

City of Biddeford

Planning Board

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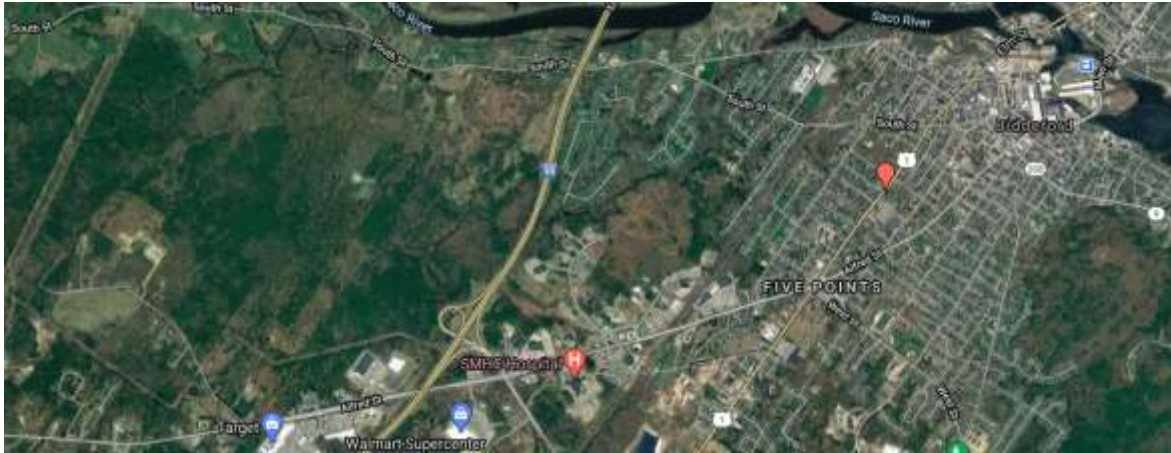
1. Biddeford Conservation Commission Presentation - Meaghan Daly Re: Proposed VMU Ordinance. Planning Board Discussion/Q&A to follow

[BCC VMU Sub-Committee - Position Paper #1_FINAL_03.03.2021.pdf](#)

2. Comprehensive Plan Workshop
Public Engagement Plan (PEP) Advisory Committee
Progress and Adjustment Discussion

Adjourn

Key Considerations and Recommendations for a Village Mixed Use Zone Ordinance



A report prepared by the
Village Mixed Use Zone Sub-committee
on behalf of Biddeford Conservation Commission

March 1, 2021
Biddeford, Maine

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Executive Summary

This report is the product of more than six months of work on the part of a sub-committee appointed by the Biddeford Conservation Commission (BCC) to study a proposed Village Mixed Use (VMU) zone ordinance. The City Council has requested the Planning Board to review the appropriateness of this zoning amendment. In line with the BCC's advisory role to support the better utilization, protection, development, and use of open space, forest and farmland, and unfragmented blocks of land within Biddeford, we have conducted in-depth research to examine various aspects of the proposed VMU zone ordinance. A compilation of the primary resources that informed this research are available at [this link](#). Based on this research effort, the sub-committee has identified broad options and specific recommendations for the Planning Board and City Council to consider within future deliberations.

This amendment to the zoning ordinance is being evaluated as a potential city-wide option, though it was brought to the city by SSV LLC, which owns a 330+ acre parcel west of I-95 on South Street in Biddeford. This paper is intended to address broad considerations around the proposed VMU zone ordinance and zoning amendment; however, it is worth noting that City Council's order to the Planning Board to review such a zoning amendment makes explicit reference to the South Street Village.¹ Consequently, the analysis uses illustrative examples in several instances, which are drawn from the rezoning overview document presented in support of the zoning amendment by South Street Village LLC to the City Council and Planning Board.² This report is intended to speak to general issues and opportunities that may arise under such a zoning amendment, not to support or oppose any particular project.

In considering the range of available pathways forward, we conclude that the City of Biddeford is left with three practicable options regarding the development and adoption of a VMU zone ordinance.

The first option is to adopt a version of the VMU zone ordinance that closely adheres to the current draft prepared by the City of Biddeford Planning and Development Department (dated 12.04.20).³ The second option is to reject the VMU zone ordinance. The third option is to make substantial revisions to the current draft of the VMU zone ordinance before approval.

Before further discussion of the three options mentioned above, it is worth noting that there is, actually, a fourth option: conserve this large, unfragmented parcel in its entirety as open space or working farm or forest. Given the BCC's mandate to enhance the protection of natural resources and open space in Biddeford, it would be our highest preference to protect the whole habitat block in western Biddeford through perpetual conservation. However, the Commission recognizes that such large-scale conservation would require both political and financial commitments that are not likely – or even possible – at this time. **Thus, we acknowledge that some form of development will occur on this land. The question is, *what form will this development take?***

¹ The order reads: "2020.49 In Board of City Council...June 16, 2020: Be it ordered, that the City Council of the City of Biddeford does hereby forward a zoning request for South Street Village to the Planning Board, providing review, a public hearing and recommendations back to the City Council."

² South Street Village, LLC (2020). Rezoning Overview: Village Mixed Use Zone, City of Biddeford Maine. available at: https://legistarweb-production.s3.amazonaws.com/uploads/attachment/pdf/617851/6-16-2020_South_Street-Zoning_Proposal_to_PB-backup_docs.pdf. Note: This document was presented to the City Council in June 2020.

³ The 12.04.2020 draft of the VMU zone ordinance is available here: <https://www.biddefordmaine.org/DocumentCenter/View/8259/VMU-Zone-Draft-120420>

The **first option** would advance a VMU zone ordinance that provides negligible conservation of natural resources and rural areas by allowing maximum, high-density buildout on almost all of the 330+ acre parcel slated for rezoning. The current draft of the VMU zone ordinance omits key protections for natural resources and does not incorporate elements of the existing cluster development ordinance to enable large or contiguous portions of this unfragmented land block to remain intact as viable habitat, forest, or agricultural land. **It is the conclusion of this sub-committee that this option would be the least desirable – and even a potentially legally questionable – outcome, as this is out of step with Biddeford’s stated goals of preserving critical natural resources and rural areas of the city.**⁴

The **second option** is to reject the request for the VMU zone change in western Biddeford. In this scenario, developers may likely proceed with developing the parcel, but would be required to adhere to the requirements of existing zoning. This would include: exclusion of undevelopable lands, flood plains, and rights of way; subtraction of prime agricultural soils and soils of statewide significance from net density calculations; and adhering to the cluster development ordinance, which requires “maximum preservation of agricultural and forested land.”⁵ It is worth noting that the SSV LLC has stated that 490 units can be built on the parcel under existing zoning in documents supporting this zoning amendment; however, Biddeford’s Planning and Development Department has not yet validated the accuracy of this calculation.⁶ This calculation is further based on the presumed construction of a mobile home park on over 50% of the parcel, though it is not clear if such an assumption aligns with the developers’ actual intentions. If the developer does not build a mobile home park, the total number of allowable units on the property could be significantly lower. While the sub-committee recognizes that the current Rural-Farm (R-F) zoning in Biddeford has some limitations, **the reduced net density, protections for natural resources, and clustering required under existing zoning would achieve significant conservation benefit when compared to the current draft of VMU zone ordinance.** The sub-committee recommends this as the best of the available options currently on the table.

