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Final Report: Section 3. Code Reform Projects

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SECTION 3

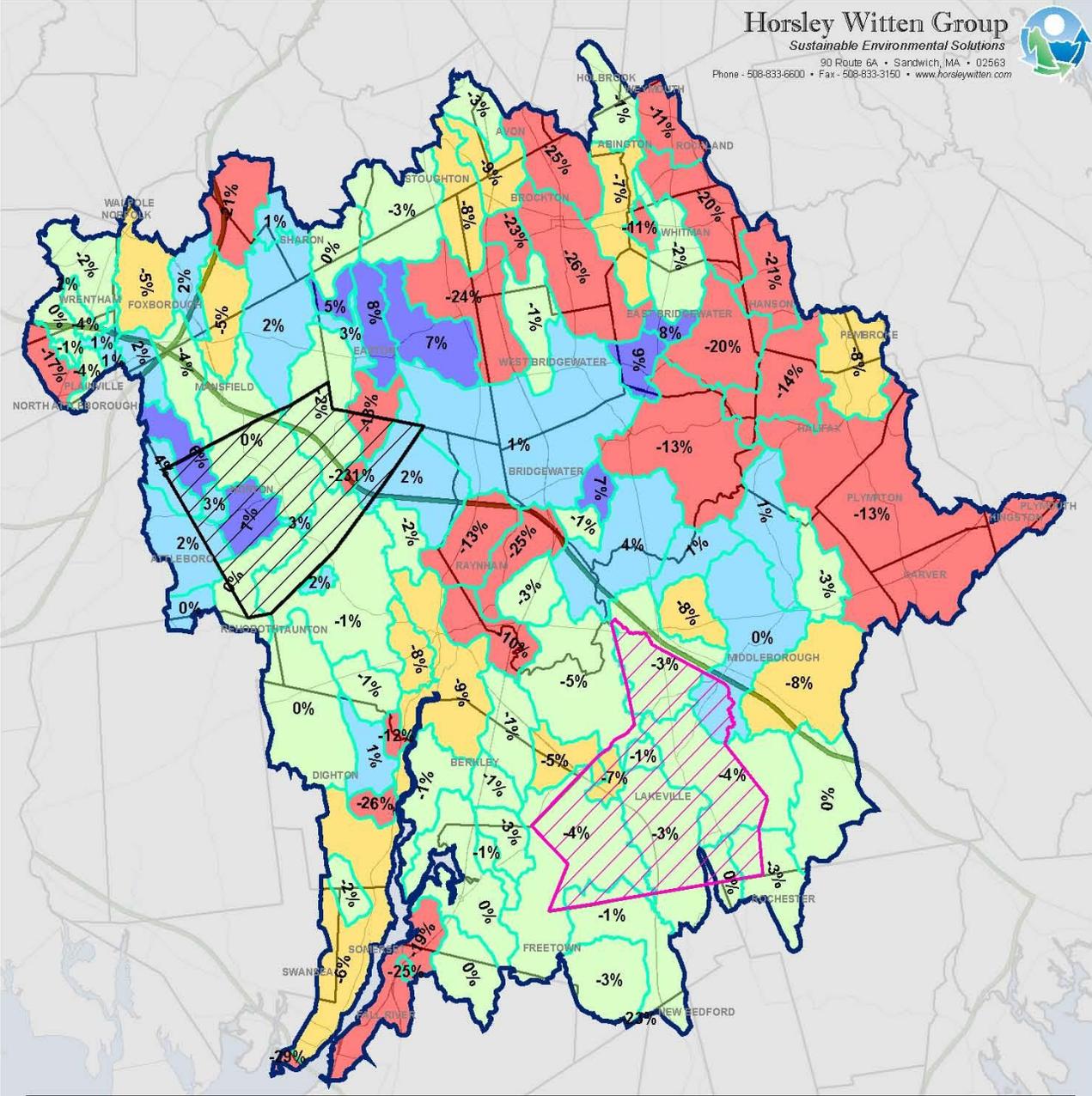
CODE REFORM PROJECTS

1.0 INTRODUCTION

HW worked with the Steering Committee to select two communities to demonstrate innovative code reform that promotes and enables ‘keeping water local’ and provides enhanced water quality protection. In selecting these two case study communities, HW reached out to various communities and organizations in the watershed, as well as to our Steering Committee and attendees at our various public educational meetings, to help us identify candidate communities and code reform issues, and willing partners. As a result, the two partner communities, Norton and Lakeville (Figure 3.1), were both recommended by the Steering Committee due to the challenges they faced, their level of interest to participate in the project, and the diversity of issues being tackled in each community. Norton was interested in developing a local Wetlands Protection Bylaw and Regulations, and Lakeville was interested in revising its zoning code to update and strengthen the stormwater management requirements and provide better protection of its surface waters that are impacted by conversion and expansion of summer cottages into year round residences in its many lakeside communities.

The scopes of work and budgets for these code reform projects were limited to several meetings with partner organizations, the development of recommended code revisions to a specific targeted portion of the local code, and attendance at a final public meeting to present the recommendations in order to assist the communities in adopting the changes. The project partners are ultimately responsible for any further work to adapt and implement the recommended code reform. However, clearly the goal of this work is to lead to a strengthening of the local code to better manage the water resources and work toward maintaining or restoring the water balance within the community.

Figure 3.1. Locations of Code Reform Projects



Legend

-  Taunton River Watershed
-  Lakeville: Zoning Code and Subdivision Rules and Regulations
-  Norton: Wetland Protection Bylaw and Regulations
-  Town Boundaries
-  Sub-basins

Water Balance

**Excluding Surface Water Withdrawals and NPDES Effluent*

-  <-10% (withdrawals > recharge)
-  -10 % to -5%
-  -5% to 0%
-  0% to 5 %
