

Updates on Ghost Dams and Dam Safety Outreach in New York's Great Lakes Region

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NEW YORK STATE WATER
RESOURCES INSTITUTE
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Sea Grant
NEW YORK



Introduction & History

- Partnership between NY Sea Grant, Water Resources Institute at Cornell; funded through FEMA Cooperating Technical Partners (CTP)
- (Phase I) was way of determining gaps in information on small dams for dam owners, residents up- and downstream from dams, and municipalities
 - Phase II will be an attempt to fill in those gaps
- Not a way of prioritizing dams for removal, restoration, or any other decision-making process
- Not an aquatic connectivity project – this is all about safety

What we're talking about when we're talking dams

Low-head Dams



Ghost Dams



Phases I and II - Deliverables

- Phase I

- Resources
- Ghost Dam Inventory – Black River Watershed
- Dam Safety StoryMap
- Final Report

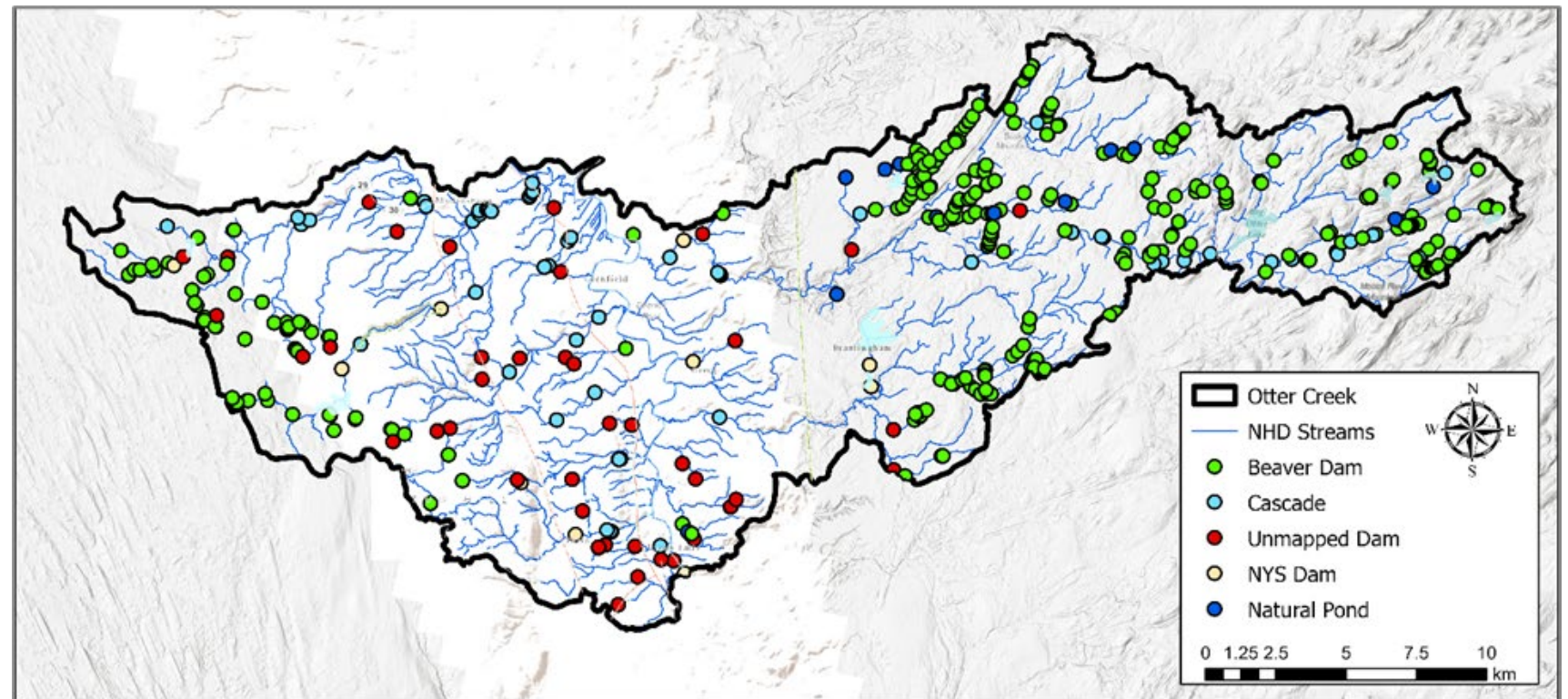
- Phase II

- Ghost Dam Inventory – Ongoing
- *What Are Ghost Dams?* Fact Sheet
 - In progress, 2025
- *Best Practices for Dam Owners*
- Dam Signage
 - 2026
 - Signage detailing navigation hazards for low-head dams



Ghost Dam Analysis (Phase I)

- Machine learning/GIS models to read elevation changes in stream corridors
- Binned into impoundment types:
 - NYS Dam (yellow)
 - Cascade (light blue)
 - Natural Pond (dark blue)
 - Beaver Dam (green)
 - **Unmapped Dam (red)**



