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Town of Milton Shoreland Protection Project

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**Town of Milton Shoreland Protection Project
PREP Community Technical Assistance Program
Final Project Report – March 2010**

Summary

Mettee Planning Consultants (MPC) worked with the Milton Conservation Commission to evaluate and streamline the town's water resource protection regulations. One of the outcomes was revision and passage of a Shoreland Protection Overlay District as part of the town's zoning ordinance.

Overview

In 2008, the Town of Milton's Conservation Commission applied for assistance through Round 3 of the Piscataqua Region Estuaries Partnership (PREP's) Community Technical Assistance Program. Mettee Planning Consultants (MPC) was selected as the technical assistance provider for the project.

The primary purposes of the project were to:

- Analyze the Town of Milton's existing Master Plan, land use ordinances, and land use regulations to determine deficiencies, inconsistencies, and enforceability problems pertaining to water resources protection, and work with citizen-led working groups to address these challenges.
- Draft new ordinances or improvements to existing ordinances that provide greater protection and accountability for water resource protection.
- Work directly with Conservation Commission, Planning Board, other relevant town committees, and town officials on supporting adoption of these measures.
- Educate town citizens and local decision-makers about the scientific basis for water resource protection regulations, and how land use decisions impact these critical resources.

This CTAP project was partially driven by interest from several ad-hoc working groups that had formed during the town's involvement with a facilitated planning process led by the Natural Resources Outreach Coalition (NROC). Over the course of the project, MPC met with the Conservation Commission and Planning Board several times to review proposed changes to town regulations that would ensure greater consistency, and to refine the specific language of a revised Shoreland Protection Overlay District. MPC also worked closely with PREP on a public educational workshop on the importance of shoreland buffers and water quality threats affecting Milton water resources. MPC and PREP jointly developed a fact sheet about the proposed Shoreland Protection Overlay District that was mailed to every Milton household prior to the Town Meeting. In March 2010, town voters approved the revised Shoreland Protection Overlay District by approximately a 2:1 margin.

Attachments

- Master Plan Review for Water Resource Protection and Conservation Town of Milton, NH
- Shoreland Overlay Protection District Fact Sheet
- Final Adopted Shoreland Protection Overlay District

This project was supported through the PREP's Community Technical Assistance Program, with funding from the US Environmental Protection Agency through an agreement with the University of New Hampshire.

**Master Plan Review for Water Resource Protection and Conservation
Town of Milton, NH
December 5, 2008**

In 2002, Milton adopted a Master Plan that was updated in 2004. The 2002 plan had minimal reference to water resources whereas the 2004 update focused much more on the issue of water resources and established numerous goals and strategies for water resource protection and conservation. In 2007 Milton engaged the services of the Natural Resource Outreach Coalition (NROC) to undertake a public education and awareness program directed at having citizens work toward adopting programs and strategies, and considering new regulations and standards, for protection and management of the town's natural resources, particularly water resources.

While the NROC process was underway, the Town of Milton applied for and received a grant from the NH Estuaries Program (NHEP) to provide technical assistance in developing regulations to better protect its water resources. One of the first tasks as part of the grant agreement is the audit of the town's current Master Plan.

The purpose of this document is to provide:

- a review and audit of Milton's Master Plan with respect to the level of resource protection as expressed in the policies and actions proposed and
- evaluate the goals of the NROC with respect to water resources protection.

This document contains a review of the level of water resource protection and conservation as provided in the Milton Master Plan. The document is organized in three parts: Part I Introduction, Part II Matrix of Provisions and Review, Part III General Recommendations.

PART I INTRODUCTION

Master Plan Review

This review provides an evaluation of the level of protection and conservation measures supported by the Master Plan, comments on provisions that effectively provide avenues for future action, recommendations for improvement of provisions, and an evaluation of effectiveness – High, Moderate and Low. The review was guided by the goals of the NROC Better Planning and Ordinances Group and the Water Resources Group, as summarized above.

The Policy Principles and Implementation Strategies of the Milton Master, particularly Section 2.2 Natural Resources, focus on regulatory and voluntary measures and monitoring programs to conserve and protect the quality of water resources in the town. Common themes and issues throughout the document include the following:

- Groundwater Hazards
- Industrial Land Uses
- Sustainable Development

- Aquifer Recharge
- Non-Point Source Pollution
- Septic Systems
- Vegetated Buffers
- Education, Outreach and Stewardship
- Water Quality Monitoring
- Local and Regional Collaboration

The 2004 Plan Update is formatted in a manner that creates a degree of complexity with respect to the usage of terms Policy Goals; Policy Principles, Policy Standards, and Implementation Strategies. This approach appears to have to lead to some overlapping of policies, standards and strategies. For example, in Master Goal #4 that deals with water resource protection there are several strategies included. In spite of this there are many good goals, policies and strategies that have been articulated and are directed at water resource conservation and protection. However, if the plan were to be updated, an effort should be made to clarify the language attributed to each of these terms.

Natural Resource Outreach Coalition (NROC) - Citizen Group Goals

As part of Milton’s participation in the Natural Resource Outreach Coalition program, three citizens groups were formed to address three focus areas relating to natural resources. Two of the three citizen groups worked extensively on natural resources and water resources – the Better Planning and Ordinances Group and the Water Resources Group.

The Better Planning Ordinances Group agreed that the most immediate issue of concern was consistency within the Master Plan - to identify conflicting provisions and establish consistency for protection and conservation of natural resources with particular emphasis on water resources.

The Water Resources Group identified the following as priority issues of concern:

- riparian buffers
- nutrients and pathogens
- septic systems and residential impacts on water quality
- economics and water quality protection
- importance of natural areas for maintaining high water quality
- stewardship and public participation

The Water Resources Group recommends holding a workshop to increase public participation by:

- being involved in protecting water quality
- increasing knowledge about water quality issues
- changing attitudes to “let’s do something about it”
- developing a committee to review and implement the water resources provisions of the Master Plan.

PART II MATRIX OF PROVISIONS AND REVIEW

| PAGE # | WATER QUALITY PROVISION | COMMENTS/RECOMMENDATIONS | PROTECTION LEVEL |
|--|---|---|-------------------------|
| Part I: Master Plan Introduction | | | |
| <i>Master Plan Policy Goals</i> | | | |
| 8 | 4. Protect the surface water resources of Milton through careful study and monitoring of the water quality in the lakes, developing effective, yet reasonable water protection regulations, and encouraging conservation practices and sustainable development. | This policy goal is quite broad and combines protection methods and strategies that may be stronger if developed as separate goals, including water protection regulations, conservation practices and sustainable development. It would be better if the Goal was a broad statement identifying a desired future condition; the strategies should be specific actions to achieve the goal. This comment applies to a number of other goals in this review. Define conservation practices and sustainable development in the Master Plan Introduction. | Moderate |
| 8 | 5. Develop a strategy for the clean up and removal of ground water hazards. Continue to protect the ground water resources through sustainable development practices so that aquifer recharge areas are not negatively impacted. | This goal is quite broad and again combines protection methods and strategies that may be stronger if developed as separate goals, including mitigation of groundwater hazards, sustainable development and protection of aquifer recharge areas. | Moderate |
| Part II: Master Plan Policies and Implementation Strategies | | | |
| Section 2.2 Natural Resources | | | |
| 10 | Policy goal statement to “preserve the Town’s natural resources and rural landscape including water/aquifers and air quality for the sustainable health, safety and welfare of current and future generations.” | The use of the word “preservation” in the policy goal statement for this Section establishes that a high level of protection is expected in the adoption and/or amendment of regulations and ordinances pertaining to natural resources. | High |
| Water/Watersheds | | | |
| 10-18 | <i>Policy Principles</i> | | |
| 10 | 1. Protect all water resources and their related watersheds to insure an adequate quantity/supply of the highest quality water. | Policy principle #1 should include maintaining high water quality for habitat, recreational uses and for receiving waters within the watershed. | Moderate |
| 10 | 2. Preserve and protect contiguous tracts of open land along riparian corridors for wildlife and recreation. | Policy principle #2 lacks the connection between preservation of land and riparian corridors for the | Moderate |

