City of Biddeford
Conservation Commission
September 15, 2022 6:00 PM City Hall
Council Chambers & Zoom
https://biddeford.zoom.us/j/95465662801?pwd=SUttWXRFWjFrdTJ2OWVJWVlrTHNoUT09
Webinar ID: 954 6566 2801 Passcode: 632041

Status: Conservation Commission, Council Chambers & Zoom 6:00 9-15-22

1. **Call to Order, Declaration of Quorum/Voting Members**
2. **Adjustments to the Adgenda**
3. **Staff Business/Announcements**
4. **Consent Agenda**
   - 4.1. Approval of Meeting Minutes from July 21, 2022 & August 18, 2022
     BCC_Meeting Notes 7.21.22.pdf
5. **Unfinished Business**
   - 5.1. SSV Site Walk Outcome
     Hidden Hills Site Visit report (draft)-Conservation Commission.pdf
   - 5.2. Winding Creek Subdivision-Planning Board meeting outcome and next steps
   - 5.3. Website-Discuss Erik's suggestions
     Conservation Commission Webpage.pdf
   - 5.4. City Email Addresses
6. **New Business**
   - 6.1. Consider meeting date in October
7. **Other Business**
8. **Adjourn**

Biddeford Conservation Commission

Thursday, July 21, 2022

6:07 - 7:45 pm

Attendees: R. Rhames, M. Lowell, D. Rioux, B. Hadler
Virtually Present: M. Atlas
Absent: T. Craven, C. Gastelum, E. Heumiller
Guests: M. Grooms (City Planner; Staff Liaison)

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1. R. Rhames reads through updated agenda
2. Meeting called to order at 6:07 pm
3. Meeting Minutes motion to approve of May and June 6:08pm by Dennis Rioux
    a. Second by M. Lowell
    b. No discussion
4. Update on the riverfront development for the Saco River Corridor Act (Saco River Corridor Commission)
    a. There will be a public notice for the proposed changes
    b. From SRCC standpoint, the standards will remain in place but the city and residents need to determine what they want
    c. Three separate applications (Gooch St., Pearl St., Diamond Match property)
        - All have gone through sketch review
        - Matt Grooms is willing to provide a full presentation
        - City met with SRCC yesterday; SRCC became aware of proposed changes in Mid-July
        - SRCC commissioners represents the river, not the communities with which the river comes into contact (this is a unique structure)
        - Questions about setbacks on the Diamond Match property
        - R. Rhames is concerned about the shoreline
        - Preliminary concept sketch has been received, but there has not yet been an environmental review
        - The planning board has seen the concept sketches but SRCC has not yet been involved
        - Question from the public:
            - Meaghan Daly: How much does the proposeld 25 ft setback diverge from the agreement with the SRCC?
            - Meaghan Daly doesn't remember it being explicitly stated that there would be a zoning change request and is wondering if there can be clarification as to whether the Planning Board was explicitly aware of the the existing sketch plan
            - Can the Diamond Match project be separated out from the Gooch Street and Pearl Street properties so that they don't have to be treated the same as far as zoning changes?
                - M. Grooms responds that because they will be sharing some development resources, it makes it challenging to fully separate them.
        - M. Grooms – Sketch plan has not been approved, the sketch plan is just an initial request for feedback. He believes that there is a good chance there would not need to be a zoning change.
        - Shoreline development limits the amount of new housing, which is another reason why the zoning may need to change.

5. Comprehensive Plan // M. Grooms update
    a. Some sections still need to be written
    b. He is hopeful that it will be complete to submit by the end of the year. Requires many layers of approval.
    c. Climate issues will be very prominent in the plan. The Climate Action Committee also submitted feedback. “It’s loud and clear through all levels of city leadership that Climate Action is an important topic”. These were submitted within the last 3 weeks.
6. City Email Accounts
    a. Richard and Denis are still having a hard time logging in – they will try again this month
7. Site Visit of Hidden Hills
    a. Richard asked Matt Grooms to reach out to the property owners to re-request a site walk. A response has not been received
    b. Mark Ward has asked for three possible dates so we have options, so that we are more likely to find a time
8. Agenda item regarding Mark Ward invoice tabled until we can clarify what specifically is pending approval.
    a. R. Rhames will follow up with Mark to confirm if there are any outstanding payments.
9. Mark Ward Clifford Park update (via R. Rhames)
    a. No new updates, he has been very busy and unable to follow up
10. M. Lowell Thatcher Brook Update
    a. Some new additions are proposed, some pools, some modifications behind Kohls
    b. There are multiple breeding grounds for wild brook trout
        - How do we get them to be able to run through the whole brook
        - Would we naturally stock the brook with trout?
    c. Consider future building – we need greater setbacks along the brook
    d. For context: Thatcher Brook was labeled an “Imparied stream” to now an “urban imparied stream”
    e. We’ve been working on a setback review, but were told it required a comprehensive plan review
11. Review Winding Creek Letter to the Council
    a. Wants to clarify that he’s not sure if the message states that there are species that are only present in Clifford Park – that is a challengeable fact
12. *M. Atlas makes a motion to approve the letter to the council and planning board contingent upon one final review over email. 7:38pm*
    a. Second D. Rioux 7:38p
        - Discussion: Word choice of “Community” at the end of the first paragraph
        - Brian votes to amend of word “community” to “local residents and public” at 7:40
        - Second by D. Rioux
        - Unanimous 7:40
    b. Unanimous 7:42
13. *Mike Lowell Motion to adjourn 7:45p*
    a. Second Brian Hadler 7:45p

