



# The Use Attainability Analysis Process for Combined Sewer Overflow Communities

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# Combined Sewer Overflow Program

- 109 Communities in Indiana have a Combined Sewer System
- These systems convey sanitary wastewater and storm water through a single pipe system to a wastewater treatment plant
- These systems discharge raw sewage directly to rivers when rainfall occurs

# Combined Sewer Overflow Program

- Communities are required to create and implement a plan to dramatically reduce discharge of raw sewage
- IDEM reviews and approves plans
- The plans entail significant infrastructure improvements and costs and often take up to 20 years to fully implement
- Indianapolis alone, for example, will spend over \$2 billion on infrastructure improvements

# Combined Sewer Overflow Program

- All Communities are under enforceable requirements to complete their plans.
- 10 Communities are under federal consent decrees
- 99 Communities are under state enforceable requirements
- 53 Communities have completed their work
- Others are in the process of implementing their plans
- At the end of the implementation process, most communities will likely have residual discharges from combined sewers during periods of high rainfall.



# CSO Policy Goals

- Meet Water Quality Standards (WQS) to protect designated uses such as fishing and swimming
- When WQS cannot be met, reduce the frequency and duration of CSO impacts to the maximum extent achievable without causing serious, adverse social and economic impacts on the CSO communities
- The federal Clean Water Act anticipated these residual events and allows for a change in the designated use under certain circumstances



# Water Quality Standards Revision

- The review of designated uses and WQS is called a Use Attainability Analysis (UAA)
- A UAA is a structured scientific assessment of the factors affecting a waterbody's attainment of its designated use
- A UAA must be performed to explain why the designated recreational use is not attainable
- Any change in the designated use is a change to the WQS, which is a change to Indiana's WQS rules
- The UAA process is spelled out in Federal regulation



# Federal UAA Regulations

Under **40 CFR 131.10(g)** States may remove a designated use which is not an existing use, as defined in § 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible utilizing, at a minimum, one of the following factors



# The Six UAA Factors 40 CFR 131.10(g)

1. Naturally occurring pollutant concentrations prevent the attainment of the use; or
2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or



# The Six UAA Factors

4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or
5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
6. Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.



# UAA Development

- Collaborative process involving IDEM, the CSO community, EPA and other stakeholders
- The UAA is complete when it provides adequate documentation of:
  - No existing use within CSO impacted waters
  - Demonstrates that the attainment of the designated use is not feasible due to any of the six identified factors
  - The extent and duration of the CSO impacts to impacted waters after the LTCP is implemented



What other designated use is there for a CSO community's impacted waterbodies?

CSO Wet Weather Limited Use Subcategory



# CSO Wet Weather Limited Use Subcategory

- This subcategory is set out in Indiana rules and statutes (IC 13-18-3)
- This subcategory is available only to CSO communities
- Allows for the suspension of the full body emersion designated use for a period of time not to exceed four days after the date the overflow discharge ends
- Applies to a specific reach of all CSO impacted waterbodies after implementation of the LTCP and approved UAA



# Rulemaking for CSO Wet Weather Limited Use Subcategory

- If the UAA meets the requirements of IC 13-18-3-2.5, it is approved by IDEM
- A rule is developed by the Agency for submittal and approval by the Environmental Rules Board per IC 13-14-9-14
  - The new rule will identify CSO impacted waterbodies and the duration for which the CSO wet weather limited use subcategory is applicable
- The proposed new rule is submitted to EPA for review and approval



# Summary

- Communities throughout Indiana are implementing plans to dramatically reduce raw sewage discharges to waters when it rains
- IDEM reviews, approves, and tracks implementation of these plans
- After full implementation, many of these communities will still experience residual discharges during high rain events about four times a year
- The federal clean water act anticipated these residual overflows and allows for a change in designated uses under certain circumstances.
- The process requires communities to submit a Use Attainability Analysis and requires IDEM to review it and propose rules to the Environmental Rules Board
- IDEM anticipates as many as 24 communities could request a change in the designated use.
- IDEM will likely propose a rule for Indianapolis before the end of the calendar year.



# Questions?

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