

CHAPTER 9 CONCLUSIONS

The Grand Traverse Bay Watershed Protection Plan was developed to help guide efforts to protect water quality of area lakes, streams, and Grand Traverse Bay. The two-year planning phase (December 2001-2003) allowed some of the key decision-makers, organizations, agencies, and the public to learn about the watershed in which they live. The plan was revised and updated in 2005 to include additional information on pollutant sources and concentrations, load reduction estimates of various BMPs, measurable milestones to guide implementation progress, and a set of criteria to evaluate the effectiveness of implementation efforts. The recommendations outlined in Chapter 7 of the Grand Traverse Bay Watershed Protection Plan will provide guidelines to all types of organizations for taking action during the implementation phase of the project and will be a useful tool in addressing current and future water quality threats to the watershed.

The five threatened designated uses identified in this protection plan are the cold water fishery, other indigenous aquatic life, total body contact, navigation, and public water supply at point of intake (Table 17). Excessive nutrient loading and sedimentation are two of the known pollutants that are threatening these designated uses in the Grand Traverse Bay watershed. Other issues that threaten these designated uses include loss of habitat, changes to hydrologic flow, invasive species, toxic substances, pathogens, and thermal pollution. All of these factors degrade water quality, destroy aquatic habitat, and reduce the number and diversity of aquatic organisms. A list of watershed pollutants was developed in a Comprehensive Watershed Management Table (Table 20 and 21) to identify water quality problems and provide guidance for future implementation projects to protect the quality of the watershed.



The Grand Traverse Bay Watershed Protection Plan is meant to assist decision-makers, landowners, residents, and others in the watershed in making sound decisions to help improve and protect water quality in their area. Chapter 7 lists recommendations (structural, managerial, and educational) on how to reduce the negative impact that pollutants and environmental stressors have on the threatened designated uses in the Grand Traverse Bay watershed.

Priority areas in the watershed were delineated to identify specific areas in the watershed that are most sensitive to environmental impacts and have the greatest likelihood to affect water quality and aquatic habitat. It is in these areas that the bulk of implementation efforts should be focused. Additionally, by focusing on reducing and/or eliminating pollution stemming from stormwater runoff, streambank erosion, road stream crossings, fertilizer use, lack of riparian buffers, and the reduction of wetlands, the bulk of pollution entering the Grand Traverse Bay and its surrounding

watershed will be addressed. Priority should also be given to implementation tasks (both BMPs and educational initiatives) that work to reduce the effects from these sources.

The Grand Traverse Bay Watershed Information and Education Strategy highlights the actions needed to successfully maintain and improve watershed education, awareness, and stewardship for the Grand Traverse Bay watershed. It lays the foundation for the collaborative development of natural resource programs and educational activities for target audiences, community members, and residents.

Future efforts for the Grand Traverse Bay Watershed Project include:

- Land use... how land used, promote water friendly land use practices (BMPs, ordinances, zoning,...)
- Building partnerships and seeking funding for implementation activities.
- Completing priority initial implementation tasks.
- Ongoing monitoring to assess environmental conditions.
- Implementing information and education initiatives.
- Compiling results from ongoing research initiatives.
- Evaluating progress of plan implementation and water quality improvements.



A project evaluation for the initial version of the plan (December 2003), completed by the Conservation Resource Alliance is included as Appendix B.