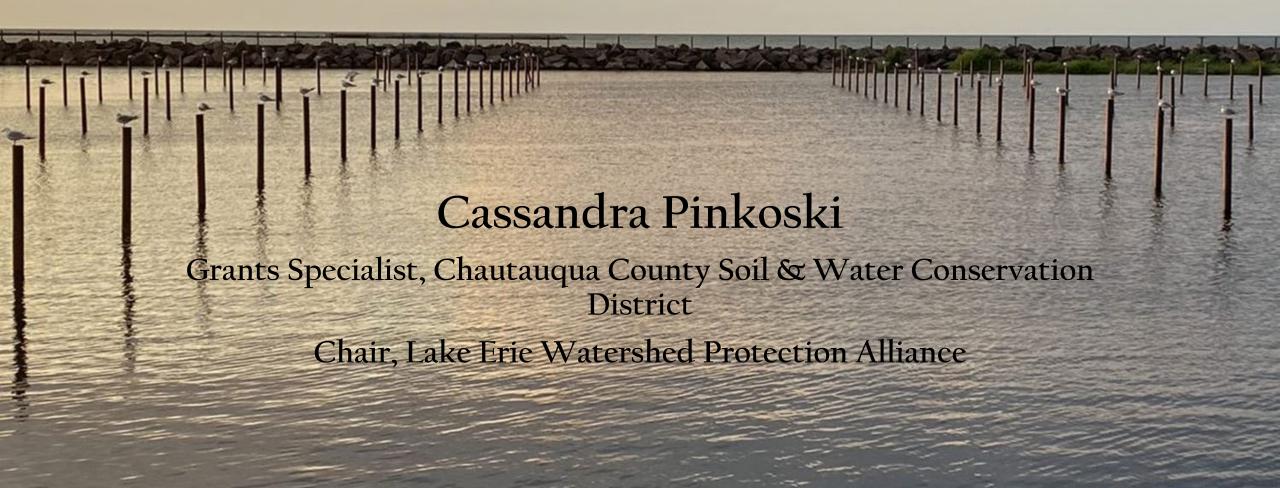
Local Projects to Protect Lake Erie

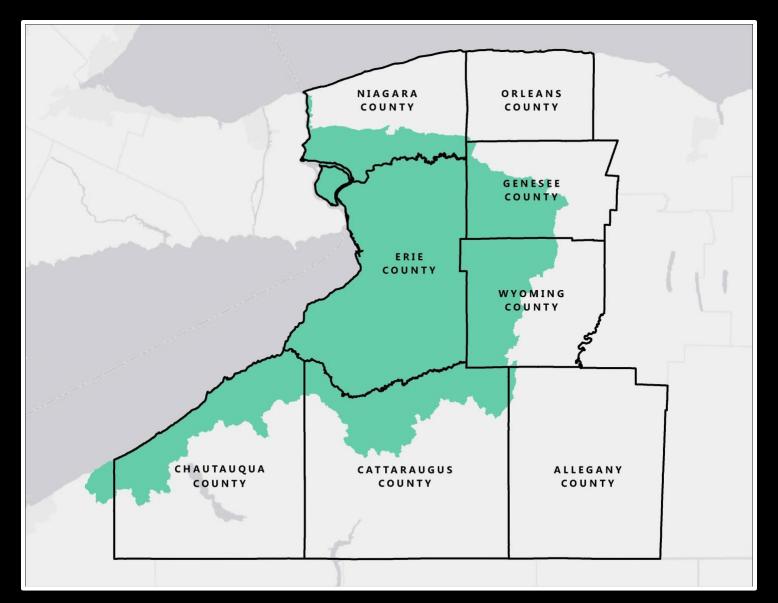


Chautauqua County Soil and Water Conservation District

- Established throughout the United States in response to the Dust Bowl of the 1930's
- Have the technical ability and enabling legislation to address water quality concerns throughout the county
- A leading strength of the Districts is their flexibility in with whom they can work—unlike other governmental agencies, Districts have a long history working with private landowners

