

# Illinois EPA Perspective on Dam Removal

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# Illinois EPA - Regulatory Perspective on Dam Removal

## Potential Permits Required

- Clean Water Act 401 Water Quality Certification

A 401 certification is required for dam removal projects if they involve a discharge of dredge or fill material under Section 404 of the Clean Water Act. This discharge and other environmental aspects of the dam removal project are subject to Illinois water quality standards and state anti-degradation rules.
- State Construction and Operating Permit for confined sediment disposal basins.
- Construction Stormwater Permit

A Construction Stormwater National Pollutant Discharge Elimination System (NPDES) permit regulates stormwater runoff from construction activities that disturb one or more acres of land. This permit requires development and submittal of a Stormwater Pollution Prevention Plan that incorporates Best Management Practices into dam removal activities.

## Illinois EPA - Regulatory Perspective on Dam Removal 401 Water Quality Certification (WQC)

The WQC provides assurance that water quality will be protected and provides the state with an opportunity to address impacts to aquatic resources resulting from dam removal.

- Testing and information about discharges
- Anti-degradation assessment
- Certification conditions
- Other Considerations

# Illinois EPA - Regulatory Perspective on Dam Removal 401 Water Quality Certification (WQC) Testing

Tests and information are required to determine the significant physical and chemical characteristics of the material that will be discharged to waters of the State. Testing may be required for:

- Construction fill materials.
- Dredged sediment placed near or in the stream
- Sediments behind the dam that may be released
- River Sediments that may be eroded due to dam removal
- Receiving waters
- Disposal sites

# Illinois EPA - Regulatory Perspective on Dam Removal 401 Water Quality Certification (WQC) Testing

- Particle size analysis (35 Ill. Adm. Code 395)
- Dry weight analysis;
  - Tiered Approach to Corrective Objectives (TACO) Ill. Adm. Code 742
  - PEC and TEC (MacDonald 2000) Sediment Quality Guidelines
- Supernatant analysis
  - Illinois narrative and numeric water quality standards

# Illinois EPA - Regulatory Perspective on Dam Removal 401 Water Quality Certification (WQC)

**Antidegradation's Purpose:** "to protect existing uses of all waters of the State of Illinois, maintain the quality of waters with quality that is better than water quality standards, and prevent unnecessary deterioration of waters of the State". The Agency must assure:

- The applicable water quality standards will not be exceeded as a result of the activity.
- All existing uses will be fully protected.
- All technically and economically reasonable measures to avoid or minimize the proposed pollutant loading have been incorporated into the plan.
- The proposed activity will benefit the community at large.



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## 401 Water Quality Certification (WQC)

### Anti-degradation Assessment

- Identification and characterization of affected water bodies downstream and upstream of the dam. The assessment will consider:
  - Existing uses.
  - Physical, Biological and Chemical conditions.
  - Designated use impairments. 303(d).
- Identification and quantification of load increases resulting from the removal of the dam and potential impacts on the affected waters.
- Purpose and benefits of the dam removal.
- Assessments of Alternatives - Avoidance and Minimization
- EcoCAT - Threatened and Endangered Consultation

# Illinois EPA - Regulatory Perspective on Dam Removal 401 Water Quality Certification (WQC) Conditions

- Sediment Disposition
- Mitigation
- Monitoring



Illinois EPA - Regulatory Perspective on Dam Removal  
401 Water Quality Certification (WQC)  
Other Considerations

- Preapplication meeting
- Biological surveys (June thru October)
- Public Notice
- Fees
- Environmental Justice

Questions?

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