     | C                     | C      | C      |
| Public facility                                |                        | C    | C  | C     | C     | C   | C   | P   | P       | C   | C   | P   | C   | C   |     | C   | C    | C | C                | C   | P                     | C      | P      |
|                                                | Article VI<br>Section* | SR-1 | CR | R-1-A | R-1-B | R-2 | R-3 | B-1 | B-2     | I-1 | I-2 | I-3 | W-1 | W-2 | W-3 | R-F | LR-F | M | IN <sup>20</sup> | OR  | MSRD-1 <sup>2,8</sup> | MSRD-2 | MSRD-3 |
| Rehabilitation facility                        |                        |      |    |       |       |     |     |     |         |     |     |     |     |     |     |     |      | P |                  |     |                       |        | C      |
| University/college*                            |                        | C    | C  |       |       |     |     |     |         |     |     | C   |     |     |     | C   |      | C | P                |     | C                     |        | P      |
| University uses*                               |                        | C    |    |       |       |     |     |     |         |     |     | C   |     |     |     | C   |      | C | P                |     | C                     |        | P      |
| Water supply system                            | 27                     | C    | C  | C     | C     | C   | C   | C   | C       | C   | C   | C   | C   | C   | C   | C   | C    | C | C                | C   | C                     | C      | C      |
| <b>Outdoor, resource-based uses:</b>           |                        |      |    |       |       |     |     |     |         |     |     |     |     |     |     |     |      |   |                  |     |                       |        |        |
| Agriculture*                                   | 3, 31                  |      |    |       |       |     |     |     |         |     |     |     |     |     |     | P   |      |   |                  |     |                       |        |        |
| Agricultural products processing and storage*  | 3, 31                  |      |    |       |       |     |     |     |         | P   |     |     |     |     |     | P   |      |   |                  |     |                       |        |        |
| Animal breeding or care                        | 42                     |      |    |       |       |     |     |     |         |     |     |     |     |     |     | P   |      |   |                  |     |                       |        |        |
| Campground*                                    | 13                     |      |    |       |       |     |     |     |         |     |     |     |     |     |     | C   |      |   |                  |     |                       |        |        |
| Cemetery                                       | 14.1                   | C    | C  | C     | C     | C   | C   |     |         |     |     |     |     |     |     | P   | C    |   | C19              |     |                       |        |        |
| Extractive industry*                           | 30                     |      |    |       |       |     |     |     | P2      | P2  |     |     |     |     |     | P2  | P2   |   |                  |     |                       |        |        |
| Farm stands* 13                                | 31                     |      |    |       |       |     |     |     |         |     |     |     |     |     |     | P   |      |   |                  |     |                       |        |        |
| Timber harvesting                              | 64                     |      | C  |       |       |     |     |     |         |     |     |     |     |     |     | P   | P    |   | C19              |     |                       |        |        |
| Golf course excluding miniature golf           |                        | P    | P  | P     | P     |     |     |     |         |     |     |     |     |     |     | P   |      |   |                  |     |                       |        |        |
| Parks and recreation*                          |                        | P    | P  | P     | P     | P   | P   | P   | P       | P   | P   | P   | P   | P   | P   | P   | P    |   | P19              |     | P                     | P      | P      |

NOTES:

- <sup>a</sup> This column has been provided to serve as an aid in finding specific performance standards, but does not address all standards that may apply. Please consult Article VI for subsequent standards that may apply to a particular project. All uses cited above are subject to specific lot and setback, height, and performance requirements, as well as specific notes below:
1. Multifamily use shall not exceed 10 units per structure.
  2. Requires Planning Board approval.
  3. Accessory structures shall be limited to:
    - (a) Private detached garages for the storage of no more than three automobiles.
    - (b) Private greenhouses less than 200 square feet in floor area.
    - (c) Private swimming pools.
    - (d) Storage sheds, provided that they are uninhabitable and less than 200 square feet in area.
    - (e) Decks, porches, patios, gazebos, summerhouses, and other structures intended for outdoor use, provided they are uninhabitable.
  4. No closer than 1,000 feet to another similar facility.
  5. (Reserved)
  6. (Reserved)
  7. Drive-through establishments (except as provided in Note 8) and street level residential uses are prohibited in the MSRD-1 Commercial Core District in the following areas:
    - (a) Along both sides of Main Street between the intersection of Elm Street (Route 1) and Main Street through to the Saco City Line north of Water Street;
    - (b) On both sides of Adams Street from Main Street to Jefferson Street;
    - (c) On the north side of Jefferson Street from Main Street to Alfred Street;
    - (d) On both sides of Washington Street from Main Street to Jefferson Street;
    - (e) On both sides of Federal Street between Washington Street and Franklin Street;
    - (f) On both sides of Franklin Street; and
    - (g) On both sides of Alfred Street from Jefferson Street/Pool Street to Main Street.
  8. Financial institutions are permitted drive-throughs limited to two lanes, are a conditional review by the Planning Board, and must adhere to the following standards:
    - (a) Located on the side or rear of the building and never between the building and the Main Street.
      - (b) *Access to be located to minimize impact on pedestrians:*
        - Not between building and the street;
        - Entrance from a side street where possible;
        - Sidewalk material carried across any driveways.
      - (c) Adequate queuing land preferably separate from the parking lot.
      - (d) Architectural treatment compatible with main building.
      - (e) Controlled lighting that does not glare onto neighboring property.
  9. Review by the Board of Appeals required for all truck loading facilities for new buildings and for changes in tenancy.
  10. Limited to offices for medical professionals and associated fields.
  11. Unless otherwise stated or allowed within the provisions of this ordinance, no more than one dwelling unit shall be allowed per lot.
  12. (Reserved)
  13. Shall be considered as a home occupation; only products grown on the premises may be sold, unless the stand is recognized as a commercial operation.
  14. Transportation facilities here shall be limited to facilities associated with firms or businesses serving passenger transport, such as bus terminals, taxi stations, passenger rail stations, etc.
  15. (Reserved)
  16. Shall be limited to internal storage in existing buildings that require no external structural changes. No loading bays shall be constructed. Off-street parking shall be available with no fewer than one space per 20 storage units. A copy of the contract that will be offered to prospective tenants shall be submitted for review.
  17. Adult businesses are restricted to that portion of the B-2 District between Dartmouth Street and Landry Street. No adult business shall be located on any lot or parcel of land with road frontage on Elm Street.
  18. All subdivisions in the Rural Farm Zoning District shall be clustered, and developed in accordance with Article VI, Section 16, Cluster Developments, of this ordinance.
  19. This use does not include facilities, activities, or programs conducted by or hosted by a college or university that meet the definition of "university uses." Such uses shall be considered as university uses and shall be permitted in the institutional zone subject to the requirements of the zone and the additional performance standards for colleges/universities.
  20. Within that portion of the Institutional (IN) Zone subject to a Shoreland Zoning District, existing buildings, structures, and roads may be maintained, modified, or replaced but no new buildings shall be built or located and no existing buildings shall be enlarged (including the replacement of existing buildings) except as follows: The existing buildings and roads may be modified to the extent necessary to meet the requirements of applicable local, state, or federal codes or regulations, the existing sewage treatment plant may be expanded or replaced, and the existing Marine Science Center may be expanded through the construction of one additional building, provided that such changes meet all shoreland requirements and the performance standards of Article XIV.
  21. See Article V, Section 7, Main Street Revitalization Districts for land uses.
  22. All addition treatment facilities shall meet all applicable federal, state, and local laws and regulations. No occupancy permits shall be issued until evidence of state certification has been presented to the Code Enforcement Office.
  23. All medical marijuana dispensaries and growing facilities shall be governed by and subject to the Maine Department of Health and Human Services, Division of Licensing and Regulatory Services, 10-144 CMR Chapter 122 (as amended).
  24. (Reserved)
  25. Internal storage fully enclosed within buildings only. Loading bays shall be located on the side or rear of buildings and shall be screened from view from public streets and any abutting residential uses.
  26. Self- storage facilities in the B-2 Zone shall not be permitted northeast of the Route 1/Dartmouth Street intersection.
  27. *Accessory dwelling units may also be permitted in nonresidential zones where there exists a nonconforming (as to use) single-family dwelling on a lot that was in existence as of January 1, 2017. See Article VI, Section 7B.*





# CITY OF BIDDEFORD

## Planning and Development Department

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### **Planning Board – Staff Report**

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director / City Planner

DATE: November 8, 2023

RE: **Accessory Dwelling Unit (ADU) Ordinance Amendment: City Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) and Table A “Table of Land Uses” – Second Hearing.**

MEETING DATE: November 15, 2023

#### 1. Overview:

This item was last discussed with the Planning Board at the 11-1-2023 regular Board meeting. At that time the Board was in favor of forwarding a positive recommendation to the City Council to adopt the proposed Ordinance Amendment. At this time Staff is seeking the Board approve the second reading of the amendment with a positive recommendation for Council adoption. The City's Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs), and “Table A – Table of Land Uses” both currently prohibit accessory structures from locating within the Coastal Residential (CR) Zoning District. To comply with State Law LD 2003, Staff is proposing the following Ordinance Amendments:

- A. Modify Table of Land Uses to add “P” which stands for “Permitted” within the Coastal Residential (CR) column, for Accessory Dwelling Unit row.
- B. Amend the City's Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) to modify Section B.1.a. Text deletions are illustrated in ~~Red strike thru~~ and text additions are shown in Blue Underline.

#### ***B. Procedural requirements.***

##### ***1. Review procedure:***

***a. One ADU is permitted per residentially zoned parcel (See Article V, Table A, Table of Land Uses.), except within the ~~Coastal Residential (CR) Zone, including the RP and LR~~ overlay districts ~~within the CR Zone, where ADUs are not permitted~~... ADUs are also permitted on nonresidentially zoned parcels containing a single nonconforming (as to use) dwelling unit which was in existence as of***

**Accessory Dwelling Unit (ADU) Ordinance Amendment: City Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) and Table A “Table of Land Uses”.**

**Planning Board Hearing Date: November 15, 2023 – Second Hearing**

*January 1, 2017. All ADUs shall comply with standards contained within Article XIV – Shoreland Zoning Ordinance. A permit for an ADU may be issued by the Code Enforcement Office so long as all of the standards in this section are met.*

Below is a link to the City’s existing Accessory Dwelling Unit (ADU) Ordinance.

<https://ecode360.com/32261933#32261933>

Attached proposed amendment to Table A, to list ADU’s as a “Permitted” use. Also attached is Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) illustrating the proposed Ordinance modifications to Section B.1.a. within the context of the entire Ordinance. Text deletions are illustrated in ~~Red strike-thru~~ and text additions are shown in Blue Underline.

**Staff Recommendation:**

Staff requests that the Planning Board forward a positive recommendation for adoption of this amendment to the City Council to bring this Ordinance into compliance with LD2003.

**ATTACHMENTS**

1. Attachment # 1: Amendment to Table A, to list ADU’s as a “Permitted” use in the Coastal residential (CR) zoning district and to allow duplexes as a “Conditional Use” within the Coastal Residential (CR) zoning district.
2. Attachment #2: Article VI – Performance Standards, Section 78 – Accessory Dwelling Units (ADUs) with proposed Ordinance modifications to Section B.1.a. within the context of the entire Ordinance.



## City Council

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**Meeting Date:** November 21, 2023

**Meeting Time:** 6:00 pm

**Agenda Item No:** 10.k.

**Item Description:** 2023.145) Amend/Code of Ordinances, Part III: Land Development Regulations, Amendment to Table A "Table of Land Uses" allow adult use marijuana retail sales within the City's I-1, I-2 and I-3 zoning districts as Conditional Use.

**Submitted by:** David C.M. Galbraith, Acting Planning & Development Director / City Planner

**Supporting Information/Documentation:**

1. City Council Order
2. Section 11 – Establishment of Zones, V Table A – to allow adult use marijuana retail sales within the City's I-1, I-2 and I-3 zoning districts as a "Conditional Use" as represented on Table A as "C".
3. Staff Memo to the Planning Board outlining the amendments.

**Key Term:**

Adult Use Marijuana / Cannabis: Means cannabis / marijuana that has been cultivated, manufactured, distributed, or sold by a licensed cannabis establishment to individuals over the age of 21 for recreational use.

**Executive Summary:**

This proposed Ordinance amendment would modify the City's Table of Land Uses – Table A allow adult use marijuana retail sales within the City's I-1, I-2 and I3 zoning districts as a Conditional Use.

**Detailed Review:**

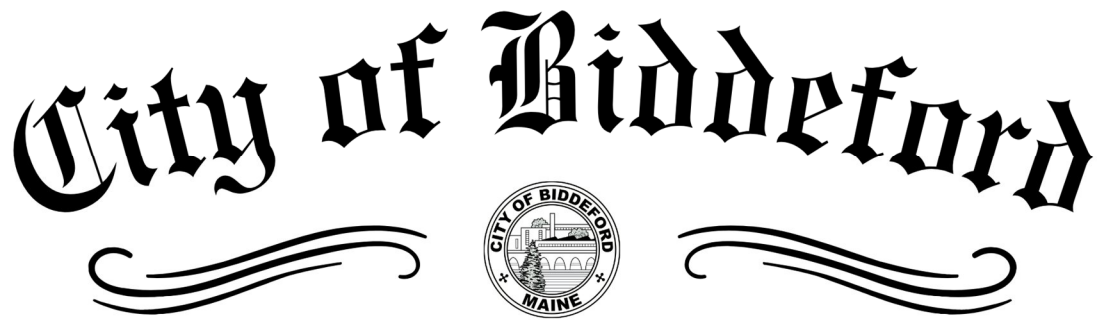
The City Table of Land Uses – Table A currently lists adult use marijuana retail sales as a specified land use, however, the use is currently not allowed within any of the City's zoning districts. The proposed amendment would allow adult use marijuana sales, as a "conditional use" within the City's I-1, I-2 and I-3 zoning districts where other marijuana uses are allowed to be located. Table A is attached with text changes shown as [blue underline](#).

**Funding Source:**

Not applicable.

**Planning Board / Staff Recommendation:**

The proposed Amendment is being forwarded to the City Council, from the Planning Board, with a recommendation for adoption as written.

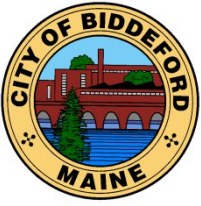


**2023.145**

**IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023**

**BE IT ORDAINED**, by the City Council of the City of Biddeford, that the City's Code of Ordinances, Part III: Land Development Regulations, Article V – Establishment of Zones, Table A-Table of Land Uses, be amended to allow adult use marijuana retail sales within the City's I-1, I-2 and I3 zoning districts as Conditional Uses as indicated by "C".

**Attest by:**\_\_\_\_\_



# CITY OF BIDDEFORD

## Planning and Development Department

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### **Planning Board – Staff Report**

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director / City Planner

DATE: November 8, 2023

**RE: Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments Odor Complaints and Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts – SECOND READING**

MEETING DATE: November 15, 2023

#### **Overview:**

This item was last discussed with the Planning Board at the 11-1-2023 regular Board meeting. At that time the Board was in favor of forwarding a positive recommendation to the City Council to adopt the proposed Ordinance Amendment. At this time Staff is seeking the Board approve the second reading of the amendment with a positive recommendation for Council adoption.

This issue involves two (2) Zoning Ordinance text amendments, namely:

- 1.** An amendment to Table A “Table of Land Uses” to allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts. Table A currently lists “Marijuana store, adult use” within Table A, however the Table does not permit the use within any zoning District.
- 2.** Zoning Ordinance text amendments to Article VI – Performance Standards, Section 77 – Marijuana Establishments which would establish formal procedures related to odor complaints with the operations of marijuana related businesses.

The issue of adult use marijuana retail sales was discussed at the City’s Policy Committee September 25, 2023, and subsequent forwarded, by the Council to the Planning Board for review. The detailed review provided to the Policy Committee is below:



## **Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations**

- 1. Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts.**
- 2. Article VI – Performance Standards, Section 77 – Marijuana Establishments - Odor Complaints and Enforcement.**

### **Planning Board Meeting: November 15, 2023 □ SECOND READING**

#### **Detailed Review:**

Maine law allows the delivery of adult use marijuana in Biddeford. This amendment would allow adult use stores in in zones where medical use stores are currently allowed. Biddeford does have a 500’ setback for new establishments. Existing establishments may transition to adult use and this setback would not apply.

Permitting adult use storefronts in these zones made sense to staff because we have had zero issues with medical marijuana sales and existing marijuana businesses have not expressed concerns with the locations.

Expanding the sale of adult use sales to other zones, may create economical differences in the price per square foot for rental space or the sale of property. In the very beginning of Marijuana operations in Maine, many communities saw a spike in the rental price for space because, operators were paying over the average price to set up locations. Permitting adult use to existing zones where medical marijuana is currently allowed, would not reintroduce the economic differences in other zoning districts.

This amendment will require Planning Board approval prior to council action

This issue relates to the State law which allows adult use marijuana to be delivered within the City limits. Although other marijuana related uses are allowed within the city, they are all limited to the City’s I-1, I-2 and I-3 zoning districts. Adult use retail sales are currently not permitted in any zoning district. However, Table A of the City’s “Table of Land Uses” lists “Marijuana store, adult use” although it is currently not permitted within any district as the Table row does not list the use as permitted, as shown with a “P” or even as a “Conditional Use” as identified within the Table by a “C”.

As discussed above, the proposal to allow adult use marijuana retail sales would be limited to the City’s I-1, I-2 and I-3 zoning districts only, and the proposal is to amend Table A “Table of Land Uses” to make the use “Conditional” which would require Planning Board review and approval. Each proposal would be evaluated on the merits of such and impacts to the community and surrounding neighborhoods. Attached is Table A “Table of Land Uses” including the use as “C” for “Conditional Use”.

The second marijuana related Zoning Ordinance text amendment relates to Article VI – Performance Standards, Section 77 – Marijuana Establishments. This text amendment would establish formal performance standards related to odor complaints, of all marijuana related businesses. Past practice has been that the Planning Board has adopted the same, or similar, Conditions of Approval (COA) on most marijuana related businesses. However, the below text amendment would formally adopt the regulations into the City’s Land Use Ordinance to standardize the rules for enforcing odor complaints. The proposed text a new section on the ordinance and would be added to the end of the existing ordinance. The new text is shown below and is highlighted in blue and underlined. There are no proposed text deletions.