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| | | purpose of protecting water quality and quantity. | |
| 10 | <p>3. Protect water quality from non-point source water pollution.</p> <p>4. Protect the surface water resources of Milton through careful study and monitoring of the water quality in the lakes, developing effective, yet reasonable water protection regulations, and encouraging conservation practices and sustainable development.</p> | Policy principles 3 and 4 are concise statements of methods to protect water quality. | High |
| 11 | <p>5. Protect Allan Hasting Pond/Jones Brook/Aquifer from potential pollution by limiting the type of industrial use on adjacent land.</p> <p>6. Protect Salmon Falls River from potential pollution in the Milton Mills, and Milton industrial zones near the River by limiting the type of industrial use.</p> | Stating that industrial uses that “pose a high risk for contamination of water resources” would make policy principles #5 and #6 stronger and more specific. | High |
| 11-15 15-16 16 16-17 17 17 | <p>7. Protect Milton Three Ponds</p> <p>8. Protect Gould Pond</p> <p>9. Protect Branch River</p> <p>10. Protect Jones Brook</p> <p>9. Protect Lyman Brook/great Brook</p> <p>10. Protect Salmon Falls River</p> | The implementation strategies in this section contain provisions best incorporated into individual management plans for the respective water bodies and watercourses. Strategies address important water quality issues of local and regional interest including: formation of associations/advocacy groups; elimination/prevention of invasive aquatic species; land conservation and easements; identification of contamination sources (septic systems, road salt) and non-point source pollution (stormwater, use of bmp’s); education and outreach; management of watercraft usage and type; preservation of open space; and shoreland aquifer protection. | High with implementation |
| | <p>1. Protect water resources by managing the use of land resources and balancing its use and development consistent with conservation and development needs:</p> <p>a. In cooperation with adjacent municipalities and the private sector.</p> <p>b. Consistent with state, regional and other adjacent municipal Master Plan policies and implementation strategies.</p> <p>c. In balance with the protection of environmental resources, the maintenance of community well being,</p> | Principles #11 provides a broad framework to continue and enhance protection and adopt new regulations to protect the quality and quantity of local and regional water resources. Principle #11-expands upon this framework by encouraging management of aquifers within the regional context through cooperative efforts with neighboring communities. Principle 11-c encourages water resource protection balanced with the needs of the community and competing interests. | High |

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| | and the ability of municipalities to provide and finance community facilities and on-going services. (See Land Resource Policy Goal, Principles and Standards) | | |
| | <p>12. Conserve land that protects water quality and water quantity including land overlaying aquifers, watersheds and buffers adjacent to surface waters such as streams, lakes and wetlands.</p> <p>13. Preserve shore-side (riparian) buffers that filter out pollutants before water discharges into lakes, streams and wetlands.</p> <p>14. Assure that proper erosion control measures and Best Management Practices (BMPs) for stormwater are in place when land use alterations occur within the watershed boundary.</p> <p>15. Foster the preservation of an intact forest canopy and understory, especially on steep, highly erodible, slopes.</p> | Principles #12-15 provide a broad framework for proactive preservation and conservation of lands that contribute directly to achieving high water quality and protection of water resources on the watershed level. The focus of these Principles is prevention – the recognition that certain uses and activities on the land can pose high risk of contamination, depletion or degradation of water resources. | High |
| 18-19 | <p><u>Policy Standards</u></p> <p>Refer also to the Recommendations portion of this document for additional information.</p> | Most of the guidance and technical references do not reflect the current literature and science. Parameters stated for buffer and setback widths are contradictory. This section would benefit from a more broad statement of the rationale and benefits of developing appropriate buffers and setbacks. | Low |
| | <u>Implementation Strategies</u> | | |
| 19-20 | <p>1. <u>Regulatory Strategies</u></p> <p>a. Adopt an ordinance/regulation to establish buffer and greenway protection areas with building setbacks along Milton's rivers, streams, seasonal and intermittent streams, lakes and ponds to implement buffer/greenway protection area standards.</p> <p>b. Adopt a local Shoreland Protection overlay district to ensure the protection of the water quality in our lakes.</p> | Strategies 'a' and 'b' state the same thing: establish setbacks and vegetated buffers along the shorelands of water bodies, streams and rivers to protect the quality of surface waters from the effects of non-point source pollution. The "greenway protection area" seems focused more on habitat protection, which would be best addressed as a separate subsection of Section 2.2 Natural Resources. | High with revision |
| | <p>c. Adopt a steep slopes ordinance.</p> <p>e. Adopt a wellhead protection overlay district to protect public drinking water sources.</p> <p>f. Adopt an ordinance to manage large groundwater</p> | <p>c. The nature of this ordinance is ill-defined.</p> <p>e. Assume this is based on hydrogeologic data supporting such an ordinance.</p> <p>f. Same as e.</p> | <p>Low</p> <p>High</p> <p>High</p> |

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| | <p>withdrawal.</p> <p>g. Amend ordinances so overall impervious coverage of development does not exceed 10% of a watershed's area.</p> | <p>g. This strategy is ill defined. For new development; all watersheds; how determined and monitored?</p> | <p>Moderate</p> |
| | <p>h. Develop more stringent septic system standards for Milton. Consider establishing regulations that require septic system inspection with transfer of title of the property.</p> <p>i. Adopt an ordinance to require annual pumping of septic systems within 125 feet of the shoreline, and enforce with registration of boats and vehicles.</p> <p>j. Require that Best Management Practices (BMP) including buffering be a condition(s) for Planning Board approval of a site plan and/or subdivision plan that involves site timber harvesting.</p> | <p>With respect to strategies 'h' and 'i', are septic systems problematic throughout the town or specifically within a certain distance, soil type or slope from surface water resources? What are the problems – failure, leakage, maintenance etc?</p> <p>The term “buffering” should be replaced with a term that defines the water quality benefit such as “vegetated buffer” or “no disturb area” within a certain distance from surface water resources.</p> | <p>Moderate</p> <p>High with revision</p> |
| | <p>k. Hire a full time Code Enforcement Officer.</p> <p>l. Hire a part time Town planner.</p> <p>m. Ensure the Milton Planning Board and Conservation Commission obtain independent technical review of subdivision and site plans to protect Town interests including ensuring storm water management and erosion control plans are designed in the best interest of the Town's watershed.</p> <p>n. Consider the feasibility and desirability of providing public water to the Village of Milton Mills.</p> | <p>To date, strategies 'k' and 'l' have been implemented.</p> <p>Recommend that an independent technical review be performed jointly with the Planning Board and Conservation Commission. This is an effective method to ensure compliance with regulatory standards relating to water quality and stormwater management.</p> <p>Consider adding a statement of need for providing public drinking water to Milton Mills. What is the benefit?</p> | <p>n/a</p> <p>High</p> <p>Not Sure</p> |
| 20-21 | <p>2. <u>Educational and Voluntary Strategies</u></p> <p><u>Educational</u></p> <p>b. Educate citizens regarding existing shoreland protection laws related to limiting the use of fertilizers, setbacks and protection of existing vegetation as well as other non-point source water quality protection Best Management Practices.</p> <p>c. Provide individuals and business of all sizes with information resources on what they can do to decrease any negative impact their business may have on the</p> | <p>Education and outreach is an effective tool to increase compliance with regulations and gain voluntary support for citizens to change their behaviors and enhance their stewardship role with respect to protecting water quality and conserving water resources. A comprehensive initiative should be assigned to a committee or other group(s) to ensure consistency of the message, materials and methods for tracking success (i.e. strategy 'f' is</p> | <p>High</p> |

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| | <p>environment and increase the positive impact they have.</p> <p>d. Keep the citizenry and business owners informed through workshops and newsletters on both the water quality status and the steps that are being taken by the Town and other organizations to ensure a high quality of water. In particular highlight the positive steps that have been taken by industries, institutions and business.</p> <p>f. Have the Conservation Commission send letters to landowners who own important natural resource areas to increase their awareness of the conservation value of their land, with information on best management practices, and on voluntary land protection techniques.</p> <p>g. Attach best management practices for timber harvesting with all applications for "Intent to Cut."</p> <p>j. Promote education and awareness of septic system regulations and best maintenance practices.</p> | assigned to the Conservation Commission). | |
| 20-21 | <p><i>Voluntary</i></p> <p>a. Assess the need for increasing the number of parameters and frequency of testing the water quality at the Town Beach, particularly in the summer months.</p> <p>e. Review current water testing programs in all of Milton's lakes and rivers to see if any changes should be considered</p> <p>i. Investigate the primary sources and types of water contamination.</p> | Recommend adding a statement of need for Strategies 'a' and 'e' to make clear why measures are proposed. Is there a water quality issue at Town Beach? Are there changes in lakes and rivers that are problematic and need additional evaluation? | High with revision |
| | <p>k. Assess water supplies in Milton to ensure sufficient water supplies exist for public use based upon future growth projections, and for native wildlife and plant communities.</p> | A water supply and source assessment could provide valuable information for water resource planning and management, particularly if new water sources need to be located and protected in the future. | High |
| 20-21 | <p>1. Encourage collaborative efforts to promote voluntary land protection of important natural resource areas with neighboring towns, Conservation Commissions and organizations such as Moose Mountains Regional Greenways, Strafford Rivers Conservancy and Strafford Regional Planning Commission.</p> | Because this Implementation Strategy is a broad goal statement, it would fit best as a Policy Principle. This goal would be strengthened if the important natural resources have been identified in a report and/or on a map. If so, these materials should be specifically referenced, as they would provide context and a framework to initiate collaborative efforts to promote | High |