The **third option** would involve making significant adjustments to the language and intent of the VMU zone ordinance to ensure that it fully reflects “Smart Growth” principles and enables meaningful protection of Biddeford’s natural resources and rural areas. The majority of the recommendations provided in this document address this option, in recognition of the lengthy work and deliberations already undertaken by both the Planning Board and City Council on the VMU zone ordinance. In Sections 1 and 2, we provide recommendations to align the VMU zone ordinance with [Smart Growth principles](#) and [comprehensive planning](#). In Sections 3, 4, and 5, we provide specific recommendations on the topics of [conservation and habitat](#), [agriculture and working landscapes](#), and [water quality](#) respectively. In Sections 6 and 7, we discuss recommendations for integrating [climate change](#) mitigation and adaptation and responsible [siting of solar energy](#) within VMU zoning. We conclude with several [overarching recommendations](#).

While the sub-committee has worked in good faith to develop recommendations to improve the VMU zone ordinance generally, it is necessary to point out contradictions inherent in this specific zone amendment proposal. **First and foremost, a VMU zone should be sited in a designated growth area.** The parcel in question (and indeed much of western Biddeford) is not designated as a growth area

⁴ City of Biddeford. (1999) Comprehensive Plan.

⁵ Biddeford City Code Part III (LDR), Article VI (Performance Standards), Section 16: Cluster Developments, available at: <https://ecode360.com/15169496>.

⁶ South Street Village, LLC (2020). Rezoning Overview: Village Mixed Use Zone, City of Biddeford Maine.

within the current (1999) Comprehensive Plan. The conversion of Biddeford’s rural areas to high-density development is in fundamental conflict with Maine’s Growth Management Act and Smart Growth principles, both of which aim to prevent sprawl and make efficient use of existing public services and infrastructure. **Besides being a radical departure from current zoning, the type of development facilitated by locating a VMU zone in non-growth areas presents a number of serious practical problems.** For example, most of western Biddeford is not served by public sewer and wastewater systems. There are serious questions about the viability of servicing hundreds of residential and commercial structures on significantly reduced lot sizes with individual or community septic systems – especially given the water quality implications of proximity to the Saco River, our public drinking water supply at the nearby Maine Water facility, and intersection of the parcel by Thatcher Brook.

Finally, we are concerned that approving a VMU ordinance and zone change in western Biddeford would undermine the legitimacy of the ongoing Comprehensive Plan update. Changing 330+ acres from R-F to VMU zoning would be a *de facto* re-designation of western Biddeford from a non-growth to a growth area. We strongly feel that Biddeford’s residents should have a voice in determining the trajectory of future land use based on rigorous data and transparent public processes. Moreover, a VMU zone in western Biddeford would likely require significant public investment to expand services and infrastructure and could potentially affect existing downtown businesses. The City has gone through significant change over the last 10 years, and evaluation of that progress is currently taking place in the Comprehensive Plan update. Therefore, conclusions on the City’s needs and resources have not yet been fully assessed or reported, and there has been no comprehensive evaluation of the fiscal or economic impacts of implementing a VMU zone in Biddeford to date. **For these reasons, the BCC recommends that the Planning Board make a negative recommendation and that the City Council reject the VMU zone ordinance proposal to await the completion of the new Comprehensive Plan.**

To conclude, we would like to acknowledge that the views of this sub-committee, and those of the broader BCC membership, represent just one of many perspectives on this complex and far-reaching issue. While this sub-committee has worked diligently to provide evidence-based analysis and well-justified recommendations, the scope of our work necessarily reflects the specific mandate of the BCC to protect the natural resources of Biddeford. Nonetheless, we hope that the information and suggestions provided in this report will be generally helpful to the Planning Board and City Council as considerations of the VMU zone ordinance move forward. We greatly appreciate the hard work of all involved in working to make Biddeford a better place, and we hope that this report may contribute to that effort.

Ken Beuchs

(Sub-committee Chair, BCC Commissioner)

Susan Amons

(Sub-committee Member, BCC Commissioner)

Richard Rhames

(Sub-committee Member, BCC Commissioner)

Chrystina Gastelum

(BCC Chair)

Denis Rioux

(Sub-committee Member, Biddeford Resident)

Maya Atlas

(BCC Commissioner)

Meaghan Daly, PhD

(Sub-Committee Member, Biddeford Resident)

Introduction

Over the last decade, Biddeford has experienced a great deal of change. Much of this change has been positive, including a revitalized downtown, a vibrant food, arts, and culture scene, and an influx of young residents. However, change has also brought new challenges. Biddeford, as well as much of southern Maine, is experiencing unprecedented demand for housing and increased gentrification as urban centers like Boston and Portland have become increasingly unaffordable. **While Biddeford can and must grow, questions remain regarding *how* and *where* Biddeford should grow. It is vital to integrate protections for Biddeford’s natural resources within future planning and development.**

In June 2020, the City Council ordered the Planning Board to consider the appropriateness of a Village Mixed Use (VMU) zoning ordinance amendment, with a focus on a 330-acre parcel of land west of I-95 that is currently owned by the South Street Village (SSV) LLC.⁷ The City Council’s order followed SSV LLC’s presentation of a rezoning overview, which provided the basic concepts for a high-density mixed-use development on this parcel. In this presentation, the developers outlined their interest in building up to 550+ new housing units, along with other commercial buildings and new road networks.⁸ Notably, this zoning amendment is proposed for the largest remaining unfragmented parcel of land in Biddeford, which is currently located within a Rural Farm (R-F) zone.

Recognizing the scale and import of such a proposal for the natural resources of the city, the Biddeford Conservation Commission (BCC) appointed a sub-committee in September 2020, consisting of two residents and three Commissioners, to study the VMU zone ordinance proposal. Based on the responsibilities of the BCC to protect Biddeford’s natural resources and habitat, the sub-committee was asked to gain an understanding of the proposal and make recommendations first to the BCC and then to both the Planning Board and the City Council regarding findings and recommendations. This is in line with the BCC’s statutory duty to serve in an advisory capacity to the Planning Board and City Council through the provision of recommendations regarding the better utilization, protection, development, and use of open space, forest and farmland, and unfragmented blocks of land within Biddeford.⁹

The scope of the sub-committee’s research included examining the relationship of the proposed VMU zone ordinance to the existing comprehensive plan and ongoing update, pertinent local, state, and federal laws, and best practices for protection of natural resources. In this report, we also examine key components of the VMU zoning ordinance that need further consideration and development, including: conservation and habitat; agriculture and working landscapes; water quality; climate change; and siting of solar energy installations.

We situate our findings within the broader context of “Smart Growth” principles and the importance of comprehensive planning for enabling responsible development, while also drawing salient lessons from other municipalities. This document includes discussion of key topics that were researched and studied.

⁷ The order reads: “2020.49 In Board of City Council...June 16, 2020: Be it ordered, that the City Council of the City of Biddeford does hereby forward a zoning request for South Street Village to the Planning Board, providing review, a public hearing and recommendations back to the City Council.”

⁸ South Street Village, LLC (2020). Rezoning Overview: Village Mixed Use Zone, City of Biddeford Maine. Note: This proposal was presented to the City of Biddeford in June 2020.

⁹ City of Biddeford, Part II: Code of Ordinances, Administration of Boards, Committees, and Commissions, Division 4: Conservation Commission, available at: <https://www.ecode360.com/15139303>.

Each section provides brief background information, key findings, and a bulleted list of specific recommendations for each topic. The paper concludes with a set of overarching recommendations for further consideration by the Planning Board and City Council.

Section 1: Mixed-Use Development & Smart Growth

When implemented strategically, mixed-use development can help cities and towns to: reduce sprawl; increase investment in existing communities and infrastructure; minimize energy consumption; prevent depletion of open space and natural resources; and reduce greenhouse gas emissions. Mixed-use development is one component of a broader approach called “Smart Growth.”

