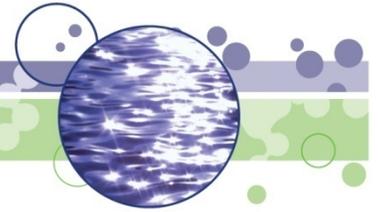




# **IDEM Overview of July 17, 2009**

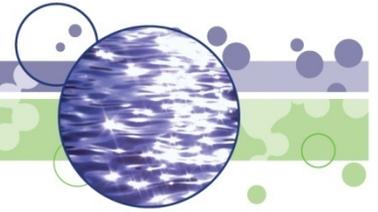
## **Draft Antidegradation Rule**

Presented at the August 4, 2009  
Antidegradation Stakeholder Meeting



# IDEM Goals for Antidegradation Rule

- That the rule meet the requirements of the Clean Water Act; comply with state law; and be consistent with existing state administrative rules.
- That the rule can be implemented by IDEM according to a clear, consistent, logical, and streamlined process which would satisfy the recommendations of the Barnes Report.



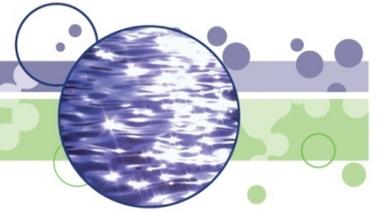
# Recent History of Antidegradation Rulemaking

- March 7, 2008 - Governor's Stakeholder meeting.
- March 14, 2008 - Draft rule language circulated.
- April 29, 2008 - Meeting held at IHS for all stakeholders:
  - IDEM presented overview of March 14, 2008 draft
  - Industrial reps presented their issues of concern
  - Environmental reps presented their issues of concern
- June 25, 2008 - Meeting held at Ft. Ben for all stakeholders:
  - IDEM presented changes to March 14, 2008 draft
  - Subgroup members selected to represent major interest groups:
    - Industrial, Environmental, and Municipal
  - Issues identified and prioritized for subsequent subgroup meetings
  - Subgroup agreed to meet monthly to discuss issues<sup>3</sup>



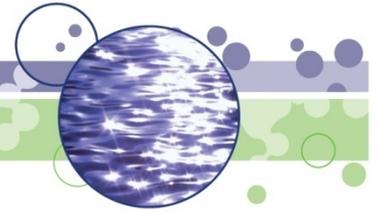
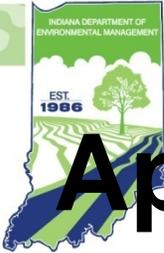
# Summary of Subgroup Activity: Key Topics of Discussion

- July 2008 –applicability; definition of “pollutant concern”; and exemptions.
- August 2008 – exemptions in detail.
- September 2008 –de minimis discharges both individual and cumulative.
- October 2008 – 3 interest groups presented their responses to homework assignment so all could better understand each group’s position on issues.
- December 2008 – elements of antidegradation demonstration
- January 2009 – public notice and public comment.



# Culmination of Subgroup Activity

- From January 2009 to April 2009 – IDEM evaluated input heard from subgroup and developed April 6, 2009 revised draft.
- April 22, 2009 – IDEM presented April 6, 2009 draft to subgroup and listened to feedback.
- From April 2009 to July 2009 – IDEM evaluated input heard from subgroup and developed July 17, 2009 revised draft where changes from April draft:
  - clarify areas where people did not understand the language as IDEM intended; and
  - 2) harmonize with HEA 1162 (signed 5/6/09 and now codified at Public Law 78-2009).



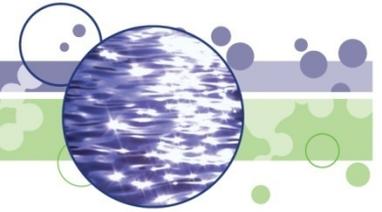
# Applicability of Antidegradation Standards and Implementation

- Except as provided under section 4 of this rule, the antidegradation implementation procedures established by this rule apply to a proposed new or increased loading of a pollutant of concern to a surface water of the state.
- Antidegradation applies when the loading results in a significant lowering of water quality.
- Significant lowering may occur although a new or modified permit limit is not required.



