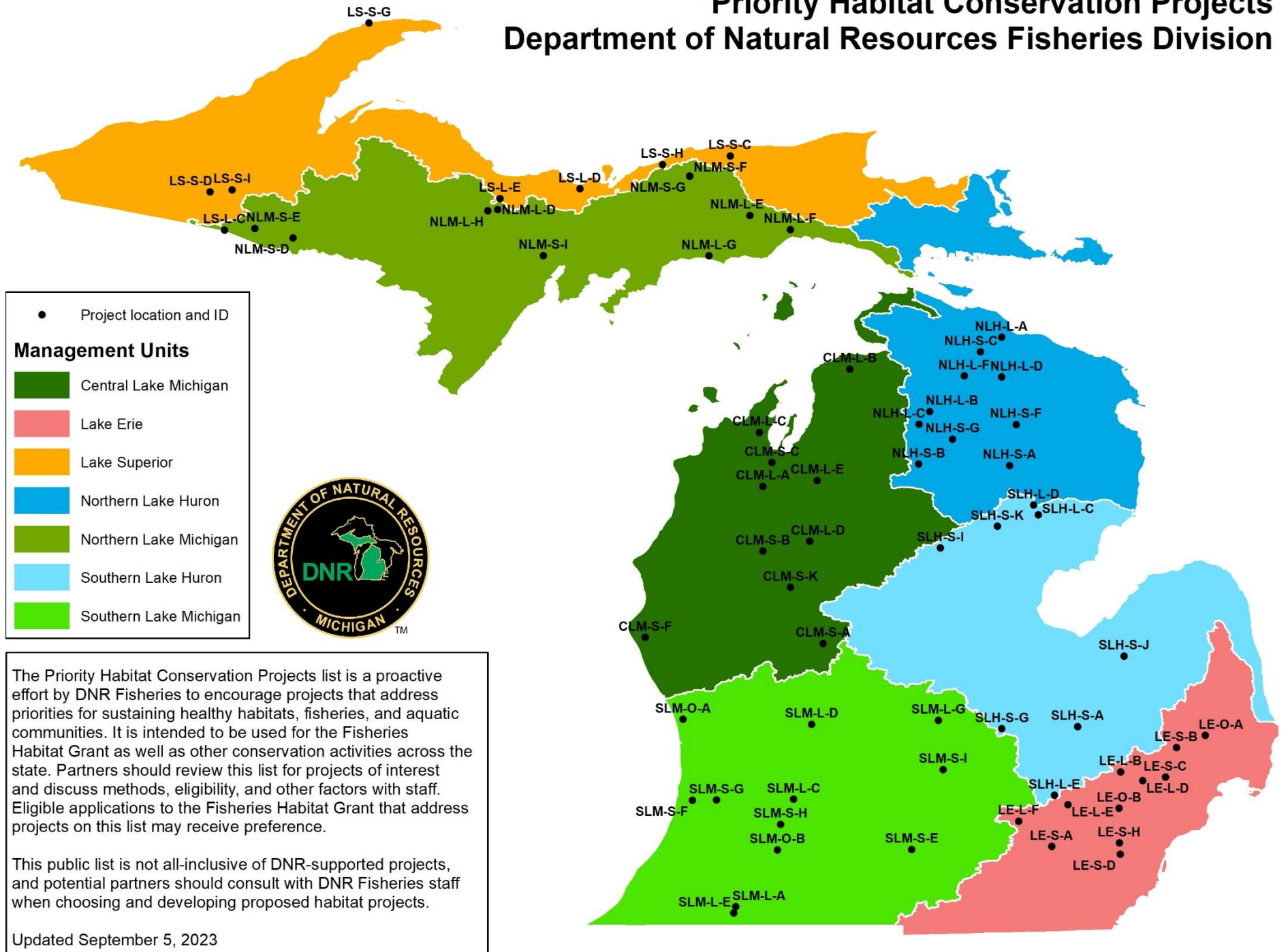


Priority Habitat Conservation Projects

Department of Natural Resources Fisheries Division



- Project location and ID

Management Units

- Central Lake Michigan
- Lake Erie
- Lake Superior
- Northern Lake Huron
- Northern Lake Michigan
- Southern Lake Huron
- Southern Lake Michigan



The Priority Habitat Conservation Projects list is a proactive effort by DNR Fisheries to encourage projects that address priorities for sustaining healthy habitats, fisheries, and aquatic communities. It is intended to be used for the Fisheries Habitat Grant as well as other conservation activities across the state. Partners should review this list for projects of interest and discuss methods, eligibility, and other factors with staff. Eligible applications to the Fisheries Habitat Grant that address projects on this list may receive preference.

