

Boardman River Townships Project

BLAIR TOWNSHIP

WATER QUALITY ACTION PLAN

Fall 2009

Partners:

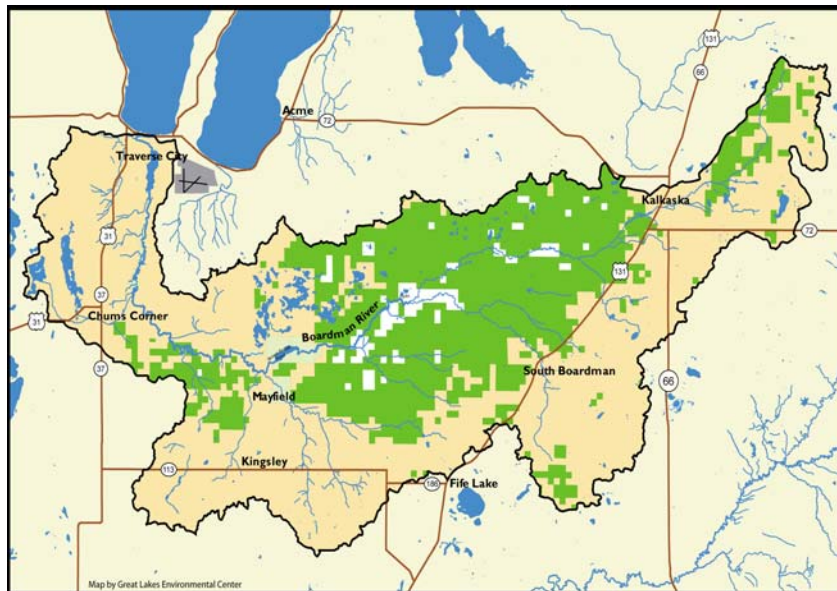
The Watershed Center Grand Traverse Bay

Northwestern Michigan College - Great Lakes Water Studies Institute

Grand Traverse Conservation District

Funded by: Michigan Department of Environmental Quality

Boardman River Watershed



Purpose

The Boardman River watershed spans 295 square miles and drains approximately 182,800 acres of land through 175 miles of river and stream tributaries. It is the largest tributary to the West Arm of Grand Traverse Bay and provides about 30 percent of the surface flow to Grand Traverse Bay. In addition, the Boardman River is considered one of the top ten trout streams in Michigan and is one of the particularly outstanding natural features of the Grand Traverse Bay region. It is a Natural River, a designation from the Michigan Department of Natural Resources that comes with associate management measures. Protecting this resource is important to the quality of life of the residents and the economic viability of the region.

The soils throughout this region are dominated by Kalkaska Sand that drains well and filters water very effectively. It is largely responsible for the remarkable water quality of lakes and rivers located in areas of the state where these soils are abundant such as northern lower Michigan. However, it is also highly erodible and low in nutrients; once disturbed, it easily erodes into our surface water. In addition, excessive levels of nutrients and other pollutants are easily passed through to the near-surface groundwater that feeds our lakes and streams. In some cases, this excessive pollution passes into our groundwater aquifers, contaminating our drinking water.

Sediment – including sand – is the number one surface water pollutant in the Grand Traverse Bay watershed, as set out in the Grand Traverse Bay Watershed Protection Plan. Sediment and sand smothers the habitat that aquatic organisms need to survive and reproduce. Sediment and sand enter our surface waters through stormwater that washes from roads, parking lots, and driveways carrying with it nutrients and many other forms of pollution such as salt, oil, anti-freeze.

As a result, one of the best ways for local governments in the watershed to address water quality protection is to consider how they are managing stormwater in their communities. In this context, protecting water quality is directly related to reducing impervious surfaces and protecting natural areas and natural vegetation.

Through a grant from the Michigan Department of Environmental Quality, the partners to the project – the Watershed Center Grand Traverse Bay, Northwest Michigan College Water Studies Institute (WSI), and Grand Traverse Conservation District (GTCD) – developed a process to assist townships and villages with a review of how they are doing with stormwater management and therefore their ability to protect their water resources.

Water Resources in Blair Township

Blair Township is blessed with over eight miles of the main stem of the Boardman River and several more miles of tributary streams including Beitner and Jaxon creeks. All of the river frontage and a majority of the tributary frontage is classified as “Country Scenic” through the state’s Natural River Plan (1976) for the Boardman. The southern part of Silver Lake outlets into Beitner Creek. Much of these water resources are groundwater fed. The majority of the township is forested and a large part of the township is in the Pere Marquette State Forest. There are numerous wetlands in the Boardman River Valley.

Process

During the summer of 2009, Blair Township officials met with representatives from WSI and GTCD to discuss the township’s zoning ordinances and policies as they relate to the protection of water quality. The discussion was guided by a modified version of the Code and Ordinance Worksheet (Worksheet), a tool developed by the Center for Watershed Protection for use throughout the country to help communities assess impacts on water quality.