Rapid Reconnaissance Survey of Two Parcels

in Western Biddeford, 2022

submitted to the Biddeford Conservation Commission

September 2022

by

Mark Ward

Ecological Consultant

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Background

On August 22, 2022, I met Erik Lema of Basswood Environmental and together we walked the grounds of two parcels, Tax Map 7, Lot 8 and Tax Map 2, Lot 38 in western Biddeford (Figure 1). I had visited both of these parcels in 2007 on behalf of the Conservation Commission as part of a broad ecological assessment of lands located west of I-95 in western Biddeford. The Commission asked me to revisit these lands in 2020 and to report on interim changes. Access to these two parcels was not granted at that time, although I was able to cursorily assess the impact of timber harvesting on the parcels from the boundaries of adjacent parcels. The objective of my 2022 visit was to conduct a rapid reconnaissance, photo document any observed changes, and report on current condition.

Prior to the site visit, I reviewed two documents that had been provided to me by Terradyn Consultants that relate to recent survey work conducted on the Map 7, Lot 8 parcel. The first was a Rare Plant Habitat Assessment conducted by Mr. Lema of Basswood Environmental dated January 9, 2022. The report included a review of potential rare plant and rare or exemplary natural community occurrences on the parcel (based on data provided by the Maine Natural Areas Program) as well as the results of a site visit conducted by Mr. Lema in either December 2021 or January 2022. The second document was a one-page Vernal Pool Assessment dated May 18, 2020, conducted by Mark Hampton of Mark Hampton Associates Inc. and based on two site visits made "over the course of six weeks beginning the first week of April." The report stated that "no vernal pools were found on the property" These documents were labelled as Appendices 9 and 10 respectively and were apparently part of a larger project application put together by Terradyn Consultants. The acreages referenced in these documents differed somewhat. The

Rare Plant Habitat Assessment refers to an approximately 160-acre site while the Vernal Pool Assessment references a "175-acre portion of parcel on South Street." I found these acreage references confusing since the actual acreage of the Map 7, Lot 8 parcel is about 314 acres. The photo point locations included in the Rare Plant Habitat Assessment Report indicate that the majority of Map 7, Lot 8 was visited during the survey, but no map or descriptive content was provided in the Vernal Pool Assessment making it difficult to evaluate what area was actually included in that survey.

Figure 1a. Aerial imagery of the subject parcels as they were in 2007.

Figure 1b. Aerial imagery of the subject parcels in 2022.

Mr. Lema and I were met at the site by Matthew Chamberlain and Chico Potvin, who made sure that I understood that the offer to walk the grounds was extended only to Mr. Lema and myself and not to members of the Conservation Commission. The encounter gave me the opportunity to ask about the timing of the logging operations at the site. Mr. Chamberlain informed me that the logging had taken place over the course of several years, beginning in either 2017 or 2018 and continuing through 2020. Mr. Chamberlain also mentioned that a Mr. Milligan (affiliation unclear) was soon intending to drop some additional trees into Thacher Brook to enhance water quality.

Methods

Mr. Lema and I walked a good portion of the two parcels (Figure 2), which collectively comprise about 333 acres (314 acres for Map 7, Lot 8 and 19 acres for Map 2, Lot 38). While a one-day site visit did not allow a comprehensive inventory of the site, I got a good sense of the condition of these parcels fifteen years later. The overall amount of field time spent on these parcels in 2022 was comparable to the amount of time I spent on them in 2007.