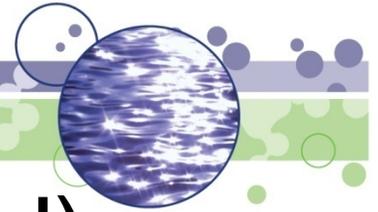
# Applicability of Antidegradation to General Permits

- For activities covered by an NPDES general permit authorized by rule, the following apply:
  - The department shall complete an antidegradation review of the rules of the board that authorize NPDES general permits.
  - The board may modify those rules for purposes of antidegradation compliance.
  - After an antidegradation review of a rule is conducted, activities covered by an NPDES general permit authorized by that rule are not required to undergo an additional antidegradation review.



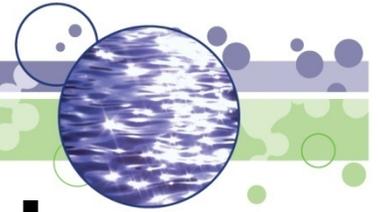
# Key Definitions

- Best Available Demonstrated Control Technology (BADCT) – if applicant agrees with this level of treatment they may forego alternative treatment analysis.
- Pollutant of Concern - a pollutant that is reasonably expected to be present in:
  - a discharge based on the source and nature of the discharge; and
  - the receiving water in sufficient amounts to have a potentially detrimental affect on the designated or existing uses of the receiving water.



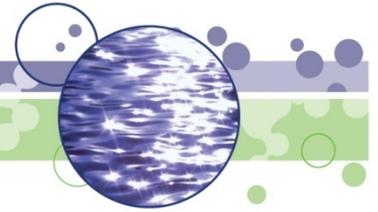
## Key Definitions (continued)

- Tributary of an OSRW - the upstream segments of a receiving waterbody when some or all of the downstream segments of the receiving waterbody are designated as an OSRW – mirrors definition in existing rule at 327 IAC 5-2-11.7.
- Total loading capacity - expressed as a mass loading rate for the waterbody in the area where the water quality is proposed to be lowered means the product of the applicable water quality criterion multiplied by the:
  - sum of the existing effluent flow, the proposed new or increased effluent flow, and the stream design flow used in the calculation of the WQBELs; or
  - alternate mixing zone volume approved for a discharge.<sup>9</sup>



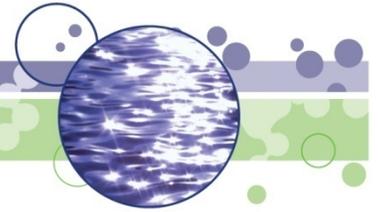
# Antidegradation Standards

- Establishes minimum standards based on Tiers – note: no designated ONRWs in Indiana.
- All waters are presumed to be high quality waters (better quality than the water quality criterion), including OSRWs – note: EUWs are now OSRWs.
- No discharges of BCCs that will result in a significant lowering of water quality are allowed to an OSRW inside Great Lakes Basin – tributaries of OSRW may be included if the discharge to the tributary impacts the OSRW.
- BCCs allowed in discharges to OSRW outside Great Lakes Basin with antidegradation review.



# De minimis - Exempt from Antidegradation Demonstration

- No de minimis for BCCs.
- For HQW (not OSRW)
  - Individual:
    - When WQS no more than 10% of existing unused loading capacity.
    - When no WQS no more than 20% (many safety factors in Tier 2 value).
  - Cumulative: no more than 25% of benchmark unused loading capacity.
- For OSRW
  - Individual:
    - When WQS no more than 1% of existing unused loading capacity.
    - When no WQS no more than 2% (many safety factors in Tier 2 value).
  - Cumulative: no more than 2.5% of benchmark unused loading capacity.



# Activities Exempt from the Antidegradation Demonstration

- May include BCCs – effectively addressing mercury is a challenge and flexibility is necessary.
- Prevention or minimization of loading required.
- Non-de minimis exemptions categorized by level of information that must be submitted:
  - Info needed by permit.
  - Info to show exemption satisfied, e.g., reference of pertinent document such as a LTCP.
  - Info supplied with exemption justification<sup>1,2</sup>



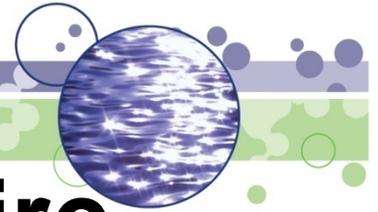
# Exemptions that Rely on Info Needed by permit

- Loading within the existing capacity and processes that are covered by an existing applicable permit.
- Loading from a bypass not prohibited by 327 IAC 5-2-8(11) .
- A new limit for a pollutant of concern for an existing permitted discharger that will not allow an increase in either the mass or concentration of the pollutant of concern discharged, e.g., revised effluent limitation guidelines.
- Increased loading at an outfall discharging to a water of the state due to increasing the sewer area, connection of new sewers and users, or acceptance of trucked-in wastes, such as septage and holding tank wastes.