-  > 5% (recharge > withdrawals)



2.0 NORTON WETLAND PROTECTION BYLAW AND REGULATIONS

2.1. Introduction

The Town of Norton Conservation Commission has had a long-standing interest in strengthening the protection of its unique wetland and water resources, including the vernal pool habitats, the Canoe River Aquifer that supplies drinking water for the town, and its myriad of streams. The Town of Norton is unique in that it is included within three different adjoining Area of Critical Environmental Concern (ACECs) designated by the Commonwealth. These are the Hockomock Swamp ACEC, the Canoe River Aquifer ACEC, and the Three Mile River ACEC. Recognizing the connection between development patterns that create significant swaths of impervious surface and the potential negative impacts on these resources, including erosion from runoff, lack of recharge to the groundwater, and habitat alteration, the Conservation Commission was interested in working with the Taunton River Watershed Management Plan Project to develop an innovative regulatory tool to protect their wetland resources.

HW assisted the Norton Conservation Commission in refining the proposed Wetlands Protection Bylaw that it had already drafted in large part, and worked with the Commission to create the associated wetland protection regulations.

The Bylaw provides the general framework for local protection of wetland resources, and extends jurisdiction beyond that of the MA Wetlands Protection Act (WPA) (MGL Chapter 131, Section 40) to several other wetland resource areas, including isolated wetlands, vernal pools, and isolated land subject to flooding. It also extends the wetland values protected in the Bylaw to include: protection of water quality, pollutant removal capacity, protection of riparian ecosystems, protection of wildlife populations and species diversity (or biodiversity), and function and character of resource area landscapes. Other differences from the MA WPA that would be provided by the proposed local bylaw include: the ability to discuss a previous project or developer's previous performance, the ability to create rules and regulations that will clarify the permitting process, design criteria, and performance standards for wetland areas not currently protected, the ability to grant a waiver from certain regulations, when warranted, the ability to evaluate impacts in the whole area rather than just on the project site, and the ability to better define ambiguous and confusing terms.