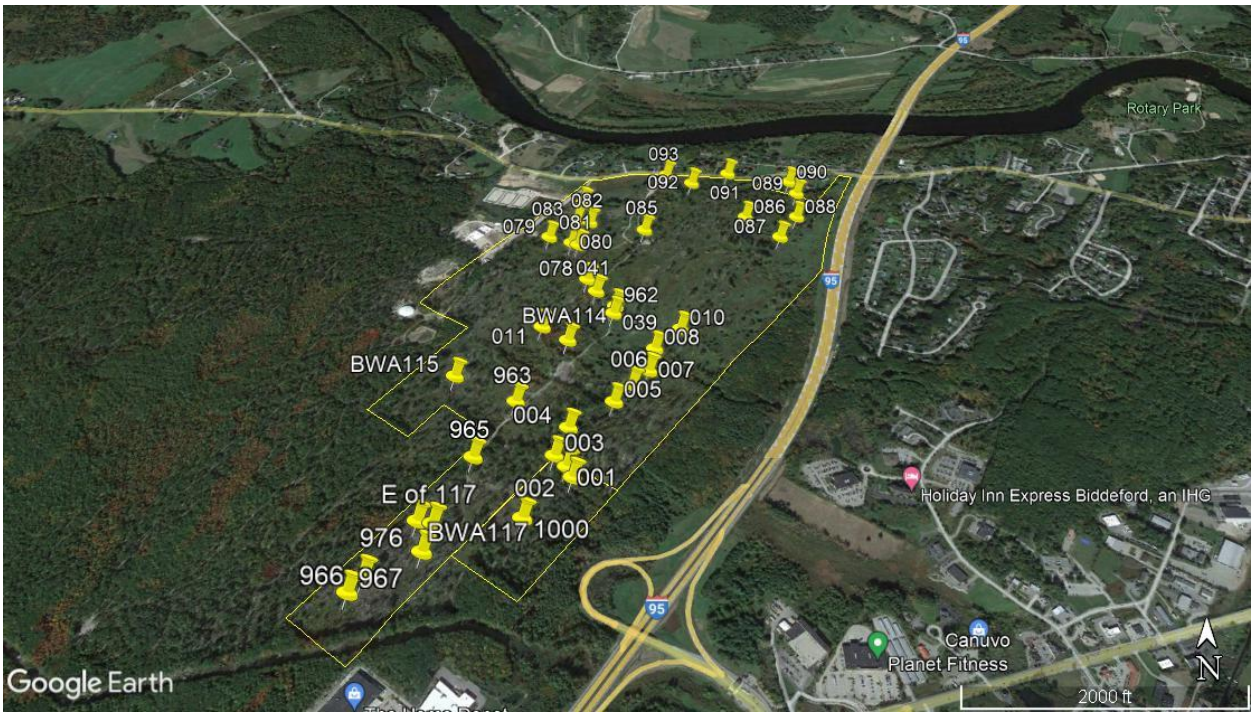


Figure 2. Map of waypoints taken at locations on the subject parcels indicating the approximate terrain covered during the Aug 22, 2022 rapid reconnaissance.

Results

Site Description

The subject parcels include a variety of upland and wetland habitats characterized by rocky upland rises punctuated by lowland swales and wetland basins. There are both perennial and intermittent streams at the site. A powerline corridor runs more or less parallel to South Street about one quarter of the way south at the site (Figure 1a). The southern two thirds of the site drain primarily to the east into Thacher Brook, while the northern third of the site drains north into tributary streams of the Saco River.

The conditions at the site were unusually dry at the time of the visit owing to the drought conditions experienced in 2022.

Timber Harvesting

The most obvious change in the condition of these parcels since my visit in 2007 was the timber harvesting that has taken place. As noted in Mr. Lema's report, the infrequently used ATV trail that I had observed in 2007 running from north to south through the parcel has now become an approximately 25-ft wide logging road. While a significant portion of the northern third of the site was open field or early successional in 2007, the southern two thirds was primarily forested (Figure 1a). Recent aerial imagery (Figure 1b) illustrates the extent to which the formerly wooded land on these parcels has been largely cleared of trees. It appears to have been the same logging operation that occurred on both parcels as there was no indication of any difference between treatments on the two parcels (the parcels are indistinguishable from one another on the ground). These parcels now have a relatively low number of scattered standing trees except in a few areas that border perennial or intermittent streams, were difficult to access because of rocky slopes, or were presumably deemed to be low value. The heavy cutting on these parcels is in sharp contrast with uncut, or selectively, cut forested parcels that they abut (Figure 1b). The cutting operation on these parcels has left sections of exposed bedrock on shallow-to-bedrock Lyman soils (Figure 3). The sparse array of remaining trees has made them more susceptible to blowdown (Figure 4). Early successional pioneer species such as blackberry (*Rubus allegheniensis*) and sweet fern (*Comptonia peregrina*) were common in upland areas.

While cutting operations seem largely to have concluded at this site, there was still earth-moving machinery present at site at the time of my visit (Figure 5).

Thacher Brook

Land located to the east of Thacher Brook on the Map 7, Lot 8 parcel was also cut during the logging operation in what appeared to be a series of strip cuts. This section of the site was apparently accessed by a temporarily constructed bridge that allowed machinery to cross the brook during the operation (Figure 6). Thacher Brook has a history as an impaired stream with water quality issues to which the City of Biddeford has devoted both monetary and human resources in an effort to restore it. With the help of Mr. Lema and a 100ft measuring tape, I measured the forested buffer along Thacher Brook at several locations (Figure 7). City ordinance requires a 75-ft forested buffer be maintained on streams to maintain water quality. I found

measurements of the forested buffer along Thacher Brook on these parcels to routinely fall short of this threshold. Measured buffer widths at five different locations ranged from 0-75 ft, with only one measurement approaching 75 feet and most falling in the 35-50 ft range. For an impaired waterway, such as Thacher Brook, extra caution should have been taken to assure that, at a minimum the required 75-ft forested buffer condition was met. This does not appear to have been the case.