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| | | land protection. Recommend developing strategies that outline a method for implementation, assignment of lead group, geographic areas and natural resources targeted for protection. | |
| | m. Update ordinances and regulations to enable the development of open space conservation and cluster development subdivisions to provide more open space and reduce non-point source water pollution and impervious coverage. | A Conservation Subdivision ordinance has since been adopted which requires preservation of 50% of land as open space. By design nonpoint source pollution and impervious cover are reduced. | High |
| 21-22 | <p>3. <u>Stormwater Management Strategies</u></p> <p>a. Adopt in municipal regulations, state standards for stormwater management and require a stormwater management plan for each subdivision and site design.</p> <p>b. Use vegetation in stormwater management plan to stabilize soil, filter pollutants, and reduce runoff volume.</p> <p>c. Implement best management practices to control stormwater runoff such as: infiltration, detention, retention, constructed wetland, filtration, and vegetated systems.</p> <p>d. Use low impact development design approaches when possible.</p> | <p>State regulations should not be duplicated on the local level. An alternative approach might be to target development that falls below the minimum threshold for state permitting and oversight (i.e. review under Alteration of Terrain, septic approval as part of subdivision review).</p> <p>Although strategies #3 a-d are concise statements of methods to protect water quality by effectively managing stormwater and mitigating adverse impacts of development, there is no mechanism assigned to implement them either through site plan review or subdivision approval processes.</p> <p>Low impact development designs have the added benefit of retaining a more natural landscape, which helps achieve other Master Plan principles and strategies relating to vegetated buffers, greenway protection areas, open space preservation, and habitat protection.</p> | High |
| 22 | Groundwater/Aquifer Protection | | |
| 22 | <p><u>Policy Principles</u></p> <p>1. Continue to protect the ground water resources through sensitive development practices so aquifer recharge areas are not negatively impacted.</p> <p>2. Protect the aquifer in the Exit 18, Picket Hill Road area, by ensuring the industrial uses will not negatively impact the aquifer.</p> | Principles #1, 3, 4, 6 and 7 provide a broad framework to continue and enhance protection and adopt new regulations to protect the quality and quantity of local groundwater resources. Principle #6 expands upon this framework by encouraging management of aquifers within the regional context through cooperative efforts | High with revision |

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| | <ol style="list-style-type: none"> 3. Protect existing and future public drinking water supply. 4. Establish an aquifer protection overlay district or similar zoning tool to protect groundwater resources. 5. Protect aquifers through the use of best management practices and monitoring of activities for existing development located within zones. 6. Negotiate, when needed, mutually beneficial municipal agreements that protect aquifers, crossing municipal boundaries. 7. Protect water supplies around wells and rivers through establishment or upgrade of ordinances, such as wellhead protection districts, well recharge areas, aquifer protection districts, and substantial riparian setbacks for water conservation. | <p>with neighboring communities. Note: principles #2 and #5 appear to be strategies not overarching principles.</p> <p>This Section would be strengthened with addition of a statement of need or a rationale for protecting aquifers and groundwater resources. For example, the following questions may be addressed: Does most of the population depend upon private drinking water wells than the public drinking water supply? Does existing zoning permit high risk land uses and activities within known aquifers and recharge areas? Are there any existing groundwater contamination issues in the town?</p> | |
| 22 | <p><u>Policy Standards</u> None stated.</p> | Refer to the Recommendations portion of this document for references. | n/a |
| 22-23 | <p><u>Implementation Strategies</u></p> <ol style="list-style-type: none"> 1. Develop a strategy to protect source water public drinking water supply and proposed supply site. 2. Develop a strategy for the clean up and removal of ground water hazards. 3. Adopt ordinance to establish an aquifer protection overlay district to protect ground water by limiting and controlling hazardous development and land uses and implementing inspections of potentially hazardous operations. 4. Adopt an ordinance to limit significant water withdrawal that could negatively affect the Town's underground water resources. 5. Link surface water protection to ground water protection activities. | <p>Strategy #1 would be best achieved through development of a water resource management plan, rather than a “strategy”.</p> <p>Are there specific hazards that need to be addressed? If so, these hazards or hazardous sites should be addressed specifically as opposed to this sort of generalized statement.</p> <p>Strategies #3 and 4 enable adoption of standards to protect both water quality and quantity.</p> <p>Strategy #5 is a broad statement best suited as a Policy Principle, which provides a goal to achieve consistency among standards, regulations and policies relating to water resource protection. Recommend developing specific strategies to establish this “link” either through regulation and/or voluntary measures.</p> | <p>Moderate</p> <p>Moderate</p> <p>High</p> <p>Moderate</p> |

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| | 6. Use USGS Stratified Drift Aquifer map as a basis for aquifer protection planning. | Strategy #6 is really a Policy Standard which would be used to guide and inform aquifer protection planning initiatives. | Moderate |
| 23 | Floodplains | | |
| 23 | <u>Policy Principles</u> Minimize the hazards to life and property due to flooding. | Recommend adding Policy Principles that address how floodplains function to maintain water quality. | Low |
| 23 | <u>Policy Standards</u> See existing Zoning Ordinance and Subdivision Regulations. | | |
| 23 | <u>Implementation Strategies</u> 1. Update maps per Strafford Regional Planning Commission hazard mitigation planning project. 2. Regulate floodplain development per FEMA, state and town policies. 3. Continue the prohibition of construction within the 100 year floodplain. | Recommend adding Implementation Strategies that address protection of floodplain functions, including preservation of riparian areas, flood storage, and role in maintaining stream and river base flow for aquatic habitat and water quality. If prohibiting development within the 100-year floodplain is already a requirement of the zoning ordinance, Strategies #2 and #3 should be Policy Principles. Does the prohibition apply only to new construction? Is reconstruction limited in any way? | Moderate |
| 23 | Wetlands | | |
| 23-24 | <u>Policy Principles</u> 1. Protect high value wetlands as listed in the Blue Moon Environmental report as well as vernal pools through regulatory and non-regulatory implementation strategies. 2. Protect and maintain the valuable functions of wetlands including wildlife habitat by minimizing the impact of development and allowing only appropriate adjacent land uses such as low impact recreation and limited controlled timber harvesting. 3. Protect water resources through the use of a wetlands conservation overlay zone applied to wetlands, and surface waters (e.g., ponds, first order streams, headwaters). 4. Consider placing mandatory conservation easements or | Principles #1-2 provide a broad framework to continue and enhance protection and adopt new regulations to protect wetlands and their contribution to maintaining water quality and water resources. Principles #7 and 8 expands protection to upland areas adjacent to wetlands, recognizing that buffers are essential to maintaining the health and function of the wetlands themselves. Regarding Policy Principle #3, the existing Wetland ordinance does protect water resources with buffers and setbacks. Placing conservation easements on wetlands is redundant | Moderate |

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| | <p>deed restrictions on wetlands within subdivisions.</p> <p>5. Consider providing stricter protection of the ecological services of wetlands, such as filtration.</p> <p>6. Officially designate prime wetlands for the municipalities in the region (Chapter Wt 700 states how to identify, evaluate, and select the designation of prime wetlands).</p> <p>7. Preserve areas surrounding wetlands; particularly prime wetlands and other high value wetlands with legal standing.</p> <p>8. Develop wetland buffer/setback requirements for inclusion in the Zoning Ordinance to encourage stewardship of forest and farmlands while restricting intense land uses such as buildings, septic systems and roadways.</p> | <p>protection given that the state and the local ordinance already regulate them.</p> <p>Is Strategy #5 referring to establishing site-specific wetland buffers and structural setbacks? How would this be accomplished for individual development projects? What methodology would be implemented to evaluate ecological services?</p> <p>How would Milton be involved in designating prime wetlands on a regional basis unless a prime wetland crossed municipal boundaries? Designation of prime wetlands in Milton would be an Implementation Strategy toward achieving water resource protection.</p> <p>The term “legal standing” is not defined.</p> <p>Regarding Policy Principles #7 and #8, the existing Wetland ordinance does protect areas surrounding wetlands with buffers and setbacks.</p> | |
| 24-25 | <p><u>Policy Standards</u></p> <p>1. See existing Zoning Ordinance and Subdivision Regulations.</p> <p>2. Prime wetlands will be designated per the Blue Moon Environmental report standards. (See Appendix)</p> <p>3. Setback development from wetlands based on buffer considerations included in the following:</p> <p>a. Use the research based evaluation of 10 of Milton's wetlands prepared by Blue Moon Environmental, Inc. for Moose Mountains Regional Greenways. This study identifies wetlands of special importance, and</p> | <p>As stated above, Policy Standard #2 is really an Implementation Strategy.</p> <p>The first sentence of Policy Standard #3 is not necessary (see comments above in the Policy Principles section). However, the Prime Wetlands study is an important technical document which can inform development of standards and regulations for protection of significant wetlands.</p> | <p>High with revision</p> |