The Town's proposed Wetland Protection Regulations would extend stormwater management controls to include runoff volume controls in addition to the standard peak discharge controls, and would increase the level of pollutant removal beyond the 80% Total Suspended Solids (TSS) removal required under the MA Stormwater Standards, and referenced in the MA Wetlands Protection Regulations. It would also require that designers use the more current precipitation data from the Atlas of Precipitation Extremes for the Northeastern United States and Southeastern Canada¹, known as the "Cornell data", rather than outdated precipitation data utilized in the MA Stormwater Standards. The Cornell data is believed to be more accurate than the Technical Paper-40 data referenced by the MA Stormwater Standards, and in most cases, the Cornell data reflects larger storm events than the TP-40 data.

¹ Atlas of Precipitation Extremes for the Northeastern United States and Southeastern Canada. Daniel S. Wilks and Richard P. Cember. Cornell University, Publication No. RR 93-5. September 1993 and the beta website.

All of these proposed revisions are discussed in more detail below. We have developed a comparison between Norton’s proposed Bylaw and Regulation and the State’s Wetlands Protection Regulations as a means to highlight the particular unique aspects of the Norton Bylaw and regulations. These can be used as a menu for other communities aiming to improve wetland resource protections within their own municipality.

2.2. Comparison of Proposed Bylaw and Regulations to Massachusetts Wetlands Protection Act

Purpose

The proposed Bylaw expands the protective interests beyond the eight interests identified in the MWPA to include the following interests, which are more broadly defined and emphasize the importance of maintaining and protecting water quality in a town where 95% of the citizens are reliant upon town water from a sole source aquifer (Canoe River Aquifer):

- Prevention and control of pollution;
- Water quality;
- Pollutant removal capacity;
- Protection of riparian ecosystems;
- Protection of wildlife populations and species diversity;
- Passive recreation; and
- the function and character of resource area landscapes.

Jurisdiction

The proposed Bylaw adds protection for additional resource areas beyond those identified in the WPA:

- Isolated freshwater wetlands (wetlands do not have to be “bordering”);
- Ponds of any size (not just those with a surface area of 10,000 SF);
- Lands adjoining freshwater wetlands out to a distance of 100 feet (i.e., adds a 100-foot buffer zone as a resource area); and
- Vernal pool habitat, regardless of whether certified by NHESP or whether occurs within a WPA-protected resource.

Fees

The proposed Bylaw adds a provision for collecting local filing fees under the Bylaw for both applications and employing outside review consultants. This allows the Conservation Commission to collect some minor reimbursement for staff labor in reviewing and assisting with applications, and also allows the Commission to enlist the assistance of experts to review projects for compliance with the bylaw and regulations, at the applicant’s expense. This is commonly done in Massachusetts by Conservation Commissions and Planning Boards, but must be codified in the local bylaw or formally adopted by the commission or board pursuant to MGL Chapter 44; Section 53G of the state code.

Assessment of Impacts

The proposed Bylaw empowers the Commission to consider cumulative impacts to protected resources and how the proposed project would fit into the overall picture, rather than simply looking at the project as an isolated event. It also allows for additional scrutiny for projects proposed within any of the three ACECs located within the Town of Norton.

Permits

The proposed Bylaw requires all applicants to undergo an alternatives analysis (regardless of the resource area proposed to be impacted) to ensure that there is no other feasible design for the project with less adverse impact on the protected wetland resources and to demonstrate that the proposed project will not have an unacceptable significant or cumulative adverse effect on the interests of the Bylaw. The WPA requires an alternatives analysis only for projects located within the Riverfront Area, a 200-foot buffer along both sides of perennial rivers (25-feet in some specific urbanized areas).

The proposed Bylaw also includes provisions to ensure that projects may not be segmented or phased to evade or defer review, and provides the ability for the Commission to set certain conditions and requirements related to habitat evaluations, no build or no disturb setbacks, require wetland replication and other standards as deemed necessary by the Commission. It also allows discretion for Waivers under appropriate circumstances (e.g., to accommodate an overriding public interest).