The concept of Smart Growth arose in the 1990’s to help promote sensible development approaches that balanced competing social, economic, and environmental considerations. The American Planning Association states that Smart Growth “is an approach to achieving communities that are socially, economically, and environmentally sustainable,” that also “promotes efficient and sustainable land development, incorporates redevelopment patterns that optimize prior infrastructure investments, and consumes less land that is otherwise available for agriculture, open space, natural systems, and rural lifestyles.”¹⁰

According to the U.S. EPA, the ten principles of Smart Growth are:¹¹

1. Mix land uses.
2. Take advantage of compact design.
3. Create a range of housing opportunities and choices.
4. Create walkable communities.
5. Foster distinctive, attractive communities with a strong sense of place.
6. Preserve open space, farmland, natural beauty, and critical environmental areas.
7. Strengthen and direct development toward existing communities.
8. Provide a variety of transportation options.
9. Make development decisions predictable, fair, and cost-effective.
10. Encourage community and stakeholder collaboration in development decisions.

These principles illustrate that while fostering mixed land uses is an important element of Smart Growth, it is not sufficient on its own. The site location of mixed-use development is an essential consideration. The principles listed above emphasize the desirability of focusing development within existing communities and preserving open space, agricultural lands, and environmental resources. Indeed, land preservation is an essential element of Smart Growth.¹²

EPA Smart Growth guidelines state that new development should avoid prime agricultural soils and other sensitive environmental features, such as wetlands.¹³ Additionally, development should focus on

¹⁰ American Planning Association Policy Guide on Smart Growth, available at: <https://www.planning.org/policy/guides/adopted/smartgrowth.htm>

¹¹ U.S. EPA (2012). Essential Smart Growth Fixes for Rural Planning, Zoning, and Development Codes.

¹² Daniels & Lapping (2005). Land Preservation: An Essential Ingredient in Smart Growth.

¹³ U.S. EPA (2009). Smart Growth Guidelines for Sustainable Design & Development.

infill and redevelopment wherever possible, while also seeking locations where there are existing roads, water, sewers, and other infrastructure. In addition to environmental benefits, Smart Growth provides fiscal savings by making the most efficient use of existing infrastructure and services. Importantly, reliance on private septic systems is strongly discouraged due to the high likelihood of system failures, which incur both economic and environmental costs on the broader community.

For the reasons identified above, the Village Mixed Use (VMU) zoning ordinance by the City of Biddeford should take the full suite of Smart Growth principles on board. In particular, any mixed-use zoning ordinance should include specific performance standards to guide the responsible location of development in order to protect agricultural and working landscapes, open space, and environmentally sensitive areas. We provide specific recommendations below.

Recommendations:

- Preserve and protect farmland, natural resources, and habitat by locating mixed-use zoning on sites that do not have: wetlands; unique or prime agricultural soils; unique or prime forest soils; threatened or endangered species habitat; aquifer recharge areas.
- Establish mandatory no-development buffers of at least 250 feet surrounding all wetlands, lakes, rivers, and estuaries.
- Site mixed-use developments on greyfield, brownfield, or other infill sites.
- Site mixed-use development where there are existing roads, sewers, and other infrastructure.
- Site mixed-use development in proximity to mass transit and community services.
- Do not allow use of private septic / wastewater treatment systems in mixed-use developments.

Section 2: Mixed-Use Development & Comprehensive Planning

To achieve Smart Growth, it is necessary to take a strategic and comprehensive approach to land use decisions. At the state level, Maine has implemented laws to prevent runaway suburban sprawl. Maine's Growth Management Act [30-A, §4301 et seq] was passed in 1988 and defined a number of key goals, including the following:

- 3A. To encourage orderly growth and development in appropriate areas of each community and region while protecting the State's rural character, making efficient use of public services preventing sprawl.
- 3H. To safeguard the State's agricultural and forest resources from development which threatens those resources.

According to the former State Planner, Evan Richert, Maine's landscape has increasingly shifted from being "organized for production" – via its working farms and forests – to being "organized for consumption" through the expansion of suburban development.¹⁴ Indeed, in southern Maine, rural land area has shrunk by more than a third as suburban development has rapidly expanded over the last several decades.¹⁵ In this shift, many of Maine's residents have become largely

¹⁴ Richert, E. (2004) Land Use in Maine, 1960 to 2000: From Production to Consumption. In Changing Maine, Ed. R. Barringer, Tilbury House.

¹⁵ Ibid.

disconnected from production activities, such as farming and forestry; rather, these land uses are increasingly considered a nuisance by suburban residents due to the associated noise, odor, and dust, etc. Thus, a key feature of the Growth Management Act was to protect the state's rural working landscapes by keeping *some* land uses apart, while also lowering the fiscal and environmental impact of sprawling development.

To achieve this end, the Growth Management Act promotes widespread use of comprehensive planning at the municipal level. A comprehensive plan presents a vision for the future to guide the actions of a community. Effective comprehensive planning and Smart Growth strategies should involve broad and rigorous public engagement to identify goals, priorities, and key natural and historic assets. Additionally, comprehensive plans are the legal underpinning for zoning ordinances.¹⁶ **Thus, a comprehensive plan should dictate the development of zoning ordinances – not the other way around.**

The Growth Management Act specifies that municipalities “must direct most of the anticipated growth to areas of town designated as ‘growth’ areas, and away from ‘rural’ areas” in line with their comprehensive plan.¹⁷ **According to best practice, comprehensive planning should begin with an inventory of natural features, including soils, agriculture, forestry, habitat, and water resources to broadly define non-growth areas.**¹⁸ Further, the designation of growth areas should be justified by rigorous data collection and analysis.¹⁹

Biddeford's 1999 Comprehensive Plan also sought to protect rural lands from incompatible development and sprawl. The Agriculture and Forest Resources section of the plan aimed to address those goals with the following implementation strategies:

- 1a. Net density calculations, the formula used to determine net acreage allowed for development in a subdivision after deducting soils not suitable for development, revised the standard to subtract out “soils identified by the Soil Conservation Service as being of statewide significance, as prime agricultural soils, and unique soils”.
- 1d. Require lots in all subdivisions in the R-F zone to be clustered with the goal of achieving maximum preservation of farm and forest areas, in particular soils identified as being statewide significant, prime agricultural soils, and as unique soils.

Biddeford's cluster development ordinance was adopted in 2000.²⁰ The ordinance states that clustering “shall be used when parcels of land sustain significant wildlife habitats or other significant natural features that would be destroyed if ordinary development approaches were used.” Early application of the ordinance resulted in the preservation of some large parcels of rural land by conservation easement and outright fee donations to a local land trust.

However, the effectiveness of the cluster development ordinance in Biddeford is likely constrained by the lenient minimum lot size (currently 1 acre) used for net density calculations in the R-F zone;

¹⁶ Maine State Planning Office (2005). Comprehensive Planning: A Manual for Maine Communities.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ U.S. EPA (2012). Essential Smart Growth Fixes for Rural Planning, Zoning, and Development.

²⁰ Biddeford City Code Part III (LDR), Article VI (Performance Standards), Section 16: Cluster Developments, available at: <https://ecode360.com/15169496>.

however, the city has not conducted any systematic analysis to evaluate the effectiveness of the cluster development ordinance to date. In contrast, neighboring towns have been able to effectively apply cluster development to conserve land. This success is due largely to the fact that their minimum lot sizes are significantly larger (or allowable net densities smaller) – ranging anywhere from approximately 2 to 10 acres – meaning that their cluster ordinances provide anywhere from 2 to 10 times the conservation benefit when compared to Biddeford. Moreover, other towns have effectively integrated conservation requirements within their cluster development ordinances, a step that Biddeford has not taken. For example, in Cape Elizabeth, the cluster development ordinance requires 40% of the gross land area be placed in perpetual conservation. Thus, cluster development and decreased density in rural areas can effectively enable conservation if designed and implemented correctly.