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| | <p>provides scientific justification for the appropriate use and protection afforded to these wetlands. Scientific data is used to evaluate wetlands according to the functions and values that make them special and important, each with their own unique sets of attributes.</p> <p>b. Use the research based study of the Jones Brook Watershed prepared by Natural Resources 775 Senior Project, Spring 2000. This study identifies the Jones Brook watershed as containing many ecologically significant wetlands, and shows that the system is rich in plant diversity and wildlife. It is important to protect this watershed and its adjacent lands so that the natural communities continue to survive.</p> | <p>Recommend adding additional technical references to support identification of ecologically sensitive wetland systems and habitats and to address the importance of providing water quality protection (i.e. NH Wildlife Action Plan, The Land Conservation Plan for NH's Coastal Watersheds).</p> | |
| 25 | <p><u>Implementation Strategies</u></p> <p>1. Adopt ordinances and regulations to protect the wetlands including designating the Town's eleven wetlands as evaluated by the Blue Moon Environmental report as primary wetlands.</p> | <p>Recommend adding several education and outreach strategies that address the functions and values of wetlands in protecting water quality and recharging aquifers and the importance of stewardship.</p> | <p>High with revision</p> |
| 41 | Section 2.4 Economic Development and Land Use | | |
| 41 | <p><u>Policy Goal</u></p> <p>1. Encourage well planned industrial and commercial growth in appropriate sections of Milton while maintaining the rural character of the community and protecting natural resources.</p> | <p>Recommend expanding Policy Goals to clearly establish the link between land use, development and water quality. The following topics developed in previous Sections of the Master Plan should be included: sustainable development, low impact development, non-point source pollution, vegetated buffers, aquifer recharge and best management practices.</p> | <p>Low</p> |
| 41 | <u>Implementation Strategies</u> | | |
| 41 | <p>7. Actively seek funding to address any contamination threats to the Town's water and natural resources.</p> | <p>Recommend development of Strategies that address the Policy Goals recommended above. Strategies should address how and where alteration of the landscape occurs to mitigate or prevent adverse impacts to water resources.</p> | <p>Low</p> |
| Part III: Master Plan Implementation Program | | | |
| 48 | 1. Regulatory Implementation Programs | | |

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| | Ordinances and Regulations- new or amendments. 2. Non-Regulatory Implementation Programs | Recommend that completion of the Implementation Program be designated a high priority within the next few years, as well as an overall update of the Master Plan. | Low |
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PART III GENERAL RECOMMENDATIONS

- 1) Section 2.2 Natural Resources – Water/Watersheds. Recommend adding a clear introductory paragraph that identifies the various types of water resources present in Milton, and which, if any, of these resources are of regional or statewide significance. It may be helpful to describe how these resources are connected hydrologically within the local watersheds or drainage systems, perhaps using a map to illustrate these relationships.
- 2) Section 2.2 Natural Resources - Water/Watersheds. Consider framing the policy principles within a watershed context, as watersheds are referenced throughout this section and management and/or regulatory measures are recommended for specific water bodies and stream/river systems.
- 3) Policy Standards. The statement “See existing Zoning Ordinance and Subdivision Regulations” is repeated under the Policy Standards in most subsections. Recommend a brief summary added here, with a minimum, listing the relevant ordinances and regulations to the subject matter of the subsection.
- 4) Technical References. Following is a table containing technical references and sources of information some of which may be appended to the Master Plan or references inserted in the appropriate sections.

| Source | Type of Information |
|---|--|
| NH Estuaries Project | See the Resources page by clicking the “Buffers” link and “Other Resources” list at bottom of page at http://www.nhep.unh.edu/resources/index.htm and an additional reference list at http://www.nhep.unh.edu/resources/temp/buff_resource_list.pdf |
| NH Department of Environmental Services | Water Division – Stormwater http://des.nh.gov/organization/divisions/water/stormwater/categories/publications.htm See Publications list for stormwater reference and guidance documents |
| University of New Hampshire Cooperative Extension | See <i>Integrated Landscaping: Following Nature’s Lead</i> , a new publication for New Hampshire and other gardeners, landscapers, contractors, businesses and municipalities in the Northeast that want to create beautiful, functional landscapes based on natural ecosystems at http://extension.unh.edu/resources/ |
| University of New Hampshire Stormwater Center | Technical and guidance reference materials, training courses and workshops, facility field trips, stormwater BMP water quality data/performance, BMP Fact Sheets http://www.unh.edu/erg/cstev/ |
| Statewide Resource Studies | The Land Conservation Plan for New Hampshire’s Coastal Watersheds (The nature Conservancy, 2006) at http://www.nature.org/wherewework/northamerica/states/newhampshire/projects/ NH Wildlife Action Plan (NH Fish & Game, 2006) at http://www.wildlife.state.nh.us/Wildlife/wildlife_plan.htm |

- 5) Funding. Seek funding sources for evaluation, monitoring and education/outreach strategies.
- 6) Community Projects. The Master Plan stresses the need for public participation and stewardship to achieve water resource protection goals. Recommend developing specific Implementation Strategies to achieve these goals. For example, community projects could be developed including hazardous materials collection days, storm drain stenciling and neighborhood pet waste management programs, as well as demonstration projects including installation of rain barrels and construction of rain gardens.
- 7) Master Plan Update. The Milton Master Plan was last updated in 2004. Recommend an overall review and update, including development of an implementation plan by end of 2009.

Prepared by:
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Changes Sought in Milton Ordinances to Protect the Community's Water Quality

A Citizen's Fact Sheet on Proposed Shoreland Overlay Protection District

February, 2010

What is a Shoreland Overlay Protection District?

Put simply, Milton's Shoreland District is a 150-foot strip of land on either side of a small or medium-sized stream in Town. To prevent pollution from entering our streams, lakes, and drinking water, property owners need to manage this area differently than land far away from the water resources. The proposed ordinance also refers to this area as the "shoreland management area".

Within the Shoreland District, the land next to the water is particularly important. This area is called the **riparian buffer** (see diagram below). Riparian buffers do a great job of filtering pollution from rainwater and melting snow. They also are important habitat for wildlife and help lessen the impact of flooding. There is more about buffers in the middle of this fact sheet.

Key Elements of the Proposed Ordinance

This year, Milton's Conservation Commission worked to simplify, update, and improve the current regulations that govern the shoreland district that will prevent pollution of our water. The proposed ordinance:

- Replaces two current regulations (250 foot Shoreland District and 150 foot Conservation District) with one simpler regulation that proposes a single shoreland management area of 150 feet next to a stream.
- Preserves a 50 foot riparian buffer while allowing responsible building and woodland management outside the riparian buffer.
- Provides more clarity and flexibility for Conditional Permitted Uses, such as construction of roads, as needed.
- Applies shoreland protection equally to areas zoned residential,

Continued on back page

Letter of Support

To my fellow Milton residents,

We are fortunate. The Town of Milton is unusually rich in fresh-water resources with three lakes, two major rivers and hundreds of small tributary streams in our watershed. Our lakes serve the town for swimming, fishing and boating recreation, attracting new residents and, in emergencies, as a potential source of drinking water.

Thanks to dedicated citizens who monitor the water quality in these lakes, we now have data that indicates serious problems if we do not act to protect the Milton Three Ponds from nutrients entering the lake from the watershed.

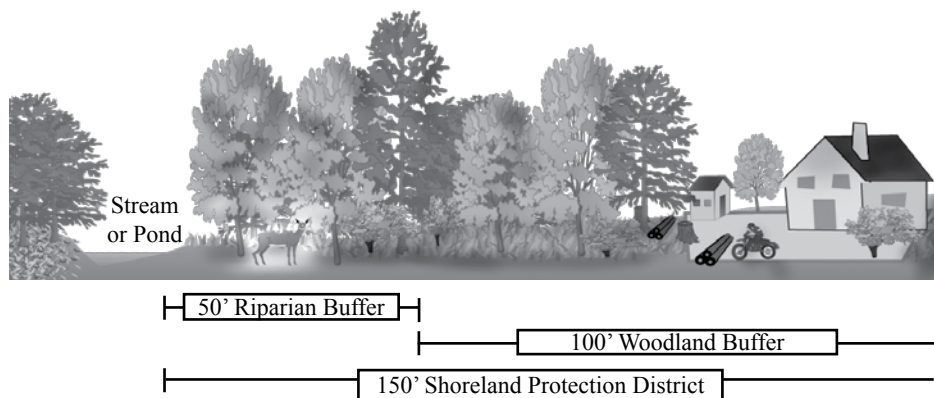
The proposed Shoreland Overlay Protection District ordinance is an opportunity to take control of our future and avoid the loss of the most valuable and essential resource in Milton. Common-sense protection of the land and streams that contribute water to our lakes is a small investment, considering the potential financial and health costs of taking no action.

We owe it to ourselves and to our children to take this opportunity.

