Minnesota Pollution Control Agency

Environmental Outcomes Division

# Beneficial Use Framework: Tiered Aquatic Life Uses (TALU)

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The Clean Water Act (CWA) Amendments of 1977 required that states designate beneficial uses for all waters within their jurisdiction (i.e. waters of the state) and develop water quality standards to protect each use. The states responded to this directive by designating beneficial uses for streams, rivers, lakes and wetlands.

Minnesota adopted a beneficial use framework that includes uses for drinking water, aquatic life and recreation, industry, agriculture and wildlife, aesthetic enjoyment and navigation, limited resource value waters and other uses. Implicit in the CWA and the federal regulations was the presumption that the aquatic life use should be considered attainable unless proven otherwise through the completion of a use-attainability analysis.

Thus, in Minnesota, all waters are considered fishable and swimmable with the exception of waters designated as limited resource value waters, which are protected for secondary body contact only.

## Diversity of waterbody types

While the current system of beneficial uses and water quality standards has served Minnesotans well, advances in the fields of biological assessment and stream ecology have lead to the recognition that all waters are not the same and that there exists a diversity of the waterbody types. For example, within rivers and streams, factors like waterbody size, geographic location, hydrology, water temperature, and stream gradient influence chemical, physical and biological composition.

The inherent differences in waterbodies combined with a rigid and inflexible set of standards and beneficial uses have led to chemical and biological goals that are often under protective of the highest-quality resources and overprotection of some waterbodies that for various reasons will likely never achieve certain chemical and biological standards.

In short, MPCA now recognizes that proper management of our waterbodies requires a more flexible approach, one in which the goals are tailored to specific waterbody types and uses.

## Tiered Aquatic Life Uses

In response to these challenges, MPCA is proposing to modify the beneficial use framework for aquatic life. The new framework, known as Tiered Aquatic Life Uses (TALU) would allow for better goal-setting processes through the application of a framework that recognizes tiers, or levels of aquatic life-use based on a stream's type and potential. For example, under a tiered system of aquatic life uses, our highest-quality rivers and streams might belong to an "exceptional-use" class, with water chemistry and biological standards designed to protect the higher use.

Additionally, under a TALU framework, uses could be designed to more appropriately reflect the potential of channelized streams and ditches. The fundamental goal of TALU is to set biological and chemical goals that are protective, yet attainable. The TALU framework fully complies with CWA requirements which allow for the establishment of subcategories of the uses, as long as existing uses are protected. At the same time, it allows MPCA to utilize the latest scientific knowledge to develop appropriate standards and uses and meet the increasingly complex challenges of protecting our water resources.

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The MPCA is in the process of developing an implementation plan to facilitate the transition into a TALU framework. Through this implementation plan the MPCA intends to engage stakeholders in a dialogue to examine how the proposed TALU framework will impact other programs within and outside of the MPCA. In addition, the MPCA is continuing to develop the technical elements (e.g. biological and habitat assessment criteria) that will form the foundation of the TALU framework. Once the implementation plan and technical elements are completed the MPCA will introduce the TALU framework into rule. It is anticipated that this will occur during the 2010-2012 time frame.

## Contact Information

To learn more information about beneficial use framework and TALU, please contact:

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