



2024 AOC Habitat Restoration Monitoring Site Report Wetlands County Park

Report Prepared for: Saint Clair County

Project: Wetlands County Park

Project Completion Year: 2015

GLRI Investment: \$1,039,500

Funding Provided by: The Michigan Department of Environment, Great Lakes, and Energy (EGLE)

Owner: St. Clair County Parks & Recreation Commission

Monitoring Date: August 19, 2024

Report Prepared by: Friends of the St. Clair River

Report Date: December 1, 2024

Project Purpose: Historically an industrial brownfield, funding by EGLE restored nearly one mile of St. Clair River shoreline from Court St. at the northern boundary to Jenkins St. at the southern boundary. Wetlands County Park restoration site comprises the southern-most 3.5 acres of the project and 0.1 miles of St. Clair River shoreline. The hard-armored seawall was removed and replaced with large cement riprap and rocks along the shoreline, rocky breakwaters were installed to reduce the forceful wave action against the shore and provide habitat for aquatic species, and native shrubs and forbs were planted to increase the quality of the terrestrial ecosystem component of the shoreline restoration project. Three ponds were installed to act as bioretention wetlands of surface water runoff before entering the St. Clair River, and a walkway around the ponds including a bridge was installed for pedestrian passage. A Chronolog station was erected on the southern stanchion of the pedestrian bridge to act as a citizen science monitoring tool. Wetlands County Park was one of nine restoration sites along the St. Clair River to address the loss of fish and wildlife beneficial use impairment of the Area of Concern (AOC; Appendix 1, Map 1 and Map 2).

RECOMMENDED MAINTENANCE:

- Continued invasive species maintenance of Wetlands County Park is recommended. Without the current maintenance scheme, the site would quickly transform from a native plant ecosystem into a wasteland of thistle and phragmites which would degrade the ecosystem and effectively block the view and access to the river.

- Tree of heaven should be removed. This exotic invasive species has the capacity to produce hundreds of seeds and seedlings annually. The allelopathic nature of the plant prevents other species from thriving when found growing in close proximity, giving this tree a competitive advantage against the native species in the restoration area. Tree of heaven is also a preferred host plant for the invasive spotted lanternfly, which threatens Michigan’s multibillion-dollar agricultural industry.
- The current Chronolog station blends in with its surroundings and is not very visible to the public as it blends into its surroundings, nor does it offer any identification or education to its purpose. Updating the Chronolog station with additional educational signage to draw attention to its presence and purpose would likely bring more use by pedestrians.

EVALUATION CRITERIA

Friends of the St. Clair River annually monitors the St. Clair River AOC habitat restoration projects to assess their effectiveness and identify areas of enhancement or improvement. Each site is evaluated on five criteria: vegetation, habitat, human impact, erosion, and project maintenance. The criteria are given a score (Good, Fair, Poor) based on a habitat scorecard rubric (Appendix 2). This report includes our observations, photos (Appendix 3) and recommendations for our site visit on August 19, 2024.

EVALUATION OBSERVATIONS:

VEGETATION – Good

Overall vegetation was estimated at 80% native and 20% exotic/invasive. Native species present included a mixture of grasses, forbs, shrubs, and trees such as multiple coneflower species, wild bergamot, butterfly weed, big and little bluestem, Canada wild rye, staghorn sumac, dogwood, and basswood. Maintaining such native species helps increase the ecological integrity of this site for multiple species of terrestrial wildlife and increases shoreline stability as the extensive root systems help hold soil in place preventing erosion.

Exotic species present that requires regular maintenance include Canada thistle (plant is from Europe, not Canada), spotted knapweed, phragmites, and tree of heaven. All listed species exhibit aggressive growth patterns without natural competitors or herbivores to control their populations.

See Appendix 4 for the observed native and exotic vegetation list.

HABITAT - Good

The rocky shoreline and the wetland ponds seemed to be intact and functioning. The rocky

shoreline was installed to provide protection from heavy wave action from the St. Clair River and nursery habitat for small aquatic species. Although due to cool temperatures and high winds on the day of the site visit insects and songbirds were not observed, but ducks and geese typically use the shoreline habitat, as do other species of songbirds and insects.