## **Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations**

- 1. Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts.**
- 2. Article VI – Performance Standards, Section 77 – Marijuana Establishments - Odor Complaints and Enforcement.**

### **Planning Board Meeting: November 15, 2023 □ SECOND READING**

D. Odor Disobedience Process. Any licensed operator who receives multiple, legitimate complaints for the cannabis odor emitted by their business, may be unable to renew their business license, and therefore also may become unable to operate within the City of Biddeford.

- a) First complaint - The office of code enforcement will review the complaint, and current odor abatement plan. The Operator will have 30 days to address the problem and come up with a solution. After which they will have another 60 days to fix the issue(s).
- b) After these initial 90 days the business should stay complaint free. If another complaint is made they will have another 90 days to address and fix the issue.
- c) If three complaints are made throughout the licensed year, the operator will need to update their odor abatement plan, go through the site plan review process, and may not be granted a renewed license.
- d) If the operator's license is up for renewal within the 90 days of a complaint the city may offer an extension or temporary license to allow for proper reconditioning of the odor abatement system.

Below is a link to the City’s existing Marijuana Establishments Ordinance.

<https://ecode360.com/31970024#31970024>

### **Staff Recommendations:**

These amendments need to be voted upon independently as they relate to two (2) separate marijuana amendments, namely, “Adult Use” retail sales and the regulation of odor complaints and enforcement actions. Staff requests that the Planning Board forward a positive recommendation for adoption of both of the proposed amendments to the City Council to formally adopt:

### **SAMPLE MOTION #1 □ Table A:**

- A. Motion to Approve: I motion to APPROVE the proposed Amendments to Code of Ordinances, Part III: Land Development Regulations, Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I-3 zoning districts, as a “Conditional Use”, as written.
- B. Motion to Deny I motion to DENY the proposed Amendments to Code of Ordinances, Part III: Land Development Regulations, Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I-3 zoning districts, as a “Conditional Use”, for the following reasons:
  - 1) \_\_\_\_\_.
  - 2) \_\_\_\_\_.
  - 3) \_\_\_\_\_.
- C. Motion to Table: I motion to TABLE the proposed Amendments to Code of Ordinances, Part III: Land Development Regulations, Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I-3 zoning districts, as a “Conditional Use”, for the following reasons:
  - 1) \_\_\_\_\_.
  - 2) \_\_\_\_\_.
  - 3) \_\_\_\_\_.

**Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations**

- 1. Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts.**
- 2. Article VI – Performance Standards, Section 77 – Marijuana Establishments - Odor Complaints and Enforcement.**

**Planning Board Meeting: November 15, 2023 – SECOND READING**

**SAMPLE MOTION #2 – Marijuana Odor Complaints:**

Amendments to Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City’s Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City.

A. Motion to Approve: I motion to APPROVE the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City’s Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City, as written and proposed.

B. Motion to Deny: I motion to DENY the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City’s Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City, for the following reasons:

- 1) \_\_\_\_\_.
- 2) \_\_\_\_\_.
- 3) \_\_\_\_\_.

C. Motion to Table: I motion to TABLE the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City’s Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City, for the following reasons

- 1) \_\_\_\_\_.
- 2) \_\_\_\_\_.
- 3) \_\_\_\_\_.

**ATTACHMENTS**

1. Attachment # 1: Table A “Table of Land Uses” including “Marijuana store, adult use” as Conditional Uses (“C”) within the City’s I-1, I-2 and I-3 zoning districts, including the Use as “C” for “Conditional Use”.
2. Attachment #2: Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments including proposed amendments.

|   | A                                         | B                            | C    | D  | E     | F     | G   | H   | I   | J   | K   | L   | M   | N   | O   | P   | Q   | R    | S | T  | U  | V      | W      | X      |
|---|-------------------------------------------|------------------------------|------|----|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|---|----|----|--------|--------|--------|
| 1 | MARIJUANA USE CLASSIFICATIONS             | Table A - Table of Land Uses |      |    |       |       |     |     |     |     |     |     |     |     |     |     |     |      |   |    |    |        |        |        |
| 2 |                                           | Article 5 Section            | SR-1 | CR | R-1-A | R-1-B | R-2 | R-3 | B-1 | B-2 | I-1 | I-2 | I-3 | W-1 | W-2 | W-3 | R-F | LR-F | M | IN | OR | MSRD-1 | MSRD-2 | MSRD-3 |
| 3 | Marijuana Caregiver Retail Store          | 77                           |      |    |       |       |     |     |     |     | C   | C   | C   |     |     |     |     |      |   |    |    |        |        |        |
| 4 | Marijuana Store, Adult Use                | 77                           |      |    |       |       |     |     |     |     | C   | C   | C   |     |     |     |     |      |   |    |    |        |        |        |
| 5 | Marijuana Cultivation Facility            | 77                           |      |    |       |       |     |     |     |     | C   | C   | C   |     |     |     |     |      |   |    |    |        |        |        |
| 6 | Marijuana Testing Facility                | 77                           |      |    |       |       |     |     |     |     | C   | C   | C   |     |     |     |     |      |   |    |    |        |        |        |
| 7 | Marijuana Products Manufacturing Facility | 77                           |      |    |       |       |     |     |     |     | C   | C   | C   |     |     |     |     |      |   |    |    |        |        |        |



## City Council

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**Meeting Date:** November 21, 2023

**Meeting Time:** 6:00 pm

**Agenda Item No:** 10.I

**Item Description:** 2023.146) Amendment/Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments - Odor Disobedience Process.

**Submitted by:** David C.M. Galbraith, Acting Planning & Development Director / City Planner

**Supporting Information/Documentation:**

1. City Council Order
2. Section 77 – Marijuana Establishments – Proposed Odor Disobedience Process
3. Staff Memo to the Planning Board outlining the amendments.

**Key Term:**

N/A

**Executive Summary:**

This proposed Ordinance amendment would modify Section 77 – Marijuana Establishments by establishing an “Odor Disobedience Process”.

**Detailed Review:**

The City Code Office is responsible for responding to odor complaints and the proposed text amendment would establish formal performance standards related to odor complaints, of all marijuana related businesses. Past practice has been that the Planning Board has adopted the same, or similar, Conditions of Approval (COA) on most marijuana related businesses. However, the below text amendment would formally adopt the regulations into the City's Land Use Ordinance to standardize the rules for enforcing odor complaints. The proposed text a new section on the ordinance and would be added to the end of the existing ordinance. The new text is shown below and is highlighted in blue and underlined. There are no proposed text deletions.

D. Odor Disobedience Process. Any licensed operator who receives multiple, legitimate complaints for the cannabis odor emitted by their business, may be unable to renew their business license, and therefore also may become unable to operate within the City of Biddeford.

- a) First complaint - The office of code enforcement will review the complaint, and current odor abatement plan. The Operator will have 30 days to address the problem and come up with a solution. After which they will have another 60 days to fix the issue(s).
- b) After these initial 90 days the business should stay complaint free. If another complaint is made they will have another 90 days to address and fix the issue.
- c) If three complaints are made throughout the licensed year, the operator will need to update their odor abatement plan, go through the site plan review process, and may not be granted a renewed license.
- d) If the operator's license is up for renewal within the 90 days of a complaint the city may offer an extension or temporary license to allow for proper reconditioning of the odor abatement system.



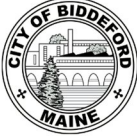
**Funding Source:**

Not applicable.

**Planning Board / Staff Recommendation:**

The proposed Amendment is being forwarded to the City Council, from the Planning Board, with a recommendation for adoption as written.

# City of Biddeford



2023.146

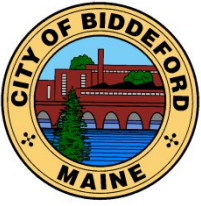
IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023

**BE IT ORDAINED**, by the City Council of the City of Biddeford, that the Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments be amended to include new item “D” – *Odor Disobedience Process* to formalize the handling of marijuana odor complaints by adding text as follows:

D. Odor Disobedience Process. Any licensed operator who receives multiple, legitimate complaints for the cannabis odor emitted by their business, may be unable to renew their business license, and therefore also may become unable to operate within the City of Biddeford.

- a) First complaint - The office of code enforcement will review the complaint, and current odor abatement plan. The Operator will have 30 days to address the problem and come up with a solution. After which they will have another 60 days to fix the issue(s).
- b) After these initial 90 days the business should stay complaint free. If another complaint is made they will have another 90 days to address and fix the issue.
- c) If three complaints are made throughout the licensed year, the operator will need to update their odor abatement plan, go through the site plan review process, and may not be granted a renewed license.
- d) If the operator's license is up for renewal within the 90 days of a complaint the city may offer an extension or temporary license to allow for proper reconditioning of the odor abatement system.

Attest by: \_\_\_\_\_



# CITY OF BIDDEFORD

## Planning and Development Department

David C.M. Galbraith  
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P.O. Box 586  
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[David.Galbraith@biddefordmaine.org](mailto:David.Galbraith@biddefordmaine.org)

### **Planning Board – Staff Report**

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director / City Planner

DATE: November 8, 2023

**RE: Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments Odor Complaints and Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts – SECOND READING**

MEETING DATE: November 15, 2023

#### **Overview:**

This item was last discussed with the Planning Board at the 11-1-2023 regular Board meeting. At that time the Board was in favor of forwarding a positive recommendation to the City Council to adopt the proposed Ordinance Amendment. At this time Staff is seeking the Board approve the second reading of the amendment with a positive recommendation for Council adoption.

This issue involves two (2) Zoning Ordinance text amendments, namely:

- 1.** An amendment to Table A “Table of Land Uses” to allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts. Table A currently lists “Marijuana store, adult use” within Table A, however the Table does not permit the use within any zoning District.
- 2.** Zoning Ordinance text amendments to Article VI – Performance Standards, Section 77 – Marijuana Establishments which would establish formal procedures related to odor complaints with the operations of marijuana related businesses.

The issue of adult use marijuana retail sales was discussed at the City’s Policy Committee September 25, 2023, and subsequent forwarded, by the Council to the Planning Board for review. The detailed review provided to the Policy Committee is below:

## **Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations**

- 1. Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts.**
- 2. Article VI – Performance Standards, Section 77 – Marijuana Establishments - Odor Complaints and Enforcement.**

### **Planning Board Meeting: November 15, 2023 □ SECOND READING**

#### **Detailed Review:**

Maine law allows the delivery of adult use marijuana in Biddeford. This amendment would allow adult use stores in in zones where medical use stores are currently allowed. Biddeford does have a 500’ setback for new establishments. Existing establishments may transition to adult use and this setback would not apply.

Permitting adult use storefronts in these zones made sense to staff because we have had zero issues with medical marijuana sales and existing marijuana businesses have not expressed concerns with the locations.

Expanding the sale of adult use sales to other zones, may create economical differences in the price per square foot for rental space or the sale of property. In the very beginning of Marijuana operations in Maine, many communities saw a spike in the rental price for space because, operators were paying over the average price to set up locations. Permitting adult use to existing zones where medical marijuana is currently allowed, would not reintroduce the economic differences in other zoning districts.

This amendment will require Planning Board approval prior to council action

This issue relates to the State law which allows adult use marijuana to be delivered within the City limits. Although other marijuana related uses are allowed within the city, they are all limited to the City’s I-1, I-2 and I-3 zoning districts. Adult use retail sales are currently not permitted in any zoning district. However, Table A of the City’s “Table of Land Uses” lists “Marijuana store, adult use” although it is currently not permitted within any district as the Table row does not list the use as permitted, as shown with a “P” or even as a “Conditional Use” as identified within the Table by a “C”.

As discussed above, the proposal to allow adult use marijuana retail sales would be limited to the City’s I-1, I-2 and I-3 zoning districts only, and the proposal is to amend Table A “Table of Land Uses” to make the use “Conditional” which would require Planning Board review and approval. Each proposal would be evaluated on the merits of such and impacts to the community and surrounding neighborhoods. Attached is Table A “Table of Land Uses” including the use as “C” for “Conditional Use”.

The second marijuana related Zoning Ordinance text amendment relates to Article VI – Performance Standards, Section 77 – Marijuana Establishments. This text amendment would establish formal performance standards related to odor complaints, of all marijuana related businesses. Past practice has been that the Planning Board has adopted the same, or similar, Conditions of Approval (COA) on most marijuana related businesses. However, the below text amendment would formally adopt the regulations into the City’s Land Use Ordinance to standardize the rules for enforcing odor complaints. The proposed text a new section on the ordinance and would be added to the end of the existing ordinance. The new text is shown below and is highlighted in blue and underlined. There are no proposed text deletions.

## Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations

1. Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts.
2. Article VI – Performance Standards, Section 77 – Marijuana Establishments - Odor Complaints and Enforcement.

### Planning Board Meeting: November 15, 2023 ☐ **SECOND READING**

D. Odor Disobedience Process. Any licensed operator who receives multiple, legitimate complaints for the cannabis odor emitted by their business, may be unable to renew their business license, and therefore also may become unable to operate within the City of Biddeford.

- a) First complaint - The office of code enforcement will review the complaint, and current odor abatement plan. The Operator will have 30 days to address the problem and come up with a solution. After which they will have another 60 days to fix the issue(s).
- b) After these initial 90 days the business should stay complaint free. If another complaint is made they will have another 90 days to address and fix the issue.
- c) If three complaints are made throughout the licensed year, the operator will need to update their odor abatement plan, go through the site plan review process, and may not be granted a renewed license.
- d) If the operator's license is up for renewal within the 90 days of a complaint the city may offer an extension or temporary license to allow for proper reconditioning of the odor abatement system.

Below is a link to the City’s existing Marijuana Establishments Ordinance.

<https://ecode360.com/31970024#31970024>

### **Staff Recommendations:**

These amendments need to be voted upon independently as they relate to two (2) separate marijuana amendments, namely, “Adult Use” retail sales and the regulation of odor complaints and enforcement actions. Staff requests that the Planning Board forward a positive recommendation for adoption of both of the proposed amendments to the City Council to formally adopt:

### **SAMPLE MOTION #1** ☐ **Table A:**

- A. Motion to Approve: I motion to APPROVE the proposed Amendments to Code of Ordinances, Part III: Land Development Regulations, Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I-3 zoning districts, as a “Conditional Use”, as written.
- B. Motion to Deny I motion to DENY the proposed Amendments to Code of Ordinances, Part III: Land Development Regulations, Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I-3 zoning districts, as a “Conditional Use”, for the following reasons:
  - 1) \_\_\_\_\_.
  - 2) \_\_\_\_\_.
  - 3) \_\_\_\_\_.
- C. Motion to Table: I motion to TABLE the proposed Amendments to Code of Ordinances, Part III: Land Development Regulations, Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I-3 zoning districts, as a “Conditional Use”, for the following reasons:
  - 1) \_\_\_\_\_.
  - 2) \_\_\_\_\_.
  - 3) \_\_\_\_\_.



**Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations**

- 1. Amendment to Table A “Table of Land Uses” allow adult use marijuana retail sales within the City’s I-1, I-2 and I3 zoning districts.**
- 2. Article VI – Performance Standards, Section 77 – Marijuana Establishments - Odor Complaints and Enforcement.**

**Planning Board Meeting: November 15, 2023 – SECOND READING**

**SAMPLE MOTION #2 – Marijuana Odor Complaints:**

Amendments to Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City’s Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City.

A. Motion to Approve: I motion to APPROVE the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City’s Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City, as written and proposed.

B. Motion to Deny: I motion to DENY the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City’s Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City, for the following reasons:

- 1) \_\_\_\_\_.
- 2) \_\_\_\_\_.
- 3) \_\_\_\_\_.

C. Motion to Table: I motion to TABLE the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City’s Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City, for the following reasons

- 1) \_\_\_\_\_.
- 2) \_\_\_\_\_.
- 3) \_\_\_\_\_.

**ATTACHMENTS**

1. Attachment # 1: Table A “Table of Land Uses” including “Marijuana store, adult use” as Conditional Uses (“C”) within the City’s I-1, I-2 and I-3 zoning districts, including the Use as “C” for “Conditional Use”.
2. Attachment #2: Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments including proposed amendments.

# Article VI. Performance Standards

## Section 77. Marijuana establishments.

### **DRAFT ORDINANCE AMENDMENTS**

**Planning Board Review: November 15, 2023 – SECOND READING**

Article VI. Performance Standards

Section 77. Marijuana establishments.

[Added 1-17-2017 by Ord. No. 2016.88; amended 1-19-2021 by Ord. No. 2021.1]

- A. All marijuana establishments shall be located indoors. Any common areas, including, but not limited to, storage areas and building facilities, shared with another marijuana establishment shall be clearly identified as such on the site plan or conditional use application.
- B. Odor management. For all marijuana establishments, the odor of marijuana shall not be detectable off-premises, meaning not detectable on any property that is not under the control of the establishment. To prevent and control marijuana odors, an odor control plan shall be submitted as part of the site plan application describing the odor(s) originating or anticipated to originate at the premises and the control technologies to be used to prevent such odor(s) from leaving the premises. The odor control plan shall, at a minimum, include the following:
1. A facility floor plan that identifies the locations of all odor-emitting activities and sources. The plan shall also identify the location of doors, windows, vents, HVAC systems, odor control systems and other relevant information.
  2. A list of specific odor-emitting activities and sources, and a description of the processes that will take place at the facility, including, but not limited to, vegetative flowering, processing and storage.
  3. For each odor-emitting activity or source, a description of the administrative procedures as well as the engineering processes, technologies, and equipment the facility will use.
    - a. Administrative controls shall include, at a minimum: management practices to isolate odor activities and sources, use of standard operating procedures, employee training, regular equipment inspections and maintenance of inspection logs.
    - b. Engineering controls shall include, at a minimum, building design features; use of equipment and technology to address each specific odor-emitting activity or source; a systems and equipment maintenance and replacement schedule; and evidence that proposed equipment and technology are sufficiently capable and appropriately sized consistent with marijuana industry best practices for control technologies designed to effectively mitigate odors.

Marijuana establishments shall implement appropriate ventilation and filtration systems to satisfy the odor standard contained herein. While the City does not mandate any particular equipment specifications with regard to filtration, all marijuana establishments are strongly encouraged to adopt best management practices with regard to implementing state-of-the-art technologies in mitigating marijuana odor, such as air scrubbers and charcoal filtration systems.