This public list is not all-inclusive of DNR-supported projects, and potential partners should consult with DNR Fisheries staff when choosing and developing proposed habitat projects.

Updated September 5, 2023

Priority Habitat Conservation Projects List

Department of Natural Resources Fisheries Division

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The order in which Priority Habitat Conservation Projects are listed and their project IDs do not imply a ranking among projects. Project IDs may not be sequential due to changes in priorities or completion of past priorities.

Central Lake Michigan Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	CLM-L-A	Inland lakes Cisco evaluations	Land use practices, shoreline and watershed development, and aquatic vegetation control.	Determine presence, abundance, and trends in Cisco populations in waters where they were historically present.	Cisco	44.5301	-85.6865	Center point represents many lakes throughout the Management Unit.
Lake	CLM-L-B	Shoreline restoration project (Lake Charlevoix)	Development and armament of shoreline.	Nearshore habitat is critical to many fish species, amphibians, and reptiles. Restoring natural shoreline improves habitat, reduces nutrient inputs, and allows natural processes to occur.	Cisco, Walleye, Yellow Perch, Smallmouth Bass	45.27	-85.14	
Lake	CLM-L-C	South Lake Leelanau	Human development along shoreline.	Add fish habitat structures to specific locations within the lake to provide cover and potential spawning areas.	Walleye, Yellow Perch, Smallmouth Bass	44.87	-85.71	
Lake	CLM-L-D	Stone Ledge Lake Wetland Reconnection	Historical wetland fill.	Years ago, the mouth of a wetland connected to Stone Ledge Lake was filled in for vehicle travel, essentially cutting off the wetland from the lake. This project should remove the fill and restore connection to the wetland.	Northern Pike, Largemouth Bass, Black Crappie, Bluegill, Pumpkinseed Sunfish, Yellow Perch	44.1834	-85.3932	

Central Lake Michigan Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	CLM-L-E	Fife Lake Shoreline Habitat Improvement Project	Human development along shoreline.	Add woody habitat in the style of Wisconsin Fish Sticks, also some shoreline erosion control using bioengineering.	Bluegill, Pumpkinseed Sunfish, Largemouth Bass, Smallmouth Bass, Black Crappie, Yellow Perch, Northern Pike, Walleye	44.5673	-85.3441	
Stream	CLM-S-A	Altona Dam removal (Little Muskegon River)	Remnant dam in poor condition serving no purpose.	The dam impedes aquatic organism passage, disrupts the natural processes of woody debris and sediment transport, and increases stream temperature.	Brook Trout, Brown Trout, Rainbow Trout, White Sucker	43.5397	-85.3088	
Stream	CLM-S-B	Bank stabilization project (Pine River)	Sandy bluff is popular stop for paddlers and tubers and human traffic prohibits natural stabilization from occurring.	High bluff/bank is severely eroded and is a point source of added sediment and sand.	Brook Trout, Brown Trout, Rainbow Trout	44.1210	-85.6868	Center point of multiple sites in the vicinity
Stream	CLM-S-C	Boardman River dam removal habitat projects	The Brown Bridge, Boardman, and Sabin dams were removed on the mainstem of the Boardman River. Restored stream channel and new channel reaches lack suitable instream fish habitat and/or bank stabilization.	Support projects at all three sites that improve instream habitat and habitat within the stream corridor.	Brook Trout, Brown Trout, Lake Sturgeon, Lake Trout	44.6801	-85.6305	Center point of the former impoundments for Boardman Dam (44.694382, -85.624861), Sabin Dam (44.703709, -85.620514), and Brown Bridge Dam (44.647716, -85.500389).