Strikingly, the proposed VMU zone ordinance does not contain any of the protections currently in place in Biddeford’s R-F zone (i.e., subtraction of valuable soils, clustering requirements). **Rather, shifting a large parcel in the R-F zone to a newly created VMU zone represents a radical departure from the current (1999) Comprehensive Plan and existing zoning ordinance.** If applied within the largest unfragmented habitat block in the city, such as the 330+ acre parcel owned by SSV LLC, the change would be especially concerning.

Mixed-use zoning should be implemented as part of a broader vision for growth and development in a community; it should not be treated as a stand-alone or ad-hoc approach. Most examples of successful mixed-use development have occurred in pre-established and spatially defined mixed-use zoning districts set out in a comprehensive plan (See Section 9 for further discussion). This is in stark contrast to the current draft of the VMU zone ordinance before the City of Biddeford, which would potentially allow application of a mixed-use zone and master planning approach throughout the city based on the size of a parcel (i.e. 3 acres or larger).

Based on established best practices, it is essential that decisions about the site location of proposed VMU zoning should adhere to an up-to-date comprehensive plan. **Accordingly, mixed-use development should only be allowed within identified growth areas under Biddeford’s forthcoming updated comprehensive plan.** Currently, the proposed zone change west of I-95 from R-F to VMU is in direct conflict with Biddeford’s current (1999) comprehensive plan, since that is not a designated growth area.

Finally, it is worth noting that much of downtown Biddeford is already mixed-use. Biddeford is considered a “traditional main street community” with a focal commercial center, established compact adjacent neighborhoods, and historically significant architecture and public spaces. The American Planning Association states that Smart Growth should include well defined “community edges” – such as agricultural greenbelts, wildlife habitat blocks and corridors, and/or permanently preserved open space. If we are striving to achieve smarter growth in Biddeford, it does not make sense to detract from our city’s existing (and only recently revitalized) urban core while at the same time diminishing the city’s intact rural areas.

Recommendations:

- Complete the Comprehensive Plan update through a rigorous and transparent public process prior to reviewing the VMU zone ordinance.
- Conduct a natural resources inventory as a first order of priority – using available federal, state, and local databases and empirical field studies – within the proposed VMU zone to identify key ecological features and other resources requiring protection. This inventory should, at a minimum, include: wildlife habitat blocks and corridors; wetlands and vernal pools; water bodies; forests and other natural landscapes; agricultural soils; and working farms, fields, and forests.
- Conduct participatory 10-year “build out scenario” mapping exercises to allow city residents to understand and visualize the impacts of the proposed VMU zone ordinance.
- Conduct economic, fiscal, and environmental impact assessments for a new VMU zone – this should include studies of: 1) the potential costs to the City for construction and maintenance of any new infrastructure or services that may be required, potential loss of state education subsidy, and associated impacts on tax rates, 2) potential economic impacts on existing businesses in the downtown urban core, and 3) potential impacts on habitat, wildlife and plant species, forests and farmlands, and water bodies.
- Before changing the R-F zoning in western Biddeford, develop an agricultural profile, in partnership with resident farmers, that assesses the economic, cultural, and resource stewardship value of agriculture in Biddeford, and which includes: quantitative and qualitative research, identifies the structural difficulties facing local agriculture, and develops recommendations to address these issues.
- Align the proposed VMU zone ordinance with the goals, strategies, and future land use map approved in the Comprehensive Plan update.

Section 3: Conservation & Habitat

Smart Growth is designed to steer development away from farm, forest, and natural habitat areas. Accordingly, any zone change consideration should start first and foremost with the identification of natural resources, habitat, wetlands, and other important ecological features that should be protected.

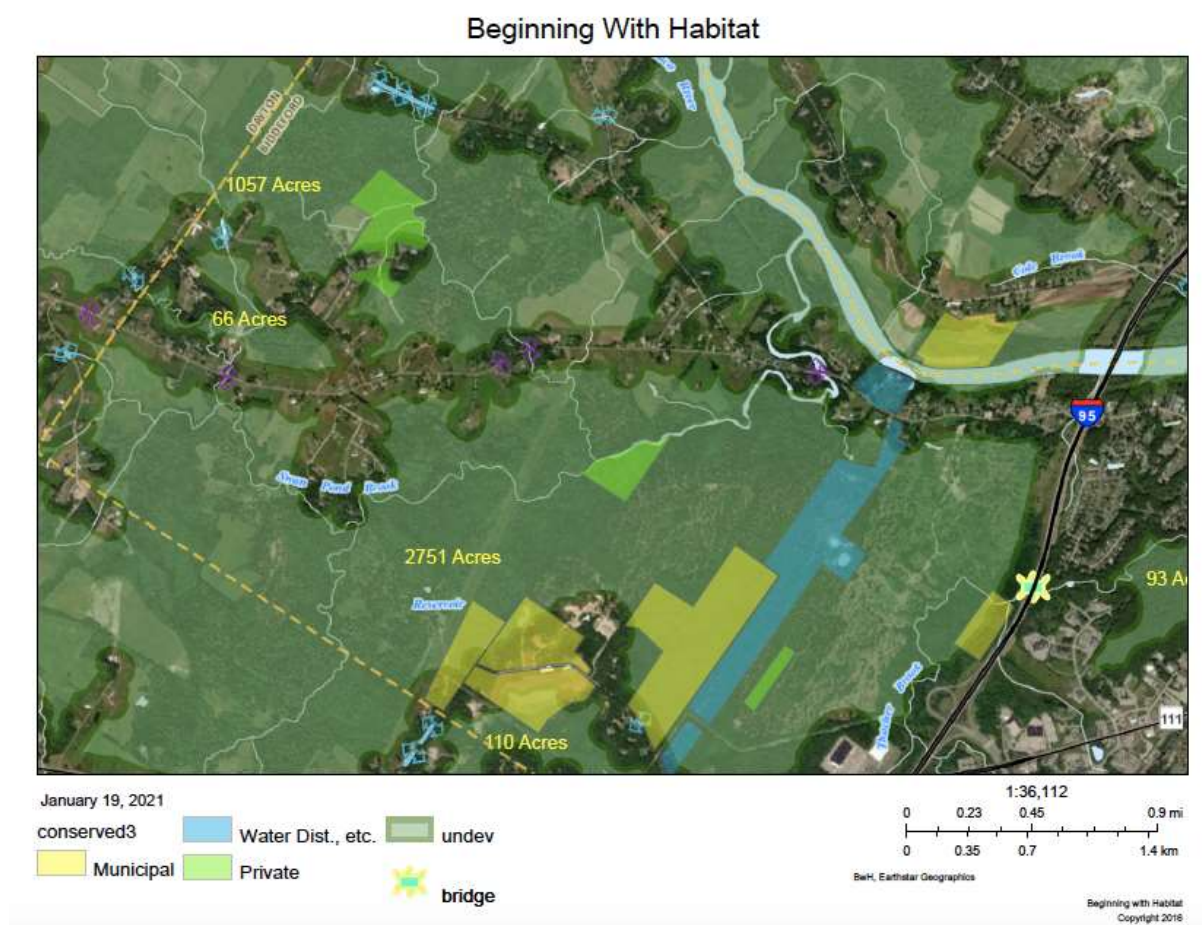
As currently envisioned, the VMU zoning could potentially allow conversion of a significant portion of an existing 2,751-acre functional habitat block into a high-density residential and commercial development (see Map 1 below). While some legacy “amenities” – such as small stands of trees and walking paths – are included in the proposed VMU zone amendment concept, these features do little to meaningfully protect habitat, valuable soils, and other sensitive environmental features.