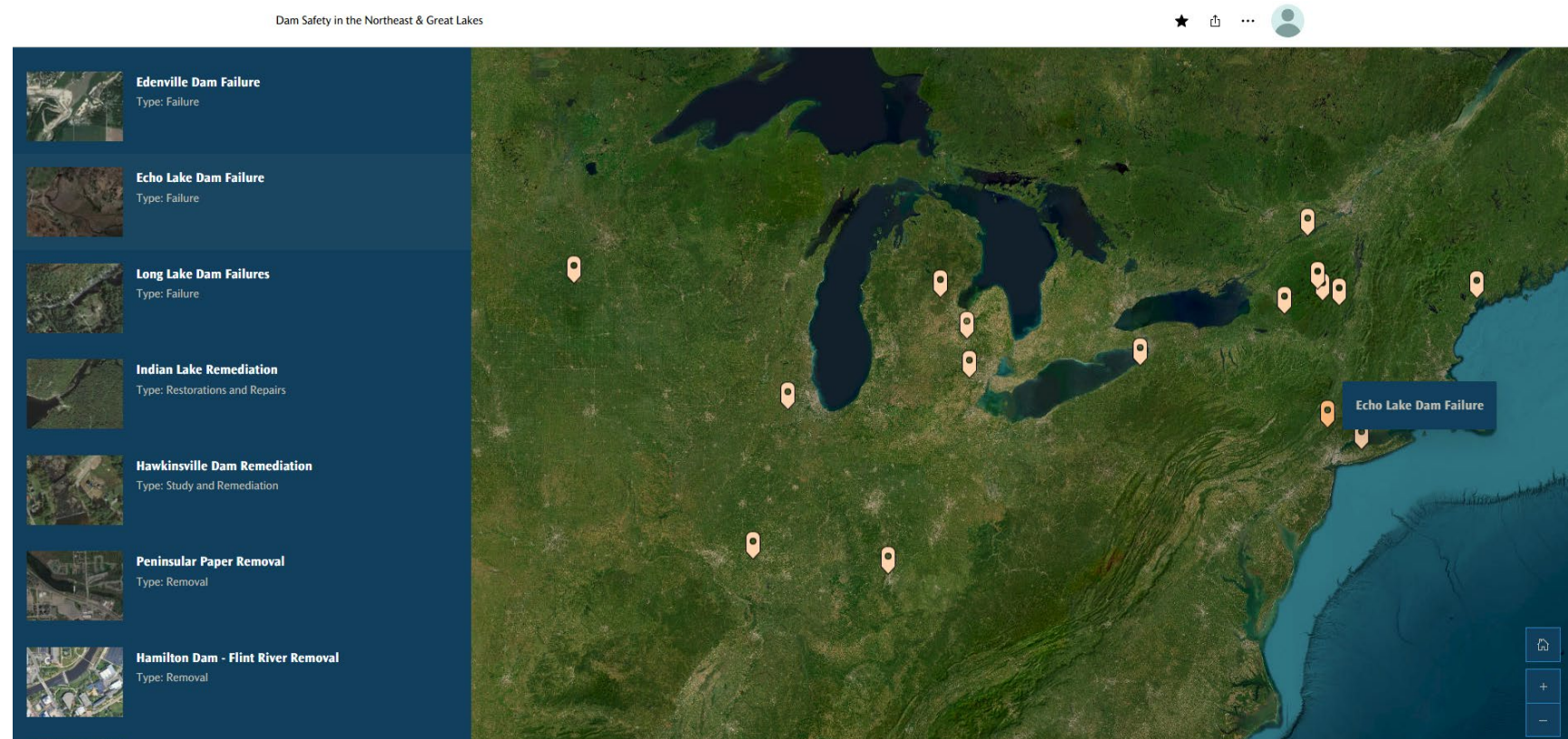




Case Studies/Story Map



- Case Studies for recent dam events
 - Repairs, removals, restorations, failures
- Resources for:
 - Owners
 - Municipalities
 - Funding
 - Residents along dammed waterways
 - Recreation





Phase II Components

- Ghost Dam Analysis
- Production of new outreach material

Ghost Dam Analysis (Phase II)

- Improved geographical reach across New York State
 - 3-5 additional watersheds
 - Varying land use and physical geographic settings
- Additional sensitivity for binning of Ghost Dams:
 - Natural Cascade
 - Beaver Dam
 - Unmapped Dam



New Outreach Material

- New material is intended to “fill the gaps” discovered in Phase I
- Noticeable lack of outreach material for:
 - Presence of ghost dams
 - Options for ghost dam owners
 - Recreational hazards



New Outreach Material - Signage

- Aimed at recreational use of rivers – canoeing, kayaking, angling
- Dangers of currents at low-head dams
- Templates or ready-to-install signage