Central Lake Michigan Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	CLM-S-F	Marshville Dam removal (Stoney Creek)	Marshville Dam is breached and crumbling. It is a safety hazard in its current state.	Remnant dam structure is hazardous to recreationalists, impedes access, and should be removed. The site is in a public park.	Brook Trout, Brown Trout and Steelhead	43.5775	-86.4296	
Stream	CLM-S-K	Nartron Dam Removal	Last remaining large dam in the Hersey River Watershed.	Large dam that warms the water temperatures and blocks all fish passage. Also, a lengthy culvert that runs under an airport runway should also be removed, in effect "daylighting" the stream.	Brown and Brook Trout	43.8927	-85.5139	

Lake Erie Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	LE-L-B	Large woody material and shoreline buffer restoration in Deer Lake	Shoreline development.	Loss of riparian buffer and in-water large woody debris, with a focus on lake littoral zones as identified in the MDNR Wildlife Action Plan.	Bluegill, Largemouth Bass, Northern Pike, Cisco, forage fish, herpetofauna, & aquatic insects	42.73	-83.43	Point represents centroid of 138-acre lake in Independence Twp., Oakland Co
Lake	LE-L-D	Shoreline softening and bioengineered shoreline protection on publicly owned inland lake parcels in Southeast Michigan (Cass Lake, Stony Creek Lake, Pontiac Lake)	Conversion of natural shorelines to hardened shorelines with riprap or vertical seawalls and erosion.	Loss of shoreline vegetation, wave rebound, and the loss of shallow water habitats and natural transition between land and water. Restore and/or protect naturally sloped, vegetated shorelines through demonstration projects to increase visibility and outreach opportunities surrounding this type of shoreline protection.	Pugnose Shiner, Blanchard's Cricket Frog, Bluegill, herptile species, Black Crappie, Northern Pike, forage fishes	42.6754	-83.2926	Center point among three focus lakes (Cass Lake, Stony Creek Lake, & Pontiac Lake)

Lake Erie Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	LE-L-E	LE-L-E Watershed Conservation in Southeast Michigan Cisco lakes (Appleton, Blind, Cedar Island)	Nutrient inputs, sediment erosion and resuspension, and shoreline development.	Eutrophication, loss of deep-water oxygen, and sedimentation of nearshore spawning habitats. Identify major sources of nutrient and sediment inputs in a lake's watershed. Design a plan and implement it to address those inputs and/or resuspension.	Cisco, Northern Pike, Bluegill	42.523	-83.764	Point represents approximate center point of these 3 lakes.
Lake	LE-L-F	Joslin Lake habitat preservation	Undeveloped portion of shoreline at high risk of development.	Shoreline preservation.	Blanchard's Cricket Frog, Blanding's Turtle, Yellow Perch, Bluegill	42.4204	-84.0751	Point represents middle of shoreline transect
Other	LE-O-A	Black River and Belle River wetland restoration	Past agriculture and drainage practices.	Wetland connection to the river that helps filter and slow surface water from entering the stream.	Northern Pike, Channel Catfish, Smallmouth Bass, Steelhead, Eastern Sand Darter, mussel spp.	42.9598	-82.8964	Reference point for a larger area in two watersheds; map of entire area available upon request
Other	LE-O-B	Reconnection of floodplain wetlands	Draining or filling in of wetlands and urban development.	Loss of connectivity to floodplain wetlands degrades habitat for fish and wildlife habitat. Implement one project reconnecting wetlands to serve as a demonstration in the Lake Erie watershed.	Northern Pike, Eastern Fox Snake, herptile species, Yellow Perch, other fish species	42.2600	-83.8659	Wetlands dispersed throughout the Management Unit; this point represents the center.

Lake Erie Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	LE-S-A	Habitat assessments for Michigan's Wildlife Action Plan focal species in warmwater streams	Channelization, irrigation, loss of riparian buffers, and fragmentation.	Identify and increase understanding of key habitats, presence or absence of focal species, and identify areas where on the ground conservation work would be most effective for areas identified as high and moderate conservation priority in Michigan's Wildlife Action Plan.	Wavy-rayed Lamp Mussel and fish host species, Smallmouth Bass, Northern Pike, Southern Redbelly Dace, Redside Dace	42.2600	-83.8659	South Branch Raisin River, Saline River, Bean Creek, Tiffin River, Stoddard Drain, Johnson Creek. Streams dispersed throughout the Management Unit; this point represents the center.
Stream	LE-S-B	Improve connectivity and aquatic organism passage in North Branch Clinton River	Perched and/or improperly sized culverts.	Identify road crossings that are limiting fish passage and natural flow regimes in the headwaters area upstream of Almont, MI.	Smallmouth Bass, Logperch, Gizzard Shad, White Sucker, White Bass, Emerald Shiner, Brook Trout, Darter spp., Sucker spp.	42.8830	-83.0779	Fisher Rd. crossing of the North Branch Clinton River, in the headwaters area.
Stream	LE-S-C	Redesign and construction of Paint Creek Trail Bridge near Tienken Road	In-stream pilings which allow unnatural buildup of nuisance log jams.	Rebuild bridge to clear span stream and allow unrestricted flow of stream to reduce erosion and restore aquatic organism passage.	Brown Trout, Rock Bass, Black Crappie, White Sucker, Mottled Sculpin, forage fishes	42.6971	-83.1493	

