

DEVELOPMENT & LAND USE REGULATIONS

Addressed by 10 management objectives, 26 action plans

“THE GOAL OF LOW IMPACT DEVELOPMENT (LID) IS TO REDUCE THE VOLUME AND FLOWS OF RUNOFF FROM THE DEVELOPED SITE AND TO TREAT AND RECHARGE PRECIPITATION IN A WAY THAT MIMICS THE NATURAL HYDROLOGY OF THE SITE. LID HELPS TO MANAGE THE IMPACTS THAT STORMWATER RUNOFF HAS ON WETLANDS, STREAMS, LAKES AND COASTAL ENVIRONMENTS, AND HELPS TO RECHARGE NATURAL GROUNDWATER AQUIFERS.”

- LID GUIDANCE MANUAL FOR MAINE COMMUNITIES, 2007

Population and land development have slowed in recent years (New Hampshire Office of Energy and Planning, 2006), however, development continues to have significant negative impacts on water quality in the Piscataqua Region. Conventional development practices have rapidly increased impervious surfaces throughout the Region at an average rate of 1,500 acres per year over the last 15 years (Justice and Rubin, 2006). The resulting increase in stormwater runoff has had significant negative impacts on the channel stability of the Region’s streams and the quality of water resources. Sprawling development patterns also fragment the integrity and connectivity of the remaining high quality wildlife habitats in the Region. An emphasis of the Land Use and Habitat Protection theme involves promoting land use practices that better protect critical “green infrastructure” needed to maintain the ecosystem services that sustain healthy human and wildlife communities.

In 2009, PREP completed the Piscataqua Region Environmental Planning Assessment (PREPA); a comprehensive survey of existing municipal regulations and management efforts aimed at protecting the Piscataqua Region estuaries. PREPA results provide a valuable snapshot of communities’ current practices and serve as a baseline for evaluating successes over the next 10 years from implementing land use and conservation initiatives. Based on the assessment results, PREP has developed strategic targets for improving the quality and consistency of environmental protection throughout the Piscataqua Region (Appendix B).

In addition to the PREPA results, guidance on smart growth land development patterns, low-impact development (LID) techniques, stormwater management, and green building practices (LEED) have been developed nationally and locally. The 2009 New Hampshire Innovative Land Use Planning Guide provides background and model language for ordinances that minimize environmental impacts from development patterns, site development practices, transportation patterns and energy usage. Maine agency model guidance and ordinances for LID and green development practices include Maine State Planning Office LID guidance, Maine DEP land use regulations, Maine Centers for Disease Control water-supply protection guidance, and the Beginning with Habitat wildlife and land protection toolbox.

In 2009, the UNH Stormwater Center and UNH Cooperative Extension released an outreach and training guide for municipal officials entitled *Protecting Water Resources and Managing Stormwater*. Under a contract from the New Hampshire Fish & Game Department, New Hampshire Audubon developed a process to assess municipal land-use planning documents for wildlife habitat and natural resources protections.

Examples of innovative land use and low-impact development include compact development, conservation subdivisions and techniques to control and treat stormwater while minimizing changes to on-site hydrology. Compact development which maximizes open space and reduces changes to site hydrology will help protect remaining open space and sensitive lands from development impact. Stormwater Best Management Practices (BMPs) and LID techniques are designed to reduce peak stormwater runoff volumes/rates and at least partially treat the water quality of stormwater runoff before it leaves a developed site.

At the municipal level, adoption of compact development strategies and LID techniques, along with permanent land protection of essential wildlife habitat, will slow the consumption of remaining open lands and protect the region’s green infrastructure that provides important ecological services, such as pollutant removal, infiltration and slowing of floodwaters, clean drinking water and resilient wildlife populations.

In order for land use regulations to be effective they must be consistently applied and enforced. When environmental protections are frequently waived in the site plan and subdivision approval process or through variances granted by Zoning Boards of Adjustment (ZBAs), the original intent of a community’s regulations are lost and the cumulative effect is significant, contributing to degradation of habitats and water resources. Similarly, without vigilant enforcement of existing ordinances, town regulations are relegated to “paper protections” with little on-the-ground effect. Assisting communities with prioritization of regulations for enforcement and providing training and environmental information to ZBAs, planning boards, and conservation commissions will help focus limited resources.