Definitions

The proposed Bylaw includes several additional or more detailed definitions than the WPA. Of particular interest, the definition for 'Isolated Land Subject to Flooding' encompasses all isolated lands that are a minimum of 400 square feet in area, while excluding isolated pockets in lawn/landscaped areas, driveways, or stormwater structures. Conversely, the WPA definition is based on a minimum volume of ¼-acre foot (10,890 cubic feet) of water. As an example, this translates into a relatively large vernal pool that is 1/4 acre (10,890 square feet) in area and an average of one foot in depth, or alternatively a vernal pool that is 1/8 acre (5,445 square feet) in area and an average of two feet in depth. The proposed bylaw definition will capture smaller areas for protection. In addition, the definition of 'vernal pools' was written to include those areas that support certain facultative species, including invertebrate animal species that the NHESP no longer considers in vernal pool certifications. Again, this is broader than the WPA definition.

Security

The proposed Bylaw allows the Commission the discretion to require performance securities to ensure compliance with the permit. The securities are further described within the regulations.

Enforcement

The proposed Bylaw allows enforcement to be carried out under both criminal and noncriminal disposition and allows fines to be issued for violations under the Bylaw, up to \$300 per infraction per day.

2.3. Comparison of Proposed Rules and Regulations to MA Stormwater Standards

The ten MA Stormwater Standards are required for all projects under the jurisdiction of the WPA. The Town of Norton proposed Wetland Protection Bylaw and Rules and Regulations go above and beyond the Stormwater Standards in some cases, in an effort to provide enhanced protection of their unique water resources and habitat areas. A comparison of key differences between the proposed local protections and the Massachusetts Standards are provided below, language from the original standards are italicized.

Standard 2

Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. Projects are required to meet this standard for the 2-year and 10-year 24-hour design storms, and to show that discharges from the 100-year storm will not cause an increase in downstream flooding.

The proposed rules and regulations expand the scope of this standard to not only peak discharge rates, but also post-construction runoff volumes for the 2, 10, 25, 50, and 100- year storms. This is significantly more conservative than the MA Stormwater Standards because it is relatively easy to control discharge rates using extended detention practices, but controlling runoff volume involves on-site retention and infiltration. However, it is just this type of requirement that can help to ‘keep water local’ as recommended the by the Taunton Watershed Plan.

Standard 4

Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS).

The proposed rules and regulations increase the minimum TSS removal rate for stormwater systems for all projects from 80% to 88% for all projects, except those within an ACEC, which would be required to meet the TSS removal rate of 93%. This approach is a very conservative one developed by the Norton Conservation Commission. It may be difficult for projects to practically meet this standard with existing individual technologies, although the use of a treatment train approach (practices in series) will likely be employed to get the highest calculated TSS removal rates. Alternatively, a commission could consider increasing the water quality treatment volume from one half inch, as required under the Massachusetts Stormwater Standards, to 1 inch, to increase the level of overall water quality treatment.

Standard 5

For land uses with higher potential pollutant loads (LUHPPLs), source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable.

The proposed rules and regulations expand the category of LUHPPLs to include projects with greater than 300 vehicle trips per day, rather than just parking lots with greater than 1,000 vehicle trips per day, as in the MA Stormwater Standards. The intention of this drainage is to

include some large residential multi-housing complexes as LUHPPLs to address the increased pollutant load that can be expected from these higher traffic areas.

Standard 6

Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area, require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook.

The proposed rules and regulations expand the definition of outstanding resource waters, which warrant extra stormwater management protections, to include potential vernal pools, wetland resource areas in an ACEC, and seasonal coldwater fisheries identified by MA Division of Fisheries and Wildlife.

Standard 8

A plan to control construction-related impacts including erosion, sedimentation, and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.

The proposed rules and regulations require that the Stormwater Pollution Prevention Plan (SWPPP), required under the NPDES Stormwater Construction General Permit SWPPP for projects that disturb greater than 1 acre of land, shall be submitted before closing the public hearing for the Conservation Commission. The MA Stormwater Standards allow SWPPPs to be submitted before land disturbance commences. The Town of Norton's approach requires the engineer to plan appropriately ahead of time for the detailed erosion controls and other stormwater pollution prevention aspects of the project rather than leaving it up to the site contractor, and gives the Commission more ability to review the plan in public rather than simply placing it in the file when it is submitted later. In practice, the SWPPPs generally do not get reviewed or scrutinized by any regulatory authority, unless a site visit is performed by the MA DEP or US EPA under the NPDES Program, which only happens in rare occurrences.