# Article VI. Performance Standards

## Section 77. Marijuana establishments.

### DRAFT ORDINANCE AMENDMENTS

#### Planning Board Review: November 15, 2023 – SECOND READING

- c. Noxious gases and fumes. Marijuana establishments shall have appropriate ventilation systems to mitigate noxious gases or other fumes used or created as part of the establishment. Gases or fumes shall not extend beyond the premises of any establishment, meaning not detectable on any property that is not under the control of the establishment.
  - d. Sufficient measures and means of preventing smoke, debris, dust, fluids and other substances from exiting a marijuana establishment shall be provided at all times.
  - e. All marijuana and marijuana by-products intended for disposal shall be stored indoors in a self-contained room that is intended solely for this purpose and in accordance with all applicable federal, state and local laws and regulations. When moving material from the self-contained storage room for disposal, marijuana and marijuana by-products shall be moved only in receptacles with a cover or lid. Security cameras shall be installed to record activities in the area of the storage room as well the areas between the storage room and where said material is loaded onto vehicle(s) for disposal.
- C. Separation of marijuana establishments. No new marijuana establishment may be located within any building that is located within 500 feet of any other building containing a marijuana establishment.
- D. Odor Disobedience Process. Any licensed operator who receives multiple, legitimate complaints for the cannabis odor emitted by their business, may be unable to renew their business license, and therefore also may become unable to operate within the City of Biddeford.
- a) First complaint - The office of code enforcement will review the complaint, and current odor abatement plan. The Operator will have 30 days to address the problem and come up with a solution. After which they will have another 60 days to fix the issue(s).
  - b) After these initial 90 days the business should stay complaint free. If another complaint is made they will have another 90 days to address and fix the issue.
  - c) If three complaints are made throughout the licensed year, the operator will need to update their odor abatement plan, go through the site plan review process, and may not be granted a renewed license.
  - d) If the operator's license is up for renewal within the 90 days of a complaint the city may offer an extension or temporary license to allow for proper reconditioning of the odor abatement system.



## City Council

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**Meeting Date:** November 21, 2023

**Meeting Time:** 6:00 pm

**Agenda Item No:** 10.m.

**Item Description:** 2023.147) Approval/Density Bonus Ordinance - Amendment to the City's Code of Ordinances, Part III: Land Development Regulations, Table B "Dimensional Requirements" to allow high densities within the downtown.

**Submitted by:** David C.M. Galbraith, Acting Planning & Development Director / City Planner

**Supporting Information/Documentation:**

1. City Council Order
2. Table B with proposed amendments with in-line text amendments
3. Staff Memo to the Planning Board outlining the amendments.

**Key Terms:**

N/A

**Executive Summary:**

The purpose of the proposed Ordinance amendment would allow higher housing densities for Low/Moderate Income housing projects in close within the downtown and existing services, in the R-1-A, R-1-B, R-2, R-3, OR, and MSRD-2 Zoning Districts.

**Detailed Review:**

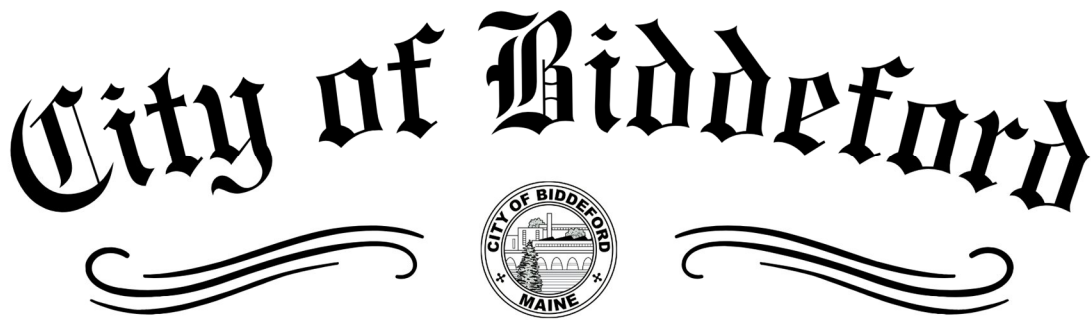
The purpose of the proposed Ordinance amendment would allow higher housing densities for Low/Moderate Income housing projects, within the downtown and existing services, within the R-1-A, R-1-B, R-2, R-3, OR, and MSRD-2 Zoning Districts. A copy of the proposed amendments is attached. It should be noted that the proposed amendments are located within Table B "Dimensional Requirements" and modifies only Item # B, items 1-3. The only exception would be further modifying the original numbering, following the proposed amendment, so that the item that was formerly #2 now changes to #4, and following sections would progress in sequential order. This document includes deleted text in ~~red strikethrough~~ or added text as blue underlined and is proposed to be adopted as written.

**Funding Source:**

Not applicable.

**Planning Board / Staff Recommendation:**

The proposed Density Bonus Ordinance is another land use tool, recommended for adoption by City Staff and the Planning Board, as it seeks to increase the City's supply of housing and in particular low/moderate income housing. The Planning Board forwarded the proposed text amendments to the City Council, as written, with a recommendation for adoption. This is the first reading of this item.



2023.147

IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023

**BE IT ORDAINED**, by the City Council of the City of Biddeford, that the Code of Ordinances, Part III: Land Development Regulations, Article V – Dimensional Requirements, NOTES for Table B, Item B be amended by amending B.1.a. and B.1.c., adding a new B.2.a and B.2.b, adding a new B.3., and renumbering existing B.2. to B.4 by adding and ~~deleting~~ text as follows:

- B. In order to promote condominium forms of housing and affordable housing in close proximity to downtown and services, in the R-1-A, R-1-B, R-2, R-3, OR, and MSRD-2 Zoning Districts, the density requirements may be relaxed as follows:
1. Redevelopment of existing structures:
    - a. The Planning Board, or other appropriate approval authority, shall consider granting a density bonus of one residential unit for every ~~650~~ 500 square feet of living space within an existing structure, excluding unfinished basement areas, provided the applicant presents redevelopment/renovation plans to the Code Enforcement Officer demonstrating how the redevelopment project will result in the number of residential units with two or more bedrooms being at least, if not more than, the number of units with two or more bedrooms before the density bonus was granted.
    - b. If the project is provided a density bonus, the Code Enforcement Officer shall document the allowable density and number of units, in writing, for the Code Enforcement Office files.
    - c. An applicant provided a density bonus for rental housing shall enter into a thirty (30) year contractual agreement with the City of Biddeford requiring that at least 30% of the additional units created shall be leased such that they do not exceed 70% of the fair market rent (FMR) per bedroom size, as established annually by the U.S. Department of Housing and Urban Development (HUD). The contractual agreement shall be recorded at the York County Registry of Deeds, a copy of which shall be provided to the Code Enforcement Office prior to the issuance of any building permits. Rent-restricted units will be annually monitored by the Planning and Development Department for contract compliance.

2. Density Bonus Review Process: Expansions of low/moderate income (LMI) projects shall be reviewed as followed:



- a. Where expansions of affordable housing units under this provision are being utilized, up to a maximum of eight (8) or less units being created, shall be reviewed and approved by the City's Staff Review Committee (SRC). Projects exceeding eight (8) units shall be reviewed by the Planning Board for Site Plan and Subdivision review.
  - b. Parking standards for affordable housing projects of this nature, shall provide a minimum of one parking space for every two (2) low/moderate income (LMI) housing units created. For units exceeding the low/moderate income (LMI) threshold, parking shall be provided as required within the City's parking standards.
3. Vacant Land Development: For vacant lots located within the R-1-A, R-1-B, R-2, R-3, OR, and MSRD-2 Zoning Districts, utilizing the density bonus standards within Section B, for low/moderate income (LMI) housing developments, may increase the base density by 2.5% of the particular zoning district where the lot is located.
- ~~24~~. Condominium conversions/development:

**Attest by:**\_\_\_\_\_

ESTABLISHMENT OF ZONES  
V Attachment 2  
City of Biddeford  
Table B

Updated 11/21/23  
3:40 pm

DRAFT Amendments – Density Bonus Ordinance  
Planning Board Public Hearing: November 1, 2023

BIDDEFORD CODE NOTES for Table B:

N/A: Not allowed.

\* A new structure may be permitted to be built with less than the required setback, provided that the following are met:

1. The setback will be equal to the average front yard setback of the existing houses on the immediately adjacent lots; and
2. The setback shall be at least 15 feet; and
3. These provisions shall apply only along existing residential streets which were developed prior to the enactment of the present front yard setback requirements.

\*\* The Building Inspector may allow a lessening of setback requirement for access structures, as necessary, to facilitate reasonable handicapped accessibility. This provision shall apply to existing structures only. Any access structure built under this provision shall be temporary to facilitate the handicapped or disabled occupant and shall be removed when no longer needed.

+ Maximum height is exclusive of chimneys, antennae, and roof-mounted, building-integrated, building-mounted or architectural wind systems when attached to a structure. Chimneys and antennae shall not be higher than 12 feet above the structure. Roof-mounted, building-integrated, building-mounted or architectural wind systems shall not be higher than 15 feet above the maximum allowed building height in the zone.

A. Minimum land area per dwelling unit.

B. In order to promote condominium forms of housing and affordable housing in close proximity to downtown and services, in the R-1-A, R-1-B, R-2, R-3, OR, and MSRD-2 Zoning Districts, the density requirements may be relaxed as follows:

1. Redevelopment of existing structures:

- a. The Planning Board, or other appropriate approval authority, shall consider granting a density bonus of one residential unit for every 500 square feet of gross building living space floor area, excluding unfinished basements, within an existing structure, provided the applicant presents redevelopment/renovation plans to the Code Enforcement Officer demonstrating how the redevelopment project will result in the number of residential units with two or more bedrooms being at least, if not more than, the number of units with two or more bedrooms before the density bonus was granted.
- b. If the project is provided a density bonus, the Code Enforcement Officer shall document the allowable density and number of units, in writing, for the Code Enforcement Office files.

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- c. An applicant provided a density bonus for rental housing shall enter into a thirty (30) year contractual agreement with the City of Biddeford requiring that at least ~~51%~~ 30% of the additional units created shall be leased such that they do not exceed ~~80%~~ 70% of the fair market rent (FMR) per bedroom size, as established annually by the U.S. Department of Housing and Urban Development (HUD). The contractual agreement shall be recorded at the York County Registry of Deeds, a copy of which shall be provided to the Code Enforcement Office prior to the issuance of any building permits. Rent-restricted units will be annually monitored by the Planning and Development Department for contract compliance.
  - d. For projects proposing to demolish and rebuild an existing building, the existing approved density, may be re-utilized within the redevelopment.
2. Density Bonus Review Process: Expansions of low/moderate income (LMI) projects shall be reviewed as followed:
- a. Where expansions of affordable housing units under this provision are being utilized, up to a maximum of eight (8) or less units being created, shall be reviewed and approved by the City's Staff Review Committee (SRC). Projects exceeding eight (8) units shall be reviewed by the Planning Board for Site Plan and Subdivision review.
  - b. Parking standards for affordable housing projects of this nature, shall provide a minimum of one parking space for every two (2) low/moderate income (LMI) housing units created. For units exceeding the low/moderate income (LMI) threshold, parking shall be provided as required within the City's parking standards.
3. Vacant Land Development: For vacant lots located within the R-1-A, R-1-B, R-2, R-3, OR, and MSRD-2 Zoning Districts, utilizing the density bonus standards within Section B, for low/moderate income (LMI) housing developments, may increase the base density by 2.5% of the particular zoning district where the lot is located.
4. The developer may elect to utilize either the 500 square feet of gross building living space floor area calculation outlined in Section 1A, or increasing the base density by 2.5%, as outlined in Section 3, providing it equates to more affordable housing being provided.
2. 5. Condominium conversions/development:
- a. A property may be proposed for redevelopment/renovation from apartments into condominiums in accordance with 1 above.
  - b. An applicant provided a density bonus for condominiums shall enter into a contractual agreement with the City of Biddeford obligating them to complete the project as condominiums to be offered for sale upon or before completion of the project in return for receiving the density bonus. The contractual agreement shall be recorded at the York County Registry of Deeds, a copy of which shall be provided to the Code Enforcement Office prior to the issuance of any building permits.

ESTABLISHMENT OF ZONES  
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- c. The applicant agrees that if the project is converted to condominiums, said units shall not be sold for a price that exceeds 125% of the York County median home price affordable to median-income households as set annually by HUD for the City of Biddeford.
- C. Applies only to dwelling units. All other uses shall have a minimum of 10,000 square feet.
- D. (Reserved)
- E. All buildings and structures shall be set back at least 50 feet from any zone in which residential dwellings are an allowed use, except as otherwise provided in this table.
- F. (Reserved)
- G. (Reserved)
- H. Roadside stands may be 10 feet from the major access road.
- I. This is the density limit for the expansion of existing residential dwelling units.
- J. Applies to all uses.
- K. Hospital height limit shall be 110 feet.
- L. Does not apply to cluster development.
- M. The number of accessory structures shall meet setback requirements; and shall be limited to no more than three per lot; and shall not exceed the height of the primary structure; and any plumbing, if necessary, shall be limited to a utility sink. Structures associated with bona fide working agricultural uses are not subject to these limits.
- N. Any use not serviced by a public water supply must show evidence that it is serviced by a potable water supply meeting minimum state standards for safe drinking water.
- O. Any residential structures in existence prior to December 20, 1990, may be expanded or added to as long as they meet minimum setbacks (from major access, 40 feet; from other streets, 25 feet; from side and rear property lines, 10 feet).
- P. The location of new or expanded buildings and structures including the replacement of existing buildings in the Institutional Zone shall conform to the approved Institutional Master Plan and the following dimensional standards:
  - 1. Maximum height. The maximum height of buildings in the Institutional Zone shall be 35 feet, 50 feet, or 65 feet depending upon in which building height subdistrict the building is located. The building height subdistricts and maximum building heights are shown on the Institutional Zone Subdistrict Map dated September 6, 2001, and described in boundary descriptions prepared by an independent registered land surveyor licensed to practice in the State of Maine which are made a part of this ordinance. Notwithstanding the maximum building height provision, the tallest point of any building

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or structure, including appurtenant structures, in the Institutional Zone shall not exceed 115 feet above sea level based upon the national geodetic vertical datum (NGVD), unless a higher elevation is mandated as part of a state or federal environmental approval or permit.

2. Minimum building setbacks from public streets. All buildings in the Institutional Zone shall conform to the following minimum setbacks from public streets:

- South side of Hills Beach Road from intersection with Old Pool Road east to a point 250 feet west of the zone boundary/property line: 25 feet.
- South side of Hills Beach Road from a point 250 feet west of the zone boundary/property line east to the zone boundary: 50 feet with a provision that it can be reduced to 25 feet if replacement buildings at the housing park are located further from the wetland.
- North side of Hills Beach Road from intersection with Old Pool Road east to the zone boundary: 50 feet.
- Both sides of Hills Beach Road from intersection with Old Pool Road west to the zone boundary at Route 9: 50 feet with a provision that it can be reduced to 25 feet when a Hills Beach bypass is built that conforms to the following standards and is approved as part of the Institutional Master Plan.
- Both sides of Old Pool Road: 50 feet.
- Both sides of Pool Road (Route 9): 50 feet.
- Both sides of Newtown Road: 40 feet.
- Both sides of the Hills Beach bypass road when built: 50 feet.

The reduced setback along the westerly portion of Hills Beach Road shall be effective only if a Hills Beach bypass road has been constructed that meets the following standards:

- a. The road shall be designed and located to allow traffic to Hills Beach to travel directly from Route 9 to the approximate vicinity of the intersection of Old Pool Road and Hills Beach Road without using campus roads.
- b. The intersection with Route 9 will be located at an appropriate location for this use.
- c. The road shall be designed as a limited access facility with not more than one curb cut on each side providing campus access through internal campus streets. These curb cuts shall be in addition to any intersections with public streets or roads.
- d. No buildings or parking lots shall have direct access to or from the bypass road.
- e. A landscaped street buffer shall be established as provided for in Section 43 of Article VI.



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3. Minimum building setback from the perimeter of the Institutional Zone. All buildings shall be setback a minimum of 50 feet from the external boundary of the Institutional Zone where such zone boundary abuts a Suburban Residential (SR-1), Coastal Residential (CR), or Rural-Farm (R-F) Zone. The area along the zone boundary shall be maintained as a landscaped buffer in accordance with the provisions of Article VI, Section 12.
4. Maximum lot coverage. The maximum lot coverage shall be as follows:
  - a. Within the area south of Route 9 and west of the Newtown Road: 10%.
  - b. Within the area South of Route 9 and east of the Newtown Road: 30%.
  - c. Within the area North of Route 9: No maximum except as provided for in 5, Restricted Development Areas.
- 5.-Restricted development areas. Within the areas identified as “No Build Zones” on the Institutional Zone Subdistrict Map dated September 6, 2001, and described in boundary descriptions prepared by an independent registered land surveyor licensed to practice in the State of Maine which are made a part of this ordinance, the following additional requirements shall apply:
  - a. No new buildings, parking, roads, or access drives shall be constructed except for the construction of a Hills Beach bypass road and connections to the bypass road from existing public streets.
  - b. Existing buildings, parking, roads, and access drives may be maintained and may be improved with Planning Board approval but may not be relocated or expanded except as provided for in a.
  - c. The existing student housing park located on the south side of the Hills Beach Road may be replaced with new low-impact academic or support facilities. Low impact is defined as meeting the following standards:
    - 1). The replacement has been approved as part of the institutional master plan.
    - 2). The total footprint area of all replacement buildings and structures shall not exceed 14,400 square feet.
    - 3). The amount of nonvegetated area after redevelopment shall be not more than the amount of nonvegetated area existing at the time of adoption of this provision.
    - 4). No buildings, structures, parking, or other impervious surfaces shall be located closer to any adjacent wetland or the external boundary of the Institutional Zone than the existing facilities being replaced and, where possible, the setback from wetlands shall be increased.
    - 5). The architectural design of the low-impact academic or support facilities shall be compatible with the adjacent residential character, consistent with the approved University

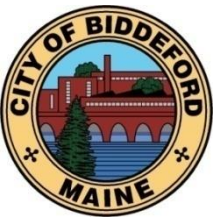
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Master Plan Architectural Design Standards, and shall be limited to a maximum height of 35 feet.