The water level was lower than in previous years in each of the wetlands. Several logs were exposed providing basking habitat. Visible aquatic vegetation consisted of white water lilies, flat leaf pondweed, duckweed, and algae. Each of the ponds were surrounded by a combination of staghorn sumac, phragmites and cattails.

HUMAN USE - Good

The multi-use, non-motorized trail that bisects the park is part of the Bridge to Bay Trail and used by pedestrians daily. Very little trash/litter was evident, likely due to regularly placed and maintained trash receptacles. Some walking paths to the water were evident, but no visible erosion or excessive trampling were observed. An encampment was found along the shoreline, not immediately visible from the trail. Authorities were called and the encampment was later removed.

EROSION/HIGH WATER IMPACTS – Good

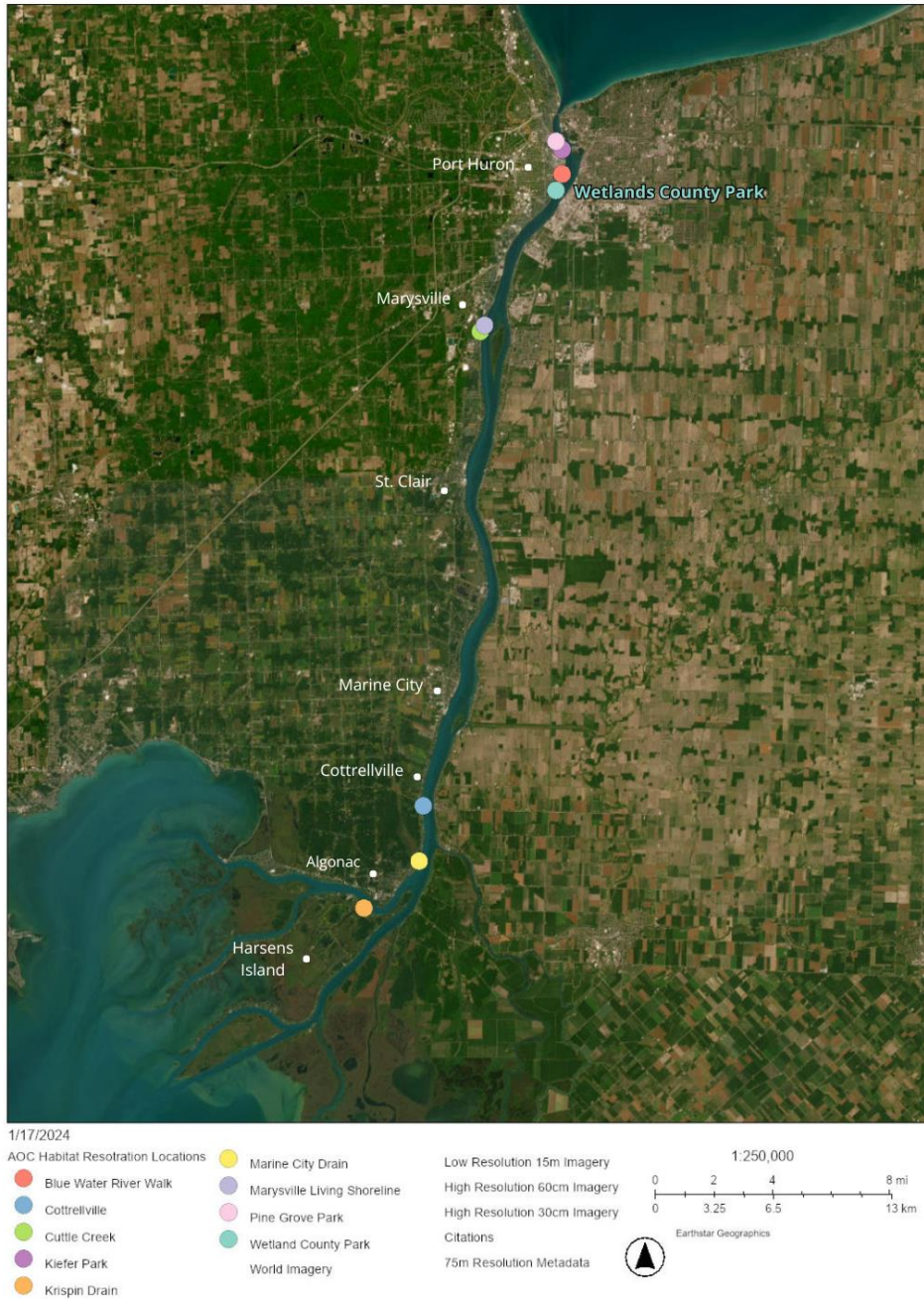
No shoreline erosion along the St. Clair River was evident at the site. The breakwater habitat structures and rock armored shoreline prevented such significant erosion impacts. The water level was low in each of the three ponds, which is unusual due to the recent heavy rains and wet season in general.

