Antidegradation assessment

Water Quality Certification Applicants

401 Certification

Doc Type: 401 Certification

Instructions: This form provides general guidance on information that may be necessary for antidegradation review. The Minnesota Pollution Control Agency (MPCA) reserves the right to request information from the applicant in addition to that provided in this form.

Section 401 of the Clean Water Act requires any applicant for a federal license or permit that authorizes an activity that may result in a discharge to Waters of the United States to obtain certification from the state or tribe in which the discharge originates to ensure compliance with applicable water quality standards. In addition to completing the Joint Application Form, https://bwsr.state.mn.us/joint-application-form, applicants whose proposed projects may require an MPCA Individual 401 Water Quality Certification for work in aquatic resources must also provide the information necessary to demonstrate compliance with the Minnesota antidegradation water quality standards (Minn. R. 7050.0265, https://www.revisor.mn.gov/rules/7050.0265/). Applicants should review the antidegradation requirements in Minn. R. 7050.0285 (https://www.revisor.mn.gov/rules/7050.0285/) prior to completing this form.

The purpose of the antidegradation requirements is to achieve and maintain the highest possible quality in surface waters of the state. To accomplish this purpose, antidegradation requires:

A. The protection of existing uses and the level of water quality necessary to protect existing uses;
B. The minimization of degradation of high water quality, and only to extent necessary to accommodate important economic or social development;
C. The protection of outstanding resource value waters; and
D. Consideration of thermal discharges.

Applicant information

Applicant name/Project name/USACE ID number: _____

Date submitted (mm/dd/yyyy): _____

1. Environmental Assessment Worksheet (EAW)/Environmental Impact Statement (EIS)

Note: The MPCA cannot make any certification decision until the Environmental Review process is complete.

Is environmental review (Environmental Assessment Worksheet or Environmental Impact Statement required for this project? Yes No

If yes, include the date it was completed and the decision: _____

2. Analysis of alternatives to project design that avoid or minimize degradation

(This does not include the Preferred Alternative discussed below)

Describe your analysis of at least two prudent and feasible alternative project designs that would avoid or minimize degradation and avoid or minimize net increases in loading of pollutants or other causes of degradation to surface water (such as wetlands, lakes, stream, etc.). The analysis of each alternative must include a description of how impacts to surface waters are avoided and/or minimized; information on any design considerations and constraints; expected performance, construction, operation, and maintenance costs; and reliability for each alternative. Minn. R. 7050.0280, subp. 2

3. Preferred alternative project design

Describe the analysis of your preferred alternative project design that avoids or minimizes net increases in loading of pollutants or other causes of degradation. The analysis must include a description of how impacts to surface waters are avoided and/or minimized; information on any design considerations and constraints; expected performance, construction, operation, and maintenance costs; and reliability for each alternative. In addition, the analysis must verify that the preferred alternative is the least degrading prudent and feasible alternative for surface water. Minn. R. 7050.0280, subp.2

4. Water quality parameters of concern

List the water quality parameters of concern for the project.
Examples: Total Suspended Solids (TSS), Dissolved Oxygen (DO), Mercury (Hg), Temperature, PCBs, etc.

5. Existing uses and level of water quality necessary to protect uses

Antidegradation requires the protection of existing uses and the protection of the water quality necessary to protect those uses (Minn. R. 7050.0265, subp. 2). Existing use is defined as *those uses actually attained in the surface water on or after November 8, 1975* (Minn. R. 7050.0255 subp. 15).

Example 1: A surface water is in pristine condition on November 28, 1975, but development or other impacts have degraded that same water and it is no longer a high quality surface water. The existing use is the pristine water.

Example 2: A stream is highly degraded for several decades until it is restored to a trout stream in 1990. The existing use is the restored trout stream.

In the table below:

Identify streams, rivers, and lakes by Waterbody Identification Number (WID). WIDs, and other information, can be found by using the map at: EDA: Surface water data. Identify the use classification and existing use for **all** surface waters potentially impacted by this project. Include surface waters that are not directly within the project area, but may be *potentially impacted*. Review Minnesota Rules 7050. 0410-0430 for the use classification that fits the waters potentially impacted by your project. Use classifications are also located at https://www.revisor.mn.gov/rules/?id=7050.

Also, identify the existing water quality of each surface water for the water quality parameters of concern. The methods for determining existing water quality are found in Minn. R. 7050.0260.

Streams and rivers
If the waterbody is a stream/river and not listed in *Beneficial use designations for streams reaches* the beneficial uses are 2Bg, 3, 4A, 4B, 5 and 6.

Lakes and wetlands
To find beneficial use designations for lakes and wetlands, check Minn. R. 7050.0470. Waterbodies described in both documents are arranged by major watershed basins in this document. If the waterbody is a wetland and not listed in Minn. R. 7050.0470, the beneficial uses are 2D, 3, 4A, 4B, 5 and 6. If the waterbody is a lake and not listed in Minn. R. 7050.0470 the beneficial uses are 2B, 3, 4A, 4B, 5 and 6.

