

# **Key Municipal Planning Findings in Stone Environmental's Framework for Action on Stormwater: Ridge 2 River Phase 1 Final Report**

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The *Framework for Action on Stormwater: Ridge 2 River Phase 1 Final Report* provides a foundation for addressing stormwater management across the five municipalities that make up the Mad River watershed (the Mad River Valley, MRV). The report compiles existing environmental data about the current condition of the MRV landscape in order to identify approaches that both directly and indirectly address stormwater management. It also reviews the five towns' existing municipal planning landscape (including plans, policy, and on-the-ground practices) related to stormwater runoff. The goal was to identify inconsistencies, gaps, and opportunities for strengthening these controls in order to have a positive impact on water quality and flood resilience. The report's municipal regulatory approaches for stormwater management are broken into three categories: Construction Site Stormwater Runoff Control, Post-Construction Stormwater Control, and Additional Valley-Specific Program Elements (Transportation & Existing Development). The report provides implementation strategies for the three broad approaches via standards, municipal review, and municipal enforcement (See *Summary of Stone Environmental's Recommended Implementation Strategies* attached).

## *Construction Site Stormwater Runoff Control*

Overall, the study identifies improving the regulatory basis for implementing and enforcing erosion control and other municipal requirements to be most obvious and potentially beneficial areas for stormwater management. While the State of Vermont requires construction-phase erosion controls for projects that disturb one acre or more of land area, either on an individual site or as part of a common plan of development, the only development in the watershed requiring State-level review in recent years has been the redevelopment of Sugarbush Resort's base area. Thus, municipalities are the level of government (rather than the State) with the ability to require erosion control measures for the vast majority of land disturbing activities in the watershed. The report identifies components of typical construction site stormwater runoff control programs, breaking them down by basic, enhanced, and valley-wide approach. In all cases, such programs require not only the regulatory basis, but also proper training, education and enforcement (Development Review Board members and Zoning Administrators).

## *Post-Construction Stormwater Runoff Control*

For Post-Construction Stormwater Control, the report highlights that most projects are not subject to any requirement for creating permanent, post-construction stormwater controls for driveways, houses, or any other types of permanent impervious surface. As with erosion control, these small sites, minor land-disturbing activities (i.e. driveway repairs and culvert replacements, residential site re-grading or drainage changes), and forestry – or “quasi-forestry” – activities that are not subject stormwater management regulations, or in some cases even zoning permits, are known to be contributing to water quality problems. The report recommends consideration of some requirement for minimal stormwater management controls for projects ranging from single- or two-family structures to larger projects that are “just short” of State permitting thresholds. Once again, such require proper training, education and enforcement (Development Review Board members and Zoning Administrators).

### *Recommendation: Expand Local Regulatory Authority*

Much of the development activity in the MRV lies below existing regulatory thresholds. As a result, a major source of erosion, sedimentation, and flooding in the watershed comes from cumulative impact of small, unregulated sites including minor land disturbing activities such as culvert replacements, residential activities, and small “quasi” forestry operations. A central recommendation of the report is to evaluate a reduction in the regulatory threshold for construction and post construction stormwater management standards, as well as the inclusion of a land disturbance minimum, for town regulations. Such a change would ensure LID/GIS techniques are incorporated across the broad range of development and land disturbing activities. This recommendation is tempered, however, with the acknowledgment that programmatic resources are not sufficient to manage a program that would require additional permit review and post-implementation inspection and maintenance.

### *Additional Valley-Specific Program Elements*

**Transportation** - The report identifies the important role transportation infrastructure plays in both creating, and managing, stormwater. Key takeaways are the need for better communication between all the players (municipal road crews, VTrans, Planning Commissions, Selectboards) within and across the valley in order to ensure projects and lessons are shared. The Report recommends the creation of a joint, Valley-wide working group among road crew and town staff members for sharing information about the permit process and compliance strategies. In addition, the Report highlights the prevalence of private driveways (33% of the watershed’s road network) and the importance of standards that property address related erosion, clogging of ditches and culverts, and sedimentation of surface waters.

**Existing Development** – Given the relatively slow pace of land development and land use change in the MRV, addressing impacts of stormwater runoff from existing development is an important focus of any management program. The report identifies two specific opportunities for addressing the contribution of existing development: pre-emptive maintenance of erosion-prone driveway areas and partnership funds for residential driveway/culvert retrofits.

**Enforcement Support** – Zoning Administrators and Development Review Boards hold the responsibility of performing all the regulatory review functions for their towns as set forth in their zoning, subdivision, and other applicable bylaws. In addition to this quasi-judicial role, Zoning Administrators are responsible for the administration and enforcement of these regulatory documents. The *Framework for Action on Stormwater: Ridge 2 River Phase 1 Final Report* clearly articulates that all bylaw amendments require technical expertise and buy-in from staff and those playing a regulatory role (DRB). In interviews with the Valley’s Zoning Administrators and DRB members as part of the report, it was reported that there’s a great need to invest in supporting staff and board members to enhance the quality of review and the effectiveness of development conditions. Such training opportunities will enhance ZA/DRB members’ capacity to enforce their regulations.

**Need for Funding** – Stone Environmental acknowledges that many of their recommendations require substantial resources not currently available to Mad River watershed towns. A stormwater utility, loan options (like the State Revolving Fund), and bonding were suggested as options to ensure towns have capacity to regulate and enforce stormwater protections for flood resilience and water quality in town plan and policy.