According to the 2012 Open Space Plan, the Swan Pond Brook Block located west of I-95 (which encompasses the SSV LLC parcel) has been identified as a highly valuable, unfragmented habitat block that contains more than 500 forested acres, 300 acres of deer wintering ground, up to 19 potential vernal pools, and 2 large high quality wetlands.²¹ The SSV LLC parcel in particular is intersected by the Thatcher Brook (an impaired stream) and has at least 4 identified vernal pools, which warrant further

²¹ City of Biddeford (2012). Open Space Plan, available at:
<https://www.biddefordmaine.org/DocumentCenter/View/1311/2012-Biddeford-Open-Space-Plan-PDF?bidId>

investigation to determine whether these meet Maine’s criteria for designation and protection as significant vernal pools (See Map 2 below).

To date, no systematic effort has been made to identify prime agricultural soils, important habitat features, working landscapes, impairment of streams, or other matters affecting the largest undeveloped portion of Biddeford as part of evaluating the VMU zone ordinance and proposed zone amendment. Such assessments should be the starting point for any consideration of the VMU zone ordinance and any subsequent zoning change. Given that the VMU zone ordinance has been presented as a potential template for zoning amendments citywide, the lack of basic data-gathering to inform the development of the ordinance is concerning. **We ask that the city engage in a professional and rigorous process to gather the necessary data to ensure that decisions about the VMU zone ordinance, or any major change to the zoning ordinance, are well-informed.**



Map 1: This map provides a visual perspective of the large, unfragmented habitat block (2,751 acres) in western Biddeford. **Source:** Maine Department of Inland Fisheries and Wildlife, Beginning with Habitat Database.

Smart Growth stipulates the importance of pairing mixed-use densification with perpetual conservation. **Mixed land use proposals should include a minimum ratio-based requirement for conservation.** For example, international sustainability standards suggest a 1:1 ratio of developed / conserved land – i.e. if

100 acres is developed, another 100 acres would need to be put into perpetual conservation.²² Conserved land can be located on the parcel under question or in another location within the city. Transfer of development rights and purchase of development rights are two tools that may be used to effectively protect land with high conservation value.

Importantly, most discussion of conservation in the VMU zoning ordinance has not centered on questions of how to effectively sustain functional wildlife habitat. **When habitats are small and fragmented, they no longer serve the same critical ecological functions that they do when they are part of a contiguous ecosystem.** As evidence, Maine Water has reported that large national land trusts declined to accept an easement on the 250-acre parcel adjacent to the SSV LLC property, perhaps because of awareness of the impending development on adjacent parcels, including the mixed-use zone and proposed additional highway spur off of I-95 that would drastically diminish the conservation value of the land.²³

Vernal Pool Survey Data compiled by the Biddeford Conservation Commission



The wetlands in this layer constitute locations that have received survey effort to assess their status as vernal pools either by the Biddeford Conservation Commission or from other sources that the Commission has accessed.

USDA FSA, GeoEye, Maxar | Esri, HERE, Garmin, iPC

Map 2: This map shows vernal pools (orange dots) and the Thatcher Brook (light blue shading) located on the SSV LLC parcel. **Source:** City of Biddeford GIS Division and Biddeford Conservation Commission, available at: <https://biddgis.maps.arcgis.com/>.

²² International Living Future Institute (2017). Living Community Challenge: A Visionary Path to a Regenerative Future.

²³ As reported by Rick Knowlton (President, Maine Water Company) at the 11.19.20 Biddeford Conservation Commission meeting.

The suggested “density bonus” for conservation of unbuildable wetland (included in the 12.04.20 draft of the VMU ordinance) provides no meaningful ecological value. Since most wetland species depend on undeveloped surrounding land to complete their life-cycle, the small, isolated wetland areas that would remain interspersed between residential and commercial structures provide no real conservation benefit. Rather, provisions should be included in any VMU zone ordinance that encourage preservation of larger, contiguous habitat blocks through accompanying conservation requirements.

It is highly unlikely that most of what is proposed under the VMU zone ordinance is consistent with R-F zoning under the current (1999) Comprehensive Plan. This further represents a radical break with the basic tenets of the Growth Management Act. As discussed earlier, one primary goal of mixed-use development is to reduce impact on the natural environment; however the VMU zone ordinance, as currently written, does not serve to conserve our natural resources, but rather to diminish them.

Recommendations:

- Prioritize unfragmented blocks for conservation to preserve ecologically functional wildlife habitat.
- Do not include an additional density bonus to developers for the conservation of wetlands that are already unbuildable – i.e. no “double credit.”
- Include a minimum ratio- or percentage-based contiguous conservation requirement for new mixed-use development – e.g. 1:1 ratio of developed to conserved land OR 50% of parcel should be conserved.
- Further develop and utilize transfer of development rights or purchase of development rights mechanisms alongside mixed-use zoning to divert new development away from rural zones toward areas that are already designated for growth (e.g. urban core).

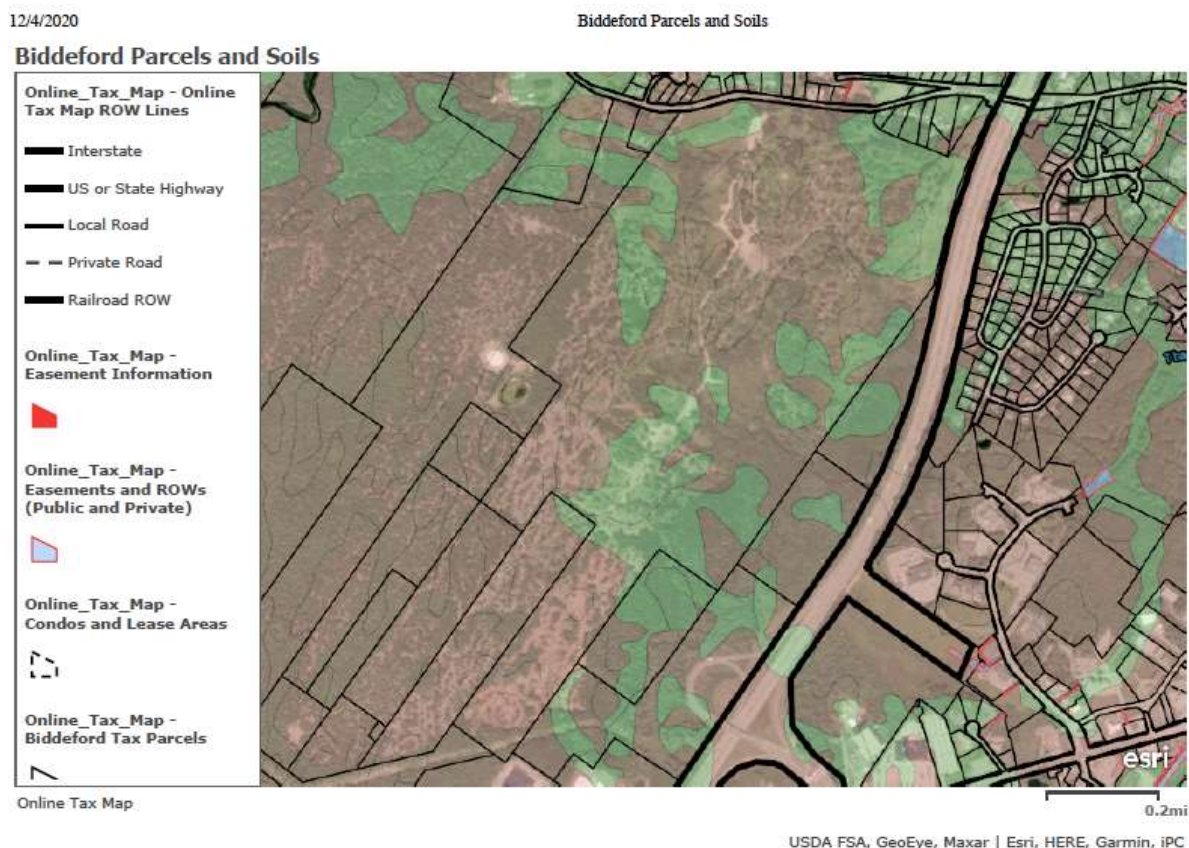
Section 4: Agriculture & Working Landscapes

While the City is considering the creation of a new VMU zone and a master plan approach that would be used as a template for development throughout Biddeford, it is important to again bear in mind the goals of the Growth Management Act (See Section 3) .