- ~~6.~~ 6. The low-impact academic or support facilities shall have no greater impact on the adjacent wetlands, than did the development existing at the time of the approval of the 2003-2007 Master Plan (approved May 7, 2003), as demonstrated by a wetlands delineation plan and stormwater management plan submitted as part of the application for site plan approval.
- ~~7.~~ 7. The low-impact academic or support facilities shall have no greater light intrusion, noise or traffic impact (both vehicular and pedestrian) on adjacent residential properties, than did the development existing on the site at the time of the approval of the 2003-2007 Master Plan (approved May 7, 2003), as demonstrated by a noise mitigation plan and traffic study submitted as part of the application for site plan approval.

- d. No new athletic fields or athletic facilities shall be constructed.
  - e. Existing athletic fields may be maintained and improved but may not be expanded. Improvements to the existing fields shall be limited to items such as fencing, buffering, portable grandstands, scoreboards, lighting, temporary rest room facilities, storage sheds with less than 300 square feet of floor area, and similar facilities.
  - f. The areas not currently used for athletic fields, parking or the student housing park shall be maintained as naturally vegetated areas and shall not be converted to lawns or other improved open space. Existing vegetation shall be maintained subject to sound management practices relative to cutting, thinning, pruning, and similar activities.
- Q. Existing nonconforming lots or structures may be considered for conversion to nonresidential uses allowed in the OR Zone, provided that neither structure nor lot are made more nonconforming as a result of the conversion.
- R. The setback may be reduced to the average of the lots immediately adjacent to the lot, as determined by the Code Enforcement Officer.
- S. The Building Inspector may allow a lessening of setback requirements, to no less than 10 feet, for utility buildings and structures to facilitate utility infrastructure improvements. Any such buildings or structures built under this provision shall be removed when no longer used for such necessary utility infrastructure.



# CITY OF BIDDEFORD

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## PLANNING DEPARTMENT

David C.M. Galbraith  
Deputy Director/City Planner  
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### Planning Board Memorandum

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Acting Planning Director / City Planner

DATE: November 8, 2023

RE: **Density Bonus Ordinance – Amendments to Table B “Dimensional Requirements”**

MEETING DATE: November 15, 2023

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#### 1. Amendment Overview:

This item was last discussed with the Planning Board at the 11-1-2023 regular Board meeting. At that time the Board was in favor of forwarding a positive recommendation to the City Council to adopt the proposed Ordinance Amendment. At this time Staff is seeking the Board approve the second reading of the amendment with a positive recommendation for Council adoption.

The purpose of the proposed Ordinance would allow higher housing densities for Low/Moderate Income housing projects in close proximity to downtown and services, in the R-1-A, R-1-B, R-2, R-3, OR, and MSRD-2 Zoning Districts. A copy of the proposed amendments are attached.

It should be noted that the proposed amendments are located within Table B “Dimensional Requirements” and modifies **only** Item # B, items 1-3, with the exception on modifying original numbering at #4 which was formerly #2, where the numbering progresses in sequential order.

#### Staff Recommendation:

Staff requests that the Planning Board forward a positive recommendation for adoption of this ordinance amendment to the City Council to bring this Ordinance into compliance with LD2003 and to provide additional incentives for low / moderate Income housing developments. This document includes deleted text in ~~red-strikethrough~~ or new text as blue underlined.

- A. Motion to Approve: I motion to APPROVE the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Amendments to Table B “Dimensional Requirements”, as written and proposed.
- B. Motion to Deny: I motion to DENY the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Amendments to Table B “Dimensional Requirements”, as written and proposed, for the following reasons:

1) \_\_\_\_\_.

MEETING: Planning Board Meeting  
TOPIC: Case # 2023.42 Frontage Reduction Ordinance Amendment / Draft Ordinance Language / Discussion Item  
MEETING DATE: September 20, 2023

- 2) \_\_\_\_\_.
- 3) \_\_\_\_\_.

C. Motion to Table: I motion to TABLE the proposed Amendments to the City’s Code of Ordinances, Part III: Land Development Regulations, Amendments to Table B “Dimensional Requirements”, for the following reasons:

- 1) \_\_\_\_\_.
- 2) \_\_\_\_\_.
- 3) \_\_\_\_\_.

ATTACHMENTS

- 1. Attachment # 1: Proposed – Density Bonus Ordinance - Amendments to Table B



## City Council

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**Meeting Date:** November 21, 2023

**Meeting Time:** 6:00 pm

**Agenda Item No:** 10.n.

**Item Description:** 2023.148) Approval/Amendment Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards; Add Section 40 – Inclusionary Zoning (IZ).

**Submitted by:** David C.M. Galbraith, Acting Planning & Development Director / City Planner

**Supporting Information/Documentation:**

1. City Council Order
2. Housing Task Force Order
3. Section 40 – Inclusionary Zoning Ordinance
4. Staff Memo to the Planning Board outlining the amendments.

**Key Term:**

N/A

**Executive Summary:**

The proposed Ordinance amendment proposes to create a new Ordinance, Section 40 – Inclusionary Zoning (IZ).

**Detailed Review:**

The City Council previously determined that it is in the public interest to promote an adequate supply of housing that is affordable to a range of households at different income levels. The purpose of this section is to offer incentives to developers to include units of affordable and workforce housing within development projects, thereby mitigating the impact of market rate housing construction, or the demonstrated increase in affordable housing needs resulting from the creation of new lower income jobs, on the limited supply of available land for suitable housing, and helping to meet the housing needs of all economic groups within the city. The City believes that this section will assist in meeting the City's comprehensive goals for affordable housing, in the prevention of overcrowding and deterioration of the limited supply of affordable housing, and by doing so promote the health, safety, and welfare of its citizens. The proposed Ordinance outlines the purpose of the IZ Ordinance and established specific criteria to allow for additional workforce housing. The new text is shown below and is highlighted in blue and underlined. There are no proposed text deletions. It should be noted that the one remaining item that some of the Planning Board struggled with was the "Sunset Regulations" which read:

**F.Sunset Regulations. Municipal Inclusionary Zoning Regulations will sunset within ten (10) years following City Council adoption unless extended by the City Council. All Inclusionary Zoning Projects approved by the Planning Board shall remain in full effect if the Inclusionary Zoning Regulations Sunset.**



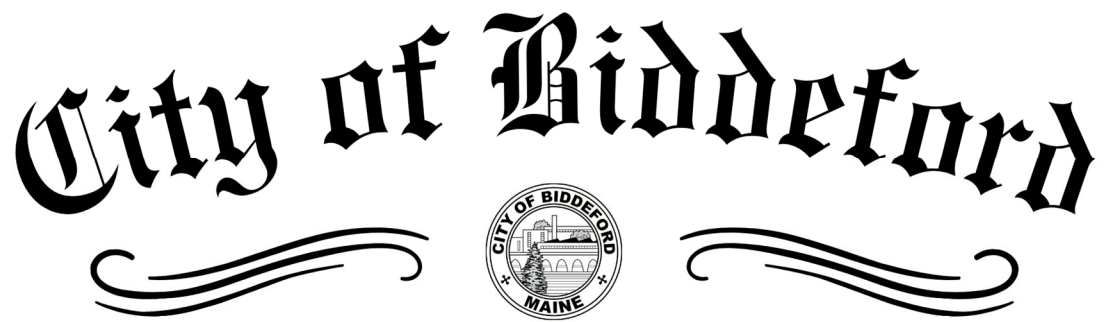
The Board questioned the need for the Sunset clause as it the City Council could repeal or amend the Ordinance if it wasn't working as intended rather than having an automatic sunset which, over time, could go into effect without the Council's desire to eliminate the Ordinance. The Board suggested that the Council evaluate keeping the sunset provision in the Ordinance or not. Earlier drafts of the Ordinance had the "sunset clause" going into effect in two (2) years and the Board amended this to expire in ten (10) years, which is incorporate into the Ordinance as proposed. The Board felt that the two (2) year time period was insufficient to properly evaluate the effectiveness of the Ordinance and that the ten (10) year sunset would provide additional time to use and evaluate the effectiveness of the Ordinance and modify if determined necessary.

**Funding Source:**

Not applicable.

**Planning Board / Staff Recommendation:**

The proposed Amendment is being forwarded to the City Council, from the Planning Board, with a recommendation for adoption as written.

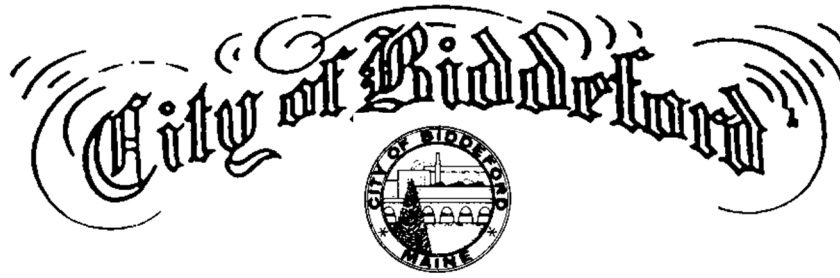


**2023.148**

**IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023**

**BE IT ORDAINED**, by the City Council of the City of Biddeford, that the City's Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, be amended by adding a new Section 40 – Inclusionary Zoning (IZ) as referenced by [adding](#) text to the Code of Ordinances as reflected within the attached draft text of Sec 40.

**Attest by:** \_\_\_\_\_



2023.25

IN BOARD OF CITY COUNCIL on June 20, 2023

WHEREAS, the Biddeford City Council has received the Report of the Mayor's Affordable Housing Task Force;

WHEREAS, that report identified that long term residents of the City, most especially long term renters, "... are more likely to pay a greater percentage of their monthly income today than they did when they started renting..." and over fifty percent (50%) of all full time Biddeford residents are renters;

WHEREAS, the market rents continue to increase at a rate in Biddeford that exceeds cost of living and inflation, and the history and unique character of Biddeford includes a mix of residents with a range of income levels;

WHEREAS, the current increase in housing costs, particularly among renters is a hardship for the residents of the City of Biddeford and the Biddeford City Council recognizes and finds that there is currently a lack of affordable housing within the City of Biddeford, and the lack of affordable housing is detrimental to the health, safety and welfare of the inhabitants of the City of Biddeford and said lack of affordable housing constitutes an emergency as set forth in the Charter of the City of Biddeford, Article III, § 8.

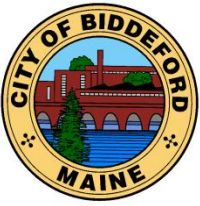
WHEREAS, the Mayor's Affordable Housing Task Force has recommended that the City adopt an Inclusionary Zoning Ordinance and Inclusionary Zoning Regulations which may include multiple approaches;

WHEREAS, the City's current land use ordinance, regulations and existing comprehensive plan are inadequate to prevent serious public harm, namely the continuance of residential development without requiring affordable housing units;

WHEREAS, based upon a finding that the current lack of affordable housing constitutes an emergency and the City of Biddeford current ordinances, land use regulations and existing comprehensive plan are inadequate to address the lack of affordable housing, pursuant to 30-A M.R.S. § 4356, a moratorium on new residential projects with ten (10) or more units was approved by the City Council on April 4, 2023 to address existing land use ordinance, rules and regulations and adopt new land use ordinances, rules and regulations;

**NOW, THEREFORE, IT IS HEREBY ORDERED** that the City Council supports the concept of municipal Inclusionary Zoning Regulations and refers to the Planning Board the responsibility to prepare Inclusionary Zoning Regulations for City Council review and action.

**Attest by:** \_\_\_\_\_



# CITY OF BIDDEFORD

## Planning and Development Department

David C.M. Galbraith  
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[David.Galbraith@biddefordmaine.org](mailto:David.Galbraith@biddefordmaine.org)

### **Planning Board – Staff Report**

TO: Chair Patoine and Members of the Biddeford Planning Board  
FROM: David C.M. Galbraith, Deputy Director / City Planner  
DATE: October 31, 2023  
MEETING DATE: November 1, 2023

**RE:** NEW ORDINANCE: Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 40 – Inclusionary Zoning (IZ) and a Zoning Text Amendment to Code of Ordinances, Part III: Land Use Development Regulations, Article II – Definitions.

#### **1. Overview:**

The proposed Inclusionary Ordinance has previously been discussed with the Planning Board on a couple of occasions. The proposed Ordinance is being proposed as a new Section (40) within the City's Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 40 (New) – Inclusionary Zoning (IZ). As all of the text is new the document is presented "clean" so there is not any blue underlined text, for text additions, or ~~red-strikethrough~~ for text deletions.

The Ordinance also requires a Zoning Text Amendment to the Code of Ordinances, Part III: Land Use Development Regulations, Article II – Definitions to include a new definition for "Affordable Housing Development".

#### **2. Staff Recommendation:**

Staff requests that the Planning Board forward a positive recommendation for adoption of this amendment to the City Council to increase low / Moderate Income (LMI) housing within the City and to further bring the City into compliance with LD2003.

#### **ATTACHMENTS**

1. Attachment # 1: Section 40 – Inclusionary Zoning (IZ)
2. Attachment #2: Text Amendment to Code of Ordinances, Part III: Land Use Development Regulations, Article II – Definitions



**City of Biddeford, Maine**  
**DRAFT Inclusionary Zoning Regulations**  
**\*NEW ORDINANCE: Code of Ordinances, Part III: Land Development**  
**Regulations, Article VI – Performance Standards,**  
**Section 40 – Inclusionary Zoning.**

**Planning Board Public Hearing: November 1, 2023**

**Amendment to Code of Ordinances, Part III: Land Use Development Regulations, Article II – Definitions:**

**ITEM # 1: New Definition:**

Amendment to Code of Ordinances, Part III: Land Use Development Regulations, Article II – Definitions and Article VI – Performance Standards, and included within Section 40 – Inclusionary Zoning.

**40.1 AFFORDIBLE HOUSING DEVELOPMENT:**

- A. For rental housing, a development in which a household whose income does not exceed 70% of the median income for the area as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, Section 8, as amended, can afford a majority (51% or more) of the units that the developer designates as affordable in the development, without spending more than 30% of the household's monthly income on housing costs; and
- B. For owned housing, a development in which a household whose income does not exceed 120% of the median income for the area as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, Section 8, as amended, can afford a majority (51% or more) of the units that the developer designates as affordable in the development without spending more than 30% of the household's monthly income on housing costs.
- C. Affordable Housing. Housing for which the percentage of income a household is charged in rent and other housing expenses or must pay in monthly mortgage payments (including condominium/HOA fees, mortgage insurance, other insurance and real estate taxes), does not exceed 30% of a household income, or other amount established in City regulations that does not vary significantly from this amount.

**40.2 Workforce housing unit for rent for which:**

- A. The rent is affordable to a household earning 100% or less than of AMI.
- B. The unit is rented to a household earning 100% or less than of AMI.
- C. The requirements of (A) and (B) above are limited by deed restriction or other legally binding agreement for the applicable length of time in this ordinance.

**City of Biddeford, Maine**  
**DRAFT Inclusionary Zoning Regulations**  
**\*NEW ORDINANCE: Code of Ordinances, Part III: Land Development**  
**Regulations, Article VI – Performance Standards,**  
**Section 40 – Inclusionary Zoning.**

**Planning Board Public Hearing: November 1, 2023**

**40.3 Purpose**

It is in the public interest to promote an adequate supply of housing that is affordable to a range of households at different income levels. The purpose of this section therefore is to offer incentives to developers to include units of affordable and workforce housing within development projects, thereby mitigating the impact of market rate housing construction, or the demonstrated increase in affordable housing needs resulting from the creation of new lower-income jobs, on the limited supply of available land for suitable housing, and helping to meet the housing needs of all economic groups within the city. The City believes that this section will assist in meeting the City's comprehensive goals for affordable housing, in the prevention of overcrowding and deterioration of the limited supply of affordable housing, and by doing so promote the health, safety, and welfare of its citizens.

**40.4 Ensuring Workforce Housing**

- A. Purpose.** Based on the City Council adopted the 2023 City's Comprehensive Plan and the Mayor Affordable Housing Task Force Report dated December 2022, it is in the public interest to promote an adequate supply of housing that is affordable to a range of households at different income levels. The purpose of this subsection is to ensure that housing developments over a certain size provide a portion of workforce housing units and, by doing so, promote the health, safety, and welfare of City of Biddeford citizens. This Ordinance shall regulate properties located within the City's MSRD1 and MSRD3 zoning districts and any undeveloped residentially zoned properties.
- B. Applicability.** This subsection shall apply to development projects that create eight (8) or more net new dwelling units for rent through new construction, substantial rehabilitation of existing structures, adaptive reuse or conversion of a nonresidential use to residential use, or any combination of these elements. This ordinance shall not apply to projects as follows:
- a. Using public financing requiring affordability restrictions, as defined by tax increment financing, U.S. Department of Housing and Urban Development funds such as HOME or CDBG, other federal, state, or local housing program, or the Low-Income Housing Tax Credit Program or
  - b. Existing residential projects with Planning Board and/or City Council approvals.
  - c. Projects that qualify for a Density Bonus pursuant to "Table B – Dimensional Requirements".