MAINTENANCE - Good

The Wetlands County Park habitat has been well maintained. The ratio of native species to invasive species, especially in comparison to other similar habitats without a management program in place, shows that regular restorative maintenance is keeping the ecology of this habitat thriving. Invasive species management is an ongoing task at this site, and there was evidence of Phragmites treatment between the middle and south ponds. Any mowing or vegetation trimming that wasn't directly association with vegetation management was limited to the area surrounding the pedestrian path and was performed to increase safety and visibility for users. Regular presence of St. Clair County Park staff, Friends of the St. Clair River staff, and community volunteers and their management efforts keep this area a thriving ecosystem and provide an open and safe environment for the public. The restoration signs are all in good condition, as is the Chronolog station.

Appendix 1: Maps

Map of Wetlands County Park in context to the AOC shoreline



Map 1. The Wetlands County Park AOC habitat restoration project is found along the upriver section of the St. Clair River in Port Huron, MI, as identified by the light blue marker on the map.



Map 2. The yellow polygon outlines the Wetlands County Park restoration site in Port Huron, MI, along the St. Clair River.

Appendix 2: Habitat Scorecard Rubric

Wetlands County Park

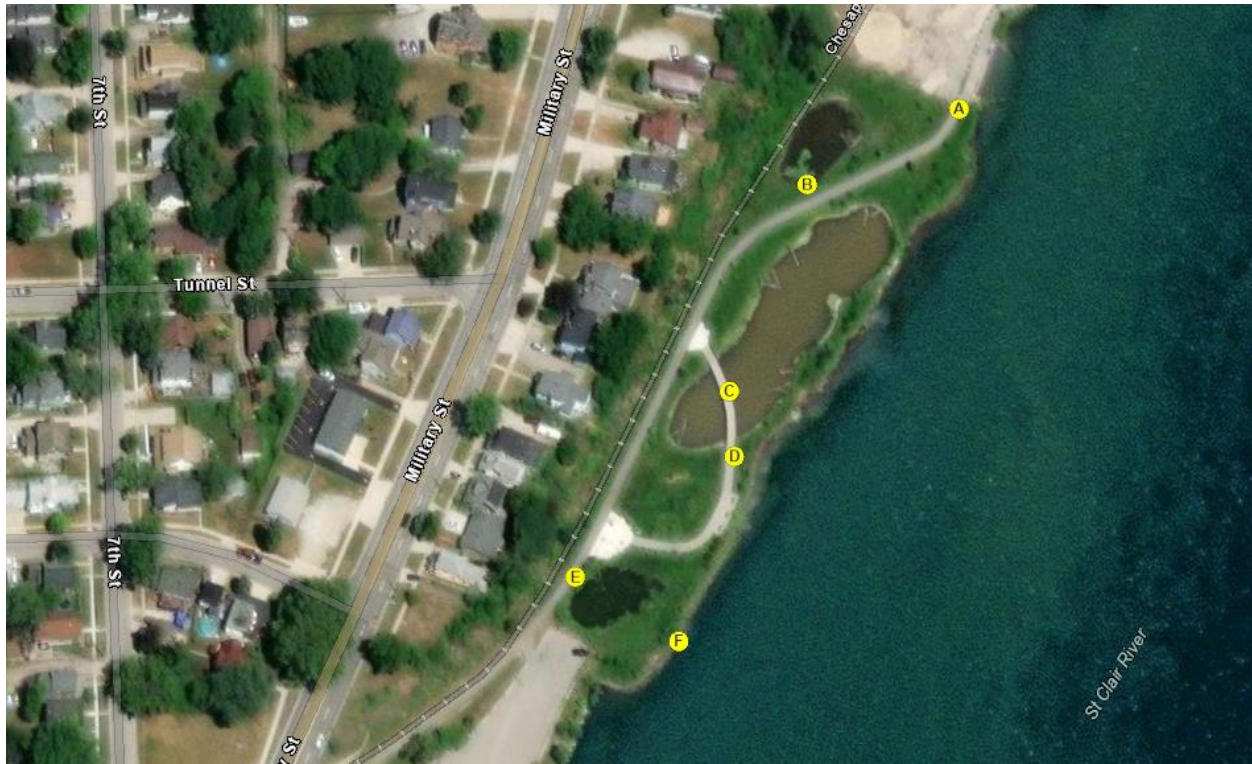
CATEGORY: GOOD	CRITERIA	SCORE	COMMENTS
Vegetation	80%+ native cover, 20%- invasive cover, few or no issues with excessive mowing or trimming of native vegetation.	X	Native vegetation was abundant at Wetlands County Park.
Habitat	Most features intact, abundant and diverse native wildlife observed.	X	The rocky shoreline seemed intact, preventing significant erosion and offering instream habitat to small aquatic species. Wetland ponds are in good condition.
Human use	Little trash, trampling, or vandalism observed, amenities intact, no safety concerns.	X	Very little trash/litter evident. Pedestrians use the walkway; no evidence of off-trail trampling was evident. An encampment was found but quickly removed.
Erosion/water level	Shoreline and upland areas intact without significant damage.	X	No erosion was evident at the site. Pond water level was low.
Maintenance	Project is well-maintained with dedicated funding, staff and technical guidance.	X	Evidence of a thorough habitat and trail maintenance schedule was evident by the ratio of native plants to invasive plants. Very little evidence of human-produced refuse.