Given the City’s announced goal of creating 600 new housing units over the next five years, it is highly likely that developers will be looking to the rural areas of the city for large lots and soils suitable for development, posing a major threat to valuable farm and forest land. **The VMU zone ordinance, as currently constructed, is silent as to the importance of preserving these natural resources.** This is in stark contrast to current R-F zoning in place west of I-95, which recognizes and seeks to protect natural and working landscapes through rural density limits and provisions to protect agricultural soils.

The foundation of productive working landscapes are its soils. Whether it be growing tomatoes and cucumbers, potatoes, corn, hay and pasture, or trees, suitable soils are essential. **Soils are non-renewable resources: once they are gone, they are gone.** For this reason, net density calculations in the VMU zone must continue to evaluate and deduct prime agricultural soils and soils of statewide significance, as is currently required in the R-F zone in western Biddeford. The concept of clustering development on a parcel, with the goal of maximum preservation of its farm and forest areas, should be continued by strengthening the existing cluster development ordinance. Notably, the unfragmented

block of land in western Biddeford also contains large areas that have been designated as farmland of statewide significance (See Map 3 below).



Map 3: This map shows the extent of farmland of statewide importance (indicated by green shading) located on the SSV LLC parcel. **Source:** City of Biddeford GIS Division, available at: <https://biddgis.maps.arcgis.com/>.

It is widely acknowledged that maintaining a land base to enable local food and fiber production is vital to ensuring community resilience. “Buy local” has become more than a popular catch phrase – it is highly valued by many of our residents. Moreover, local food production has been identified as a vital strategy for ensuring long-term food security in Maine in the face of increasing impacts of climate change.²⁴ For these reasons, the loss of our productive land base threatens our local food economy and resource base. There continue to be highly productive agricultural and forestry operations within the city. How important are local farms and woodlots?

Consider the following: an existing family-owned dairy farm in western Biddeford continues to maintain a herd of 25 milking cows, with each cow producing approximately 20,000 lbs. of milk each year. This translates to 900,000 8 oz. servings – or 58,000 gallons – of local milk produced within city limits on an annual basis on just one farm. Additionally, the Maine Forest Service reported that from 2013 – 2018, there were 40 timber harvesting permits issued on 1,664 acres in Biddeford.²⁵ Of these 1,664 acres, only

²⁴ Maine Climate Council. (2020) Maine Won’t Wait: A Four-Year Plan for Climate Action.

²⁵ Maine Department of Agriculture, Conservation, and Forestry, Biddeford Timber Harvest Data. Data is compiled from confidential Year End Landowner Reports to the Maine Forest Service.

26.5 acres were permanently converted to development; the remaining acreage remains productive woodland that preserves the rural character of our city. The sub-committee has further requested hunting and fishing license numbers from the Department of Inland Fisheries and Wildlife.

Additionally, there are significant fiscal benefits associated with the protection of farms and forests – preservation of working landscapes and open space can help to keep municipal tax rates low. While residential development broadens the tax base, this is almost always offset by increased costs of expanded community services and infrastructure. Studies have shown that municipalities spend approximately \$1.15 on community services for every \$1.00 of tax revenue raised from residential land uses.²⁶ In contrast, farm and forest land uses cost municipalities \$.36 per dollar of tax revenue raised.²⁷ Thus, with rare exception, evidence shows that increased residential development does not tend to lower the municipal tax rate. Rather, such development may even increase the tax rate. This further highlights the importance of conducting a fiscal impact study of any proposed development within the VMU zone (See recommendations in Section 3).

These examples demonstrate that working landscapes in Biddeford are productive and contribute to the local economy and tax base. Furthermore, these working landscapes contribute to the broader resilience of our community and should be valued and protected. Finally, maintaining working landscapes continues to foster the cultural and aesthetic values that open space provides to the city. A more rigorous assessment of the importance of working landscapes to Biddeford's economy, culture, and character is warranted.

Recommendations:

- Retain protections for agricultural soils and working landscapes in any VMU zone ordinance – prime agricultural soils and soils of statewide significance should continue to be subtracted from net density calculations following Biddeford's current Agriculture and Forest Resources Ordinance.
- Retain deduction of prime agricultural soils & soils of statewide significance from any net density calculations.
- Retain and strengthen the cluster development ordinance – e.g. increase minimum lot size & require conservation conveyances.
- Develop an agricultural profile, in conjunction with farmers, that assesses the economic, cultural, and resource stewardship value of agriculture in Biddeford including: quantitative and qualitative research, critical challenges facing local agriculture, and recommendations to address these challenges.
- Recognize the importance of local food production in creating resilience, especially in the face of climate change and other supply-chain disruptions.

²⁶ Freedgood, J. (2002) Cost of Community Service Studies: Making the Case for Conservation. Note: this study consolidates the findings of 83 studies across 19 states to draw generalizable conclusions about the costs of residential development.

²⁷ Ibid.

Section 5: Water Quality

While the proposed VMU zone ordinance is meant as a template for the entire city, information provided by SSV LLC in their rezoning overview document provides an illustrative example of what potential development under the proposed zoning amendment might look like. This information is important to consider in relation to water quality issues, since the proposed site does not currently have access to municipal sewer or wastewater systems.²⁸ The SSV LLC parcel falls within the Thatcher Brook Watershed and is in close proximity to the Saco River. Thatcher Brook has been formally classified as an impaired stream by the Maine Department of Environmental Protection. Impervious surface coverage (e.g., rooftops, parking lots, and roads) and resulting runoff have been identified as the greatest cause of the water quality issues.²⁹ In 2015, Biddeford created a detailed approach to addressing water quality issues through the Thatcher Brook Watershed Management Plan.

The plan highlights the need for protection of the Thatcher Brook and Watershed through zoning and ordinance changes for both new and re-development projects. **Specific ordinance changes to protect Thatcher Brook were proposed three years ago, but have yet to be drafted or implemented by the City.** Increased protective setbacks (of at least 250 ft.) from the Brook are expected after the ordinance change is implemented. It is our position that these increased setbacks from Thatcher Brook should be enacted prior to the review of the VMU zoning ordinance or other zoning ordinance amendments. Additionally, new zoning ordinances should include specific requirements to minimize impervious surface or else provide robust mitigation of the effects of impervious coverage.

It is notable that the area west of I-95 is not served by public sewer or wastewater systems. The potential for faulty installation and owner maintenance of sub-surface septic systems can compromise the effectiveness of sewage disposal, with resulting impacts on water quality – indeed, Smart Growth guidelines specifically discourage the use of septic systems for these reasons.³⁰ **The risk associated with failure of private wastewater and sewage systems is high, and the resulting costs will be borne by all city residents, not only those living and working in the mixed-use zone.** The effects of these failures will not be realized immediately, but rather over years and decades, leaving future residents of Biddeford to clean up the mess. Indeed, experience across the U.S. shows that developers are increasingly installing relying on septic systems in suburban communities to avoid the cost of sewer connections, thereby transferring those costs to unsuspecting tax payers down the line.³¹

For these reasons, high-density mixed-use development should require public sewer and wastewater disposal at the expense of the developer. The use of individual or central subsurface wastewater treatment systems in the context of high density, small lot sizes, and multi-family and commercial uses, as proposed in the VMU zone ordinance amendment, should be prohibited. In the SSV LLC parcel example, the potential use of subsurface wastewater treatment systems for 550+ residential units and commercial buildings in the proposed VMU zone would pose a major threat to water quality given the

²⁸ South Street Village, LLC (2020). Rezoning Overview: Village Mixed Use Zone, City of Biddeford Maine.