Standard 9

A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.

The proposed rules and regulations require that both the owner and applicant sign the operation and maintenance plan acknowledging responsibility, and proof of a final inspection and cleaning of the stormwater system at the site is required with the request for a Certificate of Compliance. This strengthens the ability of the Commission to ensure that the project is constructed and maintained in accordance with the permit.

Plans and Drainage Report, Subdivision LID Design and Plan Submittal Requirements

The proposed rules and regulations require that plans show water surface elevations for the various storm events on BMP cross sections, that street sweeping is performed twice a year, and that the new Cornell precipitation data shall be used for the design storms. They also encourage

LID aspects within the subdivision design to reduce runoff, improve infiltration, protect sensitive resource areas, and maintain natural vegetation on the site. However, this section is only a recommendation and other communities may consider adding more strength to this requirement either by incorporating by reference the LID credits allowed by the MA Stormwater Standards, as described in the MA Stormwater Handbook (MA DEP, February 2008), or by requiring the applicant to document their LID design process. This approach was incorporated into the recommendations provided to the Town of Lakeville, described in the next section of this report.

2.4. Results and Next Steps

The Conservation Commission was successful in placing the proposed Wetlands Protection Bylaw on the Town Meeting Warrant for the October 2009 Town Meeting. At the time, the draft regulations were in very preliminary form and had not been released to the public for review. A group opposing the proposed Bylaw became very active and vocal within 1-2 weeks prior to the Town Meeting, and was able to lead a successful effort to vote down the Bylaw. They cited, among other concerns, the fact that the regulations had not yet been made available and therefore, the voters did not know what to expect from them. Therefore, the Conservation Commission worked with HW to prepare for Spring Town Meeting in May 2010 by revising the proposed Bylaw and finalizing a draft of the proposed regulations that would be adopted pursuant to an adopted Wetlands Protection Bylaw. It is this Bylaw and regulations that are available in the Appendices of this report. The Conservation Commission held several public information sessions as well as the required public hearings for proposed bylaws, prior to the Town Meeting. Unfortunately, the Bylaw was voted down again following another significant last minute campaign.

Despite this setback, the example code that was developed through this process contains a useful menu of wetland and water resource protection tools. In addition, the process and difficulties faced by the Norton Conservation Commission in passing the Wetlands Protection Bylaw at Town Meeting are a useful example to other communities trying to make similar reforms. Public education and outreach to the voters cannot be overlooked; in fact, there is probably never too much public education and outreach. There will likely always be those that oppose an initiative such as this, and it is important to develop an accurate and valid response to their concerns, and to ensure that accurate information is used in any debate and discussion. It is also important to understand the limits of the voting public in accepting change and consider proposing change in smaller, incremental steps. Perhaps with more public education and outreach, the Conservation Commission will return to this effort again in the near future.

3.0 LAKEVILLE ZONING CODE AND SUBDIVISION RULES AND REGULATIONS

3.1. Introduction

The Town of Lakeville is concerned about improving its ability to protect the vast water resources that make Lakeville so unique, and to that end, the Town agreed to participate in the Taunton River Watershed Management Plan project to explore code reform options. The Assawompsett Pond Complex, an assemblage of three large ponds, including the largest natural pond in Massachusetts, and several smaller ponds, supplies drinking water to the cities of Taunton and New Bedford. There are also numerous lakeside communities that have grown up along the shores of these ponds, and over the years have been converted from summer cottages to year-round residences. Many of these communities also have small beaches that are used by the residents, often times even when the beaches are officially closed. Furthermore, drinking water for the Town of Lakeville is generally supplied by individual onsite private wells, which are directly linked to the pond complex via the groundwater system that supplies baseflow to the ponds. As a result of these conditions, the Town has obvious interest in maintaining water quality and water elevation in the ponds.

