



WATER RESOURCE MITIGATION

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PROGRAM OVERVIEW



Vision / Goals

Key Initiatives

Standardize Mitigation Strategy

Establish consistency and predictability

Align with Federal Law

Eliminate duplicative state + federal mitigation

Consolidate Mitigation

Promote robust watershed-level compensation

Streamline Permitting

Reduce burden on permittees; avoid requiring a mitigation project per construction permit

1. **Establish a comprehensive mitigation program** with statewide applicability to address compensation for impacts to water resources.
2. **Cultivate robust compensation:** establish standard guidance, criteria, and SOPs for mitigation that promote in-kind, watershed-level compensation projects managed by experts rather than permittees (i.e., in-lieu fee/banking)
3. **Implement a program consistent with the CWA federal Mitigation Rule** (EPA/USACE 2008) and modern federal New England District Mitigation SOP (USACE 2024)
4. **Propose legislation as needed to support program:** establish authority to require watershed-level in-kind compensation
5. **Provide tools, technical assistance, and outreach**

CURRENT STATUS / SHIFTING THE PARADIGM

Mitigation Approach

Currently DEEP only accepts Permittee-Responsible Mitigation (PRM). PRM is widely known to be the least ecologically successful approach and is the least preferred approach federally. With PRM mitigation, permittees bear the burden for the entire mitigation process: site selection, design, construction, monitoring, reporting, adaptive mgmt. etc. Resulting mitigation tends to be clunky and piecemeal, often placed on small fragments of land adjacent to disturbed construction sites, and often performed by permittees without resource expertise.

Consolidated, Watershed-level Mitigation (mitigation banks and in-lieu fee programs) result in increased project success, higher water quality, and greater ecological integrity – and they also vastly streamline permitting. With ILF and banking the permittee may purchase ‘water resource credits’ from the bank or ILF during permitting, to provide compensation in accordance with impacts up front, instead of having to design and perform all the mitigation themselves.



The federal Mitigation Rule codifies a preference for watershed-level mitigation, with a hierarchy that lists banking as the first preference followed by ILF and PRM.

Mitigation banks compensate *in advance* of impact: A wetland is built, and then its ‘resource credits’ can be sold to offset impacts.

DEEP is working hard to align with the federal Mitigation Rule to best serve water resources, staff, and project proponents. Modernizing the mitigation paradigm to align with codified federal preference is beneficial to all stakeholders.

Compensatory Mitigation for Water Resources

Laura Robbins, Mitigation Specialist, Land and Water Resources Division (LWRD)



What is Compensatory Mitigation?

Compensatory Mitigation is taking action to restore, create, and/or enhance wetlands and other water resources – with a goal of gaining resource area and/or improving resource functions – to compensate for impacts.

- Compensation for impact is required by federal law under the Clean Water Act's [Compensatory Mitigation for Losses of Aquatic Resources](#) (33 CFR Part 332) and may be required by state or municipal authorities that authorize impacts.
- Mitigation should only occur after resource avoidance and minimization have been achieved to the greatest extent practicable.
- In some scenarios, alternative actions such as land preservation may be accepted as a form of compensation.

Figure 1: Wetland Mitigation Site Before / After : Restoration of agricultural ditch to wetland



Photo Credit: USFWS (Ryan Crehan)

Types of Mitigation

Creation: Establishment of a new wetland or other water resource that did not previously exist by manipulating the physical, chemical, and/or biological characteristics of an area. Creation results in a gain of new water resource area and its associated functions/values.

Enhancement: Improvement of an existing water resource by adding or heightening its functions through manipulation of the physical, chemical, and/or biological characteristics of a resource. Enhancement does not result in a gain of water resource area however it may add to and/or improve existing resource functions/values.

Restoration: Re-establishment of a former water resource to natural/historic conditions by manipulating the physical, chemical and/or biological characteristics of an area. Restoration results in a gain of water resource area and its associated functions/values.

Figure 2: Tidal Marsh degraded by inundation, Bride's Brook Marsh, Rocky Neck State Park



Water Resources

LWRD's Mitigation program addresses compensation for impacts to water resources:

- **inland wetlands and watercourses**
 - tidal wetlands
 - coastal waters
 - navigable waters
 - intertidal flats

Program Applicability

Tidal wetlands & other tidal/coastal/navigable water resources:
DEEP has authority

Inland wetlands and waters:

- Municipalities have authority per Inland Wetlands and Watercourses Act
- DEEP has authority for State activities, activities on State lands, and in State 401 Water Quality Certifications for projects needing federal 404 permits

Municipal Inland Wetland Commissions may choose to require compensation for water resource impacts in permit decisions.

Sec. 22a-41. Factors for consideration of commissioner. Finding of no feasible and prudent alternative. Wetlands or watercourses. Habitats. Jurisdiction of municipal inland wetlands agencies.

Mitigation Guidance – Coming Soon!

DEEP's LWRD Division is developing a comprehensive statewide mitigation program to address compensation for impacts to water resources. Program guidance materials are coming soon, to help stakeholders navigate the mitigation process.

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| Glossary of Mitigation Definitions | Mitigation Pre-Application Consultation Form |
| Water Resource Mitigation Factsheet | Mitigation Monitoring Report Form |
| Mitigation Threshold/Ratio Criteria | Mitigation Commencement/Completion Form |

Regulatory Mechanisms for Mitigation

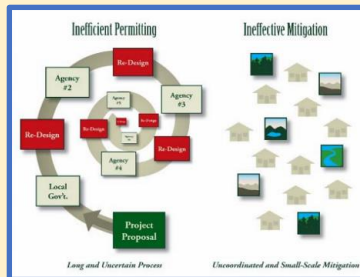
PERMITTEE RESPONSIBLE MITIGATION (PRM) = Water resource creation, restoration, or enhancement activities **provided by the permittee** to compensate for resource impacts. With PRM, project proponents submit a Mitigation Plan for approval with the permit application and the permittee is responsible for all aspects of mitigation until goals are met.

IN-LIEU FEE (ILF) = A program where **permittees purchase future mitigation credits** during the permit process, to compensate for impacts to water resources. ILF funds are deposited into a protected fund for watershed-level mitigation projects, and the ILF administrator is responsible for ensuring mitigation projects are performed. Mitigation occurs after impacts and funds are allocated, with temporal resource loss.

MITIGATION BANK = A **built mitigation site** where water resources are restored, created, and/or enhanced, then set aside **for future sale as mitigation credits** to offset impacts. The bank administrator (sponsor) performs mitigation to create the bank site, which gets approved for operation (credit sale) by federal and state agencies. Permittees then purchase 'resource credits' from the mitigation bank during the permit process, to offset impacts in advance of the impact, so there is no temporal resource loss.

Consolidated Watershed-Level Mitigation : The Way of the Future

PRM and Onsite Mitigation Obstacles



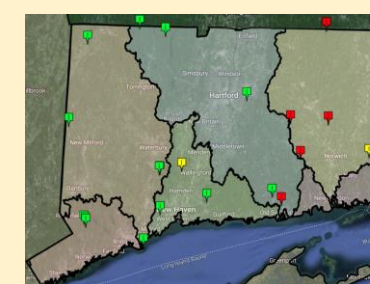
Sites often piecemeal in disturbed areas, High cost, burdensome/inefficient permitting

Mitigation Banks in the USA



35 states / ~ 2,600 banks

USACE In-Lieu Fee Program Sites



~20 mitigation projects since 2013
Federal Mitigation only, run by Audubon