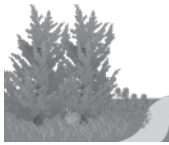
James F. Haney, Professor
Center for Freshwater Biology
University of New Hampshire

Read more support for the ordinance on the back page

The Proposed Milton Shoreland Overlay Protection District addresses land use within 150 feet of small ponds and small to medium streams.



Riparian Buffers: What They Are, What They Do



Riparian buffers are naturally vegetated areas next to water bodies (like streams) that primarily protect water quality, lessen the impact of flooding, and provide habitat for wildlife. The roots of plants both clean water of contaminants and enable the soil to absorb water where even more contaminants are neutralized. This absorbing quality also lessens the impact of flooding because stormwater is held in the buffer zone longer and does not rush into the stream and cause flooding. Finally, wide buffers provide food, shelter, and breeding places for a variety of wildlife species.

Buffers Provide Many Benefits to Citizen's of Milton

- Removal of nitrogen, sediments and other pollutants
- Protection and recharge of groundwater (i.e. drinking water) supplies
- Stabilization of stream banks
- Maintenance of stream ecology
- Moderation of stream temperatures
- Flood control services
- Wildlife habitat and connections between natural areas

The simplest, cheapest, and most effective way to protect streams, rivers, and lakes is to leave an area of undisturbed native vegetation adjacent to the water body.

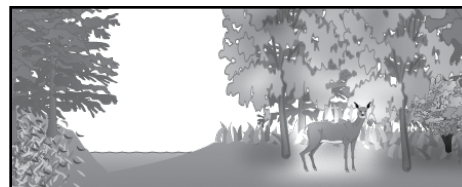
Some Activities Damage Buffers and Lead to Polluted Water

Riparian buffers protect streams and ponds from pollution that flows in from the surrounding landscape. Removing all or most of the plants in a shoreland buffer dramatically increases erosion and water pollution. Riparian buffers function best when left in a natural state and not mowed or landscaped.

Fertilizer has been found to be a major problem for ponds, lakes, and estuaries downstream. The proposed ordinance addresses this threat by requiring the use of low phosphorus, slow release nitrogen fertilizer in the shoreland buffer beyond 25 feet from a stream. No fertilizer, except limestone, would be allowed within 25 feet of a stream.

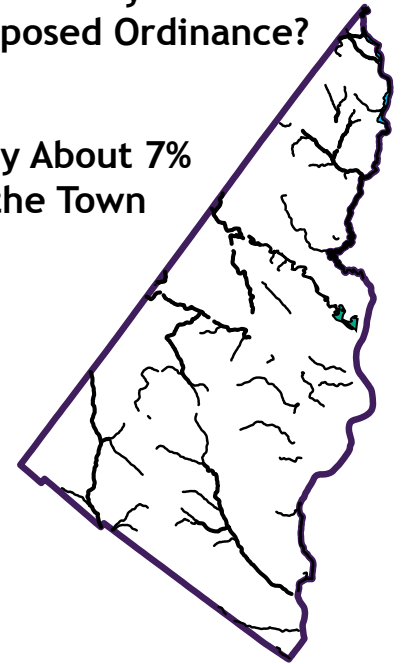
Rainwater runoff can transport many pollutants, such as oil, salt, and mud off of roads, driveways and roofs in to a pond or stream. Plants and soil actually neutralize many contaminants in rainwater if it is allowed to soak into the ground. That is why the proposed ordinance prohibits the installation of drainage pipes that whisk rainwater past a shoreland buffer and directly into a pond or stream.

Keeping riparian buffers intact makes simple common sense when managing land that borders a stream or pond. It is in the best interest of the land owner, as well as the rest of the community, to maintain healthy, functional riparian buffers.



How Much Land is Affected by This Proposed Ordinance?

Only About 7% of the Town



The map above shows the small ponds and small to medium-sized streams (also called 1st, 2nd, and 3rd order streams) in Milton. The proposed Shoreland Overlay Protection District is 150 feet on either side of these water bodies, which only accounts for 7% of the land in Milton. Even though the actual amount of land is a very small, these areas are critical for preventing pollution from entering Milton's water resources.



For More Information

If you would like more information on how buffers keep water clean, email Dave.Kellam@unh.edu or call 603-862-3403.

If you have questions about the proposed Shoreland Overlay Protection District, please email Milton's Conservation Commission at Cinny_Wyatt@siemon.com

A copy of this fact sheet and a draft of the ordinance can be found at www.prep.unh.edu/milton-shoreland.pdf

Milton's Proposed Shoreland Overlay Protection District—How It Came to Be

The Milton Conservation Commissions feels it is very important for citizens to know the process that led to the update and improvement of the regulations that protect water resources in the Town. The following is an explanation of the process.

1. Water Resource Protection Kicks off with NROC Program

In 2007, the Town of Milton engaged in an active volunteer program with the Natural Resources Outreach Coalition (NROC) sponsored by the University of New Hampshire Cooperative Extension. The purpose of this program was to look at key natural resource issues affecting the Town of Milton. During this year, close to 100 concerned citizens became involved in committees focused in one of three areas—Water Resource Protection, Better Ordinances for Natural Resource Protection, and Environmentally Sound Economic Development.

2. Town Recognizes Need to Better Protect Water Resources; Receives Grant

In view of the well-documented ongoing decline of water quality in the Milton Three Ponds, and the encroachment of development into wetlands, the town perceived a need to better protect its water resources. Town boards sought funding for professional assistance to explore ways to better protect their water resources. The town applied to the Piscataqua Region Estuaries Partnership for a matching grant to examine the town's current regulations and if necessary, upgrade the water resources regulations. Milton was awarded this grant and hired a consultant in September of 2008. The consultant and the Conservation Commission determined that the best strategy would be to streamline the existing patchwork of ordinances to ensure they were consistent with one another and compatible with the updated state Comprehensive Shoreland Protection Act.

3. Conservation Commission Audits Master Plan and Zoning Ordinance; Holds Public Forum

In late 2008 the Conservation Commission and the planning consultant developed a work program and schedule for the project. The scope involved a review of Milton's current Master Plan and Zoning Ordinance, proposing zoning changes to better protect water resources, and public education and outreach. In January 2009, the Conservation Commission held a public forum exploring the value of water resource protection with two leading experts on water resource protection and riparian buffers. During the spring and summer the consultant audited the town's existing water protection ordinances and provided specific recommendations for reducing duplication and addressing gaps.

4. Updated Shoreland Overlay Protection District Ordinance

The Conservation Commission and planner decided to revise the Shoreland Overlay Protection District Ordinance. The new town ordinance would combine the existing town Shoreland Protection and Conservation Overlay districts into a single, consistent district. The revision was to be consistent with the newly updated state Comprehensive Shoreland Protection Act (CSPA), and also would incorporate provisions more appropriate to the town's geography from the existing Shoreland Protection and Conservation Overlay Ordinances. The state CSPA is primarily concerned with large streams and lakes. Because Milton occupies a watershed headwaters area, the town contains small streams and bodies of water which are not covered by CSPA protections. Therefore the town's revised and updated ordinance was aimed at protecting shorelands and streams not already protected by the state CSPA—small to medium size streams and ponds, while reducing duplication and inconsistencies in the current regulations.

5. Conservation Commission Meets with Planning Board

Once the Conservation Commission completed its work on preparing a revised shoreland ordinance, it met with the Planning Board to discuss the proposed ordinance. The Board had several good suggestions which were incorporated into the proposed ordinance, and which reduced its scope by eliminating overlap with the state CSPA. The Conservation Commission then met again with the Planning Board and asked local resident and UNH water biologist Jim Haney to make a presentation about the issue of declining water quality in Milton's Three Ponds. That presentation also addressed the importance of natural buffer areas along streams, rivers and ponds for protecting water quality and wildlife habitat.

After further deliberation a final version of the ordinance was prepared and submitted for a public hearing on December 15, 2009. At that public hearing the Planning Board recommended that the ordinance be placed on the warrant for town meeting in March of 2010.

Key Elements . . .

continued from front page

- and commercial. Farming and forestry practices are exempt from the law because they are governed by state/federal regulations.
- Addresses shoreland areas with steep slopes to prevent erosion.
 - Makes it easier to prune and maintain trees because it provides more straightforward guidelines than current regulations provide.
 - Is consistent with the New Hampshire Comprehensive Shoreland Protection Act.
 - Allows for ordinary maintenance and repairs, such as repairing a shed or removing a hazardous tree.
 - Avoids "regulatory overlap". Currently several town ordinances address activities around larger rivers and lakes, and the installation of septic systems. These town regulations were found to be redundant since the New Hampshire Department of Environmental Services already regulates these activities.