**City of Biddeford, Maine**  
**DRAFT Inclusionary Zoning Regulations**  
**\*NEW ORDINANCE: Code of Ordinances, Part III: Land Development**  
**Regulations, Article VI – Performance Standards,**  
**Section 40 – Inclusionary Zoning.**

**Planning Board Public Hearing: November 1, 2023**

**C. Standards.** Development projects subject to this subsection shall be subject to the following requirements:

1. Notwithstanding any language to the contrary in this Land Use Code, all developments of eight (8) units or more are conditional uses subject to Planning Board review on the condition that they comply with the requirements of this subsection.
2. At least 10% of the units in the project shall meet the definition of workforce housing units for rent to an eligible household, as defined in Article I, In General. The project shall have the option of paying a partial fee-in-lieu as outlined in Subsection 6a below. Where the required number of units results in a fraction of less than 0.5, the required number of onsite units is rounded down to the nearest whole number. Where the required number of units results in a fraction of 0.5 or more, the development project shall have the option of paying a partial fee-in-lieu for the fractional value or rounding the number of onsite units up to the nearest whole number.
3. Projects shall not be segmented or phased to avoid compliance with these provisions. In cases where projects are completed in phases, affordable units shall be provided in proportion to the development of market rate units unless otherwise permitted through regulations.
4. Workforce units must be integrated with the rest of the development, must use a common entrance, and must provide no indications from common areas that these units are workforce housing units. Exteriors of affordable units shall be consistent with and indistinguishable from the exteriors of other units in the project. Workforce units shall be comparable in materials, interior finishes, amenities, and parking to dwelling units in the neighborhood and in the development in which they are located.
5. Workforce units need not be the same size as other units in the development but the number of bedrooms in such units shall be no less than 10 percent of the total number of bedrooms in the development. For the purposes of calculating the number of bedrooms in a development, every 400 square feet in each market rate unit will count as a bedroom if the Planning Authority determines this method is appropriate in lieu of counting actual bedrooms.
6. As an alternative to providing workforce housing units, the project may:
  - a. Pay a fee-in-lieu of some or all of the units. In-lieu fees shall be paid into the Housing Trust Fund. The fee for affordable units not provided shall be \$100,000 per unit. The payment shall be required in conjunction with a request for a Certificate of Occupancy.
7. If at least 33% of the units in a development are workforce units, the development is eligible for subsidy through an Affordable Housing Tax Increment Financing (TIF) District Credit Enhancement Agreement, subject to City Council approval.

**City of Biddeford, Maine**  
**DRAFT Inclusionary Zoning Regulations**  
**\*NEW ORDINANCE: Code of Ordinances, Part III: Land Development**  
**Regulations, Article VI – Performance Standards,**  
**Section 40 – Inclusionary Zoning.**

**Planning Board Public Hearing: November 1, 2023**

8. The term of affordability for the required % workforce units provided shall be thirty (30) years.

**D. Implementing regulations.** Regulations to further specify the details of this subsection shall be developed, including, but not limited to:

1. Specific methodology for income verification.
2. Situations where less than permanent affordability might be considered.

**E. Reporting to City Council.** In conjunction with the annual report on the Housing Trust Fund, the Planning Authority shall annually report on developments subject to this subsection, the number of units produced, the amount of fee-in-lieu collected, and the overall effectiveness of this subsection in achieving its stated purpose.

**F.Sunset Regulations.** Municipal Inclusionary Zoning Regulations will sunset within ten (10) years following City Council adoption unless extended by the City Council. All Inclusionary Zoning Projects approved by the Planning Board shall remain in full effect if the Inclusionary Zoning Regulations Sunset.



## City Council

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**Meeting Date:** November 21, 2023

**Meeting Time:** 6:00 pm

**Agenda Item No:** 10.o.

**Item Description:** 2023.149) Amendment/Code of Ordinances, Part III: Land Development Regulations, Article II Definitions - Affordable Housing Development

**Submitted by:** David C.M. Galbraith, Acting Planning & Development Director / City Planner

**Supporting Information/Documentation:**

1. City Council Order
2. Amendment to Code of Ordinances, Part III: Land Use Development Regulations, Article II Definitions to include Affordable Housing Development.
3. Staff Memo to the Planning Board outlining the amendment.

**Key Term:**

N/A

**Executive Summary:**

This proposed Ordinance amendment would modify the City's Code of Ordinances, Part III: Land Use Development Regulations, Article II Definitions to include Affordable Housing Development definitions to comply with LD2003.

**Detailed Review:**

LD2003 requires municipalities to adopt specific definitions for "Affordable Housing development". The proposed text amendment is shown below in its entirety. The below are new definitions so are shown below highlighted in blue and underlined. There are not any text deletions.

**AFFORDABLE HOUSING DEVELOPMENT:**

- A. For rental housing, a development in which a household whose income does not exceed 70% of the median income for the area as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, Section 8, as amended, can afford a majority (51% or more) of the units that the developer designates as affordable in the development, without spending more than 30% of the household's monthly income on housing costs; and
- B. For owned housing, a development in which a household whose income does not exceed 120% of the median income for the area as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, Section 8, as amended, can afford a majority (51% or more) of the units that the developer designates as affordable in the development without spending more than 30% of the household's monthly income on housing costs.
- C. Affordable Housing. Housing for which the percentage of income a household is charged in rent and other housing expenses or must pay in monthly mortgage payments (including condominium/HOA fees, mortgage insurance, other insurance and real estate taxes), does not

exceed 30% of a household income, or other amount established in City regulations that does not vary significantly from this amount.

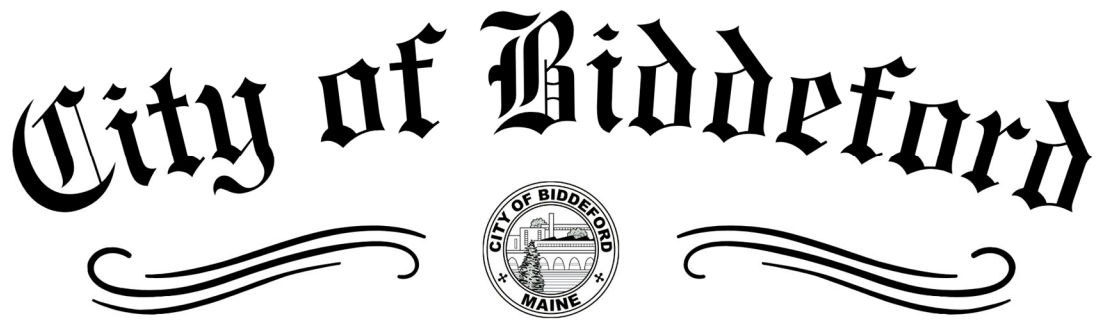
**Funding Source:**

Not applicable.

**Planning Board / Staff Recommendation:**

The proposed Amendment is being forwarded to the City Council, from the Planning Board, with a recommendation for adoption as written.





2023.149

IN BOARD OF CITY COUNCIL...NOVEMBER 21, 2023

**BE IT ORDAINED**, by the City Council of the City of Biddeford, that the City's Code of Ordinances, Part III: Land Use Development Regulations, Article II – Definitions, Section 2-Definitions, be amended to include a definition for Affordable Housing Development to comply with LD2003 by adding text as follows:

**AFFORDABLE HOUSING DEVELOPMENT:**

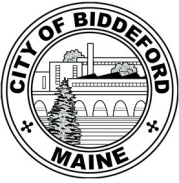
- A. For rental housing, a development in which a household whose income does not exceed 70% of the median income for the area as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, Section 8, as amended, can afford a majority (51% or more) of the units that the developer designates as affordable in the development, without spending more than 30% of the household's monthly income on housing costs; and
- B. For owned housing, a development in which a household whose income does not exceed 120% of the median income for the area as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, Section 8, as amended, can afford a majority (51% or more) of the units that the developer designates as affordable in the development without spending more than 30% of the household's monthly income on housing costs.
- C. Affordable Housing. Housing for which the percentage of income a household is charged in rent and other housing expenses or must pay in monthly mortgage payments (including condominium/HOA fees, mortgage insurance, other insurance and real estate taxes), does not exceed 30% of a household income, or other amount established in City regulations that does not vary significantly from this amount.

Attest by:\_\_\_\_\_

Amendment to Code of Ordinances, Part III: Land Use Development Regulations, Article II – Definitions:

AFFORDABLE HOUSING DEVELOPMENT:

- A. For rental housing, a development in which a household whose income does not exceed 70% of the median income for the area as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, Section 8, as amended, can afford a majority (51% or more) of the units that the developer designates as affordable in the development, without spending more than 30% of the household's monthly income on housing costs; and
- B. For owned housing, a development in which a household whose income does not exceed 120% of the median income for the area as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, Section 8, as amended, can afford a majority (51% or more) of the units that the developer designates as affordable in the development without spending more than 30% of the household's monthly income on housing costs.
- C. Affordable Housing. Housing for which the percentage of income a household is charged in rent and other housing expenses or must pay in monthly mortgage payments (including condominium/HOA fees, mortgage insurance, other insurance and real estate taxes), does not exceed 30% of a household income, or other amount established in City regulations that does not vary significantly from this amount.



## City Council

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Meeting Date: November 21, 2023

Meeting Time: 6pm

Agenda Item No: 10.p.

Item Description: 2023.150) Approval/State of Maine Department of Transportation Cooperative Agreement for Multi-Project Design Cost Sharing for Proposed Improvements to Multiple Elm Street Segments Biddeford, Maine

Submitted by: James Bennett

### Supporting Information/Documentation:

State of Maine Department of Transportation (MDOT) Cooperative Agreement for Multi-Project Design Cost Sharing for Proposed Improvements to Multiple Elm Street Segments Biddeford, Maine. This is a three party agreement between MDOT, the Portland Area Comprehensive Transportation System (PACTS) and City of Biddeford.

### Key Terms:

Not Applicable

### Executive Summary:

The Proposed MDOT Cooperative Agreement supports proceeding with “complete streets” design work for the Elm Street/Route One Corridor from Main Street to the Biddeford/Saco line. The Proposed Cooperative Agreement is needed to support future use of a federal \$7.8 million dollar Congressional Directed Spending grant commitment along with other local, state and federal funds to make improvements to the downtown Elm Street corridor.

### Detailed Review:

The Cooperative Agreement covers the design work for the Elm Street Corridor from Main Street to the Biddeford/Saco municipal line. The design work will include a “complete streets” approach to improving pedestrian, bicycle and vehicle safety. The proposed future construction project is broken up into three phases which include:

Phase One. Elm Street from Main Street to existing Railroad Bridge.

Phase Two. Lincoln Street improvements beginning at the Lincoln/Pearl Street intersection extending to Elm Street including improvements along Pearl Street to Elm Street and the proposed realignment of Pearl Street to create a signalized four-way intersection with Elm and Spruce Streets.

Phase Three. Improvements to Elm Street beginning at the railroad bridge extending to the Elm and Pine Street intersection.

Funds available to support future Corridor construction include a \$7.8 million dollar federal grant secured with MDOT and US Senator Collins assistance through the 2022 Congressional Directed Spending Program. Additional estimated funds are expected to be available from three large downtown private sector development projects (Upper Falls Road under construction, Fathom Companies Pearl Street and One Diamond) through Project MDOT Traffic Movement Permits and additional PACTS funding leveraged with city funds. *Separate city approvals are required to support future transportation construction project investments.*

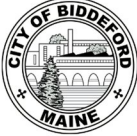
Funding Source:

*No new municipal financial appropriation is needed to approve this Cooperative Agreement.* The City of Biddeford's previous financial commitment of \$50,000 to support preliminary engineering design work associated with the PACTS Lincoln Street Area Project is being assigned to the Elm Street Cooperative Agreement. The City's previous financial commitment of \$50,000 will leverage \$1 million from MDOT federal and state funds along with \$150,000 in PACTS funds for a total cost of \$1.2 million.

Staff Recommendation:

City staff recommends that the City Council authorize the City Manager to sign the State of Maine Department of Transportation Cooperative Agreement for the Multi-Project Design Cost Sharing for Proposed Improvements to Multiple Elm Street Segments Biddeford, Maine.

# City of Biddeford

The seal of the City of Biddeford, Maine, is circular. It features a central illustration of a lighthouse on a rocky shore with waves. The words "CITY OF BIDDEFORD" are inscribed around the top inner edge, and "MAINE" is at the bottom. There are small stars on either side of the word "MAINE".

2023.150

IN BOARD OF CITY COUNCIL...Novemebr 21, 2023

**BE IT ORDERED**, that the City Manager is hereby authorized to excute the State of Maine Department of Transportation Cooperative Agreement for Multi-Project Design Cost Sharing for Proposed Improvements to Multiple Elm Street Segments Biddeford, Maine.

Attest by: \_\_\_\_\_



|                   |                    |
|-------------------|--------------------|
| MaineDOT use only |                    |
| TEDOCS #:         | Insert TEDOCS #    |
| CTM #:            | Insert CTM #       |
| CSN #:            | Insert CSN #       |
| PROGRAM:          | Bureau of Planning |

**(Receivable Agreement)**

|                                                                                                                                                                                                                                                            |                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>Receivable Party:</b> <ul style="list-style-type: none"> <li>Municipality of Biddeford</li> </ul>                                                                                                                                                       | <b>Agreement Begin Date:</b><br>Upon full execution                     |
| <b>Vendor Number:</b> <ul style="list-style-type: none"> <li>Municipality: _____</li> </ul>                                                                                                                                                                | <b>Agreement Completion Date:</b><br>Estimated                          |
| <b>Funding Sources (WIN: _____):</b> <ul style="list-style-type: none"> <li>Federal Share: \$750,000.00</li> <li>MaineDOT Share: \$250,000.00</li> <li>PACTS Share (using federal funds): \$150,000.00</li> <li>Municipality Share: \$50,000.00</li> </ul> | <b>Estimated Total Project Design Cost:</b><br>\$1,200,000.00           |
| <b>CSN#:</b>                                                                                                                                                                                                                                               | <b>Agreement Receivable Amounts:</b><br>Municipality Share: \$50,000.00 |
| <b>AMS Advantage #:</b>                                                                                                                                                                                                                                    | <b>Program:</b><br>Planning                                             |

**NOTE: The information in the table above is for administrative purposes only and is not a legal component of the attached agreement.**

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Administrative Cover Page  
Cooperative Agreement  
Biddeford, Elm Street Segments – Project Design  
(contract begins on following page)



**State of Maine**  
**DEPARTMENT OF TRANSPORTATION**  
**COOPERATIVE AGREEMENT**

For Multi-Project Design Cost Sharing for  
Proposed Improvements to Multiple Elm Street Segments  
Biddeford, Maine

This Cooperative Agreement (the “Agreement”) is entered into by and between the **Maine Department of Transportation**, an agency of state government with its headquarters located at 2 Child Street, Augusta, Maine (“MaineDOT”), the **City of Biddeford**, a municipal corporation with its principal administrative offices located at 205 Main Street, Biddeford, Maine (the “Municipality”), and the **Portland Area Comprehensive Transportation System**, the designated Metropolitan Planning Organization for the Portland Urbanized Area with offices located at 970 Baxter Boulevard, Portland, Maine (“PACTS”) (MaineDOT, the Municipality, and PACTS are collectively referred to as the “Parties” or sometimes a “Party”).

**RECITALS**

- A. MaineDOT, through its partnership with Maine’s Metropolitan Planning Organizations (“MPOs”), is charged with managing and disbursing MPO state and federal funds to support capital improvement projects programmed by the MPOs. PACTS is MaineDOT’s MPO partner for the Portland Urbanized Area, which includes the City of Biddeford.
- B. MaineDOT applied for and was awarded \$7,800,000 of Congressionally Directed Spending (CDS) in the FY 2023 Federal Appropriations Bill for design, right of way, and construction of Elm Street improvements in the City of Biddeford. The CDS funding must be obligated on or before September 30, 2026, and expended on or before September 30, 2031.
- C. The Parties have identified three segments along Elm Street that are collective candidates for improvement using the CDS funds (the “Project Phases”). The proposed Project Phases are further set out in the *Scope of Work* section of this Agreement.
- D. The work that is the subject of this Agreement consists of full design of all three Project Phases (the “Project Design”). Although all three Project Phases will be designed together under this Agreement, nothing in this Agreement is intended to obligate the Parties to advance any Project Phase to construction. When and if the Parties allocate additional funding to a Project Phase, that Phase will advance to construction and a separate construction cost-sharing agreement will be entered into by the affected Parties.
- E. Additionally, MaineDOT is aware of several developer projects in the Elm Street vicinity that are, or will soon be, in the process of filing for Traffic Movement Permits (the “Developer Projects”). The Traffic Movement Permits will likely require various levels of mitigation for a Developer Project’s traffic impacts, which could be in the form of

developer-funded construction improvements affecting the Project Phases or in-lieu monetary contributions that could be applied toward the costs of constructing a Project Phase. Therefore, construction funding needs may be influenced by these Developer Projects, resulting in possible downward adjustments of the Parties' construction shares.

- F. Lastly, the Parties previously allocated preliminary engineering funding for an Elm Street project, beginning at St. Mary Street and extending to Lincoln Street (the "St. Mary to Lincoln Elm Street PACTS Project") through execution of a three-party cooperative agreement dated [REDACTED], obligating \$150,000 of PACTS' federal allocations and \$50,000 in funding from the Municipality (the "St. Mary to Lincoln Elm Street Agreement"). Because one of the Project Phases encompasses the general area covered by the St. Mary to Lincoln Elm Street PACTS Project, the Parties have agreed to abandon the St. Mary to Lincoln Elm Street Agreement in exchange for the terms of this Agreement.
- G. This Agreement is intended to cover the roles and responsibilities of the Parties during Project Design, and to establish the financial obligations of each Party through Project Design with the intention to advance selected Project Phases to the construction phase where CDS funding will then be applied.

## **AGREEMENT**

**NOW, THEREFORE**, in accordance with the foregoing, the Parties agree as follows:

### **1. Appendices:**

The following appendices are hereby incorporated into this Agreement:

- Appendix A – Aerial depiction of Elm Street Project Overview, Phases 1, 2, and 3
- Appendix B – Anticipated Construction Funding Shares for Project Phases
- Appendix C - Current Developer Projects that have been awarded or currently in processes of Traffic Movement Permits

### **1. Scope of Work:**

- a. The scope of work for this Agreement shall include full design of all Project Phases up to but not including construction. The three identified Project Phases are described as follows, and further depicted on **Appendix A**, attached hereto:
- i. Project Phase No. 1: Includes improvements along US Route One/Elm Street (Elm Street), beginning at the Elm Street/Main Street intersection, extending northeasterly along Elm Street approximately 1100 feet, and ending at the south side of the existing railroad bridge (MaineDOT Bridge No. 1351). The proposed scope also includes full design of intersection improvements at the intersections of Elm Street and Main Street, St. Mary's Street, Pearl Street, Spruce Street,

Thornton Avenue, Lincoln Street, Hooper Street, South Street, Diamond Street/Upper Falls Road, and Pine Street.