An inadequate forested buffer can subject Thacher Brook to additional sediment input during heavy rainfall events. Increased solar inputs caused by an inadequate forest buffer can raise water temperatures, which can in turn reduce dissolved oxygen levels and further the cycle of impairment.

Discussions of dropping additional trees in this already under-allocated forested buffer to "improve stream habitat" seems ill-advised. If the desired goal is put trees in the stream channel for structural purposes to enhance pool formation, then I would recommend using some of the already downed wind-thrown trees on the property rather than felling additional trees in an inadequate forest buffer.

There was plenty of water in Thacher Brook at the time of the site visit. The clay banks of Thacher Brook often make it cloudy as sediments remain in suspension in the water column (Figures 6 & 7). The floodplain along the margins of the brook is typically occupied by shrubby or tall herbaceous plants (Figure 8), but at one location we came across a floodplain pool (Figure 8) that was covered with duckweed (*Lemna* sp.) that is probably a remnant pond for livestock.

Wetland Delineation

This site appears to have more wetlands than were indicated on the National Wetland Inventory maps that I consulted prior to visiting. At numerous locations on the parcels, the presence of obligate wetland plant indicator species such as cattail (*Typha* sp.) suggest that wetlands are widespread in swales and lowland basins at this site (Figure 9). At the southern end of the site, formerly forested wetlands had been heavily cut and were characterized by large numbers of sprouting red maple stumps (Figure 10). There was a surprising amount of cattail (and other floral indicators of wetland habitat) present on the west side of the Map 7, Lot 8 parcel in swales that occupy low areas at the base of upland rises with shallow to bedrock soils.

There was little indication at the site (such as extant flagging) that a thorough wetland delineation has been completed on the subject parcels. The only location where we observed any flagging to suggest wetland delineation was along a wooded stream channel at the northern edge of the site (Figure 11).

I was not provided with a report of wetland delineation that has taken place at the site. Presumably wetland delineation is a requirement for any project application on the scale being contemplated at this site. Conducting a wetland delineation prior to the cutting operation would have been a much easier undertaking for a wetland scientist. As Mr. Lema's report suggests the disturbances associated with the harvesting operation has likely expanded habitat that would now be delineated as wetland at this site.

Based on my observations of obligate wetland species throughout the site, I would suggest that the Maine Natural Areas Program map included in Mr. Lema's report, which includes a category for "additional NWI wetlands" is a much better proxy for wetland delineation at this site than the NWI maps that I consulted before visiting. If a wetland delineation of the site has been completed, I would be interested to know when it was done and to see what it includes.

Potential Vernal Pools

I revisited two potential vernal pools on Map 7 Lot 8 (Waypoints BWA115 & BWA117), where I had conducted egg mass counts in early May 2007. I was able to confirm that both of these potential vernal pools were natural basins in surrounding bedrock (a fact that I had neglected to record in my original notes from this site). Both pools had seen heavy cutting in them and in their immediately adjacent uplands. Both potential vernal pools had significant amounts of logging slash deposited in their deeper portions (Figure 12). Although these wetlands lacked standing water at the time of my visit, both included obligate wetland indicator plant species, such as cattail, bur-reed (*Sparganium* sp.), and wild calla (*Calla palustris*) that suggest them as semi-permanent wetlands (Figure 13)—in other words wetlands that retain standing water throughout the summer in some, if not most, years. In combination with the natural basin setting, these indicators should suggest to a trained eye the need for their assessment as potentially "significant vernal pools." During my single day visit to these wetlands in May 2007, one of these wetlands (Waypoint#BWA117) easily exceeded the thresholds for both wood frog and spotted salamander egg mass counts to suggest it as a likely candidate for significant vernal pool designation. Other wetland basins at the site also suggest that they should have been deemed worthy of egg mass counts.

The one-page Vernal Pool Assessment by Mark Hampton in 2020 did not contain a map of the area assessed although it referenced a "175+/- acre portion" of what was presumably Map 7, Lot 8 (a 314-acre parcel). The one-page report did not include any data on potential vernal pools that were visited and/or egg mass counts at assessed pools. If data showing the area assessed, the locations of potential vernal pools investigated, and egg mass counts tallied or species observed exist, I would be very interested to see these. The report implies that there were no wetlands worthy of egg mass counts in the assessed area, which seems questionable. However, without knowing the area covered it is impossible to evaluate the reasonableness of this claim. If either of the two potential vernal pools that I revisited in 2022 were located within the 175 +/- acre area covered by the 2020 vernal pool assessment, then they should have at least had egg mass counts conducted at them.