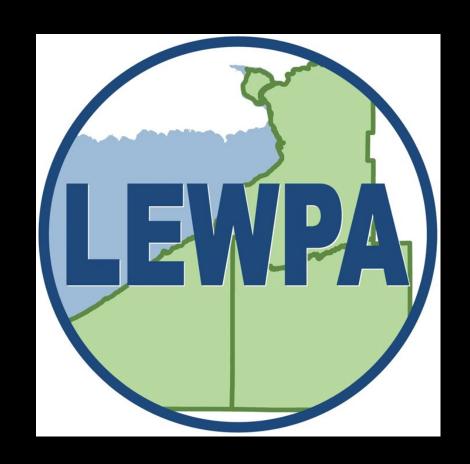


Where do you live?



Lake Erie Watershed Protection Alliance

- Chautauqua, Cattaraugus, Erie counties
- Water Resource Board:
 - 3 representatives from each county
 - Local representative
 - Regional representative
 - Soil & Water Conservation District representative
- Canadian, Tribal, State, Regional, Local, and Non-Profit, and Business partnerships
- Funding through Environmental Protection Fund since 2015



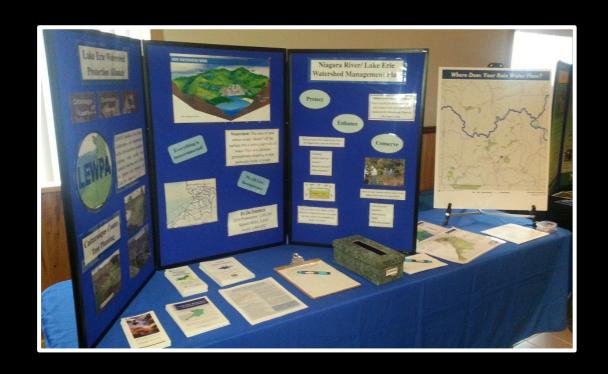
What LEWPA Does

Education

- Identify funding opportunities for municipalities
- Training
- Public outreach
- Advisories

Implementation

- Surveys
- Planning
- Coordinating partnerships
- On-the-ground projects
- Monitoring





Ecosystem-Based Management

- SUNY ESF Ecosystem-based management is an integrated organizational approach to decision making that considers an <u>entire ecological community</u>, including humans to create a sound blueprint for the <u>near and long-term</u> ecological health and development.
- NYS Ag & Markets Ecosystem Based Management uses a place-based approach to natural resource conservation. This approach focuses on the <u>complex issues</u> threatening our environment in a single location, rather than resolving a single issue statewide. It works by <u>coordinating local, state, and federal</u> programs and providing funding in targeted areas to fill in the gaps, making it easier for landowners and conservation agencies to get conservation off the ground and to achieve <u>meaningful</u> results.
- US EPA EBM emphasizes on factoring in complex linkages in social-ecological systems; dealing with adequate scales (both time and space wise); promoting adaptive management of <u>complex and dynamic systems</u>; and adopting integrated assessment and management frameworks. It assigns <u>economic and non-economic value</u> to our biodiversity (Ecosystem Services) through environmental and ecological economics, highlighting the fundamental philosophical principles underlining both approaches.