Lake Erie Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	LE-S-D	Restoring connectivity and aquatic organism passage in the Huron River Watershed	Dams block fish passage, disrupt flow of sediment and woody habitat, and warm stream temperatures.	Restore/improve aquatic organism passage and/or natural connectivity at Flat Rock Dam and improve river connectivity and natural flow regime at Peninsular Dam.	Snuffbox mussel, Elktoe mussel, Purple Wartyback mussel, Wavy-rayed Lampmussel, Logperch, Walleye, Smallmouth Bass, Lake Sturgeon, Eastern Sand Darter, Spotted Sucker	42.2112	-83.4347	Center point of the Flat Rock Dam (42.097289, -83.295258) and Peninsular Dam (42.256126, -83.624146)
Stream	LE-S-H	Improve connectivity and fish passage in the Rouge River	Perched and/or improperly sized culverts.	Identify road crossings that are limiting fish passage and natural flow regimes, and repair perched culverts and other obstacles to fish passage.	Smallmouth bass, logperch, gizzard shad, white sucker, white bass, emerald shiner, freshwater mussels	42.2819	-83.4374	Approximate center point of Lower Watershed

Lake Superior Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	LS-L-D	Au Train Lake riparian improvements (Phase 2)	Shoreline development by riparian owners has decreased the amount of large woody habitat.	In 2023, a total of 90 woody structures were installed in Au Train Lake. At 830 acres, Au Train Lake would benefit from additional woody structure to approach natural levels of 140 pieces/ km of shoreline.	Yellow Perch, Centrarchid spp., Cyprinid spp.	46.4047	-86.8421	

Lake Superior Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	LS-L-E	Big Trout Lake riparian restoration	Shoreline development by riparian owners has decreased the amount of large woody habitat.	Loss of woody habitat nearshore has impacted fish community. Installation of Fish Sticks (felled trees nearshore) and brush shelters would benefit fish community and functionality of the Big Trout Lake ecosystem.	Centrarchid spp., Brown Trout, Cyprinid spp.	46.3442	-87.3450	
Lake	LS-L-C	Wild Rice awareness for Lac Vieux Desert flowage	Boat activity within the wild rice beds has detrimental results to these plants. Increased outreach and awareness, such as maintaining warning buoys, would potentially reduce disturbance to wild rice beds.	Develop public education materials or program to address degradation of wild rice beds.	Wild rice. Multiple fish species will also benefit from protection of nursery habitat.	46.1464	-89.0828	
Stream	LS-S-C	Sucker River- Road stream crossings and habitat	Historical logging practices combined with poorly organized instream habitat improvements (40 years ago) have accelerated the natural downstream migration of the Sucker River.	Sedimentation, material movement, and floodplain connectivity. Channel is incised.	Steelhead, Longnose Sucker, Common Sucker, Brook Trout, Coho Salmon	46.6124	-85.8945	Center point of three crossings: H-58 crossing (46.662320, -85.869225), Harvey Creek crossing (46.580488, -85.886598), Klondike Creek (46.594537, -85.927750)