# Exemptions that Require Info to Show Exemption Satisfied

- Loading due solely to the presence of the pollutant in the intake.
- Loading due solely to implementation of enforceable municipal or industrial controls on wet weather flows, when there is no net increase in the quantity and concentration of the pollutant of concern.
- Loading of a pollutant of concern for short term, temporary, new, or increased discharges.
- Loading resulting from an action utilizing federal or state authorities with regulations to alleviate a release into the environment of hazardous substances, pollutants, or contaminants.
- A new or increased discharge of noncontact cooling water that will not increase the temperature of the receiving water or waters outside of the designated mixing zone.
- Loading of an approved non-BCC water treatment additive.



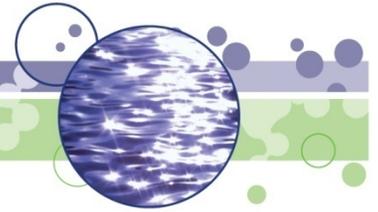
# Exemptions that Require an Exemption Justification

- Loading where there is a voluntary, simultaneous, enforceable decrease in the actual loading of the pollutant of concern from sources contributing to the same ten (10) digit watershed resulting in a net decrease in the loading of the pollutant of concern.
- Loading is necessary to accomplish a reduction in the loading of another pollutant that is either more bioaccumulative more or toxic.
- Loading is necessary to accomplish a required reduction in the release of one or more air pollutants.
- Loading from a sanitary wastewater treatment plant constructed or expanded to alleviate a public health concern.



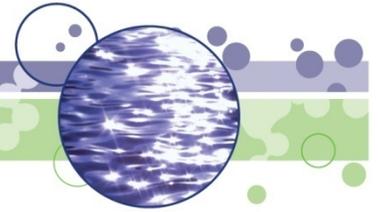
# Exemption Justification

- IDEM will public notice receipt.
- Public meeting if in OSRW or sufficient petition by 25 persons within 10 digit watershed or 15 miles.
- IDEM will public notice their determination.



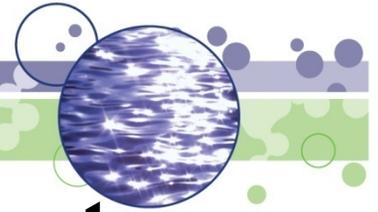
# Antidegradation Demonstration Application

- The economic and social factors that may be considered are defined by HEA 1162.
- HEA 1162 requires that the commissioner give substantial weight to any applicable determinations by governmental entities.



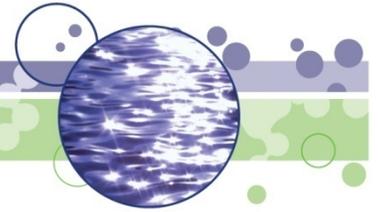
# Commissioner's Determination: Antidegradation Demonstration

- IDEM will public notice receipt.
- Public meeting if in OSRW or sufficient petition by 25 persons within 10 digit watershed or 15 miles.
- Applicant will have already held a public meeting to present their rationale supporting the elements of their antidegradation demonstration.
- IDEM will public notice their determination.



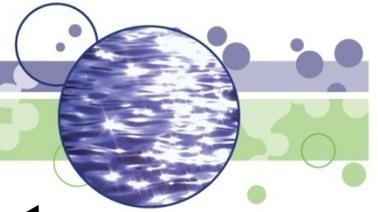
# Water Quality Improvement Project for OSRW

- A project application is required.
- IDEM will public notice receipt of application.
- The commissioner shall approve or deny a water quality improvement project application considering the following factors:
  - Whether the project can be successfully implemented.
  - Whether the project will offset the lowering of water quality caused by new or increased loadings of pollutants of concern.



