

Williston's Watershed Protection Buffer Program

This is the “plan” required by Section 4.2.5.1.2.2 of General Permit 3-9014, as amended by the Memorandum of Decision issued by the Vermont Water Resources Board on July 21, 2005. It begins with a brief history of watershed protection buffers in Williston. It then addresses the three specific requirements of the amended general permit: 1) providing a map of impervious cover in the Allen Brook corridor; 2) identifying opportunities for enhanced protection of undeveloped stream corridors; and 3) identifying opportunities for the restoration of stream buffers that have been impacted by development. The text of these requirements is attached for the convenience of the reader. See Appendix A.

Watershed Protection Buffers in Williston

The Town of Williston began protecting stream corridors from inappropriate development following the adoption of its first *Open Space Plan* in 1989. That plan called for the adoption of the Conservation, Open Space, and Water Course Protection Overlay that first took effect in August 1990. This overlay was amended and made more stringent in 1998. Copies of the 1989 *Open Space Plan* and the Conservation, Open Space, and Water Course Protection Overlay as it existed when it was replaced (see below) are available upon request.



The Conservation, Open Space, and Water Course Protection Overlay was superseded by more stringent watershed protection standards on March 21, 2005. Those standards were included in a set of interim regulations the town adopted to comply with Minimum Control Measures 4 and 5 required by General Permit 3-9014. A copy of the interim regulations is available upon request.

Williston adopted a new town plan that features a chapter on “Watershed Health” on February 6, 2006. Excerpts from that plan are provided in Appendix B. Policy 10.1.3 identified a need for some further improvements in the watershed protection performance standards, and improved standards were adopted as part of an interim regulation on November 19, 2007. Those standards appear in Appendix C. It is anticipated that they will be permanently adopted – along with the rest of the new *Williston Development Bylaw* – in late spring or early summer 2008.

Stream Corridor Development in Williston

Williston's growth as a suburban center began only about 40 years ago. Most development has proceeded within the framework of local subdivision and zoning bylaws, the National Flood Insurance Program, Act 250, and other environmental regulations. Direct impacts on stream corridors have been limited.

Attached Map 1 shows the current extent of impervious cover within the watershed protection buffers along the Allen Brook. Those buffers encompass approximately 857 acres, of which less than 19 acres is occupied by impervious surfaces. That is just 2.2%, and a testament to the effectiveness of the town and state regulations that have governed Williston's growth.

The insets on Map 1 highlight the areas with the most impervious cover in watershed protection buffers. Looking at those insets makes it clear that most of the hard surfaces in Williston's watershed protection buffers are roads that cross or parallel the brook or its tributaries. A few (roughly three dozen) structures are entirely or partially within the current watershed protection buffers, along with stretches of the town recreation path, some outdoor storage space, and some parking. All of this development predates the current watershed protection buffer standards. Note also that agricultural structures are exempt from local regulation in Vermont.

Additional Opportunities for Stream Corridor Protection

Williston's current watershed protection standards, including the buffer requirements, are as stringent as any in Vermont, and when combined with other local, state, and federal regulations they have been quite effective. Williston has experienced extensive land development and population growth while limiting impervious cover to a tiny fraction of its stream corridors. There is no reason to believe that additional regulation will yield additional water quality benefits and the town has turned its attention to land conservation and stream corridor restoration efforts.



Land Conservation. The Town of Williston has acquired considerable land and three conservation easements in the upper Allen Brook watershed. These conserved lands are shown on Map 2. Town ownership of the Mud Pond Conservation Area (158 acres, shown in the photo above) and the nearby Mud Pond Country Park (79 acres), and the easements the town has helped acquire on the Johnson (196 acres) and Siple (244 acres) farms combine with Williston's stringent regulation of rural residential development to ensure that the upper watershed will remain rural. There is also protected open space along the middle reaches of the Allen Brook, including Community Park, the private open spaces in the Church View, South Ridge, Tafts Farm, Indian Ridge, Brennan Woods, Finney Crossing, and Meadow Run developments, and the town-owned parcel on the west side of the Meadow Brook Subdivision. Almost 30% of the main stem of the Allen Brook runs through protected open space, and the Town expects to protect at least one more reach of the brook through development review in the near future.

Additional Opportunities for Stream Corridor Restoration

Williston's watershed health efforts currently focus on the restoration of streams and adjoining riparian lands. The town recently completed a major restoration project in the Sucker Brook watershed and has been designing its first restoration project in the Allen Brook watershed. The town is also participating in

or seeking funding for several other projects that address erosion control and re-vegetation needs in stream corridors. These town efforts follow an award-winning private effort that restored the lower reach of the Allen Brook on the Onion River Farm.



Village Center Restoration Project. The town is in the process of acquiring an approximately 14-acre parcel of riparian and wetland habitat that is in a conservation area designated in the 2006 *Open Space Plan*. This parcel, which is shown as one of the water quality improvement project sites on Map 2, straddles important Allen Brook tributaries, including the 50-foot watershed protection buffer and more. The town will reforest the portions of the parcel that are currently mowed and, at the same, expand and reforest portions of the riparian buffer in the adjoining town park. If all goes as currently scheduled, the initial planting will be in the fall of 2008.

In addition to securing grant funds through state and federal programs, the town has:

... built its own sediment yield model to evaluate the benefits of this type of project,

... worked with the landowner to create a multi-parcel, noncontiguous planned unit development that transfers most of the development rights from the project site to a suitable site in the town's designated growth center;

... commissioned appraisals, initiated a land survey, and prepared a contract to support acquisition of the site; and

... prepared a reforestation plan for use once the site is acquired. Plant materials will be ordered this winter to be ready for next fall.

Other Projects. Three other current projects will contribute to the health of stream corridors.

- The town is actively seeking funding for a stormwater treatment pond to serve the Meadow Brook Subdivision. This 1960's development currently has no stormwater treatment, resulting in rapid runoff that is bringing sediment into the Allen Brook from eroding tributary channels. This pond has been engineered and permitted.
- The town has worked with the Winooski Natural Resource Conservation District on two projects that address Allen Brook tributaries. Work has been completed on a small tributary restoration project along Oak Hill Road in Williston Village. Work has begun on the stabilization of eroding tributaries in the Williston Hills area.
- The town intends to reconstruct the intersection of East Hill and South roads. This project will make it possible to divert runoff from East Hill Road and the Meadow Ridge Subdivision around the manure bunkers of the Siple Farm. This will eliminate a periodic water quality problem, while also improving both farm operations and traffic safety.

Future Projects. Once the Village Center Restoration project is complete, the town will develop another restoration project along the Allen Brook. Discussion will focus on the reach from South Ridge Road through Tafts Farm where there is visible bank erosion.

Summary of Williston's Efforts

Williston has an ambitious watershed health program for a small local government. Its watershed protection buffer standards combined with other regulations, an active land conservation program, and private conservation efforts point toward a healthier watershed in the future and toward the removal of the Allen Brook from Vermont's list of stormwater-impaired streams.