²⁹ City of Biddeford. (2015) Thatcher Brook Watershed Management Plan, available at: <https://www.biddefordmaine.org/DocumentCenter/View/1068/Thatcher-Brook-Watershed-Management-Plan---January-7-2015-PDF>

³⁰ U.S. EPA (2009). Smart Growth Guidelines for Sustainable Design & Development.

³¹ Vock, D. (2019) America Has a Sewage Problem, available at: <https://www.governing.com/archive/gov-sewage-septic-tank-pollution-health.html>.

proximity to the Thatcher Brook and Saco River.³² The SSV LLC has indicated the potential use of the Norweco Inc. Singulair Model 960 / TNT-500 wastewater treatment system on significantly reduced lot sizes (10,000 SF).³³

Recommendations:

- Enact the delayed proposed ordinances contained in Thatcher Brook Watershed Management Plan before reviewing or approving the VMU zone ordinance.
- Implement increased protective setbacks (of at least 250 feet) from the Thatcher Brook before reviewing or approving VMU zone ordinance.
- Include specific requirements to minimize impervious surface (or else provide robust requirements for the mitigation of the effects of impervious coverage) before reviewing or approving the VMU zone ordinance – e.g. 25% max impervious surface, decreased minimum parking requirements, use of permeable materials.
- Do not allow use of private or community septic systems in VMU zones.
- Conduct a fiscal analysis to determine the impacts of construction and maintenance of any required extension of public sewer or wastewater systems to areas not already served.
- Require developers to pay any costs associated with extension of public sewer or wastewater systems.

Section 6: Climate Change

It is well recognized that development patterns, land use, and urban form have far-reaching implications for climate change. While mixed-use development can contribute toward the reduction of greenhouse gas emissions and creation of resilient communities, it must be implemented as part of a broader strategy to address climate change to be effective in that regard. **For these reasons, mixed-use zoning in and of itself is not necessarily “climate friendly.”**

Where development is located has implications for the climate. Forests and other working lands are vital carbon sinks – meaning that they take up and store carbon from the atmosphere. Demand for new development drives the destruction of forests and other natural landscapes, resulting in the permanent loss of carbon sinks.³⁴ When this happens, previously stored carbon is released to the atmosphere, thereby worsening climate change.

As previously emphasized, the area west of I-95 is located on the largest contiguous unfragmented block in Biddeford, with over 500 acres of forest.³⁵ Biddeford recently adopted a resolution declaring climate change an emergency and stated its intention to address both the causes and consequences of climate change. **If Biddeford is serious about action on climate change, decisions about where to locate development should seek to preserve existing carbon sinks, such as forests and other natural and**

³² South Street Village, LLC (2020). Rezoning Overview: Village Mixed Use Zone, City of Biddeford Maine.

³³ Letter from Mitchell Razor to the City of Biddeford Planning Board Re: Responses to Village Mixed Use Zoning 7.22.20 Workshop, dated August 18, 2020.

³⁴ Sleeter et al. (2018). Land Cover and Land-Use Change. In Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. U.S. Global Change Research Program, Washington, DC.

³⁵ City of Biddeford (2012). Open Space Plan.

working landscapes. Specifically, Biddeford should examine climate change impacts associated with land use change, including emissions caused by the destruction of forests and other natural landscapes, within its planning and development decisions.

The vast majority of Maine’s greenhouse gas emissions are directly linked to development patterns, with 54% of emissions coming from transportation and another 30% from residential and commercial buildings.³⁶ In theory, mixed-use development can decrease greenhouse gas emissions associated with transportation and buildings by reducing travel distances and vehicle miles traveled, enabling walking and cycling, facilitating public transport linkages, and encouraging low-carbon design within building stock and infrastructure. **However, how and where mixed-use densification is achieved matters when considering overall climate impacts.**

Smart Growth emphasizes that mixed-use development should be located in greyfields, brownfields, or other reuse sites whenever possible.³⁷ Mixed-used development created through infill or redevelopment – such as the Lincoln Mill, Riverdam, Pepperell Mill, and Saco-Lowell projects in Biddeford – produces significantly less driving and greenhouse gas emissions when compared with suburban alternatives.³⁸ The newly proposed Five Points project is another redevelopment opportunity that has significant potential to create additional lower-carbon housing options if implemented as part of a broader climate strategy – including providing linkages to public transit and avoiding additional deforestation.

Additionally, it has been shown that cities with a single central urban core are better served by public transportation.³⁹ Thus, it is uncertain whether the addition of another mixed-use urban center west of I-95 and away from the city’s historic downtown area, major thoroughfares, and existing public transit options would facilitate desired reductions in vehicle miles traveled. The proposed addition of a new spur directly connecting the proposed VMU zone on the SSV LLC parcel with I-95 could reasonably be expected to encourage long-distance, highway-based single passenger commuting patterns for many years to come.

In addition to the location of mixed-use development, it is also important to evaluate whether new development will lock in future greenhouse gas emissions. It is vital to ensure that ordinances and building codes help to reduce residential and commercial energy consumption and support transitions to renewable energy. Maine has proposed the creation of modern, energy efficient building codes at the state level to reach net-zero carbon emissions for new construction by 2035.⁴⁰ As a forward-looking city, Biddeford should start now to update ordinances and codes to reduce climate impacts.

Finally, wetlands, forests, and working lands provide vital ecological services that enhance Biddeford’s resilience to climate change. Beyond the obvious benefits of clean air, water, and habitat, the conservation of natural and working landscapes provides important protections against future impacts of climate change, including: flooding, storm surge and sea level rise, heat waves and drought, urban heat island effects, and disruptions in global and regional food supply chains. For this reason, conservation of natural and working landscapes is a vital component of any climate adaptation strategy.

³⁶ Maine Climate Council (2020). Maine Won’t Wait: A Four-Year Plan for Climate Action.

³⁷ U.S. EPA (2009). Smart Growth Guidelines for Sustainable Design & Development.

³⁸ Urban Land Institute (2007). Growing Cooler: The Evidence on Urban Development and Climate Change.

³⁹ Lee & Lee (2014). The Influence of Urban Form on GHG Emissions in the U.S. Household Sector.

⁴⁰ Maine Climate Council (2020). Maine Won’t Wait: A Four-Year Plan for Climate Action.

Recommendations:

- The VMU zone ordinance should clearly define what is meant by “minimizing” impacts on climate change. Our suggestion is for a phased-in requirement to achieve net-zero carbon emissions for all new construction by 2035. This is in line with proposed state-level goals.
- The climate change assessment included in the Master Plan review should require inventory of emissions related to: land use change (e.g. deforestation); construction and embodied carbon in materials used; residential and commercial building energy use; and transportation.
- The climate change assessment in the Master Plan review should evaluate current and projected climate-related risks, such as flooding and heat waves, that should be addressed in a VMU zone Master Planning process.
- Encourage full electrification of household heating systems and appliances (e.g. heat pumps, electric stoves) in the VMU zone.
- Encourage design standards and wiring to accommodate renewable energy sources.
- Specifications for efficient and high-performance appliances, lighting, HVAC systems, insulation, and water fixtures in the VMU zone.
- Encourage use of “green” and recycled building materials that minimize environmental impacts in the VMU zone.
- Encourage design standards that will reduce vehicle miles traveled and emissions associated with transportation, including: increased public transport; reduced parking ratio requirements; and infrastructure to support electrification in the transport sector (e.g. electric vehicle charging stations).