Support of the Three Ponds Protective Association

The Three Ponds Protective Association wishes to express strong support for the proposed revision of Milton's Shoreland Protection Overlay District ordinance. It will help reduce the decline in water quality occurring in the Milton Three Ponds and also reduce the NH estuaries' exposure to nutrient contamination and sediments from upland watersheds. We expect the ordinance will come up for a vote on the March 2010 town ballot. Please vote YES.

Norman Turgeon, President,
Three Ponds Protective Association



Milton Conservation Commission
PO Box 310
Milton NH 03851

To All Town of Milton Voters,

The Milton Conservation Commission wishes to express strong support for the proposed revision of Milton's Shoreland Overlay Protection District ordinance.

This science-based ordinance will help to reduce the decline in water quality known to be occurring in the Milton Three Ponds, and already causing serious degradation in the Great Bay Estuary.

The revised ordinance simplifies and replaces two existing town ordinances, and creates compatibility with the state's new Comprehensive Shoreland Protection law. The ordinance provides for small but significant natural shoreland buffers on our streams and small ponds to protect surface waters, the most effective protection method for surface waters and wetlands.

This ordinance was revised with professional assistance paid for by a grant secured through the Piscataqua Region Estuaries Partnership and Strafford Regional Planning Commission. Both your Planning Board and Conservation Commission played important roles in developing this ordinance.

Milton's Shoreland Overlay Protection District ordinance will be up for vote on the March 2010 town ballot. Please vote YES.

Thank you.


Cynthia Wyatt, Chair
Milton Conservation Commission



We Want To Hear From You

Email your support for or concerns about the proposed ordinance to the Milton Conservation Commission at Cinny_Wyatt@siemon.com

This publication was produced by the Piscataqua Region Estuaries Partnership (PREP) with funding from the Otto Haas Charitable Trust 2 Fund of the NH Charitable Foundation. PREP is a collaborative program of the U.S. Environmental Protection Agency administered through an agreement with the University of New Hampshire. PREP is not responsible for the content or views and opinions expressed in this publication.



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ARTICLE XX
TOWN SHORELAND PROTECTION OVERLAY DISTRICT--FINAL

A. AUTHORITY. Pursuant to the authority granted by RSA 483-B:8, RSA 674:16 - 21, this Ordinance is adopted by the Town of Milton, New Hampshire in order to protect the public health, safety and general welfare.

B. PURPOSE. This Ordinance establishes standards for the subdivision, use and development of shoreland adjacent to surface waters, as defined herein, for the purpose of minimizing degradation of shoreland and protecting the benefits and functions provided by such shoreland to:

1. Maintain safe and healthy conditions for property owners and recreational users;
2. Prevent and control non-point source pollution;
3. Preserve riparian buffers that filter and remove pollutants from runoff;
4. Preserve existing natural drainage systems and natural flood storage areas;
5. Reduce and mitigate flooding and accelerated erosion;
6. Protect shoreland wetlands and their important natural functions;
7. Maintain aquatic habitat and instream conditions;
8. Protect water resources and watersheds to ensure the highest quality water for consumption, recreation and wildlife;
9. Protect water resources by managing land resources and balancing their use and development consistent with Milton's conservation and development needs;
10. Protect the Town from incurring unnecessary or excessive expense in providing and maintaining essential services and utilities in areas that may be subject to flooding;
11. Preserve and enhance those aesthetic values and natural and scenic beauty of Milton's waterways and shorelands.

C. TOWN SHORELAND PROTECTION OVERLAY DISTRICT

The Town Shoreland Protection Overlay District (the District) is an overlay, which is superimposed over the existing zoning district and includes all land within 150 feet of the reference line of those surface waters in the Town of Milton – including ponds in excess of five acres as well as Allan Hasting Way Pond, Willey Pond and Gould Pond, and perennial rivers, streams and brooks - not under the jurisdiction of the Comprehensive Shoreland Protection Act (CSPA).

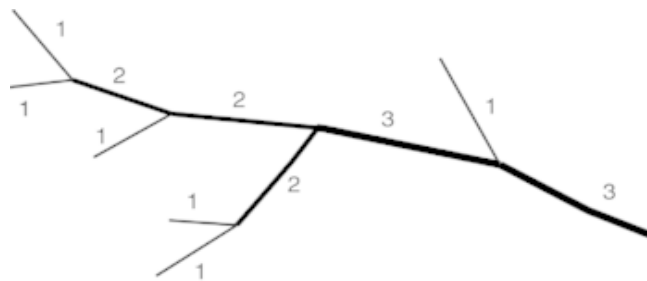
In any case where the State of New Hampshire takes jurisdiction for the issuing of permit in the state defined Protected Shoreland, the Town of Milton will not require a town permit subject to the provisions of this section of the Milton Zoning Ordinance. Should the State of New Hampshire repeal or substantially change the CSPA, the Town of Milton's Shoreland Protection Overlay District shall also apply to those areas no longer under the jurisdiction of the State of New Hampshire as per RSA 483-B:8.

The map "Water Resources of Milton, NH" is hereby incorporated as a reference to this ordinance. Any applicant requiring a town permit to work in this district shall provide information documenting the field delineation of all resources protected by this ordinance, including but not limited to headwater streams, setbacks, vegetated buffers, slopes and wetlands.

D. DEFINITIONS

1. Boat Slip - An area of water 20-feet long and at least 2-feet deep and 6 feet in width measured at, and located adjacent to, a structure to which a watercraft may be secured.
2. Canopy - The more or less continuous vegetative cover formed by tree crowns in a wooded area.
3. Disturbance – any use or activity that causes removal of vegetation or alteration of the land surface, exposing the underlying soil.
4. Ground cover - Any herbaceous or woody plant which normally grows to a mature height of two feet or less, especially mat forming vegetation which stabilizes the soil.
5. Headwater Streams - Perennial streams of first and second order.
6. Ordinary High Water Mark – The line on shore, running parallel to the main stem of the river, established by the fluctuations of the water and indicated by physical characteristics such as a clear, natural line impressed on the immediate bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristic of the surrounding areas.
7. Perennial Stream – A watercourse that has continuous flow in parts of its defined channel all year round during years of normal rainfall.
8. Primary structure – A structure built for the support, shelter or enclosure of persons, animals, goods, or property of any kind, as well, as anything constructed or erected with a fixed location on or in the ground, exclusive of fences. The primary structure is central to the fundamental use of the property and is not accessory to the use of another structure on the same premises.
9. Protected Shoreland - All land located within 150 feet of the reference line of ponds, and perennial rivers, streams and brooks in Milton.

10. Reference Line - For rivers, perennial streams and brooks it is the ordinary high water mark; for natural fresh waterbodies it is the natural mean high water level; and for artificially impounded fresh waterbodies it is the elevation at the spillway crest or, if there are flowage rights, the elevation of the flowage rights.
11. Riparian Area – The area of land immediately adjacent to a river, stream or brook consisting of natural or planted vegetation, and which helps maintain aquatic and hydrologic functions of these surface waters.
12. Shoreland Frontage - The average of the distances measured along the public boundary and along a straight line drawn between the points at which the public boundary intersects the sidelines of the property.
13. Stream Order - A classification system for streams based on stream hierarchy. The smaller the stream, the lower its numerical classification as shown in the diagram below. For example, a first order stream does not have tributaries and normally originates from springs or seeps at the head of a watershed. At the confluence of two first order streams, a second order stream begins and at the confluence of two second order streams, a third order stream begins, et.seq. A first order stream may be initially identified as a perennial stream or solid lines on the New Hampshire Hydrography Dataset (NHHD) or the most recent edition of a USGS topographic map. For purposes of this Article, this resource must be documented through field delineation by a Certified Wetland Scientist.



US Army Corps of Engineers, after Strahler Stream Order

14. Structure – anything constructed or installed the use of which requires location below grade, at grade or above grade, including but not limited to buildings. Fences 6 feet or less, poles, antennas, mailboxes, retaining walls less than three feet in height, survey monuments and similar minor structures shall not be considered structures for purposes of this article. Wiring and other aerial equipment normally associated with service drops as well as guying and guy anchors shall also not be considered structures for purposes of this ordinance.
15. Surface waters – Any flowing or standing freshwater body of water including ponds, rivers, streams, and brooks.

16. Water dependent structure - Dock, wharf, pier, breakwater, or other similar structure or any part thereof built over, on, or in the public waters.
17. Woodland buffer - A forested area consisting of various species of trees, saplings, shrubs, and ground covers in any combination and at any stage of growth.

E. PERMITTED USES

The following uses permitted by the state may be conducted within the Town Shoreland Protection Overlay District only in accordance with the conditions listed below.

