



## Antidegradation Overview

Office of Water Quality

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### What is Antidegradation?

Antidegradation is one of the required components of Indiana's Water Quality Standards. Indiana's antidegradation policy ensures that existing instream water uses (such as a well-balanced, warm water aquatic community and recreation in and on the water) and water quality are maintained and protected from unnecessary degradation caused by a new or increased discharge of a regulated pollutant. Where water quality meets or exceeds levels necessary to support the existing instream water uses, that waterbody's quality shall be maintained and protected unless the State finds that allowing a lowering of water quality is necessary to accommodate important economic or social development. In situations where a lowering of water quality is allowed, it still must be sufficient to support the existing instream water uses.

The Indiana Department of Environmental Management (IDEM) is required by federal regulations to develop an antidegradation policy and an implementation procedure to evaluate proposed activities that have the potential to lower water quality. Indiana's antidegradation standards and implementation procedures are outlined in [327 IAC 2-1.3](#). The antidegradation standards established by [327 IAC 2-1.3-3](#) apply to all surface waters of the state. Any proposed point source discharge will be evaluated by IDEM per these standards and implementation procedures.

### When do Antidegradation Implementation Procedures Apply?

Antidegradation implementation procedures apply to any deliberate activity that results in a new or increased loading of a regulated pollutant to a surface water of the state that is anticipated to cause a significant lowering of water quality. In Indiana, water quality and antidegradation applicability are assessed parameter by parameter.

- A deliberate activity includes wastewater discharges associated with building a new facility, upgrading a facility to add capacity, or introducing a new or increased wastestream.
- A regulated pollutant is a pollutant that has narrative or numeric water quality criteria, excluding biological criteria, pH, and dissolved oxygen.
- A significant lowering of water quality is defined as a new or increased loading of a regulated pollutant that results in an increase in the ambient concentration of the regulated pollutant, and the increased loading is greater than a *de minimis* lowering of water quality in accordance with [327 IAC 2-1.3-4](#).

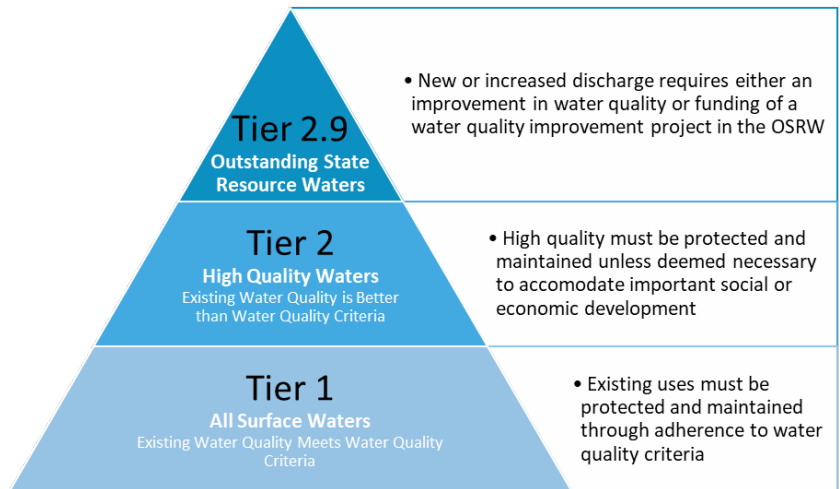
### Antidegradation Implementation Overview

Indiana's antidegradation policy involves a tiered approach. As you move up the pyramid, each Tier provides additional protection to the waterbody. Implementation procedures vary based on the Tier triggered:

- **Tier 1: Protection of Existing Uses for All Surface Waters**
  - The existing uses (uses attained on or after Nov. 28, 1975) and the level of water quality necessary to protect those existing uses shall be maintained and protected.
  - Tier 1 protection is typically achieved through inclusion of effluent limits in National Pollutant Discharge Elimination System (NPDES) permits that are equivalent to water quality criteria.

- **Tier 2: Protection of High Quality Waters (HQWs)**

- For surface waters where the existing water quality for a parameter is better than the numeric water quality criterion, the surface water is considered high quality for that parameter.
- A parameter must have a numeric water quality criterion to determine if the waterbody is a HQW for that parameter (e.g., ammonia-nitrogen).
- All waterbodies in Indiana are considered fishable, swimmable



- HQWs for all parameters unless data or information indicate otherwise.
- Tier 2 protects the assimilative capacity of a stream by ensuring that too much of a particular pollutant does not enter the waterbody. Stream characteristics, such as flow, determine the assimilative capacity of the waterbody.
- This high quality shall be maintained and protected unless the State finds that allowing a significant lowering of water quality is necessary and accommodates important social or economic development.

- **Tier 2.9: Protection of Outstanding State Resource Waters (OSRWs)**

- A new or increased loading of a regulated pollutant that causes a significant lowering in an OSRW is prohibited unless:
  - The activity results in improvement in water quality in the OSRW; or
  - The applicant funds a water quality improvement project that results in overall improvement of water quality in the OSRW.
- Within the Greak Lakes basin, no new loadings of a bioaccumulative chemical of concern are allowed that would cause a lowering of water quality, except for mercury.

- **Tier 3: Protection of Outstanding National Resource Waters (ONRWs)**

- There are currently no waterbodies in Indiana designated as ONRWs.

### **When is an Antidegradation Demonstration Required?**

An antidegradation demonstration must be submitted to IDEM if Tiers 2 or 2.9 are triggered and the activity is not exempt under [327 IAC 2-1.3-4](#). An antidegradation demonstration must be submitted to prove that the proposed new or increased loading resulting in a significant lowering of water quality is necessary for economic or social reasons. Before making a determination on any proposed lowering of water quality from a new or increased discharge, IDEM reviews the applicant’s analysis of alternatives. The analysis of alternatives must evaluate a range of practicable alternatives that would prevent or lessen the degradation associated with the proposed activity and justify why the preferred alternative resulting in the degradation has been selected. Requirements for the antidegradation demonstration vary and are dependent upon the type of deliberate activity being proposed. These requirements can include “basic” information, “necessary” information, an alternatives analysis, and a social and economic analysis, as described in [327 IAC 2-1.3-5](#).

## **What Happens after an Antidegradation Demonstration is Submitted?**

- A fundamental aspect of the antidegradation process is providing opportunities for public comment in accordance with [327 IAC 2-1.3-6](#). Public notices can be found online at [idem.IN.gov/public-notices/](http://idem.IN.gov/public-notices/). There are two public comment opportunities:
  - Once an antidegradation demonstration submittal is determined to be complete, receipt of the complete demonstration is public noticed in accordance with [327 IAC 5-2-11.2](#). A public meeting may be held if there is substantial public interest.
  - IDEM will next public notice a tentative determination on the proposed discharge. This typically occurs concurrently with a draft NPDES permit public notice period. A public hearing may be held if there is substantial public interest.
- A final determination on the proposed discharge will not be made until after any comments received during the public notice period have been considered. This final determination is subject to appeal.