- ii. Project Phase No. 2: Includes improvements along Lincoln Street, beginning at the Lincoln Street/Pearl Street intersection and proceeding northerly approximately 330 feet to Elm Street. This phase also includes roadway improvements along Pearl Street, beginning at the Lincoln Street/Pearl Street intersection, extending westerly approximately 390 feet to Elm Street. This work will include the realignment of Pearl Street to create a signalized four-way intersection with Elm Street and Spruce Street.
  - iii. Project Phase No. 3: Includes improvements along Elm Street, beginning at the northerly end of Project Phase No. 1 (at the referenced railroad bridge), extending northerly along Elm Street approximately 600 feet, and then over MaineDOT Bridge No. 3080, to the Elm Street/Pine Street intersection. This phase includes improvements to the Elm Street/ Diamond Street/ Upper Falls Road intersection and the Elm Street/Pine Street intersection. It does not include improvements beyond what is needed to configure these two intersections.
- b. The design process will consider the Municipality's desire to incorporate the following elements into all Project Phases (unless otherwise noted); however, due to space limitations and other constraints, the Parties acknowledge that it may not be practical or cost effective to incorporate all elements into the final design.
- Install sidewalks on both sides of street, seven (7) feet in width with five (5) foot clearance around light poles;
  - Include twelve (12) foot travel lanes with shared bike lane striping or possible dedicated bike lanes in center of street;
  - Include eleven (11) foot center turning lanes with vegetated island;
  - Perform Property acquisition as required;
  - Relocate hydrants out of sidewalks;
  - Install new streetlights;
  - Coordinate with natural gas utility replacement or upgrades;
  - Integrate planned attributes of the St. Mary to Lincoln Elm Street PACTS Project;
  - Design Lincoln Street from Pearl Street to Elm intersections to support bus transit activity to create a mass transit hub adjacent to new downtown 600 space parking garage; and
  - Consider the conceptual cross-sectional template that has been provided to MaineDOT by the Municipality.
- c. The Scope of Work also includes all Project activities that are outside of the scope of any consultant design contract and performed by or on behalf of any Party as appropriate, including without limitation the following:
- i. Permitting activities and fees;

- ii. all related staff engineering costs, including those set out in the *Project Design Development* section of this Agreement.

d.

## 2. **Project Cost Sharing and Payment Schedule:**

- a. **Financial Obligations:** The total estimated cost of the Project Design is \$1,200,000.00 (the “Project Design Estimate”). The Parties agree to share in all actual, eligible costs associated with Project Design (the “Project Design Costs”) in accordance with the allocations outlined below (each being a “Party Share”) unless otherwise agreed to in writing by the Parties through a written modification to this Agreement.
  - i. **Federal Share** – (provided through MaineDOT federal formula funds) – eligible Project Design Costs up to a maximum of \$750,000.00.
  - ii. **PACTS Share** – (provided through PACTS federal formula funds) – 12.5% of eligible Project Design Costs up to a maximum of \$150,000.00.
  - iii. **State Share** (provided through state funds) – 20.84% of eligible Project Design Costs, up to a maximum of \$250,000.00.
  - iv. **Municipal Share** (provided through the Municipality’s obligation of funds) – 4.16% of the following Project Design Costs, estimated at \$50,000.00 (the “Estimated Municipal Share”):
    - A. Any costs deemed ineligible for federal and state participation.
    - B. All actual Project Design Costs remaining after the above referenced Party Shares have been maximized.

### **Payment Schedule:**

- v. MaineDOT will pay up front all Project Design Costs, subject to cost sharing by the Municipality and PACTS as specified above.
- vi. MaineDOT will invoice the Municipality for the full Estimated Municipal Share of the Project Design Costs upon completion of the Preliminary Design Report (PDR) stage of the Project Design. The Municipality will remit payment in full within 30 days of receipt of an invoice from MaineDOT.
- vii. The PACTS Share will be disbursed by MaineDOT and applied against the Project Design Costs in accordance with the allocations outlined above.

## 3. **Project Design Development**

- a. MaineDOT shall prepare, or cause to be prepared, all plans, specifications, engineer’s estimates, and contract documents for the Project Design using MaineDOT’s standard project development process to ensure adherence to federal and state regulations (the “Project Development Design Materials”). If design work is contracted out, MaineDOT will be the sole administrator of such design contract (the “Design Contract”). MaineDOT will share proposed designs with the Municipality at appropriate milestones to ensure that the Municipality has the opportunity to collaborate with MaineDOT on the

final design. Notwithstanding such collaboration, MaineDOT will have sole discretion to determine which elements are included in the final design.

- b. As a component of preparing the Project Development Design Materials, MaineDOT shall, at a minimum, be responsible for the following activities, which are outside of the scope of any Design Contract (the Parties acknowledge that certain tasks will only be performed as part of the final design process if the Parties have elected to advance construction on a Project Phase):
  - i. Performing all right-of-way related title examination, appraisal, appraisal review, negotiation, and acquisition/condemnation activities for any property rights that must be acquired to accommodate anticipated construction of a Project Phase, and all necessary mapping services reflecting such property acquisitions.
  - ii. Coordinating with affected utilities to identify existing utility locations and/or implementing any utility relocation impacts that may be created by the development of a Project Phase.
  - iii. Performing all necessary National Environmental Policy Act (NEPA) compliance processes for a Project Phase.
  - iv. Performing all necessary permitting activities required in connection with a Project Phase.
- c. MaineDOT will pay up front all Project Design costs, subject to cost sharing by the Municipality and PACTS as specified in the *Project Cost Sharing and Payment Schedule* section of this Agreement.
- d. After completion of the Preliminary Design Report and a joint decision between the Parties to advance a Project Phase to construction, MaineDOT will complete all final design activities related to the Project Phase. MaineDOT, the Municipality, and PACTS if appropriate, will then execute a Construction Agreement covering their obligations regarding Project Phase advertisement, award, construction, and construction engineering. Said Construction Agreement will also incorporate the financial obligations negotiated between the Parties with the understanding that MaineDOT will apply the available CDS funding to the construction costs of only Project Phase No. 1. A Party's participation in this Project Design will not obligate any Party to move forward with full development of a Project Phase without execution of the required Construction Contract. An estimate of anticipated construction costs for each Project Phase is attached as **Appendix B**. The figures in Appendix B are non-binding, advisory, and included herewith for municipal planning purposes only and should not be relied upon by any Party as a financial commitment of future funding.
- e. If a Project Phase is selected to advance to construction, the Municipality will ensure that affected, municipally owned utilities are responsive to Project Phase demands and are completing necessary activities in accordance with the final design and construction schedules as established and coordinated by MaineDOT, allowing construction to proceed without constraint. Failure to do so may result in MaineDOT delaying implementation of the Municipality's future projects until appropriate utility responsiveness is obtained.

- f. The Parties agree to act diligently to advance any selected Project Phases to construction in a manner that minimizes the risk of any CDS funds expiring.

**4. Project Milestones:** MaineDOT agrees to share information about the Project Design with the Municipality and PACTS at the following milestones, as appropriate:

- Project kickoff/initial team meeting/formal public contact;
- Horizontal/Vertical Alignment Complete (HVAC);
- Preliminary public meeting;
- Preliminary Design Report (PDR) complete;
- Formal public meeting(s);
- Plan Impacts Complete (PIC);
- Peer reviews;
- Plans, Specifications, and Estimate (PS&E) complete;
- Changes in the Project Design schedule, or anticipated Project Phase construction schedules or estimates, as appropriate;
- As requested by the Municipality as part of regular project coordination activities.

**5. Public Involvement:**

- a. MaineDOT shall be responsible for implementing and leading any and all required public involvement activities and any necessary media coordination associated with the Project Design. The Parties agree to proactively participate as partners in all such actions and will present the Project Design as a cooperative effort between the Parties through all aspects of public involvement.
- b. The Municipality will provide meeting space, audio visual aids, etc., during in-person and hybrid public meetings associated with the Project Design as appropriate and will coordinate with MaineDOT to determine the most effective way to hold such meetings.
- c. The Municipality will take the lead on public involvement activities if requested by MaineDOT.

**6. Changes to Project Scope:**

- a. MaineDOT will consult with PACTS and the Municipality before implementing any adjustments to the Project Design scope as set out in the *Scope of Work* section of this Agreement.
- b. The Municipality may, at its election, request that changes be made or work added to a Project Phase during the period of design that benefit the Municipality, provided that the Municipality agrees in writing to pay any additional cost associated therewith. In the event that such changes or work are approved for federal participation in the cost thereof, such additional cost may be reduced to the non-federal share.

**7. Termination:**

- a. MaineDOT reserves the right to terminate the Project Design for any reason prior to the award of a Design Contract. If MaineDOT's termination under this clause is not directed



by the Municipality and/or PACTS, MaineDOT will be responsible for covering all outstanding Project Design costs, expenses, penalties, and/or liabilities expended, committed, or imposed in connection with the Project Design up to the time of termination.

- b. If the Municipality withdraws its financial support for the Project Design leading MaineDOT to terminate the Project Design, the Municipality shall reimburse MaineDOT fully for all outstanding Project Design costs, expenses, penalties, and/or liabilities expended, committed, or imposed in reliance on the Municipality's financial obligations set out herein, including, but not limited to, reimbursement of all federal and state funds expended up to the time of such termination.
- c. This Agreement may be terminated at any time by mutual written agreement of all Parties provided that such written agreement will address the allocation between the Parties of any outstanding costs, expenses, penalties, and/or liabilities expended, committed, or imposed in connection with the Project Design as of such date of termination.
- d. In no event shall any such action taken under this subsection be deemed a breach of contract, nor shall it represent any individual Party's waiver of claims for breach of contract or its right to any other remedy it may have pursuant to this Agreement, or at law or in equity.
- e. In the event of Project Design termination, all provisions of this Agreement shall become null and void except for the applicable financial obligations set forth herein, as well as those provisions to this Agreement that by their very nature are intended to survive.

#### **8. Developer Projects and Traffic Movement Permits:**

- a. During the Project Design, and in anticipation of Project Phase(s) advancing to construction, MaineDOT will review all Traffic Movement Permits awarded to Developer Projects in the Elm Street vicinity to determine whether each Developer Project will require impact mitigation in the form of developer-funded construction improvements affecting the Project Phases or in-lieu monetary contributions to MaineDOT (the "In-lieu Impact Fee(s)") that could be applied toward the costs of constructing an affected Project Phase.
  - i. For Developer Projects that submit an In-lieu Impact Fee, MaineDOT will deposit such fees into an account allocated to the Project Phase to which the impact mitigation applies (the "Impact Fee Account"). All In-lieu Fees so deposited will be used to defray costs of constructing the affected Project Phase. Party Shares toward Project Phase construction will be adjusted to account for the application of In-lieu Impact Fees.
  - ii. If a Project Phase is not advanced to construction and In-lieu Impact Fees have been collected and deposited by MaineDOT into an Impact Fee Account allocated to that Project Phase, MaineDOT will, in coordination with the affected developer, use the deposited fees to construct the impact mitigation that is required by the associated

Traffic Movement Permit. Remaining elements not constructed under this subsection may also be added to future projects for implementation at MaineDOT's discretion.

**9. General Provisions:**

- a. The Municipality shall not require MaineDOT or its contractors to pay for Municipal inspections and permits associated with the Project Design Phase.
- b. The Parties agree to comply with and abide by all applicable state and federal laws, statutes, rules, regulations, standards, and guidelines, including the Manual of Uniform Traffic Control Devices (the "MUTCD"), the Americans With Disabilities Act ("ADA"), the Occupational Safety and Health Administration ("OSHA") standards, and all Agreement provisions; avoid hindering each other's performance; fulfill all obligations diligently; and cooperate in achievement of the intent of this Agreement.
- c. State of Maine's Rights of Set-Off. MaineDOT shall have all of its common law, equitable, and statutory rights of set-off. These rights shall include, but not be limited to, the State of Maine's option to withhold for the purposes of set-off monies due the Municipality under a specific project contract up to any amounts due and owed to MaineDOT with regard to this Agreement and any other agreement/contract with any State of Maine department or agency, including any agreement/contract for a term commencing prior to the term of this Agreement, plus any amounts due and owed to the State of Maine for any reason including without limitation, tax delinquencies, fee delinquencies, or monetary penalties relative thereto. MaineDOT shall exercise its set-off rights in accordance with normal state practices including, in cases of set-off pursuant to an audit, the finalization of such audit by MaineDOT, its representatives, or the State Controller. When applicable, MaineDOT reserves the right to withhold or reduce future Local Road Assistance payments to the Municipality for purposes of set-off to recover the amount owed.
- d. Non-Appropriation. Notwithstanding anything herein to the contrary, the Parties acknowledge and agree that although MaineDOT's execution of this Agreement manifests its intent to honor its terms and to seek funding to fulfill any obligations arising hereunder, by law any such obligations are subject to available budgetary appropriations by the Maine Legislature and the federal government and, therefore, this Agreement does not create any obligation on MaineDOT's behalf in excess of such appropriations.
- e. Municipal Authority. The Municipality represents that it has received all necessary approvals or authorizations by its governing authorities to approve the Project Design and enter into this Agreement, and that it commits to obligate the necessary funds to satisfy its obligations identified herein.
- f. Assignment. No assignment of this Agreement is contemplated, and in no event shall any assignment be made without MaineDOT's express written permission.

- g. Amendment and Modification. This Agreement, and all attachments, may only be modified or amended in writing and signed by duly authorized representatives of all Parties.
- h. Binding Effect. The Parties shall be bound by the terms of this Agreement. This provision shall apply to the Parties' successors, administrators, and legal representatives.
- i. Independent Capacity. PACTS and the Municipality, their respective employees, agents, representatives, consultants, and contractors shall not act as officers, employees, or agents of MaineDOT.
- j. Indemnification. To the extent permitted by law, PACTS and the Municipality shall each individually indemnify, defend, and hold harmless the State of Maine, its officers, agents, and employees from all claims, suits, or liabilities arising from the indemnifying Party's own negligent or wrongful acts, errors, or omissions or by that Party's officials, employees, agents, consultants, or contractors. Nothing herein shall waive any defense, immunity, or limitation of liability that may be available under the Maine Tort Claims Act (14 M.R.S. Section 8101 et seq.) or any other privileges or immunities provided by law. This provision shall survive the termination or expiration of this Agreement.
- k. Governing Law. This Agreement shall be construed under the laws of the State of Maine. Additionally, all activities under this Agreement shall be performed in accordance with applicable federal laws and regulations, including without limitation Title 23 of the U.S. Code (USC) for statutory law, Title 23 of the Code of Federal Regulations (CFR) for administrative law, and Title 2 CFR, Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards."
- l. Counterparts and Electronic Signatures. This Agreement may be implemented in one or more counterparts, each of which will be deemed to be an original copy and all of which, when taken together, will be deemed to constitute one and the same Agreement, and will be effective when counterparts have been signed by each of the Parties and delivered to the other Parties. Each Party agrees that this Agreement and any other documents to be executed in connection herewith may be electronically signed and that any electronic signatures appearing on this Agreement or the associated documents are the same as handwritten signatures for the purposes of validity, enforceability, and admissibility.
- m. Notice and Designated Party Representatives. Any communications, requests or notices required or appropriate to be given under this Agreement shall be in writing and mailed via U.S. Mail, Certified or Registered, Return Receipt Requested or sent via a recognized commercial carrier such as, but not limited to Federal Express, that requires a return receipt delivered to the sending party. Alternatively, communication may be sent via email and shall satisfy the delivery requirements of this section through express acknowledgement of receipt by the receiving party. Said communications, requests or notices shall be sent to each Party's designated representative, who shall be the primary contact person for all matters related to the Project Design, as follows:

MaineDOT: Maine Department of Transportation  
16 State House Station  
Augusta, ME 04333-0016  
Attn.: Ernie Martin, Project Manager  
Email: [ernest.martin@maine.gov](mailto:ernest.martin@maine.gov)

Municipality: City of Biddeford  
205 Main Street  
Biddeford, ME 04005  
Attn.: \_\_\_\_\_  
Email: \_\_\_\_\_

PACTS: Portland Area Comprehensive Transportation System  
970 Baxter Boulevard, Suite 201  
Portland, ME 04103  
Attn.: Chris Chop, Transportation Director  
Email: [cchop@GPCOG.org](mailto:cchop@GPCOG.org)

Each Party agrees to promptly notify all other Parties of any changes to the above referenced contact information.

*(Signatures on following page)*

**IN WITNESS WHEREOF**, the Parties hereto have executed this Agreement effective on the day and date last signed  
For PACTS:

\_\_\_\_\_  
Date \_\_\_\_\_  
Kristina Egan, Executive Director \*  
Portland Area Comprehensive Transportation System  
Duly authorized

For Municipality:

\_\_\_\_\_  
Print Name: \_\_\_\_\_ \* Date \_\_\_\_\_  
Title \_\_\_\_\_  
Municipality of Biddeford  
Duly authorized

For MaineDOT:

\_\_\_\_\_  
Date \_\_\_\_\_  
Dale Doughty, Director, Bureau of Planning \*  
Maine Department of Transportation  
Duly authorized

*\* I certify that the signature above is true and accurate. I further certify that the signature, if electronic: (a) is intended to have the same force as a manual signature; (b) is unique to me; (c) is capable of verification; and (d) is under my sole control.*

## **APPENDIX B**

### **Anticipated Construction Funding Shares for Project Phases**

*(non-binding, advisory estimates for planning purposes only – not to be relied upon by any Party as a financial commitment of future funding)*

|                                                              | <b>Congressionally<br/>Directed<br/>Spending<br/>Award</b> | <b>MaineDOT<br/>FHWA<br/>formula<br/>funds</b> | <b>MaineDOT<br/>State Share</b> | <b>Municipality<br/>Share</b> | <b>PACTS<br/>FHWA<br/>formula<br/>funds</b> | <b>Impact<br/>Fees *<br/>(TMP)</b> |
|--------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------|---------------------------------|-------------------------------|---------------------------------------------|------------------------------------|
| <b>Preliminary<br/>Design<br/>Phases I, II<br/>&amp; III</b> | None anticipated                                           | \$750,000                                      | \$250,000                       | \$50,000                      | \$150,000                                   | None<br>anticipated                |
| <b>Phase I<br/>Construction</b>                              | \$7,800,000                                                | None<br>anticipated                            | \$975,000                       | \$975,000                     | None<br>anticipated                         | 2,495,000                          |
| <b>Phase II<br/>Construction</b>                             | None anticipated                                           | None<br>anticipated                            | None<br>anticipated             | 289,013.60                    | 1,156,054.40                                | 1,603,000                          |
| <b>Phase III<br/>Construction</b>                            | None anticipated                                           | None<br>anticipated                            | None<br>anticipated             | TBD                           | None<br>anticipated                         | 465,000                            |

\*Traffic Movement Permit (TMP) totals above are estimates, as permits are still in development. They are broken out by project phase.