1. All permitted uses allowed within the municipality's underlying zoning district(s) for any lot or parcel or portion of a lot or parcel located within the district except for those expressly prohibited in Section G below and subject to the requirements of Section K of this ordinance. Any application for such uses must be accompanied by the information required in Section H.3.
2. The following water dependent uses and structures are permitted within the Town Shoreland Protection Overlay District in compliance with all applicable local, state, and federal regulations. Water dependent structures including, but not limited to, docks, wharfs, swimming floats and boat ramps. Other water dependent uses and structures upon issuance of a conditional use permit approved by the Planning Board per Innovative Land Use Controls, RSA 674:21 and after recommendations from the Conservation Commission, provided the proposal complies with the general conditional use permit criteria and also complies with the following criteria:
 - (a) The use would be in keeping with the purpose and intent of these regulations; and
 - (b) Canopies and seasonal covers shall extend only over the boat slips and shall be removed during the non-boating season.
3. All new lots, any portion of which is located within the Town Shoreland Protection Overlay District, shall require subdivision approval by the DES Water Division, Subsurface Systems Bureau pursuant to RSA 485-A:29. All subsurface wastewater disposal facilities shall be in compliance with RSA 485-A:29 and 483-B.
4. All agricultural activities and operations in the state as defined in RSA 21:34-a and as governed by RSA 430, including the use of animal manure, lime, wood ash, irrigation and clearing of land for agricultural utilization, and other agricultural technologies, shall be exempt from the provisions of this ordinance, provided such activities and operations are in conformance with an approved Farm Plan and the most recent best management practices determined by the United States Department of Agriculture, Natural Resource Conservation Service and Cooperative Extension Service.
5. All forestry and silvaculture activities and operations, as defined in RSA 227, shall be exempt from the provisions of this ordinance, provided such activities and operations are

in conformance with the most recent best management practices determined by the United States Department of Agriculture, Natural Resource Conservation Service.

F. RESTRICTED USES

The following uses may be conducted within the Town Shoreland Protection Overlay District only in accordance with the conditions listed below for each activity.

1. An existing solid waste facility, which is located within 150 feet of the reference line of waters protected under this ordinance, may continue to operate under an existing permit. However, an existing solid waste facility may be allowed, subject to permitting conditions under RSA 149-M: 9, to erect accessory structures and conduct other activities consistent with the operation of the facility within 150 feet of the reference line of waters protected under this ordinance, such as filling, grading, and installing monitoring wells and other drainage structures as is consistent with its solid waste permit as issued by the Department of Environmental Services.
2. No solid waste facility shall place solid waste within 150 feet of the reference line of surface waters protected under this chapter except as expressly permitted under RSA 483-B: 9, IV-c.
3. Public water supply facilities as permitted by the New Hampshire Department of Environmental Services (NHDES).
4. Public water and sewage treatment facilities as permitted by NHDES.
5. Hydro-electric facilities, including, but not limited to dams, dikes, penstocks, and powerhouses, shall be recognized as water dependent, as permitted by NHDES.
6. Public utility lines and associated structure and facilities as permitted by NHDES.
7. All existing excavations as defined in RSA 155-E:2 (I) within the Town Shoreland Protection Overlay District shall operate in accordance with rules adopted by the NHDES under RSA 155-E, and to manage stormwater control and sediment, during and after construction and in compliance with the requirements of Env-Wq1500 Alteration of Terrain.

G. PROHIBITED USES

The following uses are prohibited in the Town Shoreland Protection Overlay District:

1. Establishment or expansion of an automobile junkyard, dry cleaning establishments, and solid or hazardous waste facilities;
2. Storage of hazardous waste as defined in RSA147-A Hazardous Waste Management, excluding contained small household quantities;
3. Storage of regulated substances as defined in 40 Code of Federal Regulations 302, 7-1-05 Edition, excluding petroleum and propane for the purposes of residential heating and cooling;

4. Processing of excavated materials; and
5. Dumping or disposal of snow and ice collected from roadways or parking areas.
6. Disturbance to land surfaces with a slope of 25 percent or greater as measured over a horizontal distance of 25 feet or greater unless it can be demonstrated that the activity will have minimal impact on water quality as documented through an application for a Conditional Use Permit as outlined in Section H.

H. CONDITIONAL USES

1. In order to prevent adverse impacts to riparian areas, water resources and other environmentally sensitive areas as a result of land-disturbance activities, a Conditional Use Permit from the Planning Board may be granted for the following uses within the district.
 - (a) Within the Riparian Buffer, the construction of streets, roads and other access ways and utility rights-of-way, communications equipment, easements, including communication and power lines and pipe lines; and
 - (b) Within the Town Shoreland Protection Overlay District, disturbance to slopes of greater than 15 percent, as measured over a horizontal distance of 25 feet or greater.
2. A Conditional Use Permit may be granted by the Planning Board providing it finds that all of the following conditions are met:
 - (a) the use or activity is essential to the productive use of the land;
 - (b) the use or activity is located and constructed to minimize adverse impacts to the quality of surface waters, other water resources and environmentally sensitive areas; and
 - (c) it is physically impossible to locate such uses or activities outside the Riparian Buffer or the District.
3. A Conditional Use Permit may be granted providing that the following information is submitted and accepted by the Planning Board:
 - (a) A soil erosion and sedimentation control plan that addresses conditions during construction, provides permanent post-development protection of water quality, and implements best management practices consistent with and as recommended in the NH Department of Environmental Services *New Hampshire Stormwater Manual Volume 3: Erosion and Sediment Controls During Construction* and *Volume 2: Post-Construction Best Management Practices Selection and Design* (2009, as amended);
 - (b) A post-construction stormwater management plan that implements best management practices consistent with and as recommended in Chapters 6, 7 and 8 of the NH Department of Environmental Services *New Hampshire Stormwater Manual Volume 1: Stormwater and Antidegradation* (2009, as amended);

- (c) Necessary state and federal approvals; and
- (d) A written review by the Conservation Commission of the environmental effects of the proposed use or activity upon the District has been submitted as part of the Conditional Use Permit application.

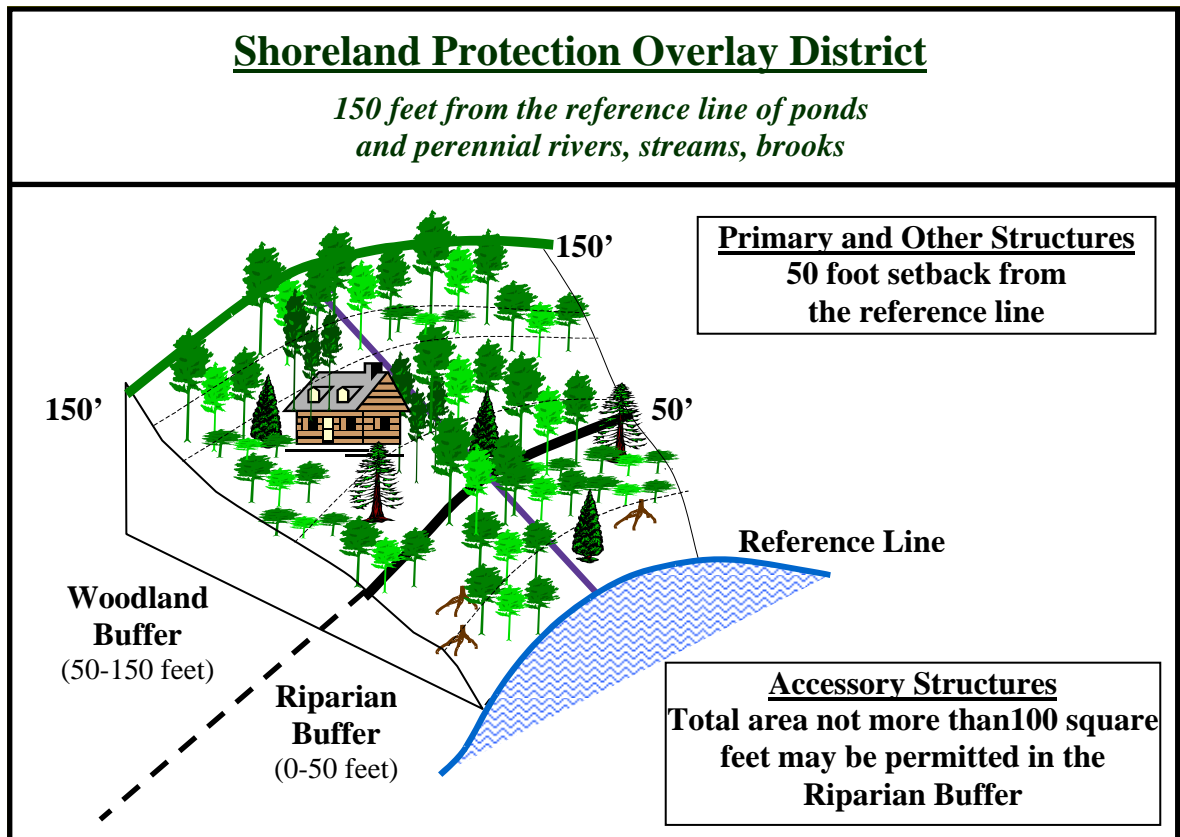
I. RIPARIAN AND WOODLAND BUFFER STANDARDS

The following buffers and requirements shall apply within the District.