An Ad-Hoc Lakeville Zoning Code Committee was formed in October 2009 to work with HW to identify potential code reform topics that were of concern to the Town of Lakeville and also fit within the purview of the watershed project. The Ad-Hoc committee was comprised of members of the Board of Selectmen, the Planning Board, the Open Space Committee, the Conservation Commission, and a member of the public. Following an initial meeting with just the Ad-Hoc Committee, HW introduced the project at a public meeting on December 1, 2009 as the Town worked to engage interest from other members of Town committees.

Discussions with the Ad-Hoc Committee, and at the public meeting, revealed several concerns that fell within the overarching goals for this project, and scope of work was developed from those discussions, as follows:

1) Peer Review of Site Plans by Professional Engineers

HW's discussions with local regulators and staff suggest that there is a need to better utilize professional peer review services acting on behalf of the Town for engineering site plans to ensure that stormwater, wastewater, and drinking water systems are properly designed for consistency with local and state regulations and best practices. HW reviewed and revised existing language to ensure that the Town is adequately using professional peer review resources for site plans dealing with both residential and non-residential uses.

2) Enforcement Mechanisms for Stormwater Facilities

Discussions with local officials illustrated that the failure of roadway design and stormwater Best Management Practices (BMPs) are a recurring problem in the community. Failure of BMPs to function as designed is believed to lead to localized

flooding, and unintended discharge of storm flows to surface water resources. HW reviewed existing provisions for enforcement and determined where further assurances can be applied to these sections of the Zoning Bylaw.

3) Enhanced Stormwater Management Techniques

The existing Zoning Bylaw is strong in its requirements for stormwater management. All development subject to Site Plan Review requires compliance with the MA Stormwater Management Policy (the Policy, now updated as the MA Stormwater Standards). However, in our research and discussions, there are areas of stormwater management that require higher levels of attention than what is required in the MA Stormwater Standards. Localized flooding, failed management practices in roadway areas, and high groundwater levels demonstrate a need for heightened attention to issues of stormwater storage and conveyance. HW reviewed existing standards for stormwater management and provided amendments that address issues of conveyance and water quality as appropriate to the unique concerns of the Town.

4) Redevelopment Permitting in Lakeside Housing Development

The Lakeville Zoning Board of Appeals (ZBA) reviews special permit applications for the redevelopment of pre-existing, non-conforming lots in lakeside communities within Lakeville. These communities were developed many years ago in a manner that causes significant environmental problems, including excessive nutrient loading to the lake from failing septic systems and untreated stormwater runoff. The lake system provides drinking water to Taunton and New Bedford, as well as recreation for Lakeville residents at its numerous beaches. In addition, the numerous individual private wells serving the Lakeville residents are drawing from the same hydrologic system. HW reviewed the current criteria for granting a special permit in these areas and provided potential amendments that would allow the ZBA to require reasonable improvements.

HW provided a set of recommendations to the Ad-Hoc Zoning Code Committee on September 23, 2010 in the form of two technical memorandums, and two full sets of suggested revisions to the existing code language for the Zoning Bylaw and the Subdivision Rules and Regulations. HW presented the recommendations at a final meeting with the Ad-Hoc Lakeville Zoning Code Committee and Planning Board on November 1, 2010. A subsequent revision to the Subdivision Rules and Regulations was provided to the Town on November 30, 2010. The final recommended changes are provided in the attached Appendices.

3.2. Zoning Bylaw Recommendations

HW developed recommendations regarding zoning code revisions to address the four topics described above:

1. Peer review of site plans by professional engineers;
2. Enforcement mechanisms for stormwater facilities;
3. Enhanced stormwater management techniques; and

4. Redevelopment permitting in lakeside housing developments.

The recommendations primarily addressed the following sections of the Town of Lakeville Zoning By-Laws:

- Section 6.7 Site Plan Review;
- Section 7.2 Water Resources Protection District; and
- Section 7.4.6 Specific Uses by Special Permit.