TMP permits in development include:

Anticipated Estimated Impact Fees:

Lincoln TMP

Diamond TMP

Upper Falls TMP

*Cooperative Agreement  
Biddeford Elm Street Segments – Project Design*

**WIN**





*MaineDOT use only*  
 TEDOCS #: Insert TEDOCS #  
 CTM #: Insert CTM #  
 CSN #: Insert CSN #  
 PROGRAM: Bureau of Planning

**(Receivable Agreement)**

|                                                                                                                                                                                                                                                            |                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>Receivable Party:</b> <ul style="list-style-type: none"> <li>Municipality of Biddeford</li> </ul>                                                                                                                                                       | <b>Agreement Begin Date:</b><br>Upon full execution                     |
| <b>Vendor Number:</b> <ul style="list-style-type: none"> <li>Municipality: _____</li> </ul>                                                                                                                                                                | <b>Agreement Completion Date:</b><br>Estimated                          |
| <b>Funding Sources (WIN: _____):</b> <ul style="list-style-type: none"> <li>Federal Share: \$750,000.00</li> <li>MaineDOT Share: \$250,000.00</li> <li>PACTS Share (using federal funds): \$150,000.00</li> <li>Municipality Share: \$50,000.00</li> </ul> | <b>Estimated Total Project Design Cost:</b><br>\$1,200,000.00           |
| <b>CSN#:</b>                                                                                                                                                                                                                                               | <b>Agreement Receivable Amounts:</b><br>Municipality Share: \$50,000.00 |
| <b>AMS Advantage #:</b>                                                                                                                                                                                                                                    | <b>Program:</b><br>Planning                                             |

**NOTE: The information in the table above is for administrative purposes only and is not a legal component of the attached agreement.**

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*Administrative Cover Page  
 Cooperative Agreement  
 Biddeford, Elm Street Segments – Project Design  
 (contract begins on following page)*

**State of Maine**  
**DEPARTMENT OF TRANSPORTATION**  
**COOPERATIVE AGREEMENT**

For Multi-Project Design Cost Sharing for  
Proposed Improvements to Multiple Elm Street Segments  
Biddeford, Maine

This Cooperative Agreement (the “Agreement”) is entered into by and between the **Maine Department of Transportation**, an agency of state government with its headquarters located at 2 Child Street, Augusta, Maine (“MaineDOT”), the **City of Biddeford**, a municipal corporation with its principal administrative offices located at 205 Main Street, Biddeford, Maine (the “Municipality”), and the **Portland Area Comprehensive Transportation System**, the designated Metropolitan Planning Organization for the Portland Urbanized Area with offices located at 970 Baxter Boulevard, Portland, Maine (“PACTS”) (MaineDOT, the Municipality, and PACTS are collectively referred to as the “Parties” or sometimes a “Party”).

**RECITALS**

- A. MaineDOT, through its partnership with Maine’s Metropolitan Planning Organizations (“MPOs”), is charged with managing and disbursing MPO state and federal funds to support capital improvement projects programmed by the MPOs. PACTS is MaineDOT’s MPO partner for the Portland Urbanized Area, which includes the City of Biddeford.
- B. MaineDOT applied for and was awarded \$7,800,000 of Congressionally Directed Spending (CDS) in the FY 2023 Federal Appropriations Bill for design, right of way, and construction of Elm Street improvements in the City of Biddeford. The CDS funding must be obligated on or before September 30, 2026, and expended on or before September 30, 2031.
- C. The Parties have identified three segments along Elm Street that are collective candidates for improvement using the CDS funds (the “Project Phases”). The proposed Project Phases are further set out in the *Scope of Work* section of this Agreement.
- D. The work that is the subject of this Agreement consists of full design of all three Project Phases (the “Project Design”). Although all three Project Phases will be designed together under this Agreement, nothing in this Agreement is intended to obligate the Parties to advance any Project Phase to construction. When and if the Parties allocate additional funding to a Project Phase, that Phase will advance to construction and a separate construction cost-sharing agreement will be entered into by the affected Parties.
- E. Additionally, MaineDOT is aware of several developer projects in the Elm Street vicinity that are, or will soon be, in the process of filing for Traffic Movement Permits (the “Developer Projects”). The Traffic Movement Permits will likely require various levels of mitigation for a Developer Project’s traffic impacts, which could be in the form of

developer-funded construction improvements affecting the Project Phases or in-lieu monetary contributions that could be applied toward the costs of constructing a Project Phase. Therefore, construction funding needs may be influenced by these Developer Projects, resulting in possible downward adjustments of the Parties' construction shares.

- F. Lastly, the Parties previously allocated preliminary engineering funding for an Elm Street project, beginning at St. Mary Street and extending to Lincoln Street (the "St. Mary to Lincoln Elm Street PACTS Project") through execution of a three-party cooperative agreement dated [REDACTED], obligating \$150,000 of PACTS' federal allocations and \$50,000 in funding from the Municipality (the "St. Mary to Lincoln Elm Street Agreement"). Because one of the Project Phases encompasses the general area covered by the St. Mary to Lincoln Elm Street PACTS Project, the Parties have agreed to abandon the St. Mary to Lincoln Elm Street Agreement in exchange for the terms of this Agreement.
- G. This Agreement is intended to cover the roles and responsibilities of the Parties during Project Design, and to establish the financial obligations of each Party through Project Design with the intention to advance selected Project Phases to the construction phase where CDS funding will then be applied.

## **AGREEMENT**

**NOW, THEREFORE**, in accordance with the foregoing, the Parties agree as follows:

### **1. Appendices:**

The following appendices are hereby incorporated into this Agreement:

- Appendix A – Aerial depiction of Elm Street Project Overview, Phases 1, 2, and 3
- Appendix B – Anticipated Construction Funding Shares for Project Phases
- Appendix C - Current Developer Projects that have been awarded or currently in processes of Traffic Movement Permits.

### **1. Scope of Work:**

- a. The scope of work for this Agreement shall include full design of all Project Phases up to but not including construction. The three identified Project Phases are described as follows, and further depicted on **Appendix A**, attached hereto:
- i. Project Phase No. 1: Includes improvements along US Route One/Elm Street (Elm Street), beginning at the Elm Street/Main Street intersection, extending northeasterly along Elm Street approximately 1100 feet, and ending at the south side of the existing railroad bridge (MaineDOT Bridge No. 1351). The proposed scope also includes full design of intersection improvements at the intersections of Elm Street and Main Street, St. Mary's Street, Pearl Street, Spruce Street, Thornton Avenue, Lincoln Street, Hooper Street, South Street, Diamond Street/Upper Falls Road, and Pine Street.

Page 2 of 11

- ii. Project Phase No. 2: Includes improvements along Lincoln Street, beginning at the Lincoln Street/Pearl Street intersection and proceeding northerly approximately 330 feet to Elm Street. This phase also includes roadway improvements along Pearl Street, beginning at the Lincoln Street/Pearl Street intersection, extending westerly approximately 390 feet to Elm Street. This work will include the realignment of Pearl Street to create a signalized four-way intersection with Elm Street and Spruce Street.
  - iii. Project Phase No. 3: Includes improvements along Elm Street, beginning at the northerly end of Project Phase No. 1 (at the referenced railroad bridge), extending northerly along Elm Street approximately 600 feet, and then over MaineDOT Bridge No. 3080, to the Elm Street/Pine Street intersection. This phase includes improvements to the Elm Street/ Diamond Street/ Upper Falls Road intersection and the Elm Street/Pine Street intersection. It does not include improvements beyond what is needed to configure these two intersections.
- b. The design process will consider the Municipality's desire to incorporate the following elements into all Project Phases (unless otherwise noted); however, due to space limitations and other constraints, the Parties acknowledge that it may not be practical or cost effective to incorporate all elements into the final design.
- Install sidewalks on both sides of street, seven (7) feet in width with five (5) foot clearance around light poles;
  - Include twelve (12) foot travel lanes with shared bike lane striping or possible dedicated bike lanes in center of street;
  - Include eleven (11) foot center turning lanes with vegetated island;
  - Perform Property acquisition as required;
  - Relocate hydrants out of sidewalks;
  - Install new streetlights;
  - Coordinate with natural gas utility replacement or upgrades;
  - Integrate planned attributes of the St. Mary to Lincoln Elm Street PACTS Project;
  - Design Lincoln Street from Pearl Street to Elm intersections to support bus transit activity to create a mass transit hub adjacent to new downtown 600 space parking garage; and
  - Consider the conceptual cross-sectional template that has been provided to MaineDOT by the Municipality.
- c. The Scope of Work also includes all Project activities that are outside of the scope of any consultant design contract and performed by or on behalf of any Party as appropriate, including without limitation the following:
- i. Permitting activities and fees;

- ii. all related staff engineering costs, including those set out in the *Project Design Development* section of this Agreement.

d.

## **2. Project Cost Sharing and Payment Schedule:**

- a. **Financial Obligations:** The total estimated cost of the Project Design is \$1,200,000.00 (the “Project Design Estimate”). The Parties agree to share in all actual, eligible costs associated with Project Design (the “Project Design Costs”) in accordance with the allocations outlined below (each being a “Party Share”) unless otherwise agreed to in writing by the Parties through a written modification to this Agreement.
  - i. **Federal Share** – (provided through MaineDOT federal formula funds) – eligible Project Design Costs up to a maximum of \$750,000.00.
  - ii. **PACTS Share** – (provided through PACTS federal formula funds) – 12.5% of eligible Project Design Costs up to a maximum of \$150,000.00.
  - iii. **State Share** (provided through state funds) – 20.84% of eligible Project Design Costs, up to a maximum of \$250,000.00.
  - iv. **Municipal Share** (provided through the Municipality’s obligation of funds) – 4.16% of the following Project Design Costs, estimated at \$50,000.00 (the “Estimated Municipal Share”):
    - A. Any costs deemed ineligible for federal and state participation.
    - B. All actual Project Design Costs remaining after the above referenced Party Shares have been maximized.

### **Payment Schedule:**

- v. MaineDOT will pay up front all Project Design Costs, subject to cost sharing by the Municipality and PACTS as specified above.
- vi. MaineDOT will invoice the Municipality for the full Estimated Municipal Share of the Project Design Costs upon completion of the Preliminary Design Report (PDR) stage of the Project Design. The Municipality will remit payment in full within 30 days of receipt of an invoice from MaineDOT.
- vii. The PACTS Share will be disbursed by MaineDOT and applied against the Project Design Costs in accordance with the allocations outlined above.

## **3. Project Design Development**

- a. MaineDOT shall prepare, or cause to be prepared, all plans, specifications, engineer’s estimates, and contract documents for the Project Design using MaineDOT’s standard project development process to ensure adherence to federal and state regulations (the “Project Development Design Materials”). If design work is contracted out, MaineDOT will be the sole administrator of such design contract (the “Design Contract”). MaineDOT will share proposed designs with the Municipality at appropriate milestones to ensure that the Municipality has the opportunity to collaborate with MaineDOT on the

final design. Notwithstanding such collaboration, MaineDOT will have sole discretion to determine which elements are included in the final design.

- b. As a component of preparing the Project Development Design Materials, MaineDOT shall, at a minimum, be responsible for the following activities, which are outside of the scope of any Design Contract (the Parties acknowledge that certain tasks will only be performed as part of the final design process if the Parties have elected to advance construction on a Project Phase):
  - i. Performing all right-of-way related title examination, appraisal, appraisal review, negotiation, and acquisition/condemnation activities for any property rights that must be acquired to accommodate anticipated construction of a Project Phase, and all necessary mapping services reflecting such property acquisitions.
  - ii. Coordinating with affected utilities to identify existing utility locations and/or implementing any utility relocation impacts that may be created by the development of a Project Phase.
  - iii. Performing all necessary National Environmental Policy Act (NEPA) compliance processes for a Project Phase.
  - iv. Performing all necessary permitting activities required in connection with a Project Phase.
- c. MaineDOT will pay up front all Project Design costs, subject to cost sharing by the Municipality and PACTS as specified in the *Project Cost Sharing and Payment Schedule* section of this Agreement.
- d. After completion of the Preliminary Design Report and a joint decision between the Parties to advance a Project Phase to construction, MaineDOT will complete all final design activities related to the Project Phase. MaineDOT, the Municipality, and PACTS if appropriate, will then execute a Construction Agreement covering their obligations regarding Project Phase advertisement, award, construction, and construction engineering. Said Construction Agreement will also incorporate the financial obligations negotiated between the Parties with the understanding that MaineDOT will apply the available CDS funding to the construction costs of only Project Phase No. 1. A Party's participation in this Project Design will not obligate any Party to move forward with full development of a Project Phase without execution of the required Construction Contract. An estimate of anticipated construction costs for each Project Phase is attached as **Appendix B**. The figures in Appendix B are non-binding, advisory, and included herewith for municipal planning purposes only and should not be relied upon by any Party as a financial commitment of future funding.
- e. If a Project Phase is selected to advance to construction, the Municipality will ensure that affected, municipally owned utilities are responsive to Project Phase demands and are completing necessary activities in accordance with the final design and construction schedules as established and coordinated by MaineDOT, allowing construction to proceed without constraint. Failure to do so may result in MaineDOT delaying implementation of the Municipality's future projects until appropriate utility responsiveness is obtained.



- f. The Parties agree to act diligently to advance any selected Project Phases to construction in a manner that minimizes the risk of any CDS funds expiring.

**4. Project Milestones:** MaineDOT agrees to share information about the Project Design with the Municipality and PACTS at the following milestones, as appropriate:

- Project kickoff/initial team meeting/formal public contact;
- Horizontal/Vertical Alignment Complete (HVAC);
- Preliminary public meeting;
- Preliminary Design Report (PDR) complete;
- Formal public meeting(s);
- Plan Impacts Complete (PIC);
- Peer reviews;
- Plans, Specifications, and Estimate (PS&E) complete;
- Changes in the Project Design schedule, or anticipated Project Phase construction schedules or estimates, as appropriate;
- As requested by the Municipality as part of regular project coordination activities.

**5. Public Involvement:**

- a. MaineDOT shall be responsible for implementing and leading any and all required public involvement activities and any necessary media coordination associated with the Project Design. The Parties agree to proactively participate as partners in all such actions and will present the Project Design as a cooperative effort between the Parties through all aspects of public involvement.
- b. The Municipality will provide meeting space, audio visual aids, etc., during in-person and hybrid public meetings associated with the Project Design as appropriate and will coordinate with MaineDOT to determine the most effective way to hold such meetings.
- c. The Municipality will take the lead on public involvement activities if requested by MaineDOT.

**6. Changes to Project Scope:**

- a. MaineDOT will consult with PACTS and the Municipality before implementing any adjustments to the Project Design scope as set out in the *Scope of Work* section of this Agreement.
- b. The Municipality may, at its election, request that changes be made or work added to a Project Phase during the period of design that benefit the Municipality, provided that the Municipality agrees in writing to pay any additional cost associated therewith. In the event that such changes or work are approved for federal participation in the cost thereof, such additional cost may be reduced to the non-federal share.

**7. Termination:**

- a. MaineDOT reserves the right to terminate the Project Design for any reason prior to the award of a Design Contract. If MaineDOT's termination under this clause is not directed

by the Municipality and/or PACTS, MaineDOT will be responsible for covering all outstanding Project Design costs, expenses, penalties, and/or liabilities expended, committed, or imposed in connection with the Project Design up to the time of termination.

- b. If the Municipality withdraws its financial support for the Project Design leading MaineDOT to terminate the Project Design, the Municipality shall reimburse MaineDOT fully for all outstanding Project Design costs, expenses, penalties, and/or liabilities expended, committed, or imposed in reliance on the Municipality's financial obligations set out herein, including, but not limited to, reimbursement of all federal and state funds expended up to the time of such termination.
- c. This Agreement may be terminated at any time by mutual written agreement of all Parties provided that such written agreement will address the allocation between the Parties of any outstanding costs, expenses, penalties, and/or liabilities expended, committed, or imposed in connection with the Project Design as of such date of termination.
- d. In no event shall any such action taken under this subsection be deemed a breach of contract, nor shall it represent any individual Party's waiver of claims for breach of contract or its right to any other remedy it may have pursuant to this Agreement, or at law or in equity.
- e. In the event of Project Design termination, all provisions of this Agreement shall become null and void except for the applicable financial obligations set forth herein, as well as those provisions to this Agreement that by their very nature are intended to survive.

#### **8. Developer Projects and Traffic Movement Permits:**

- a. During the Project Design, and in anticipation of Project Phase(s) advancing to construction, MaineDOT will review all Traffic Movement Permits awarded to Developer Projects in the Elm Street vicinity to determine whether each Developer Project will require impact mitigation in the form of developer-funded construction improvements affecting the Project Phases or in-lieu monetary contributions to MaineDOT (the "In-lieu Impact Fee(s)") that could be applied toward the costs of constructing an affected Project Phase.
  - i. For Developer Projects that submit an In-lieu Impact Fee, MaineDOT will deposit such fees into an account allocated to the Project Phase to which the impact mitigation applies (the "Impact Fee Account"). All In-lieu Fees so deposited will be used to defray costs of constructing the affected Project Phase. Party Shares toward Project Phase construction will be adjusted to account for the application of In-lieu Impact Fees.
  - ii. If a Project Phase is not advanced to construction and In-lieu Impact Fees have been collected and deposited by MaineDOT into an Impact Fee Account allocated to that Project Phase, MaineDOT will, in coordination with the affected developer, use the deposited fees to construct the impact mitigation that is required by the associated

Traffic Movement Permit. Remaining elements not constructed under this subsection may also be added to future projects for implementation at MaineDOT's discretion.