CATEGORY: FAIR	CRITERIA	SCORE	COMMENTS
Vegetation	50-80% native cover, 20-50% invasive cover, some areas excessively mowed/trimmed or mowed too short.		
Habitat	Some habitat features missing or damaged, moderate number of native wildlife species observed.		
Human use	Some trash, trampling, or vandalism observed, amenities show minor damage, no safety concerns.		
Erosion/water level	Shoreline and upland areas mostly intact with little damage.		
Maintenance	Some attempts have been made at maintenance, or project is sporadically maintained.		

CATEGORY: POOR	CRITERIA	SCORE	COMMENTS
Vegetation	<50%- native, >50%+ invasive, several areas excessively mowed/trimmed or mowed too short.		
Habitat	Many features missing or damaged, low biodiversity or few or no native wildlife species observed.		
Human use	Trash, trampling or vandalism are evident, amenities damaged or missing, has safety concerns.		
Erosion/water level	Shoreline and upland areas severely eroded and/or damaged, engineering may be required to restore.		
Maintenance	Project is not well-maintained and has been progressively degraded since completion.		

Appendix 3: Photos

PHOTO POINT LOCATION MAP



Map 3. Locations of Wetlands County Park AOC habitat restoration photo points. Refer to Table 1 for a catalog of photos taken during the site visit on August 19, 2024.

Table 1: Catalog of photos taken for the annual AOC monitoring at Wetlands County Park on August 19, 2024.

Figure	Map Photo Location	Latitude	Longitude	Location Description
1	A	42.962934	-82.423484	Northern boundary of Wetlands County Park, photo taken shooting south
2	B	42.962710	-82.424102	Southern boundary of northern pond, shooting northward
3	C	42.962096	-82.424418	Mid-section of bridge over large middle pond; shooting northward
4	C	42.962096	-82.424418	Mid-section of bridge over large middle pond; shooting southward
5	D	42.961902	-82.424398	Chronolog Station on the bridge
6	D	42.961902	-82.424398	View from Chronolog station on bridge
7	E	42.961544	-82.425045	Southern pond; shooting east
8	F	42.961353	-82.424624	Shoreline at southern boundary of project area



Figure 1. View from northern boundary shooting southward. Native trees, shrubs, and forbs are visible on both sides of the path. Mowing the path edges is maintained for pedestrian safety and to maintain the longevity of the cement pathway. L. McFadden.