The 2020 vernal pool survey was apparently conducted after logging operations were well under way (if not mostly completed). Vernal pool assessments on both parcels should have been conducted prior to the logging operations that took place. The heavy-handed logging has undoubtedly altered both upland and wetland habitats for pool-breeding amphibians on these parcels by dramatically decreasing the amount of forest cover in and around potential vernal pools. The resulting loss of forest cover not only increases exposure of pool-breeding amphibians

on their springtime journeys to and from surrounding uplands to breeding pools, it also may decrease the hydroperiod of breeding pools and render them less able to support metamorphosis of amphibian larvae to adults.

Invasive Species

This site hosts a laundry list of invasive plant species; among the invasive species observed here include bull thistle (*Cirsium vulgare*), Japanese barberry (*Berberis thunbergia*), Morrow's honeysuckle (*Lonicera morrowii*), Japanese knotweed (*Fallopia japonica*), multiflora rose (*Rosa mulitflora*), spotted knapweed (*Centaurea* sp.), Asiatic bittersweet (*Celastrus orbiculatus*), glossy buckthorn (*Frangula alnus*), and purple loosestrife (*Lythrum salicaria*). In addition to there being a wide variety of invasive plant species at this site, they are also widely distributed. The greatest abundance of invasive plants is currently found in the areas closest to South Street, that have had the longest history of human disturbance. There were, however, large dense stands of 8-10 ft high glossy buckthorn found along the floodplain of Thacher Brook. Some of these invasive plant species were certainly here when I visited the site in 2007, but I did not note any in my report. The severity of the recent cutting operation and the accompanying soil disturbance that it entailed will undoubtedly facilitate the spread of invasive plants at this site by opening up formerly wooded areas and subjecting them to occupancy by these tenacious invaders.

Rare Plant Surveys

While this site visit was a rapid reconnaissance, but this site could benefit from dedicated rare plant survey effort. I collected a small number of plants at the site, but none were determined to be rare species (I am still working on the identification of one of them). Erik Lema of Basswood Environmental is an experienced and knowledgeable botanist. His rare plant assessment report of January 2022 was thorough for a wintertime assessment. He did a commendable job of winnowing existing information provided by the Maine Natural Areas Program down to a dozen rare plant species that have the highest potential to be found at this location and identifying the best window to survey for each of those species. I found his report beneficial for my own visit to the site and it was nice to have his trained eye at the site in August when it was actually feasible to find rare plants there. It's unfortunate that the only apparent reason for his presence at the site on the date of my visit was to serve as my minder. If this project were truly interested in conducting a thorough rare plant assessment at this site, it would have had him out at the site conducting botanical surveys on its behalf earlier in 2022 during the most appropriate survey windows as recommended in his report.

Conclusions and Recommendations

The overall condition of these parcels in 2022 has been diminished significantly primarily because of a poorly executed logging operation that was conducted from 2017-2020. The most egregious issues associated with the cutting include leaving an inadequate forested buffer on an impaired waterway (Thacher Brook), indiscriminate cutting in and adjacent to a variety of

wetlands including likely significant vernal pools, extensive cutting on shallow to bedrock uplands that increased the vulnerability of remaining trees to windthrow, and opening up formerly wooded sections of the site to invasive plant species. Ideally, vernal pool survey work, wetland delineation, and rare plant assessments should have been conducted at this site prior to carrying out this cutting operation. The findings of such survey work could have informed a more ecologically sensitive cutting operation than the one that was undertaken here.

I recommend against dropping additional trees in the already inadequate forested buffer left along Thacher Brook. If putting downed trees in the stream channel is intended to enhance pool formation, then I would recommend using already downed wind-thrown trees on the property rather than felling additional trees in the insufficient forest buffer.

I recommend that the Conservation Commission seek details of any wetland delineation work that may have been conducted at this site to find out when the work was done and the extent of the site that it covers. The Maine Natural Areas Program map included in Mr. Lema's report (which includes an "additional NWI wetlands" data layer) can be used as rough guide to assess the quality of any delineation work.

I recommend that the Conservation Commission seek additional details of the Vernal Pool Assessment conducted in 2020 to determine the area assessed and to seek any data on potential vernal pools that were visited and/or egg mass counts at assessed pools.

Any future field work conducted at the site should clearly identify the area assessed (e.g. does it encompass the entirety of Map 7, Lot 8 or only a portion of it?). This will allow for a better evaluation of the comprehensiveness of the work.

I recommend that the project provide Mr. Lema of Basswood Environmental the opportunity to conduct botanical surveys on its behalf during the most appropriate seasonal survey windows as recommended in his Rare Plant Assessment Report.