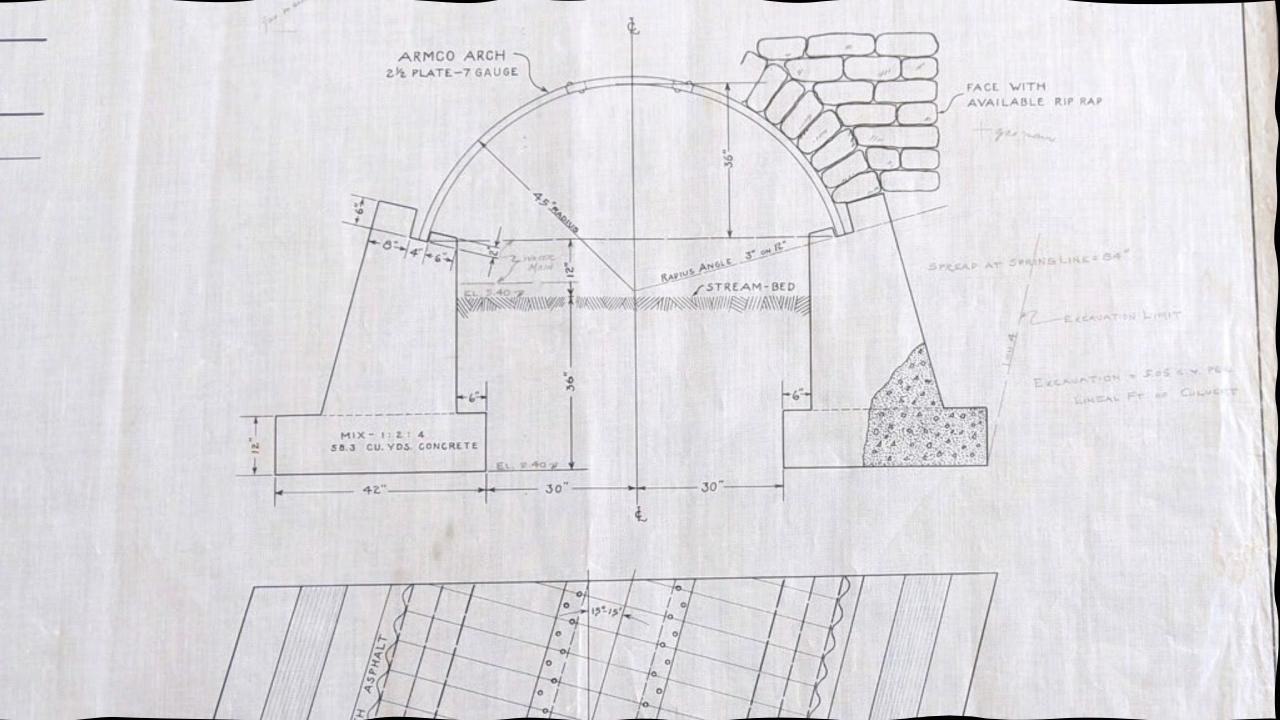
Hyde Creek Stormwater Management

Wright Park Blvd Culvert





















Hyde Creek Stormwater Management

Wright Park Floodplain







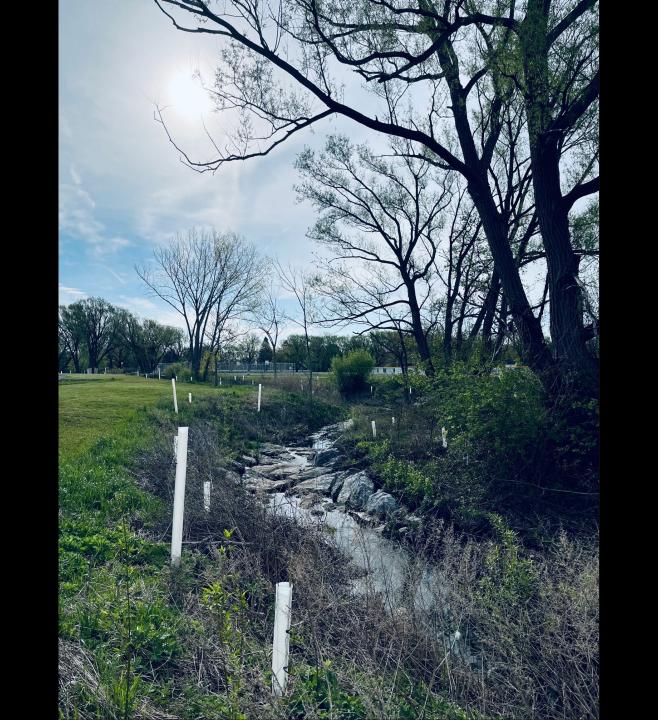


















Hyde Creek Stormwater Management

Hyde Creek Outlet

