Under the existing code, the Town of Lakeville has standards and criteria set directly within the Site Plan Review process. However, because the Site Plan Review process is meant to require the provision of certain information by the applicant to show that a proposed project meets a set of standards, HW recommended that the Town rearrange their code slightly to include only information requirements under the Site Plan review process, and place the actual standards that must be met through the site design within a separate section. For example, the Site plan Review process would require that applicants provide a Stormwater Management Plan, and the standards for that Stormwater Management Plan would be placed elsewhere in the code. A similar change was recommended for the Special Permit process.

The Town already has a Water Resources Protection District (WRPD) that actually applies to the entire town. It is within this WRPD section of the Zoning Bylaw that the design standards and criteria should be moved, as a matter of proper code format. The standards apply to projects within the WRPD, and the Site Plan Review and Special Permit processes apply to certain types of projects. The sections describing those processes should describe details such as submittal and review process. In addition, HW took this opportunity to make some recommendations to clarify language, intent, and format within the zoning code. All of these improvements can help to streamline and clarify the regulatory and oversight processes to ensure that the Town is getting the most from its bylaw.

The recommendations pertaining specifically to the four focus areas are described in more detail below.

Peer Review of Site Plans by Professional Engineers

HW incorporated language into a new section of the code entitled Peer Review, as follows:

“The applicant may be required to pay for reasonable consulting fees to provide peer review of the Site Plan application, pursuant to G.L. Chapter 44, Section 53G. Such fees shall be held by the Town in a separate account and used only for expenses associated with the review of the application by outside consultants, including by not limited to attorneys, engineers, urban designers, housing consultants, planners, and others. Any surplus remaining after the completion of such review shall be returned to the applicant.”

This language is relatively standard and gives the Planning Board, the Site Plan Review regulatory authority, the ability to hire professional assistance as needed to review particular projects.

Enforcement Mechanisms for Stormwater Facilities

HW recommended that a surety be required of the applicant to ensure that the stormwater system is constructed and maintained as approved. The surety would be released upon receipt of an inspection form one year after installation documenting that system was installed according to plan and has been maintained and functioning properly. This gives the Town the ability to review the stormwater and erosion control designs in detail, clearly identify the responsible party for maintenance of the systems, and collect a surety to pay for repairs or completion of the project in the event that there are problems.

Enhanced Stormwater Management Techniques

HW recommended that a set of stormwater management standards be incorporated directly into a new section within the WRPD entitled “Performance and Design Standards for Site Plan Review Activities.” In addition, by placing the standards in the WRPD section rather than within the Site Plan Review submittal requirements, the standards were strengthened to include the provision of a Sediment and Erosion Control Plan that is designed in accordance with the Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas: A Guide for Planners, Designers, and Municipal Officials, dated March 1997 as amended, as well as a Stormwater Management Plan that complies with the performance standards of the most recent version of MA Stormwater Management Standards (The ten MA Stormwater Standards can be found in Volume 1, Chapter 1 of the Massachusetts Stormwater Handbook on MA DEP’s website, here: <http://www.mass.gov/dep/water/laws/policies.htm#storm>). We also extended our scope of work to include a review of the Subdivision Rules and Regulations in order to strengthen the stormwater requirements for subdivisions and create consistency among various regulatory requirements in Town. These recommendations are described in more detail below.

Redevelopment Permitting in Lakeside Housing Developments

HW recommended incorporating redevelopment standards for Special Permit projects directly into the WRPD section of the Zoning Bylaw. These standards are more clearly defined and more protective of the water resources than the existing code language. All applicants with projects applying for a special permit with on-site septic system must include a septic system designed to Massachusetts Title V standards. More protective standards, including a limit on the number of bedrooms in a house, are recommended for sites that have both onsite water supply and onsite septic systems. In addition, HW recommended the following standard specifically to address lakeside communities:

“Where activities take place within a Zone C contributing area as defined by MA DEP, the following standards shall apply:

- a. The horizontal distance from the pond to the leaching field added to the vertical distance of the leaching field to the seasonal high ground water level shall exceed two hundred (200) feet where feasible. Where this level of separation is not feasible due to the location of existing structures or the proximity of a lot to surface water resources, the applicant shall site the leach field as far from the surface water resource as possible. Repair or replacement of failed septic systems that do not include an increase in design flow shall be exempt from this requirement.