Figure 3. Sections of exposed bedrock from the logging operation. (Waypoint#966)

Figure 4. Windthrown trees uprooted after logging operations. (Waypoint#976)

Figure 5. Earth moving machinery observed at site on Aug. 22, 2022 (Waypoint#085).

Figure 6. The location at which a temporary bridge was constructed across Thacher Brook for logging access. The horizontal remains of bridge materials are visible in the distance. (Waypoint#007)

Figure 7. A narrow, forested buffer along Thacher Brook showing cut stumps on a steep bank (left) and a location where felled trees left no forested buffer at all along Thacher Brook (right). (Waypoints#1000 &#006)

Figure 8. A typical section of tall herbaceous vegetation in the floodplain along Thacher Brook (left) and a duckweed covered pool in the floodplain of Thacher Brook (right). Waypoints #004 & #008.

Figure 9. An example of cattails (*Typha* sp.), an obligate wetland plant species, suggesting an area that would be delineated as a wetland. (Waypoint#041).

Figure 10. Purple loosestrife, an invasive wetland plant species, in front of stump sprouting red maples in a formerly forested wetland. (Waypoint#967)

Figure 11. Yellow flagging on a tree along a streambed at the northern edge of the property was the only on the ground indication of potential wetland delineation observed at the site. (Waypoint #091)

Figure 12. Logging slash deposited in a deep section of a potential vernal pool at which a critical threshold of egg masses had been counted in 2007 to suggest its designation as significant wildlife habitat. (Waypoint# BWA117)

Figure 13. A relatively unvegetated section of a potential vernal pool with wild calla (*Calla plaustris*) suggesting the longer hydroperiod of a semi-permanent pool. (Waypoint #BWA117)

Appendix I. Coordinate data for Waypoints taken on Aug 22, 2022

Waypoint #	Latitude	Longitude
962	43.48942	-70.50076
963	43.48588	-70.50398
965	43.48413	-70.50513
BWA117	43.48231	-70.50652
East of BWA117	43.48225	-70.50605
966	43.48089	-70.50777
967	43.48053	-70.50813
976	43.48153	-70.50624
1000	43.48245	-70.50344
001	43.48394	-70.50221
002	43.48362	-70.50201
003	43.48424	-70.50261
004	43.48516	-70.50222
005	43.48593	-70.50076
006	43.48661	-70.50016
007	43.48703	-70.49960
008	43.48789	-70.49937
010	43.48851	-70.49845
011	43.48852	-70.50332
BWA115	43.48661	-70.50607
039	43.48915	-70.50082
041	43.48988	-70.50146
078	43.49030	-70.50179
079	43.49210	-70.50332
080	43.49192	-70.50246
081	43.49182	-70.50220
082	43.49298	-70.50180
083	43.49313	-70.50231
084	43.49397	-70.50209
085	43.49252	-70.49966
086	43.49295	-70.49570
087	43.49228	-70.49442
088	43.49320	-70.49364
089	43.49420	-70.49351
090	43.49485	-70.49371
091	43.49519	-70.49619
092	43.49456	-70.49772
093	43.49516	-70.49872

Summary

The web page for the Biddeford Conservation Commission should:

1. Clearly communicate our role within the city government
    - Introduce our function and goals
2. State the value of our work to the city and residents
    - Providing recommendations and research that:
        - Protect wildlife and wildlands to ensure healthy ecosystems
        - Steward land to ensure we maintain what cannot be reclaimed after it is lost
        - Identify areas of impact (lands/waters) in Biddeford
3. Provide resources for residents/landowners to minimize environmental impacts and learn about moving land into conservation
4. Nurture relationships with residents

Simply put — this page should address any questions the public might have about what the Conservation Commission does and why it's important to residents.

References from the BCC Charter:

(Key areas of focus highlighted)

Authority to advertise, print, distribute books, maps, plans and pamphlets.
The Conservation Commission may advertise, prepare, print and distribute books, maps, charts, plans and pamphlets which in its judgment it deems necessary.

Index of open areas and working landscapes; purpose.
The Conservation Commission, or committee thereof, shall keep an index of all open areas, publically or privately owned, within the municipality, including farm and forest land, open marshlands, swamps, vernal pools, other wetlands and water bodies, wildlife habitats, especially large unfragmented blocks, for the purpose of obtaining information pertinent to proper utilization, protection, development or use of such open areas, and may recommend to the City Council or any body politic or public agency of the state a program for the better utilization, protection, development or use of such areas, which should include perpetual protection through conservation easements.

To work in advisory capacity.
The Conservation Commission shall work in an advisory capacity to the City Council and the Planning Board.

