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Antidegradation Overview

The Clean Water Act's (CWA) antidegradation policy is found in section 303(d) (and further detailed in federal regulations) and its goals are to 1) ensure that no activity will lower water quality to support existing uses, and 2) to maintain and protect high quality waters.

Antidegradation is one of three key components required by the Clean Water Act (CWA), summarized below:

1. **Designated Uses:** States must identify and designate how each waterbody in the state is used. The CWA requires that states protect waters for aquatic life and recreation (the highest standard of protection) unless it can be shown that these uses are not attainable. Examples of other uses that states may designate include drinking water, irrigation, livestock watering, etc.
2. **Water quality criteria:** States must set specific numeric and/or narrative criteria necessary to protect each designated use. An example of a numeric criteria is 5 mg/l dissolved oxygen. Narrative criteria are often called "free froms." An example is: "free from materials producing objectionable color, odor or other esthetically objectionable conditions."
3. **Antidegradation policy:** States are required to develop rules and implementation procedures to protect existing uses and to prevent clean waters from being unnecessarily degraded, while giving very stringent protection to the highest quality waters in the state.

More Details on How Antidegradation Policy Works

States must adopt an antidegradation policy and methods for implementation that adhere to the following tiered framework:

- Tier 1 – protect existing uses – permit no activity that would eliminate, interfere with or lower water quality necessary to support existing uses.
- Tier 2 – maintain high quality waters – avoid or minimize any lowering of the water quality of waters that exceed standards. In order to allow additional pollution loading, it must be shown that the increase is necessary, there are no alternatives to increasing the pollution, and the activity generating the pollution provides important economic or social development to the community (ie jobs, sanitary services, etc.).

- Tier 3 – protect outstanding waters – strict protection, no degradation allowed.

Antidegradation review is triggered by major programs and permits including wastewater discharge permits from industries and municipalities.

Although Iowa has an antidegradation policy on the books, parts of it are missing (no Tier 3) and other parts are inconsistent with the federal requirements and the policy is not properly implemented.

The problems with Iowa’s antidegradation policy are:

Tier 1 Review is inconsistent with federal law and not being implemented

Iowa rules extend Tier 1 protections to all waters of the state, but the rules do not have a proper implementation procedure to assure protection of existing uses.

In general Iowa DNR asserts that existing uses do not need to be protected if the use is not designated. We have numerous examples of wastewater permits issued without disinfection that discharge to waters where primary contact recreation (swimming, kayaking, childrens play) is occurring as an existing use, but where that use is not currently designated. DNR’s position is they determine permit limits based on criteria for designated uses, not existing uses.

DNR also states that as long as current water quality standards are being met, existing uses are protected without consideration of evidence to the contrary. An example of this is the recent proposed permit for Cedar Rapids, where permit limits for ammonia and total suspended solids could adversely affect existing populations of mussels in the Cedar River at Palisades Kepler State Park two miles downstream of the discharge. The segment of the Cedar River is listed as impaired because mussel species numbers and diversity have declined more than 50%. An adequate Tier 1 review would disallow these increased limits as they do not protect and maintain existing uses (i.e. mussels are dieing).

Tier 2 review is limited and inconsistent with federal law

Iowa limits Tier 2 review to those waters where water quality “significantly exceeds” levels necessary to protect existing uses, whereas under federal law, waters must only “exceed” these levels. Thus Iowa provides only very limited Tier 2 protection to less than 3 % of Iowa’s 71,665 miles of rivers and streams that are designated either High Quality or High Quality Resource. Most waters with water quality that exceeds minimum standards are denied this more stringent review of new or increasing pollution sources. EPA has noted this problem as early as 1997 and has repeatedly told Iowa DNR that limiting Tier 2 protections to this small subset of Iowa waters is not consistent with the Clean Water Act.

Iowa has no Tier 3 rules

Iowa DNR has no rules or implementation procedures for Tier 3 antidegradation protection and has no Tier 3 waters designated.