Section 7: Siting of Solar Energy Installations

The solar power sector in Maine has grown rapidly over the last several years, and this growth is only expected to accelerate over the coming decade.⁴¹ Consequently, land use implications of solar installations in Maine are a pressing issue: solar at scale will require large land areas. Yet, woodlands and forests are not well suited to solar due to limited solar gain, and clearing forests to install solar arrays would negate climate benefits due to loss of carbon sinks (as discussed in Section 7). Use of farmlands, while possibly physically ideal for the solar array itself, can risk destroying valuable agricultural soils or crops if not undertaken in a careful manner.

In response, various agencies in Maine have begun to develop and implement guidance and technical rules for responsible solar siting. For example, the Maine Department of Agriculture, Conservation, and Forestry has compiled a comprehensive set of resources to inform responsible solar siting to minimize adverse impacts of solar installations on wildlife habitat and farmland.⁴² The Maine Public Utilities Commission (PUC) has also established technical rules for the procurement of distributed solar energy,

⁴¹ Governor’s Energy Office & Governor’s Office of Policy Innovation and the Future. (2020) Strengthening Maine’s Clean Energy Economy.

⁴² Maine DACF Solar Siting Resources webpage, available at: <https://www.maine.gov/dacf/ard/resources/solar.shtml>

which require protections for wetlands, forests, waterways, habitat, and rare or threatened plant and animal species.⁴³

It is highly likely that these or similar rules will become formalized as law for all solar projects in Maine in the near future. Maine’s recently released climate action plan specifies that the state will: “Develop policies by 2022 to ensure renewable energy project siting is streamlined and transparent while seeking to minimize impacts on natural and working lands and engaging key stakeholders.”⁴⁴ Other states have already enacted rigorous and appropriate siting requirements for solar arrays.

All of this demonstrates that it is unwise and counterproductive to locate solar arrays on agricultural soils and/or other valuable natural resources without appropriate protections. Biddeford should anticipate the likelihood of future statewide legislation regarding solar array siting requirements. Moreover, solar siting and implementation must also be an integral consideration within the Comprehensive Plan update now underway.

In sum, protections for working landscapes and other natural resources must be included in any solar array ordinance in Biddeford. Moreover, solar siting processes should identify and utilize greyfields, brownfields, disturbed or degraded lands, and rooftops to the greatest extent possible prior to any consideration of siting solar arrays in greenfields. This should include reducing barriers to installing residential roof-top solar systems – e.g. such as the current need for a variance from the Fire Chief to install solar panels on residential roofs.

Recommendations:

- Develop a city-wide municipal ordinance for solar array siting that is in line with state-level directives to minimize impacts on natural and working landscapes.
- Locate solar arrays in the VMU zone (and city wide) on greyfields, brownfields, or otherwise disturbed or degraded lands to the greatest extent possible prior to any consideration of siting arrays in greenfields.
- Allow no more than 10% of any solar array project to be located on prime farmland or farmland of statewide importance.
- Minimize impacts to wildlife habitats and natural resources by prohibiting the siting of solar arrays on: significant wildlife habitats under Maine’s Natural Resource Protection Act; Focus Areas of Statewide Ecological Significance; other rare or sensitive habitats; large unfragmented habitat blocks; forested areas that have not yet been cleared for agriculture.
- Minimize impacts on water quality by utilizing appropriate stream crossings, erosion control, avoiding stream / wetland crossings, buffers around wetlands, streams, and other water bodies.
- Encourage and/or reduce barriers to installation of solar arrays on rooftops of all residential or commercial construction and in other already disturbed areas (e.g. parking lots) in VMU zones.

⁴³ Maine PUC rules were created under LD1711 Sec. A-1. 35-A MRSA §3201 (An Act To Promote Solar Energy Projects and Distributed Generation Resources in Maine). While these rules may not apply to any specific proposed solar arrays planned in Biddeford, as these projects may or may not pass through PUC block procurement, it is highly likely that these or similar rules will be applied to all solar projects in Maine in the near future

⁴⁴ Maine Climate Council (2020). Maine Won’t Wait: A Four-Year Plan for Climate Action.

Conclusion

Mixed-use development is being implemented in many communities across the country. While in some cases, mixed land use can facilitate effective Smart Growth, it is not a guaranteed outcome. It will be important for Biddeford to learn from the experiences of other cities and towns. **At a bare minimum, Biddeford's Planning and Development department should conduct thorough research based on practical examples of mixed-use zoning to provide the Planning Board and City Council with a VMU zone ordinance that is firmly grounded in best practice.**

Indeed, there are many good examples of Smart Growth principles being successfully applied to protect open space, farmland, and natural resources while also fostering vibrant mixed-use town and city centers.⁴⁵ As one example, Baltimore County, Maryland established clear boundaries for growth by creating true resource conservation zoning, delimiting areas that would be served by public water and sewer systems, and adopting policies to support local agriculture. For every acre converted to development in the County between 2000-2015, six acres were effectively preserved. The EPA Smart Growth Implementation Assistance program has also identified strong examples of zoning regulations to facilitate sustainable development practices.⁴⁶

Recent experience has also provided cautionary tales regarding hasty or overly broad applications of mixed-use zoning. For example, in 2016 Hartford, Connecticut expanded mixed-use zoning in three of its business zone districts for any property with a minimum lot size of 5 acres. In 2020, a citizens group began legal action to reverse the broad application of mixed-use zoning in the city, citing unlawful process. This example demonstrates the importance of carefully considering where and how mixed-use zoning concepts should be applied and the necessity of public input and buy-in to facilitate successful implementation. Moreover, this example calls into question whether it is wise or appropriate for a VMU zone ordinance to be applied generally as a template for rezoning across the city of Biddeford, as is currently proposed.

The EPA has identified key measures for implementing effective mixed-use development as part of a broader Smart Growth strategy.⁴⁷ We highlight several of these broad recommendations, which we feel should guide the development of the VMU zone ordinance and/or be enacted alongside mixed-use zoning:

1. Identify areas for growth and areas for preservation within the city, and allow use of mixed-use developments only in approved "growth" locations in line with comprehensive planning.
2. Incorporate fiscal, economic, and environmental impact analyses in all mixed-use development reviews.
3. Require mixed-use developments to include protection of functional habitat and open space.
4. Create consistent development standards across all zones so that mixed-use developments do not result in "mini-zoning districts" that create uncertainty and are difficult to administer.

⁴⁵ Smart Growth Online – Smart Growth Principle Examples: <https://smartgrowth.org/smart-growth-principle-examples/>

⁴⁶ U.S. EPA (2012) Together We Can Grow Better: Smart Growth for a Sustainable Connecticut Capitol Region – Appendices A-D, available at: https://archive.epa.gov/epa/sites/production/files/2014-04/documents/together_we_can_grow_better_appendices.pdf

⁴⁷ U.S. EPA (2012) Essential Smart Growth Fixes for Rural Planning, Zoning, and Development Codes.

5. Require developers to pay impact fees to cover costs of new water and wastewater infrastructure.
6. Require long-term financial maintenance plans for any new water and wastewater infrastructure.
7. Adopt true rural-farm zone districts with appropriately low density – i.e. one unit per 10 acres – to effectively protect forests, natural landscapes, and working landscapes.
8. Require clustering of development at the periphery of town to transition to rural areas through a strengthened and well-enforced cluster development ordinance.

In addition to the more specific recommendations provided earlier in this report, these overarching measures would go a long way toward achieving truly smart growth that will enable Biddeford to flourish for generations to come. **We strongly urge Biddeford’s Department of Planning and Development, Planning Board, and City Council to take up these overarching recommendations within the development, review, approval, and implementation of a VMU zone ordinance and as part of a broader comprehensive planning effort within the city.**