Wright Park Bluff

Drainage





























Goose Creek Culvert

Before













Goose Creek Culvert

After









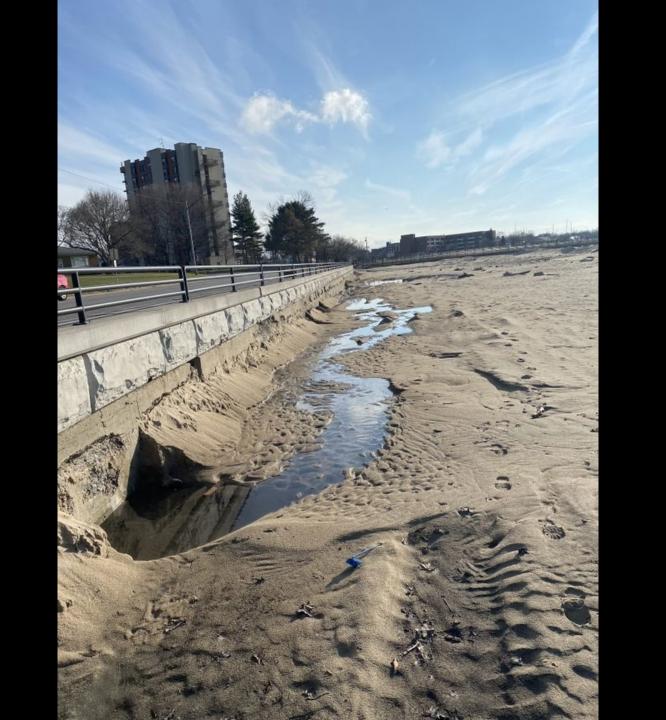




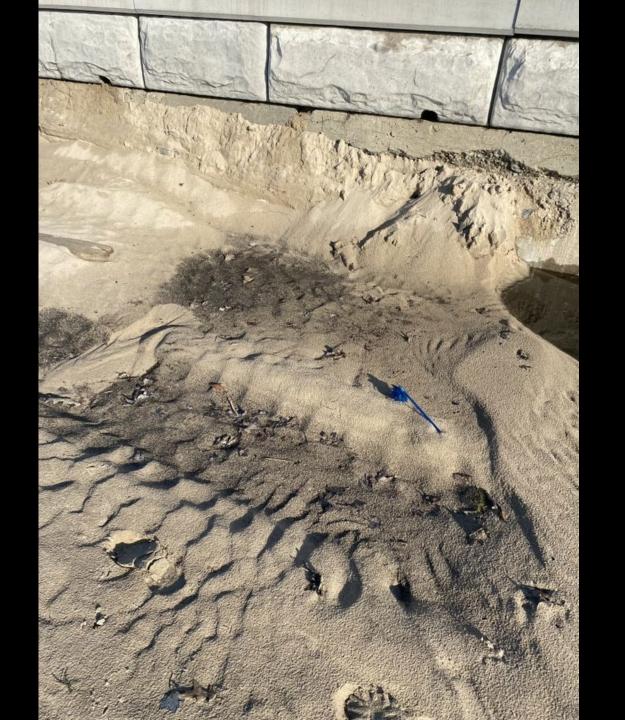


Main Street Beach Stormwater







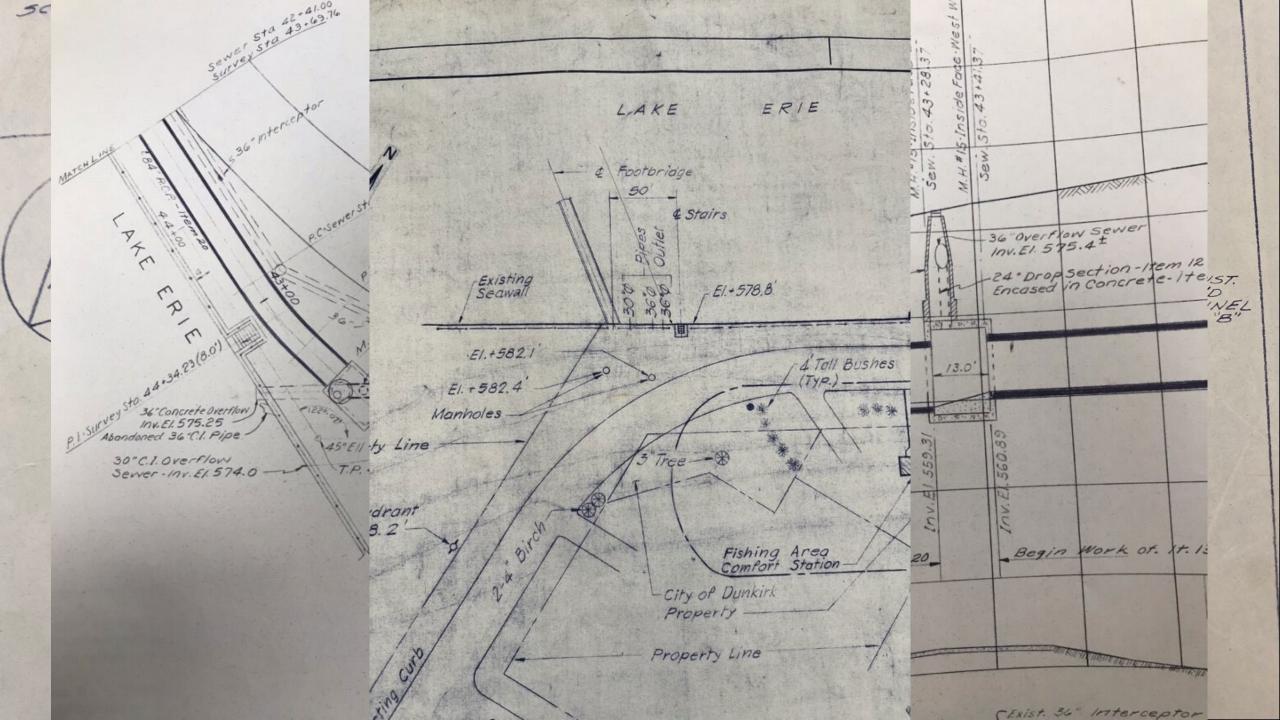


