



# U.S. Fish & Wildlife Service

## Green Bay Fish & Wildlife Conservation Office Lake Michigan Strategic Habitat Plan 2020 – 2024

The USFWS Green Bay Fish & Wildlife Conservation Office (GBFWCO) works in partnership with federal, tribal, state, county and local governments, private and non-governmental organizations, and land owners to conserve, protect, and enhance important aquatic habitats and species in the Lake Michigan basin.

The 2020 – 2024 Strategic Habitat Plan was developed to inform project selection for the USFWS *National Fish Passage Program* and the *National Fish Habitat Partnership* and to help the GBFWCO maximize conservation effectiveness and achieve outcomes that benefit Federal Trust Resources.

### GBFWCO Habitat Goals

We restore quality aquatic habitat within the Lake Michigan basin, provide technical assistance to support fisheries and conservation programs, work strategically across political and jurisdictional boundaries to restore, maintain and improve aquatic resources, and pro-actively address climate change. The following habitat goals align our work with national and partnership programs:

1. Conserve Aquatic Species
2. Conserve, Restore, & Enhance Aquatic Habitats
3. Manage Aquatic Invasive Species
4. Prioritize Tribal Trust & Subsistence Responsibilities
5. Enhance Recreational Aquatic Resources
6. Improve Data Collection & Sharing



**Priority Species**



**Focus Area Watersheds**

Priority species serve as conservation targets and aid in project selection. We developed a list of nine priority species considering the following factors:

- Federal trust resources;
- State listed status;
- Surrogate species that represent a guild, a priority ecosystem, or habitat features;
- Species listed in state management plans;
- Culturally significance species.

Subdividing the Lake Michigan basin allows us to direct and manage conservation work over a large area. Watersheds were prioritized by: priority species present in watershed, climate resiliency, number of partnership plans, and USFWS Plans.



### Focus Area Watersheds:

1. Muskegon - Pere Marquette
2. Grand - Maple - Thornapple
3. Menominee - Peshtigo - Oconto
4. St. Joseph - Kalamazoo - Black
5. Escanaba - Cedar - Sturgeon

### Priority Species Tier 1

Snuffbox Mussel, Lake Sturgeon, River Redhorse

### Priority Species Tier 2

Brook Trout, Northern Pike, Lake Whitefish

### Priority Species Tier 3

Longnose Sucker, Freshwater Mussels, Arctic Grayling

Although this focuses our efforts in specific watersheds and for specific species, the GBFWCO will continue to provide technical assistance and work across the basin and across habitat types to restore, protect, and conserve aquatic native species.

### Climate Impacts

Climate change is causing extreme weather across the globe and in the Great Lakes region, it is exacerbating non-climate stressors and accelerating the pattern of changes that detrimentally impact natural resources and economies. The GBFWCO Habitat program integrates practical actions to address climate change effects in conservation planning and implementation.

### Proactive Climate Planning

- Protect Key Ecosystem Features
- Ensure Connectivity
- Restore Structure and Function
- Support Evolutionary Potential
- Protect Refugia
- Reduce Non-Climate Stressors

### Conservation Implementation to Mitigate Climate Stressors

- Identify & Protect Coldwater Seeps
- Restore Flood Plain Connectivity & Natural Stream Sinuosity
- Increase Canopy Cover Along Waterways
- Remove Aquatic Connectivity Barriers
- Increase Vegetated Buffers & Reduce Surface Run-Off
- Protect & Restore Biodiversity to Support Evolutionary Potential

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