# Payment to the OSRW Improvement Fund

- Fee not to exceed \$500,000.
- Amount of fee based on the type and quantity of increased pollutant loadings.
- The discharger is not required to identify a water quality improvement project.
- IDEM will solicit input from interested parties on the identification and selection of projects to be funded by the improvement fund.



# Public Notice Requirements

- Applies to:
  - antidegradation exemption justification;
  - antidegradation demonstration; and
  - water quality improvement project application.
- Public meeting if in OSRW or sufficient petition by 25 persons within 10 digit watershed or 15 miles.
- Public meeting for WQ improvement project is concurrent with meeting for the antidegradation demonstration.



# HUC Size Comparison

## SUB-BASINS, WATERSHEDS, & SUB-WATERSHEDS OF INDIANA

**Hydrologic Unit Code (HUC)**

**LEGEND**

Range of Acres Per HUC Level

 HUC 8  
125,955 - 1,740,525

 HUC 10  
36,096 - 199,829

 HUC 12  
4,897 - 32,505

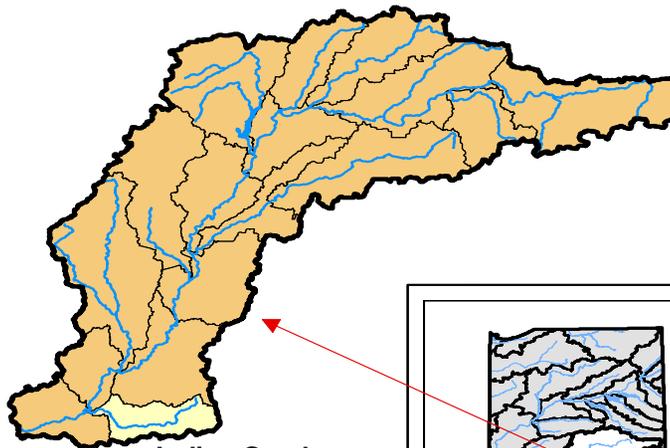


**Mapped By:**  
Joanna Wood  
Office of Water Quality

**Map Projection:**  
UTM Zone 16 N  
**Map Datum:** NAD83

**The 17 Watersheds of the Upper White River Sub-Basin (HUC 8)**

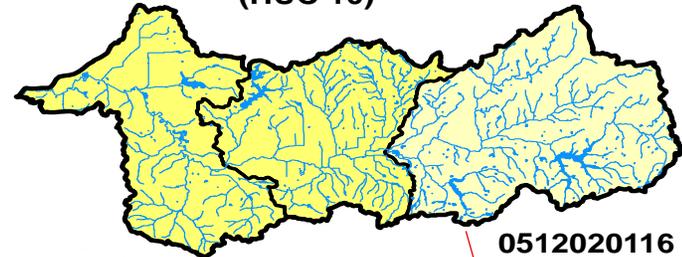
05120201



Indian Creek Watershed

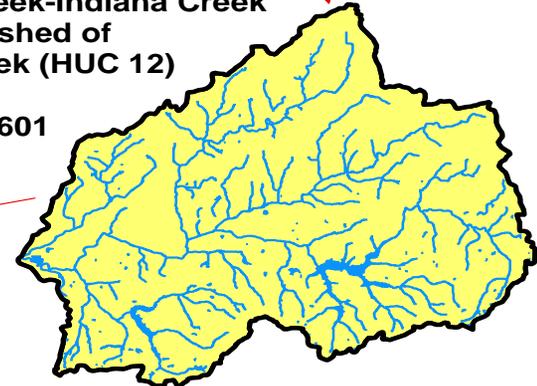
**The 3 Sub-Watersheds of Indian Creek (HUC 10)**

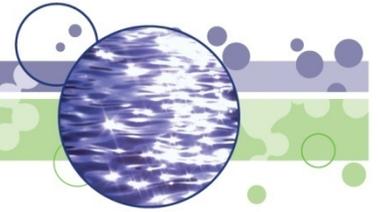
0512020116



**Barnes Creek-Indiana Creek Sub-Watershed of Indian Creek (HUC 12)**

051202011601





## Q and A and Next Steps

- Questions?
- Next Steps:
  - Consider feedback from this meeting.
  - Set/hold public information meetings – goal is to complete 3 (N, Central, S) in August.
  - Second notice draft rule language with 45 day comment period.