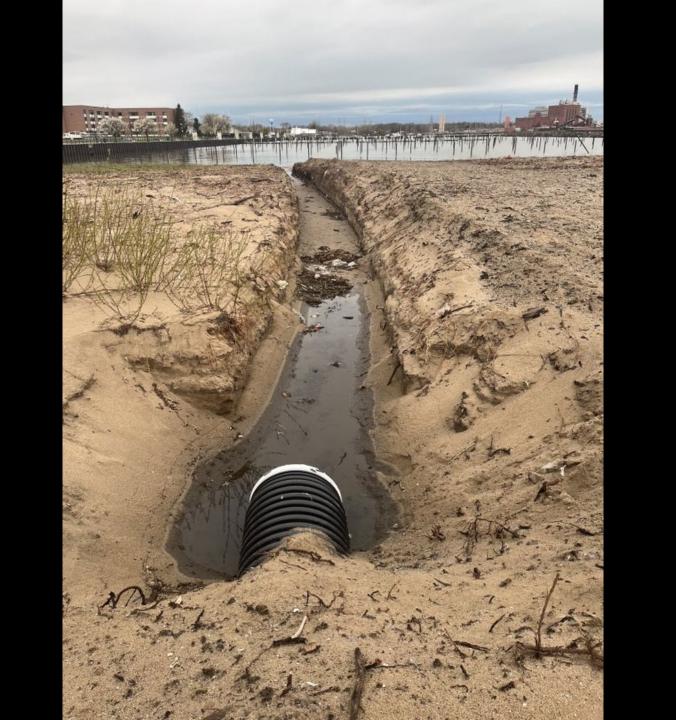


Engineered Harbor Wetland





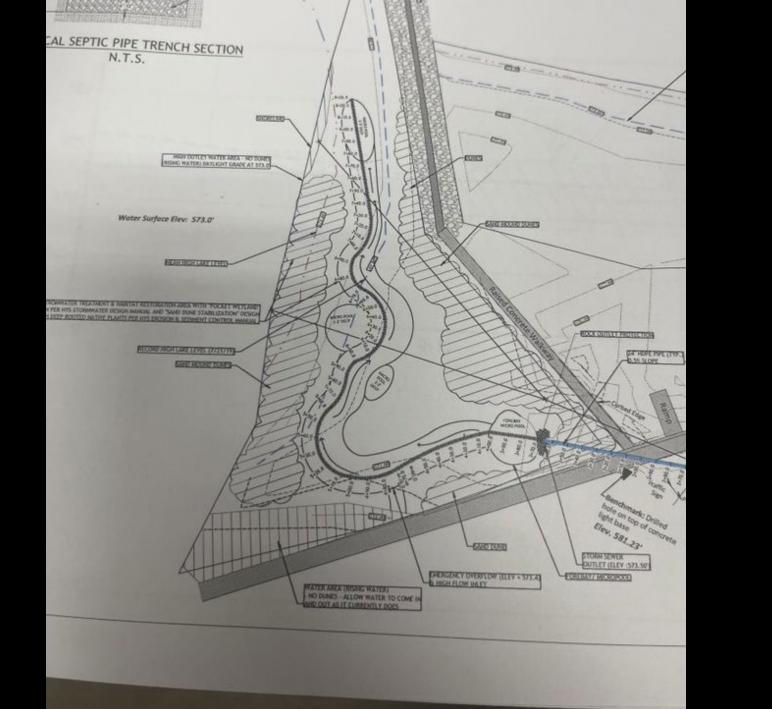






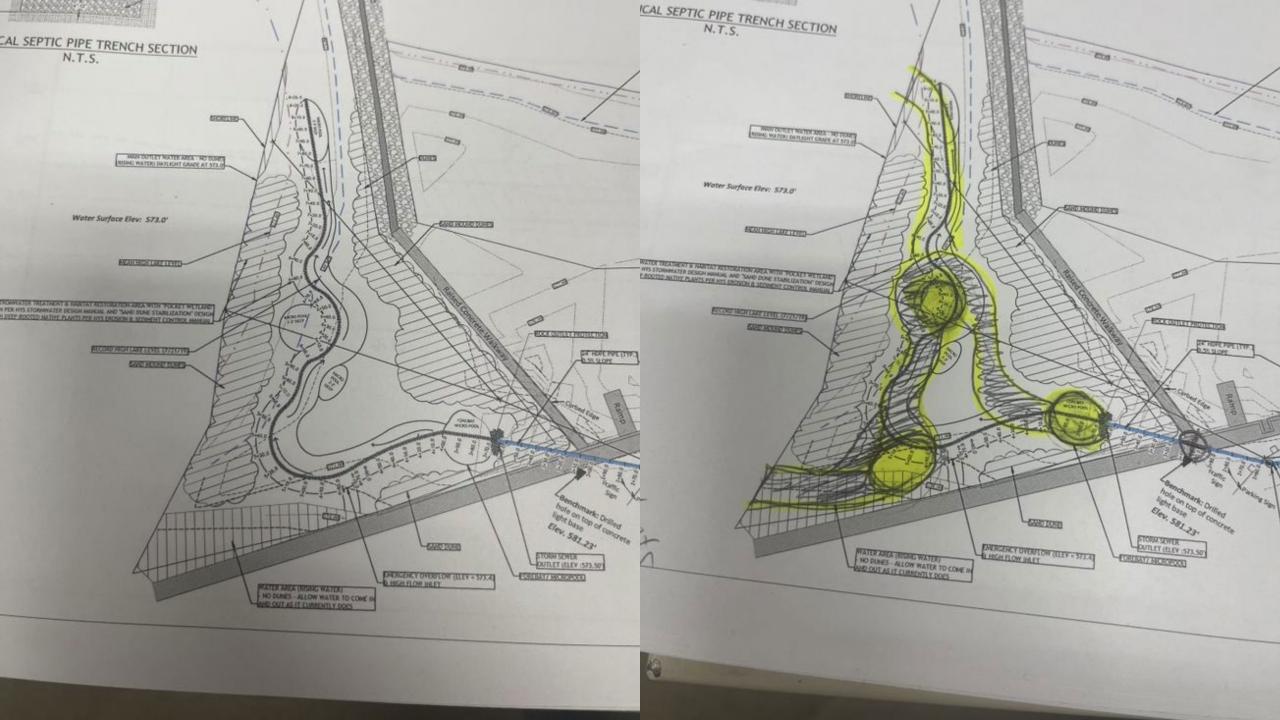
Nature-Based Solutions

- Nature-based Solutions <u>leverage nature</u> and the power of healthy ecosystems to protect people, optimize infrastructure and safeguard a stable and biodiverse future. IUCN (International Union for Conservation of Nature)
- Broadly, nature-based solutions are actions to protect, conserve, restore, and sustainably use and <u>manage ecosystems</u> in a way that addresses social, economic and environmental challenges while simultaneously benefiting human well-being and biodiversity. In other words, they are interventions that <u>use nature and the natural functions of healthy ecosystems</u> to tackle some of the most pressing challenges of our time. World Resources Institute