**9. General Provisions:**

- a. The Municipality shall not require MaineDOT or its contractors to pay for Municipal inspections and permits associated with the Project Design Phase.
- b. The Parties agree to comply with and abide by all applicable state and federal laws, statutes, rules, regulations, standards, and guidelines, including the Manual of Uniform Traffic Control Devices (the "MUTCD"), the Americans With Disabilities Act ("ADA"), the Occupational Safety and Health Administration ("OSHA") standards, and all Agreement provisions; avoid hindering each other's performance; fulfill all obligations diligently; and cooperate in achievement of the intent of this Agreement.
- c. State of Maine's Rights of Set-Off. MaineDOT shall have all of its common law, equitable, and statutory rights of set-off. These rights shall include, but not be limited to, the State of Maine's option to withhold for the purposes of set-off monies due the Municipality under a specific project contract up to any amounts due and owed to MaineDOT with regard to this Agreement and any other agreement/contract with any State of Maine department or agency, including any agreement/contract for a term commencing prior to the term of this Agreement, plus any amounts due and owed to the State of Maine for any reason including without limitation, tax delinquencies, fee delinquencies, or monetary penalties relative thereto. MaineDOT shall exercise its set-off rights in accordance with normal state practices including, in cases of set-off pursuant to an audit, the finalization of such audit by MaineDOT, its representatives, or the State Controller. When applicable, MaineDOT reserves the right to withhold or reduce future Local Road Assistance payments to the Municipality for purposes of set-off to recover the amount owed.
- d. Non-Appropriation. Notwithstanding anything herein to the contrary, the Parties acknowledge and agree that although MaineDOT's execution of this Agreement manifests its intent to honor its terms and to seek funding to fulfill any obligations arising hereunder, by law any such obligations are subject to available budgetary appropriations by the Maine Legislature and the federal government and, therefore, this Agreement does not create any obligation on MaineDOT's behalf in excess of such appropriations.
- e. Municipal Authority. The Municipality represents that it has received all necessary approvals or authorizations by its governing authorities to approve the Project Design and enter into this Agreement, and that it commits to obligate the necessary funds to satisfy its obligations identified herein.
- f. Assignment. No assignment of this Agreement is contemplated, and in no event shall any assignment be made without MaineDOT's express written permission.

- g. Amendment and Modification. This Agreement, and all attachments, may only be modified or amended in writing and signed by duly authorized representatives of all Parties.
- h. Binding Effect. The Parties shall be bound by the terms of this Agreement. This provision shall apply to the Parties' successors, administrators, and legal representatives.
- i. Independent Capacity. PACTS and the Municipality, their respective employees, agents, representatives, consultants, and contractors shall not act as officers, employees, or agents of MaineDOT.
- j. Indemnification. To the extent permitted by law, PACTS and the Municipality shall each individually indemnify, defend, and hold harmless the State of Maine, its officers, agents, and employees from all claims, suits, or liabilities arising from the indemnifying Party's own negligent or wrongful acts, errors, or omissions or by that Party's officials, employees, agents, consultants, or contractors. Nothing herein shall waive any defense, immunity, or limitation of liability that may be available under the Maine Tort Claims Act (14 M.R.S. Section 8101 et seq.) or any other privileges or immunities provided by law. This provision shall survive the termination or expiration of this Agreement.
- k. Governing Law. This Agreement shall be construed under the laws of the State of Maine. Additionally, all activities under this Agreement shall be performed in accordance with applicable federal laws and regulations, including without limitation Title 23 of the U.S. Code (USC) for statutory law, Title 23 of the Code of Federal Regulations (CFR) for administrative law, and Title 2 CFR, Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards."
- l. Counterparts and Electronic Signatures. This Agreement may be implemented in one or more counterparts, each of which will be deemed to be an original copy and all of which, when taken together, will be deemed to constitute one and the same Agreement, and will be effective when counterparts have been signed by each of the Parties and delivered to the other Parties. Each Party agrees that this Agreement and any other documents to be executed in connection herewith may be electronically signed and that any electronic signatures appearing on this Agreement or the associated documents are the same as handwritten signatures for the purposes of validity, enforceability, and admissibility.
- m. Notice and Designated Party Representatives. Any communications, requests or notices required or appropriate to be given under this Agreement shall be in writing and mailed via U.S. Mail, Certified or Registered, Return Receipt Requested or sent via a recognized commercial carrier such as, but not limited to Federal Express, that requires a return receipt delivered to the sending party. Alternatively, communication may be sent via email and shall satisfy the delivery requirements of this section through express acknowledgement of receipt by the receiving party. Said communications, requests or notices shall be sent to each Party's designated representative, who shall be the primary contact person for all matters related to the Project Design, as follows:

MaineDOT: Maine Department of Transportation  
16 State House Station  
Augusta, ME 04333-0016  
Attn.: Ernie Martin, Project Manager  
Email: [ernest.martin@maine.gov](mailto:ernest.martin@maine.gov)

Municipality: City of Biddeford  
205 Main Street  
Biddeford, ME 04005  
Attn.: \_\_\_\_\_  
Email: \_\_\_\_\_

PACTS: Portland Area Comprehensive Transportation System  
970 Baxter Boulevard, Suite 201  
Portland, ME 04103  
Attn.: Chris Chop, Transportation Director  
Email: [cchop@GPCOG.org](mailto:cchop@GPCOG.org)

Each Party agrees to promptly notify all other Parties of any changes to the above referenced contact information.

*(Signatures on following page)*

**IN WITNESS WHEREOF**, the Parties hereto have executed this Agreement effective on the  
day and date last signed  
For PACTS:

\_\_\_\_\_  
Date \_\_\_\_\_  
Kristina Egan, Executive Director \*  
Portland Area Comprehensive Transportation System  
Duly authorized

For Municipality:

\_\_\_\_\_  
Print Name: \_\_\_\_\_ \* Date \_\_\_\_\_  
Title \_\_\_\_\_  
Municipality of Biddeford  
Duly authorized

For MaineDOT:

\_\_\_\_\_  
Date \_\_\_\_\_  
Dale Doughty, Director, Bureau of Planning \*  
Maine Department of Transportation  
Duly authorized

*\* I certify that the signature above is true and accurate. I further certify that the signature, if electronic: (a) is intended to have the same force as a manual signature; (b) is unique to me; (c) is capable of verification; and (d) is under my sole control.*



## **APPENDIX B**

### **Anticipated Construction Funding Shares for Project Phases**

*(non-binding, advisory estimates for planning purposes only – not to be relied upon by any Party as a financial commitment of future funding)*

|                                                              | <b>Congressionally<br/>Directed<br/>Spending<br/>Award</b> | <b>MaineDOT<br/>FHWA<br/>formula<br/>funds</b> | <b>MaineDOT<br/>State Share</b> | <b>Municipality<br/>Share</b> | <b>PACTS<br/>FHWA<br/>formula<br/>funds</b> | <b>Impact<br/>Fees *<br/>(TMP)</b> |
|--------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------|---------------------------------|-------------------------------|---------------------------------------------|------------------------------------|
| <b>Preliminary<br/>Design<br/>Phases I, II<br/>&amp; III</b> | None anticipated                                           | \$750,000                                      | \$250,000                       | \$50,000                      | \$150,000                                   | None<br>anticipated                |
| <b>Phase I<br/>Construction</b>                              | \$7,800,000                                                | None<br>anticipated                            | \$975,000                       | \$975,000                     | None<br>anticipated                         | 2,495,000                          |
| <b>Phase II<br/>Construction</b>                             | None anticipated                                           | None<br>anticipated                            | None<br>anticipated             | 289,013.60                    | 1,156,054.40                                | 1,603,000                          |
| <b>Phase III<br/>Construction</b>                            | None anticipated                                           | None<br>anticipated                            | None<br>anticipated             | TBD                           | None<br>anticipated                         | 465,000                            |

\*Traffic Movement Permit (TMP) totals above are estimates, as permits are still in development. They are broken out by project phase.

TMP permits in development include:

Anticipated Estimated Impact Fees:

Lincoln TMP

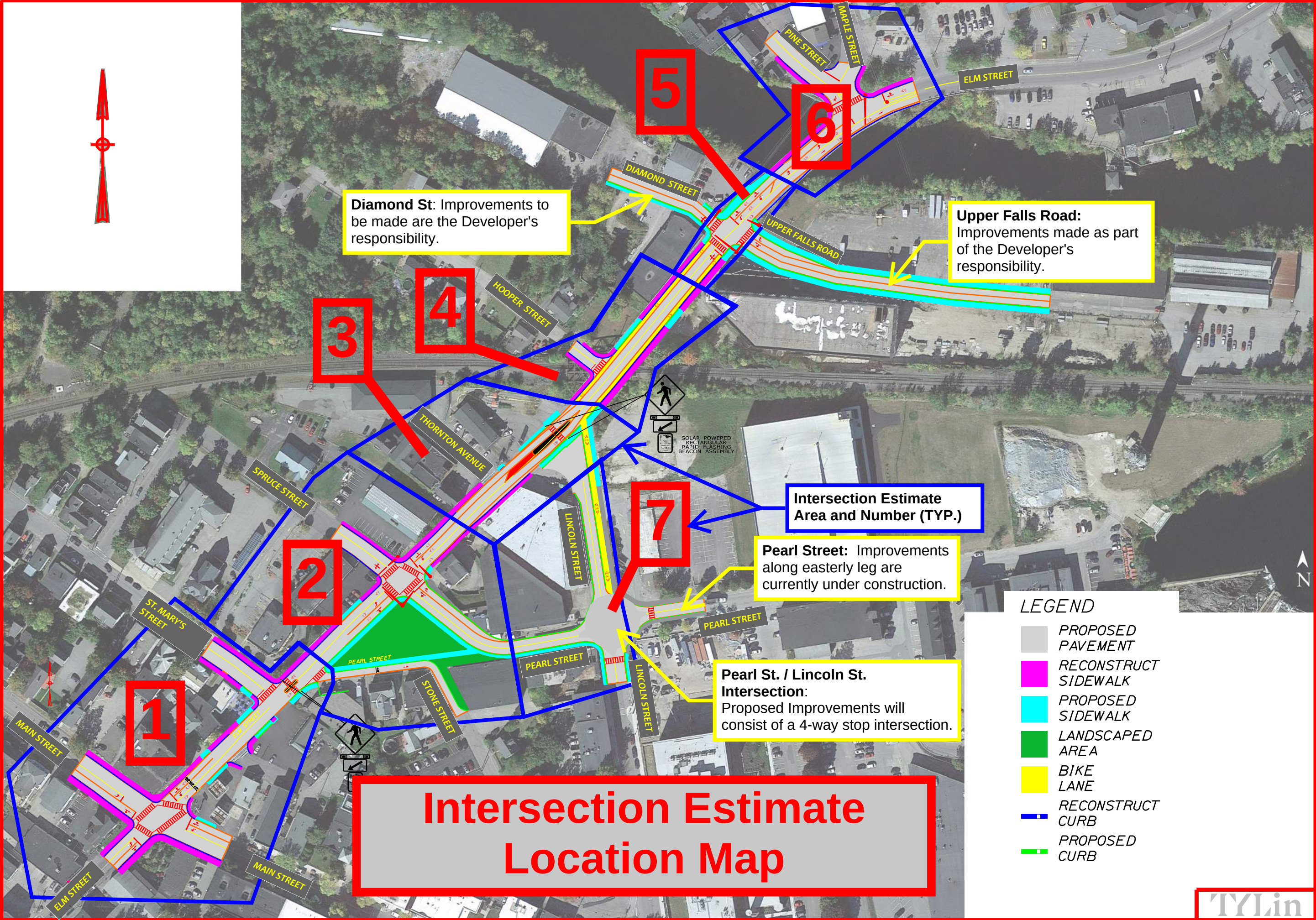
Diamond TMP

Upper Falls TMP

*Cooperative Agreement  
Biddeford Elm Street Segments – Project Design*

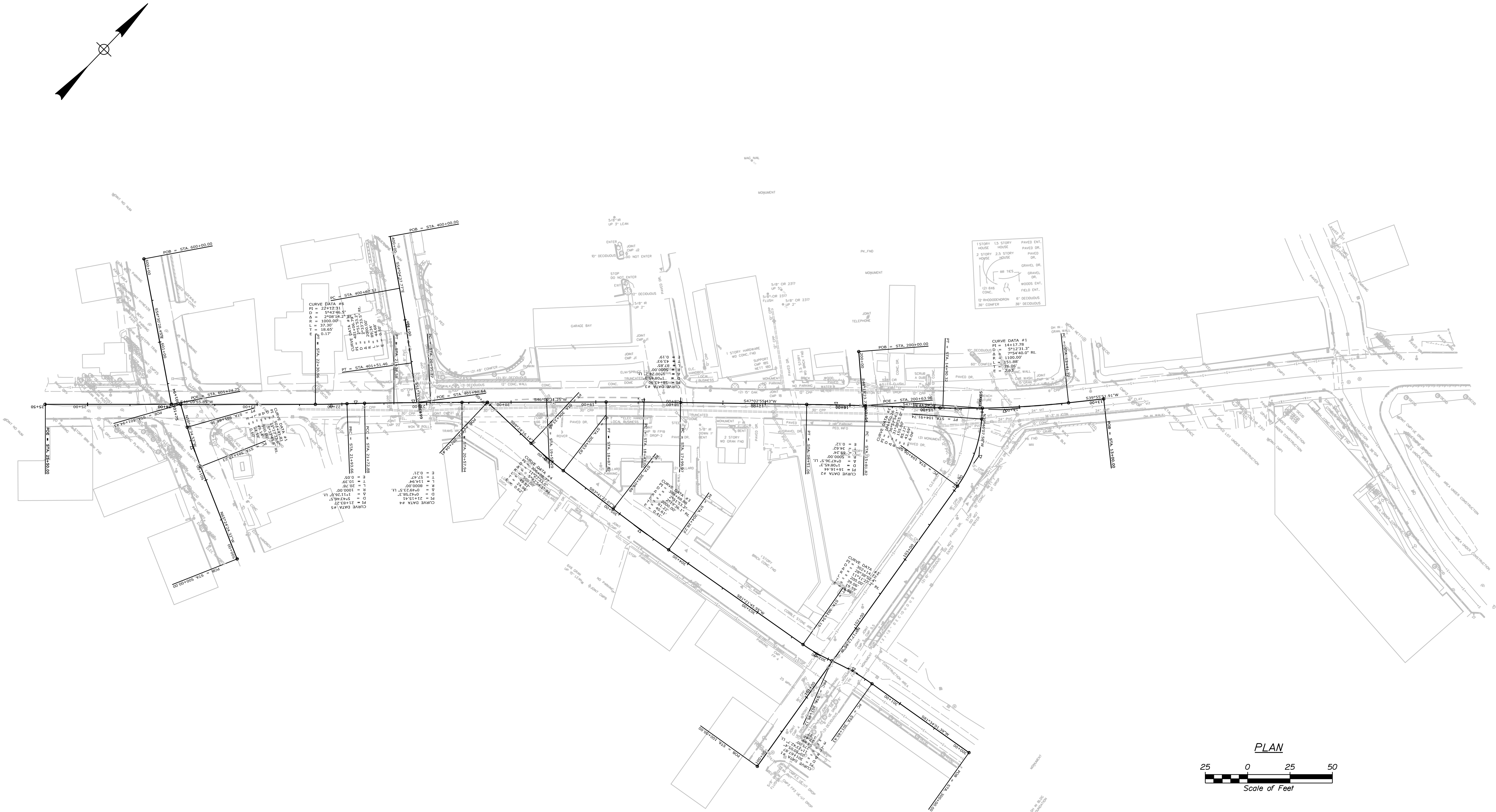
**WIN**





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|----------------|----------|------------------------------|-----------|------------------|-----------|------------------|-----------|-----------------|-----------|
| STATE OF MAINE |          | DEPARTMENT OF TRANSPORTATION |           | MULTIMODAL       |           | WIN              |           | PROGRAM         |           |
| BIDDEFORD      |          | ROUTE 1 / ELM STREET         |           | ELM STREET       |           | PROJECT OVERVIEW |           | SHEET NUMBER    |           |
| 1              |          | 1                            |           | OF 1             |           | 363              |           |                 |           |
| PROJ. MGR.     | S. DAVIS | DESIGN-REVIEWED              | D. BRYANT | CHECKED-REVIEWED | D. BRYANT | DESIGN-REVIEWED  | D. BRYANT | DESIGN-REVIEWED | D. BRYANT |
| DATE           |          | DATE                         |           | DATE             |           | DATE             |           | DATE            |           |
| BY             |          | BY                           |           | BY               |           | BY               |           | BY              |           |
| SIGNATURE      |          | SIGNATURE                    |           | SIGNATURE        |           | SIGNATURE        |           | SIGNATURE       |           |
| P.E. NUMBER    |          | P.E. NUMBER                  |           | P.E. NUMBER      |           | P.E. NUMBER      |           | P.E. NUMBER     |           |
| DATE           |          | DATE                         |           | DATE             |           | DATE             |           | DATE            |           |
| REVISIONS 1    |          | REVISIONS 1                  |           | REVISIONS 1      |           | REVISIONS 1      |           | REVISIONS 1     |           |
| REVISIONS 2    |          | REVISIONS 2                  |           | REVISIONS 2      |           | REVISIONS 2      |           | REVISIONS 2     |           |
| REVISIONS 3    |          | REVISIONS 3                  |           | REVISIONS 3      |           | REVISIONS 3      |           | REVISIONS 3     |           |
| REVISIONS 4    |          | REVISIONS 4                  |           | REVISIONS 4      |           | REVISIONS 4      |           | REVISIONS 4     |           |
| FIELD CHANGES  |          | FIELD CHANGES                |           | FIELD CHANGES    |           | FIELD CHANGES    |           | FIELD CHANGES   |           |





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| STATE OF MAINE               |  |
| DEPARTMENT OF TRANSPORTATION |  |
| XXXXX                        |  |
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| SIGNATURE   |  |
| P.E. NUMBER |  |
| DATE        |  |

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| BY   |  |
| DATE |  |

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| PROJ. MANAGER    |  |
| DESIGN-DETAILED  |  |
| CHECKED-REVIEWED |  |
| DESIGN-DETAILED  |  |
| REVISIONS 1      |  |
| REVISIONS 2      |  |
| REVISIONS 3      |  |
| REVISIONS 4      |  |
| FIELD CHANGES    |  |

|                         |  |
|-------------------------|--|
| BIDDEFORD<br>ELM STREET |  |
| PROJECT AREA            |  |

|              |  |
|--------------|--|
| SHEET NUMBER |  |
| 1            |  |
| OF 1         |  |