- b. The orientation of the leaching trenches shall be perpendicular to the direction of groundwater flow to maximize phosphorus retention. For the purposes of this ordinance, the direction of groundwater flow is presumed to be perpendicular to the edge of the nearest surface water resource unless an applicant demonstrates that the flow direction is different through the use of groundwater elevations recorded using at least three on-site wells.

The purpose of this language is to reduce the potential nutrient and bacteria loading to the Town's surface water and groundwater resources. Lakeville typically has high groundwater levels, and particularly in the lakeside communities, the Town felt that it did not have the ability to manage the level of potential pollutants contributing to the surface water bodies.

The language describing these standards was kept distinct from the language describing the submittal requirements for projects proposing to convert a seasonal home or non-residential building for year-round residence.

3.3 Subdivision Rules and Regulations Recommendations

A number of recommended revisions and additions to the Subdivision Rules and Recommendations were developed by HW, with the overall goal of strengthening and clarifying the stormwater management requirements to reflect the current knowledge and science of stormwater BMP's and create consistency with the Site Plan Review requirements. These recommendations will help ensure that new subdivisions in Lakeville will be designed to mitigate stormwater impacts to groundwater, surface water, and wetlands with improved practices and techniques. Water quality in stormwater discharges from these sites will be improved, and the volume and peak flow of discharges will be better managed to mitigate downstream impacts. LID techniques will be fostered under these recommendations rather than overlooked, or in some cases prohibited, as they are under the current Subdivision Rules and Regulations. The specific recommendations summarized here include:

- Basic terminology has been updated so that the words “drain” and “drainage” are replaced with “stormwater” where appropriate. This reflects an evolution in stormwater management from the earlier goal of simply conveying runoff from a property as quickly as possible to managing runoff in a way that provides water quality treatment, infiltration, peak flow attenuation, and volume reduction.
- An addition was made to the Purpose Section to incorporate better stormwater management into the overall goal of the Subdivision Rules and Regulations.
- Several definitions have been added, including Stormwater Management Plan, Stormwater Management Standards, Best Management Practices, and Low Impact Development.
- More detailed standards and submittal requirements were added for erosion and sedimentation control during construction, and ongoing operation and maintenance of

stormwater management practices once they are constructed. These requirements create consistency with the MA Stormwater Standards as well as the WRPD performance and design standards for projects applying for Site Plan Review, as described above.

4.0 NEXT STEPS

Additional work will be required by the Town of Norton and the Town of Lakeville to move forward with the recommended code. The Norton Conservation Commission will need to make a decision about how to move forward after its proposed bylaw was defeated twice at Town Meeting. However, a clear step forward will be an effort at more education and outreach to the local citizenry, the voters, and decision-makers, about the benefits to wetland resource protection. However, the Commission may find that additional revision to the proposed wetland protection bylaw may be appropriate as a companion action to the education effort. Any implementation of a local wetland protection bylaw will have to be approved by Town Meeting, and although regulations can be adopted subsequently by the Conservation Commission as the implementing authority, the voters have made it clear that it is important to present the draft regulations as part of a package together with the proposed bylaw, should they pursue the bylaw again.

The Town of Lakeville is interested in further discussing and potentially pursuing the recommended changes to the Zoning Bylaw and subdivision rules and regulations. They have requested an additional meeting with HW to discuss the proposed zoning changes in more detail following the conclusion of phase II of this project. Any revisions to the Zoning Bylaw would need to be approved via Town Meeting vote, and any revisions to the Subdivision Rules and Regulations would need to be approved and adopted by the Planning Board as the regulatory authority. In both cases, adoption of recommended revisions would require education and outreach to the general citizenry, particularly in the case of the Zoning Bylaw revisions regarding the long-term benefits to the community of such changes.