Figure 2. Southern boundary of northern pond, northward view. White water lilies are the predominant emergent aquatic vegetation. Staghorn sumac, phragmites, fleabane asters and goldenrod line the shoreline. P. Duhaime.



Figure 3. Mid-section of bridge over large middle pond; northward view. The water level was very low. P. Duhaime



Figure 4. Mid-section of bridge over large middle pond; southward view. The water level was very low, causing some basking logs to be out of the water. L. McFadden.



Figure 5. Chronolog Station on the bridge. This Chronolog station could use additional signage for enhanced visibility. L. McFadden.



Figure 6. View from Chronolog station. Photos taken from this Chronolog station are submitted to Wetlands County Park Chronolog timeline to observe changes in the ecosystem over time. L. McFadden



Figure 7. The surface of the southern pond is almost full of duckweed. Cattails, phragmites and staghorn sumac line the edges. L. McFadden.



Figure 8. Cement riprap lines the shoreline edges helping to prevent erosion from large waves and fast river currents while also providing habitat for aquatic fish and macroinvertebrates. Native plants, as shown in this photo, have large root systems that hold soil in place and maintain the integrity of the shoreline. L. McFadden.

Appendix 4. Vegetation Survey

Table 2. Observed native and exotic vegetation at Wetland County Park AOC habitat restoration site in Port Huron, MI. August 19, 2024.

NATIVE PLANTS

Common Name	Botanical Name
Basswood	<i>Tilia americana</i>
Big bluestem	<i>Andropogon gerardi</i>
Boxelder	<i>Acer negundo</i>
Bur cucumber	<i>Sicyos angulatus</i>
Butterfly weed	<i>Asclepias tuberosa</i>
Canada goldenrod	<i>Solidago canadensis</i>
Canada wild rye	<i>Elymus canadensis</i>
Cattail	<i>Typha latifolia</i>
Common milkweed	<i>Asclepias syriaca</i>
Common ragweed	<i>Ambrosia artemisiifolia</i>
Cottonwood	<i>Populus deltoides</i>
Dogwood	<i>Cornus</i> spp.
Evening primrose	<i>Oenothera biennis</i>
False Sunflower	<i>Heliopsis helianthoides</i>
Fragrant sumac	<i>Rhus aromatica</i>
Frost aster	<i>Symphyotrichum pilosum</i>
Giant ragweed	<i>Ambrosia trifida</i>
Hackberry	<i>Celtis occidentalis</i>
Hawthorn	<i>Crataegus</i> spp.
Jewelweed	<i>Impatiens capensis</i>
New England aster	<i>Symphyotrichum novae-angliae</i>
Ninebark	<i>Physocarpus</i> spp.
Pinnate coneflower	<i>Ratibida pinnata</i>
Purple coneflower	<i>Echinacea purpurea</i>
Raspberry	<i>Rubus</i> spp.
Red oak	<i>Quercus rubra</i>
Shrubby cinquefoil	<i>Dasiphora fruticosa</i>
Staghorn sumac	<i>Rhus typhina</i>
Stiff goldenrod	<i>Solidago rigida</i>
Switchgrass	<i>Panicum virgatum</i>
Virginia wild rye	<i>Elymus virginicus</i>
White waterlily	<i>Nymphaea odorata</i>
Wild bergamot	<i>Monarda fistulosa</i>
Willow	<i>Salix</i> spp.
Yarrow	<i>Achillea millefolium</i>
Yellow waterlily	<i>Nuphar</i> spp.

EXOTIC PLANTS

Common Name	Botanical Name
* Canada thistle	<i>Cirsium arvense</i>
Field bindweed	<i>Convolvulus arvensis</i>
* Japanese knotweed	<i>Reynoutria japonica</i>
Narrow-leaved cattail	<i>Typha angustifolia</i>
* Phragmites	<i>Phragmites australis</i>
Purple loosestrife	<i>Lythrum salicaria</i>
* Tree of heaven	<i>Ailanthus altissima</i>

*Indicates a high priority invasive species that should be removed.