Exceptions: Water bodies in the Boundary Waters Canoe Area Wilderness and in Voyageurs National Park **that are not listed**, may have different Use Classifications (Beneficial use designations).

	Name of surface water/Waterbody and Waterbody Identification Number (AUID), if applicable.	**Use classification**	**Existing use (highest quality attained from November 28, 1975 to present)**	**Existing water quality**
ex.)	*Seelye Brook – Headwaters to Rum River 07010207-528*	*2Bg, 3, 4A, 4B, 5, 6*	*Livestock and wildlife watering, navigation*	*Dissolved Oxygen (DO) meets levels for existing use*
ex.)	*Wetland 1 (wetlands do not have WIDs)*	*2D, 3, 4A*	*Flood prevention, stormwater retention, wildlife habitat*	

6. Water quality comparison before and after project

For each surface water listed in Section 5, describe the anticipated water quality after the project is fully complete and operational. If any portion of the surface area of a water resource will be permanently impacted, a Mitigation Plan will be required (see Section 12).

Name of surface water/Waterbody and Waterbody Identification Number (AUID), if applicable.	Anticipated Water Quality

7. Impaired waters and Total Maximum Daily Loads (TMDL)

Identify ALL surface waters listed in Section 5 that are listed on the Minnesota Impaired Waters List (https://www.pca.state.mn.us/water/minnesotas-impaired-waters-list). List the impairment for each surface water identified and state whether or not a total maximum daily load study (TMDL) has been completed for the waterbody.

Name of waterbody	Impairment	TMDL completed? (Y/N)
		Yes No
		Yes No
		Yes No

8. Physical alterations of surface waters

Identify ALL surface waters listed in Section 5 that are listed on the Minnesota Impaired Waters List (https://www.pca.state.mn.us/water/minnesotas-impaired-waters-list). List the impairment for each surface water identified and state whether or not a total maximum daily load study (TMDL) has been completed for the waterbody.

Name of waterbody	Physical alteration	Extent of alteration	Temporary or permanent

9. Indirect impacts

For all surface waters where partial physical alteration of the function or acreage of the surface water will occur, describe the potential indirect impacts to the remaining surface water and the potential indirect impacts to nearby surface waters. For all surface waters where physical alteration will affect the entire function or acreage of the surface water, describe the potential indirect impacts to nearby surface waters. Indirect impacts may include changes in water source timing, water quality (including temperature), aquatic species health or population, vegetation or macroinvertebrate (bug) populations, etc.

10. Loading and degradation to surface waters

For all surface waters where physical alterations are proposed, describe all anticipated net increases in loading and other causes of degradation expected in each surface water when your preferred alternative project design is fully implemented.

Example 1: Filling of a wetland that causes another wetland to backup and inundate, (the inundated wetland can be on or off the project site).

Example 2: A discharge from the project site that increases flow to another surface water on or off the project site.

Example 3: Impervious surface increases in a subwatershed to the extent water quality becomes degraded.

11. Comparison of existing and expected economic conditions and social services

Provide a comparison of existing and expected economic conditions and social services when the proposed project (preferred alternative) is fully implemented. Include a description of economic gains or losses attributable to the proposed activity; contribution to social services; prevention/remediation of environmental or public health threats; trade-offs between environmental media; the value of the water resources; and other relevant environmental, social, and economic impacts of the proposed activity. Minn. R. 7050.0265, subp. 3(B)

12. Description of the Compensatory Mitigation Plan Minn. R. 7050.0285, subp. 2 (A-E)

The applicant may propose to mitigate the project's permanent wetland impacts through an approved wetland bank if the proposed mitigation is for the same resource quality type surface water ("type-for-type") AND the proposed mitigation is located in the same major watershed (https://www.pca.state.mn.us/water/watersheds). The applicant may propose to mitigate other surface water resource types with on-site, project-specific mitigation if the mitigation is of the same resource type as the impacted water resource, and within the same major watershed.

Describe any proposed permanent surface water impacts. Include the name of the surface water and AUID if appropriate, the type of impact, and the extent of the impact.

Describe mitigation proposed for permanent surface water impacts.

For each surface water listed above, describe how the proposed compensatory mitigation will replace existing uses and maintain the current level of water quality at the proposed project site (e.g. wetland types, replacement ratio, water monitoring data if available).

Describe how the compensatory mitigation will be maintained and the monitoring activities that will be conducted to ensure the proposed mitigation is viable over the long-term. Include a timeline for reporting progress and an intervention/remediation plan to be implemented if the mitigation fails.

Applicant signature

Print name:		Title:	
Phone:	Email:	Date:	
Signature:			