The Worksheet focuses on three topics: **roads and parking lots, lot design and development, and conservation of natural areas.** The roads and parking lot section

addressed management of roads and parking lots. The lot development and design section included discussion of open space ordinances, cluster ordinances, site plan review, front yard setbacks, driveways, on-site stormwater management, and septic system maintenance. The conservation of natural areas section focused on retention of native vegetation around water resources, tree conservation, and land clearing. The Worksheet was provided in advance of the meeting, and the participants at the meeting discussed the responses to the question.

The partners to the project discussed the results of the discussion in relation to design principles and targets for each of the three areas and developed general recommendations for specific areas of focus for Blair Township.

Suggested Actions for Consideration in Blair Township

Blair Township's zoning ordinance and policies include some protections for water resources. The township has a Boardman Valley District and a cluster development ordinance. Many of the zoning districts include limits on impervious surface.

The discussion below includes a more detail regarding the three topic areas, as well as suggested actions. The suggested actions relate directly to the General Water Quality Protection Principles and Targets (Attachment-A) that accompany this plan. The Principles and Targets were developed from the Better Site Design resources of the Center for Watershed Protection. The List of Additional Resources that also accompanies this plan (Attachment-B) provides information to support implementation of the suggested actions. Finally, we are including a copy of "A Natural Solution" (Attachment-C), a document prepared by the Watershed Center GT Bay concerning low-impact design methods to manage stormwater.

In general, the more a local government can do to reduce impervious surfaces and increase the retention or restoration of native vegetation along riparian buffers and in open spaces, the better for water quality.

Roads and Parking Lots

The large majority of paved areas within a township are roads or parking lots. In the course of conducting the interviews with townships, it became clear that road design is significantly influenced by the county road commissions and local fire departments. The Grand Traverse County regulations for private roads allows for roads of 22 feet in width if agreeable to the local fire department. Blair Township addresses private roads, requiring a right-of-way of 33 feet and paved surface of 24 feet.

Addressing parking space numbers and space size are two ways to reduce paved areas in parking lots. These savings may seem insignificant on a particular site, but across the township the reductions in paved area could be substantial. Reducing parking spaces from 10 feet by 20 feet to 9 feet by 18 feet results in a 20 percent reduction in asphalt. While some of the township's standards for parking space ratios are low, others could be reduced (i.e. office buildings). The shared parking provisions allow for a smaller number of spaces in some circumstances.

ACTION: Consider reducing some of the parking ratios and setting them as a maximum number of spaces.

ACTION: Consider allowing for additional reductions in parking requirements for shared parking.

ACTION: Consider reducing the parking stall size requirements.

Lot Design and Development

Blair Township's zoning ordinance includes a cluster ordinance with a 50 percent open space requirement. The planned unit development (PUD) provisions appear to include a minimum area in open space, but the internet version of the ordinance has the number stricken. Many of the zoning districts limit the percentage of impervious surface. While a portion of the township is served by public sewer and water much of the wastewater is managed through private septic systems.

ACTION: Clarify the PUD open space requirement.

ACTION: Consider ways to encourage retention of native vegetation in open spaces.

ACTION: Consider adopting the county stormwater ordinance to help address stormwater management on site.

ACTION: Educate residents about proper septic system management and encourage residents to maintain septic systems on a regular basis.

ACTION: Consider adopting a septic maintenance ordinance or supporting a county septic maintenance ordinance.

Conservation of Natural Areas

Blair Township's Boardman Valley District includes the Boardman River, Beitner Creek, Jaxon Creek and other tributaries. A majority of these lands along the River and its tributaries fall under the Natural Rivers designation that influences numerous activities in a 400 foot corridor including building setbacks, vegetation management, and building footprint. The lot building coverage limit is 10 percent of the lot. Buildings and septic systems are to be set back 100 feet from the shoreline. The 50-foot wide vegetated buffer on the shoreline is to be maintained in native vegetation. The current management of the state lands in the township is generally compatible with protection of water quality.

ACTION: Consider a buffer of native vegetation around all water resources.

ACTION: Consider tree/vegetation conservation in the site plan review process.

ACTION: Consider buffer protection in the site plan review process.

Next Steps

Specific work on these recommendations is at the discretion of the township and what the local officials and local residents view as priorities for the community. The additional resources accompanying the action plan are designed to support the township's consideration of implementation. These include:

- General Water Quality Protection Principles and Targets -Attachment-A
- Internet resources, including example local ordinances, best management practices, the Boardman River Natural River Plan, Center for Watershed Protection resources, and Filling the Gaps (a Michigan Department of Environmental Quality document with sample ordinances) – Attachment-B
- A Natural Solution. An introduction to low impact development for commercial and residential applications in the Grand Traverse Region, prepared by the Watershed Center Grand Traverse Bay through an MDEQ grant. – Attachment-C

The partners to this project will assist, to the extent possible, with work on these recommendations. In addition, the partners will be working on public road design for water quality protection. This work will require further discussions with the road commissions and fire departments. The partners will also be pursuing workshop opportunities to help interested townships strengthen or develop ordinance language that will benefit water quality.

Contact Information

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