1. **Riparian Buffer**. The purpose of the Riparian Buffer shall be to protect the quality of surface waters by minimizing erosion and siltation, stabilizing soils, preventing excess nutrients and chemical pollution, maintaining natural water temperatures, maintaining a healthy tree canopy and under story, preserving fish, bird and wildlife habitat, and respecting the overall natural condition of the protected shoreland. A Riparian Buffer shall be maintained or established within 50 feet from the reference line of surface waters as shown in Figure 1. The following standards apply to this buffer.
 - (a) Disturbance to the land surface or vegetation is not permitted except for those uses and activities associated with:
 - (i) a water dependent use consistent with Section E
 - (ii) a Conditional Use Permit consistent with Section H and the purpose and intent of this ordinance.
 - (b) If the Riparian Buffer is not naturally vegetated or fully vegetated at the time a lot or parcel is developed, the Riparian Buffer shall be planted or allowed to naturally regenerate, to establish a well distributed cover of native trees, shrubs and groundcover. Any such planting shall be consistent with the recommendations in the UNH Cooperative Extension publication *Landscaping at the Water's Edge: An Ecological Approach, 2007* or as revised.
 - (c) The Riparian Buffer shall be expanded to include the landward extent of any wetlands in the District that are contiguous with surface waters.
 - (d) Fallen trees, saplings, shrubs, or ground cover, which are determined to be dead, diseased, unsafe, or noxious may be removed. Stumps and their root systems shall be left intact in the ground. Plantings of natural native vegetation that are beneficial to wildlife are encouraged to be undertaken to replace the vegetation removed. Dead and living trees that provide dens and nesting places for wildlife are encouraged to be preserved.
 - (e) Low phosphorus, slow release nitrogen fertilizer may be used for the area that is beyond 25 feet from the reference line. No fertilizer, except limestone, shall be used between the reference line and 25 feet.

- (f) Stormwater management structures or conveyances (including but not limited to swales, outfalls and detention or retention facilities) are not permitted.
- (g) Stormwater may only be discharged as sheet flow to densely vegetated areas or infiltrated on site.
- (h) Natural ground cover may be removed to establish a footpath to the water that does not exceed 6 feet in width and does not concentrate stormwater or contribute to erosion. Footpath materials shall be pervious in nature.
- (i) For existing developed lots and parcels in the District, the Riparian Buffer may be maintained in its existing condition; however removal of natural vegetation after adoption of this ordinance may be conducted only as otherwise permitted by this ordinance. Existing uses and activities may continue, providing the footprint of a structure is not expanded or the scale of an activity is not intensified.

Figure 1. Buffers, setbacks and extent of the Town Shoreland Protection Overlay District.



2. **Woodland Buffer.** The Woodland Buffer shall contain all land within 50 feet to 150 feet from the reference line of surface waters as shown in Figure 1. Within the Woodland Buffer, tree coverage is managed as described below:
 - (a) For lots that contain ½ acre or more, at least 50 percent of the area outside of impervious surfaces shall be maintained in an undisturbed state. For lots that contain less than ½ acre, at least 25 percent of the area outside of impervious surfaces shall be maintained in an undisturbed state. Owners of lots legally developed prior to Town Meeting of 2010 that do not comply with these standards are encouraged to, but shall not be required to, increase the percentage of the lot maintained in an undisturbed state. However, the percentage of area maintained in an undisturbed state on nonconforming lots shall not be decreased.
 - (b) For existing developed lots and parcels in the District, the vegetated condition of the Woodland Buffer shall be documented on a site plan at the time a Town Shoreland District Permit is submitted. If the removal of vegetation within the Woodland Buffer is permitted by the grant of a Town Shoreland District Permit, the property owner shall replant within the District an area of native vegetation equivalent to the area of vegetation removed within the Woodland Buffer. Any such planting shall be consistent with the recommendations in the UNH Cooperative Extension publication *Landscaping at the Water's Edge: An Ecological Approach*, 2007 or as revised.
4. **Impervious Cover.** For all uses permitted in the underlying zoning district, impervious cover shall not exceed twenty percent (20%) for any lot or parcel or portion of a lot or parcel located within the district, except as required in Section K of this ordinance. Additional impervious cover up to 25% of such lot may be granted upon the submission of a planting plan to the Planning Board accompanied by a review from the Conservation Commission documenting the environmental benefits of the proposed activity.

J. MINIMUM LOT AREA AND SETBACK REQUIREMENTS

1. **Area.** The minimum area for new lots created that use on-site septic systems shall be determined by the soil based lot sizing standards of the NHDES as set forth in rules adopted under RSA 541-A and RSA 485-A.
2. **On-Site Septic.** New lots requiring on-site water and sewage systems within the District shall have a minimum shoreland frontage of 150-feet.
3. **Municipal Service.** Lots with shoreland frontage, which are serviced by municipal sewers, shall meet the area and width requirements of the underlying zoning district or other minimum lot area requirements of the zoning ordinance
4. **Setbacks.** No primary structure shall be located within 50-feet of the reference line. Accessory structures, totaling not more than 100 square feet on a parcel or lot, (such as storage sheds and gazebos but excluding automobile garages) may be located within the

Riparian Buffer with issuance of a Building Permit providing the proposal complies with the following criteria:

- (a) The proposal is consistent with recommendations from the Conservation Commission;
 - (b) The location and construction of the accessory structure is consistent with the intent of this ordinance to maintain a Riparian Buffer; and
 - (c) The structure is used to support the primary use or water dependent activities; and
5. Building Placement - Buildings and structures shall be placed in such a manner as to minimize impact to natural vegetation and landscape features, and have the least impact on water quality.

K. COMMON OWNERSHIP AND USE OF LOTS OR PARCELS

Shorefront lots and parcels which are intended for common access and use by non-shoreland property owners in a development or subdivision which owns or has control over the common land, shall:

1. Contain a minimum of one acre;
2. Have a minimum shoreland frontage of 150 feet for the first ten residential dwelling units and an additional ten feet for each additional dwelling unit;
3. Have no structures other than toilet facilities, picnic shelters and/or recreational storage facilities (not to exceed a total of 100 square feet within the Riparian Buffer);
4. Designate half the shoreland frontage for swimming and shall be separated from boating areas by ropes and appropriate marks, subject to the approval of the Safety Services Division of the NH Department of Safety.
5. Provide toilet facilities on the basis of one facility each for men and women for each 25-residential units.
6. Impervious cover for buildings, structures, parking lots, access roads, sidewalks and any other impervious cover shall not exceed 10-percent of the area of the parcel or lot within the district.

L. TOWN SHORELAND DISTRICT PERMIT REQUIREMENTS

A Town Shoreland District Permit from the Planning Board is required for any development, use or activity in the district that does not require a Site Plan or Subdivision approval. No person shall commence any such development, use or activity within the District, unless such activity was previously authorized by a Site Plan or Subdivision approval or a building permit. No building permit shall be issued for any such activity within the District unless a Town Shoreland

District Permit has first been obtained. However, any activity that is considered to be routine repair and maintenance to a structure in the Town Shoreland Overlay Protection shall not require a Town Shoreland District Permit. Application for a Town Shoreland District Permit shall be made to the Planning Board upon the appropriate form and shall be accompanied by the following:

1. A site plan, drawn to scale, showing the actual shape, dimensions, and location of the lot to be used, existing buildings or structures, proposed alterations or expansion of existing buildings or structures, proposed new buildings or structures, or disturbance to the land surface or removal of vegetation;
2. Any other information with respect to the lot or the proposed use thereof which in the judgment of the Planning Board is necessary to determine whether the proposed use for which a town permit is sought conforms to the provisions of this Ordinance.

If the Planning Board determines that the proposed use complies with the provisions of this Ordinance, the application shall be approved and a Town Shoreland District Permit issued.

The Town Shoreland District Permit shall lapse and be of no force or effect if a building permit is not issued or construction is not begun within one year from the date of issue of the Town Shoreland Permit. If no building permit is required, the Town Shoreland District Permit shall lapse and be of no force or effect if the rights conferred by the Town Permit are not exercised within one year from the date of issue. A Town Shoreland District Permit may be extended by the Planning Board for no more than an additional one-year period if a written request for such an extension is received at least 30-days prior to the expiration of the original Town Shoreland District Permit.

M. CONFLICTS OF ORDINANCE. In the event that the requirements of this ordinance differ from another federal, state or local statute, ordinance or regulation, the more stringent requirement shall apply. In the event that the requirements within this ordinance are in conflict with one another, the more stringent requirement shall apply.

N. OTHER. Should any landowner wish to sell a property within the the Town Shoreland Protection Overlay District that uses a septic system, said landowner must provide documentation that the septic system is properly functioning consistent with the provisions of NH RSA 485A:39.