

# CHAPTER 4 DESIGNATED AND DESIRED USES

## 4.1 Designated Uses in the State of Michigan

Each of Michigan’s surface waters is protected by water quality standards for specific designated uses (Table 15). These standards and designated uses are designed to 1) protect the public’s health and welfare, 2) to enhance and maintain the quality of water, and 3) to protect the state’s natural resources.

**TABLE 15: DESIGNATED USES FOR SURFACE WATERS IN THE STATE OF MICHIGAN**

<p><i>All surface waters in the state of Michigan are designated for and shall be protected for all of the following uses:</i></p>
<ol style="list-style-type: none"><li>1. Agricultural</li><li>2. Industrial</li><li>3. Public water supply at point of intake</li><li>4. Navigation</li><li>5. Warmwater or coldwater fishery</li><li>6. Other indigenous aquatic life and wildlife</li><li>7. Partial body contact recreation</li><li>8. Total body contact recreation between May 1 – October 31</li></ol>
<p><i>Citation: R323.1100 of Part 4, Part 31 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended</i></p>

If a body of water or stream reach is not meeting the water quality standards set for a specific designated use, then it is said to be in ‘nonattainment’. An annually published listing of the bodies of water and stream reaches in the state of Michigan that are in nonattainment can be found in the DEQ’s Section 303(d) Report (DEQ 2002).

The DEQ uses a rotating watershed cycle for surface water quality monitoring where each of the 58 major watersheds in the state is scheduled for monitoring at least once every five years. The Grand Traverse Bay watershed was last monitored in the summer of 2003, and results should be available shortly. Results from the 1998 monitoring indicate that there are no widespread impairments to the designated uses in the Grand Traverse Bay watershed. The only stream in nonattainment is a small section of Kid’s Creek, a tributary to the Boardman River (Table 16).

**TABLE 16: RIVER SEGMENT IN GRAND TRAVERSE BAY WATERSHED IN ‘NONATTAINMENT’**

<b>Stream or Lake</b>	<b>Designated Uses Not Met</b>	<b>Reason for Nonattainment Status</b>
Kid’s Creek <i>(From confluence with Boardman River u/s to M-37/US-31)</i>	Cold water fishery Other aquatic life	Macroinvertebrate community rated poor

However, due to widespread mercury contamination and public health fish consumption advisories, all of Michigan’s inland lakes, including those in the Grand Traverse Bay watershed, are included on the Section 303(d) list (MDNR 1997). For further information on mercury sources in the environment and mercury pollution prevention strategies, please refer to publications by Sills (1992) and Mehan (1996), respectively. These two reports resulted from two specific DEQ task force investigations into mercury in the environment, sources, and prevention. The problem of mercury contamination and other related widespread toxic contamination problems in the Grand Traverse Bay watershed will not be discussed in this Management Plan. The DEQ has taken the lead to develop pollution prevention and abatement strategies throughout the State of Michigan for mercury contamination and other related toxins.

## 4.2 Impacted Designated Uses in the Grand Traverse Bay Watershed

None of the designated uses for the Grand Traverse Bay watershed are impaired on a watershed wide scale. However, in some cases, activities and resulting pollutants in the watershed may prove to be a threat to water quality and designated uses. Threatened waterbodies are defined as those that currently meet water quality standards, but may not in the future. The Grand Traverse Bay Watershed Protection Plan will focus on five designated uses to protect in order to maintain water quality throughout the Grand Traverse Bay and its watershed. The designated uses include the cold water fishery, other indigenous aquatic life, total body contact, navigation, and public water supply at point of intake (Table 17). Threatened designated uses were ascertained through scientific research reports, existing subwatershed management plans, DEQ water quality reports, field observations by the Project Coordinator, steering committee members, and personal contact with watershed residents and scientific experts on the Grand Traverse Bay watershed.

**TABLE 17: THREATENED DESIGNATED USES IN THE GRAND TRAVERSE BAY WATERSHED**

<b>Designated Uses</b>	
Public Water Supply at Point of Intake	Threatened <i>(For Traverse City municipal intake on East Bay only)</i>
Navigation	Threatened
Coldwater Fishery	Threatened
Other Indigenous Aquatic Life	Threatened
Total Body Contact Recreation (May1-Oct 31)	Threatened

### 4.3 *Desired Uses*

In addition to researching regulated designated uses, the project’s steering committee has also identified a number of locally determined desired uses for the watershed. Desired uses can be defined as the ways in which people use the watershed and think should be protected and/or preserved for future generations. They may be very general or very specific, or somewhere in between. Desired uses for the Grand Traverse Bay watershed include uses for recreational, aesthetic, and ecosystem preservation purposes (Table 18).

**TABLE 18: GENERAL DESIRED USES FOR THE GRAND TRAVERSE BAY WATERSHED**

<b>Desired Use Category</b>	<b>Goal</b>
<b>Recreation</b>	<ul style="list-style-type: none"> <li>• Maintain high quality areas in the watershed for recreation such as fishing, canoeing, boating, hiking, camping, and birding.</li> <li>• Develop additional Designated Natural Areas throughout the watershed for recreation and education.</li> <li>• Increase the number of boardwalks, gardens, and public parks along rivers and lakes in urban settings.</li> </ul>
<b>Aesthetics</b>	<ul style="list-style-type: none"> <li>• Preserve the distinctive aesthetic character and inherent beauty of the bay and its watershed.</li> <li>• Design and promote development that supports privacy, security, visual quality throughout the watershed.</li> </ul>
<b>Ecosystem Preservation</b>	<ul style="list-style-type: none"> <li>• Maintain and preserve wildlife corridors throughout the watershed.</li> </ul>