Website Content & Suggested Revisions

CURRENT	*NEW*
Conservation Commission The Conservation Commission promotes responsible environmental stewardship in the City of Biddeford. The Commission consists of seven commissioners, appointed for a five-year term. Annually, at its first meeting, the commission elects a chairperson, a vice-chairperson and secretary. **Agendas & Minutes** Agendas are available prior to the meetings. Minutes are available following approval. View Archived Meeting Minutes	**Conservation Commission** The Conservation Commission works in research and advisory roles with city planners on both environmental and conservation needs — helping to maintain healthy ecosystems and public access to land in the City of Biddeford. **Agendas & Minutes** The Conservation Commission meets monthly and agendas are available prior to meetings. Minutes are available following approval. View Archived Meeting Minutes The Conservation Commission consists of seven commissioners, each appointed for a five-year term. Annually, at its first meeting, the commission elects a chairperson, a vice-chairperson, and secretary.
Commission Members Chrystina Gastelum Chair Phone: 58 Pike Street Term Expires: 12/2022 Richard Rhames Vice Chair Phone: (207) 282-2119 10 West Loop Road Term Expires: 12/2026 Denis Rioux Phone: (207) 286-7967 677 South Street	*No change unless needed.*

Term Expires 12/2024 Bryan Hadler Phone: (631) 356-2663 100 Summer Street, #302 Term Expires: 12/2022 Erik Heumiller Phone: (207) 494-5556 2 Main Street, Unit 15-202 Term Expires: 12/2026 Michael Lowell Phone: (207) 283-3056 521 South Street Term Expires: 12/2026 Maya Atlas Phone: (303) 918-2341 92 Granite Street, #2 Term Expires:12/2024	
Related Documents 1. BCC Brochure for Homeowners 2. Best Management Practices for the Application of Turf Pesticides and Fertilizers (PDF) 3. Conservation Commission Resources - Combined (PDF) 4. Department of Environmental Protection Hearing - September 16, 214 (PDF) 5. Shoreland Zoning Ordinance Revisions - May 18, 2016 (PDF) 6. Village Mixed Use Sub-Committee - Position Paper	**Resources & Documents** (see revised recommendations with notes below)

A Letter from the Conservation Commission Dear Biddeford Homeowner: In an effort to encourage the safest and most environmentally friendly methods for caring for our lawns and gardens, the City of Biddeford has adopted the Best Management Practices (BMP) for the Application of Pesticides and Fertilizers on City of Biddeford Properties.	**How Can You Help?** Our city is more than the boundaries between our neighborhoods and the undeveloped spaces around them. Every resident contributes to the health of our ecosystem and benefits from access to these wild spaces. Conscious (but simple) efforts you can take today make an impact on: ● The quality of our waters ● Local fishing and shellfish industries ● The health of children and pets Explore the resources below to see how you can do your part to ensure Biddeford's connected ecosystems can thrive.
Importance of Following the BMP Recommendations Following these practices can go a long way towards ensuring the health of our watershed, your family and pets, and the fishing industries that are so important to our town. The way each of us cares for our lawn can have an impact on us all. Many of the BMP recommendations apply to individual lawns, and we are hoping that you will join the movement to minimize reliance on weed and insect controls and to take a healthier approach to lawn care.	*Strike this section and make this information more streamlined in a PDF available in the resources.*
Helpful Resources The Conservation Commission has compiled several resources for homeowners, including: ● Best Management Practices for the Application of Turf Pesticides and Fertilizers (PDF) ● 10 Simple Steps to a Safe and Healthy Lawn ● 7 Questions You Should Ask Your Lawn Care Company ● The Biddeford YardSmart Pledge	**Homeowner Resources** The Conservation Commission has compiled several resources for homeowners, including: ● Best Management Practices for the Application of Turf Pesticides and Fertilizers (PDF) ● 10 Simple Steps to a Safe and Healthy Lawn ● 7 Questions You Should Ask Your Lawn Care Company ● The Biddeford YardSmart Pledge ● Board of Pesticides Control (BPC)

Feel free to contact any member of the Conservation Commission. We will be happy to give you (or find for you) answers to any questions that you may have. Email board member Tom Craven.	• Maine Yardscaping Partnership Phone: 207-287-2731 Contact any member of the Conservation Commission with questions or concerns.
More Information Several organizations can provide more information about conservation efforts. • York County Cooperative Extension Service • York County Soil and Water Conservation District Call Melissa Brandt at 207-324-8888. • Board of Pesticides Control (BPC) • Maine Yardscaping Partnership Phone: 207-287-2731 Email the Maine Yardscaping Partnership	**Conservation Resources** If you're interested in learning about conservation easements, or other options for your land that don't involve development — explore these organizations: • York County Cooperative Extension Service • York County Soil and Water Conservation District Call Melissa Brandt at 207-324-8888. • Saco Valley Land Trust

Related Documents - Audit & Recommendations

BCC Brochure:

- Currently designed for print and fold - not ideal for web reading
    - Redesign info for online/mobile scrolling