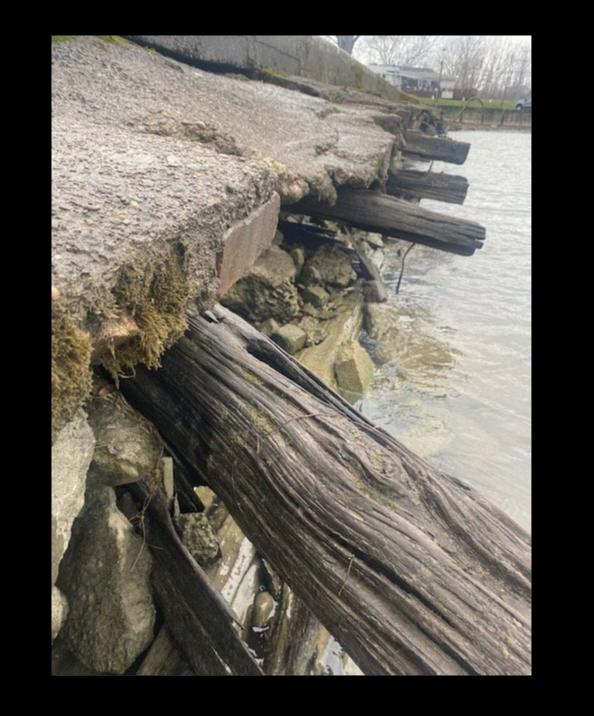


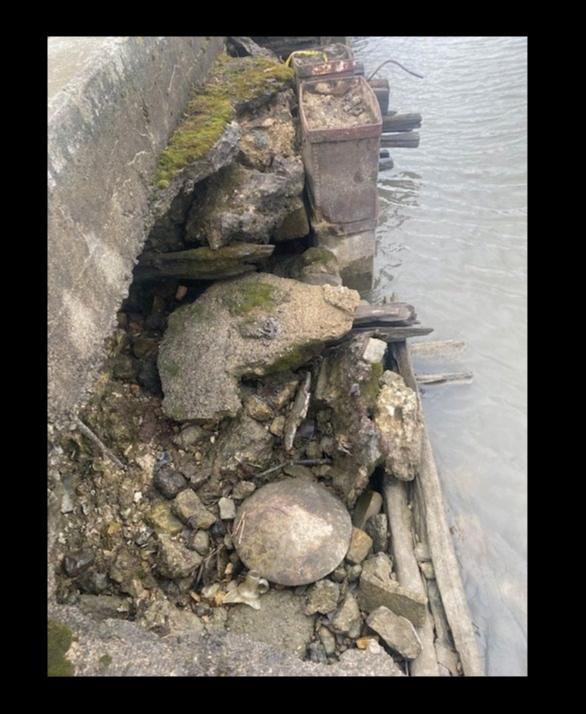


Lake Erie Shoreline

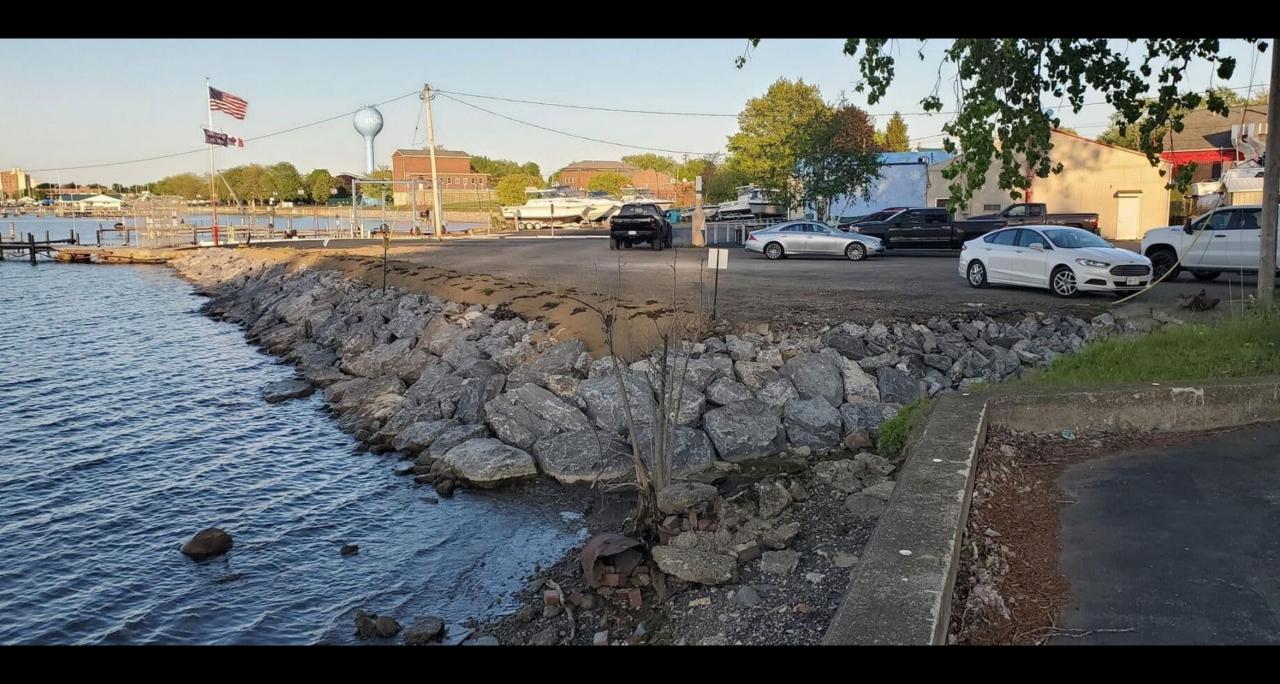
Bart's Cove Marina





















Lake Erie Shoreline

Narraway Property

