Best Management Practices - Turf Pesticides & Fertilizers

- Currently designed for print and fold - not ideal for web reading
    - Redesign info for online/mobile scrolling
    - Very information dense - hard to read and overwhelming
        - This likely causes people to skim or skip large sections
    - Also outdated? From 2009

Biddeford Yard Smart - 10 Steps

- “10 Simple Steps” starts with a lot of text
    - Could redesign to simplify info and include icons for easier absorption of information
- As part of the pledge, can we send small yard signs to residents to leave in their yards to promote awareness and acceptance?
- “Ask your lawn care” section could be a separate document?
    - Could also include a list of lawn care companies that have signed on to follow this pledge as well?
        - Make it as easy as possible for people to find alternatives

DEP Hearing

- Not sure of the relevance for the community as it is
    - Recommend taking information and revising the approach to be a public-facing document focused on education and impact

Shoreland Zoning

- Not sure of the relevance for the community as it is
- What is the desired action or education role this plays for residents?

Village Mixed-Use Sub Committee

- Feels very specific to a project that may not be known or feel relevant to residents
    - We could position this type of information as “case studies” to establish the context for the information and describe why and how we gathered the information and why we think it impacts residents
    - Current title page feels very formal (govt. docs)

Going Forward - Topics to Include/Showcase

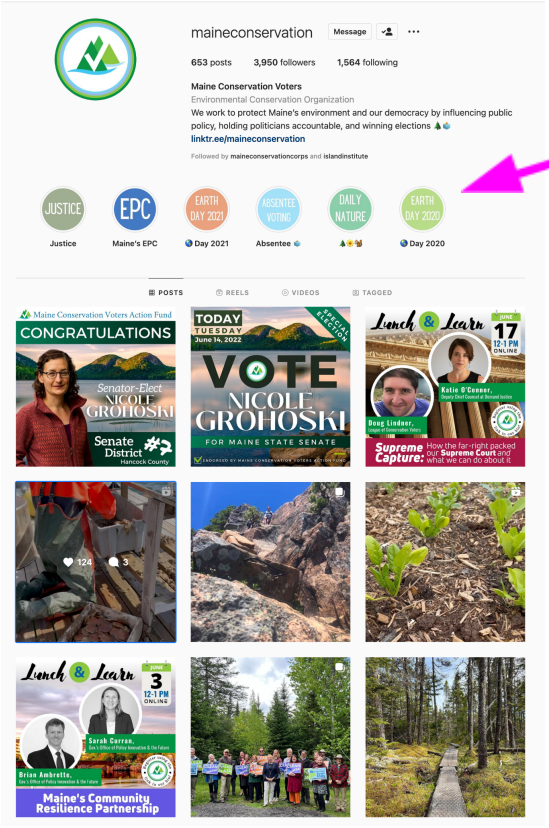
The following suggestions are topics that are more relatable to Biddeford residents, helping to position the BCC as a resource for them, while also serving to educate them and make them partners in our conservation efforts.

- Watershed protection
    - Showcase the different waterways in Biddeford
    - Possibly create videos to share the stories of prior development and impact on these watersheds
        - Talk about historical fishing and current impacts
- Land use and development
    - Options for landowners beyond development?
        - Solar Farms
        - Land share
        - Conservation easements
            - Include details on how to go about each of these
- Common unknowns for homeowners?
    - Things people may do unwittingly that are harmful
    - Things people can do to reduce their impact on watersheds
    - Lawncare info and resources
- Identify where developers are gaming the system, then create information to call it what it is, and educate the community about the negative long-term effects it has to create a broader consensus of resistance.
    - Why we do what we do
- Connect our work to the lifestyles and activities residents do identify with
    - Watersheds/runoff - shellfish, fishing, beaches, etc.
- Celebrate the “wins” - acknowledging how our work and recommendations have made an impact over time in Biddeford to lay the path for future acceptance
- Local farmland and food resilience
    - Connect to recent events, shortages, etc.
- Protecting resources is less expensive than trying to restore them
    - Make it a tax/financial decision
- Have a recommendation on the type of development or best practices for balancing development and ecological conservation/stewardship

BCC - Social Engagement

The purpose of creating/increasing activity on social profiles would be to keep BCC issues and goals top-of-mind for residents — making our activities a part of their daily/weekly life instead of something that happens behind the scenes. This can help with community involvement when issues arise (West Brook) or in prioritizing conservation perspectives across city government at large.

@the.bcc
Biddeford Conservation Commission
Research, advice, and advocacy for environmental stewardship in the City of Biddeford.



Profile Highlights:

- Lawncare (tips, resources)
- Watershed Protection
- Biddeford's Waters (brooks, ponds, river)
- Biddeford's Lands (conserved lands, photos)
- Common Pollutants (things to avoid)
- How to Help (replacements, yardscaping, etc.)

Reach & Impact:
We could also encourage residents to tag the BCC accounts with their photos from public lands to expose wider audiences to the account, mission, and resources.