Lake Superior Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	LS-S-D	Paulding Pond Dam removal	Aged, sediment filled dam located on headwaters of a coldwater trout stream.	Remove dam to improve water quality, aquatic organism passage, sediment and wood transport, and connectivity.	Coldwater stream species such as Brook Trout, dace spp., darter spp., sculpin spp.	46.3854	-89.1743	
Stream	LS-S-G	Restoring Connectivity on Eliza Creek	Non-functioning dam that is drawn down and two or three perched culverts.	Lack of connectivity with the Great Lakes and impaired sediment transport.	Brook Trout, King Salmon, Coho Salmon, Steelhead	47.4506	-88.1716	
Stream	LS-S-H	Lowney Creek Dam Removals	A series of four dams have impounded sediment, warmed the water, and isolated biological communities. A dam removal feasibility study was conducted by USACE that examined the sediment stored behind each of the dams, the potential for sediment mobilization if the dams are removed, and the likely downstream effects of dam removal.	Loss of connectivity and sediment transport.	Brook Trout	46.5574	-86.3197	

Lake Superior Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	LS-S-I	Calderwood Dam Removal	This impoundment no longer supports a trout fishery, for which was the original purpose when the dam was constructed. The dam blocks upstream and downstream movement of aquatic organisms in Trout Creek. The shallow impoundment discharges warm water into a cold-water trout stream throughout the summer.	The removal of this dam will improve stream function, natural sediment movement, and thermal characteristics of the stream.	Brook Trout	46.3995	-89.0359	

Northern Lake Huron Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	NLH-L-A	Aquatic plant status and trend assessment	Aquatic plant treatments and invasions have changed aquatic macrophyte species composition and distribution.	Document changes in plant communities so that potentially in the future when restoration practices are practicable, we will have baseline information on what was in our lakes and can better understand how invasive species and human activities changed the species assemblage.	Aquatic plant community, and by extension all lake fishes	45.4699	-84.1804	Center point represents many lakes throughout the Management Unit.

Northern Lake Huron Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	NLH-L-B	Reconnecting Dixon Lake to historic wetlands	Filling of former connection of lake to an associated wetland.	Habitat diversity was reduced when former shallow, nursery areas were permanently segregated from the lake proper by filling of the wetland connection.	Reconnecting potential productive nursery habitat to lake proper to benefit marsh-spawning fishes and all fish species.	45.0016	-84.635	
Lake	NLH-L-C	Reconnecting Otsego Lake to historic wetlands	Filling of former connection of lake to an associated wetland.	Habitat diversity was reduced when former shallow, nursery areas were permanently segregated from the lake proper by filling of the wetland connection.	Northern Pike spawning habitat (and other marsh spawners) reconnecting potential productive nursery habitat to lake proper to benefit all fish species.	44.9204	-84.7013	
Lake	NLH-L-D	Tomahawk Creek Flooding Dam, levee, and riser structure restoration	Dam managed by Fisheries Division that is reaching the end of its life at this moderate sized impoundment and has been suggested for renovation or removal. Preference is to renovate dam to retain popular fishery and campground.	Complete dam renovation.	Largemouth Bass, Smallmouth Bass, Bluegill, Crappie, Pumpkinseed Sunfish, Yellow Perch	45.2185	-84.1802	
Lake	NLH-L-F	Cornwall Dam renovation	Dam managed by Fisheries Division that is reaching end of viable life and needs repair.	Complete dam renovation would allow the abundant recreational opportunities this impoundment provides to continue well into the future.	Bluegill, Largemouth Bass	45.2261	-84.4160	

Northern Lake Huron Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	NLH-S-A	Mio Dam improvements- Au Sable River	The dam continues to hinder aquatic organism passage and prevents connection of high-quality water up and downstream. The dam also creates an impoundment which warms up the river considerably below Mio and does not allow the trout population and fishery to reach its full potential.	Work with Consumers Energy to pursue dam removal options, aquatic organism passage options, or additional options for coolwater releases.	Brown Trout, Rainbow Trout	44.6610	-84.1322	
Stream	NLH-S-B	Grayling Hatchery restoration and dam removal	The East Branch of the Au Sable River has been highly impacted at this site by the long-term presence of a fish hatchery with an associated water control structure that impairs aquatic organism passage.	Complete removal of the barrier and restoration of the altered stream channel at this publicly accessible location can serve as an educational tool for stream restoration in addition to the tangible benefits to the Au Sable system.	Brown Trout, Brook Trout	44.6703	-84.7054	
Stream	NLH-S-C	Kleber Dam and Tower Dam removals	Critical aquatic organism passage (Lake Sturgeon, Walleye) and sediment movement on the Black River remains hindered by these structures.	Work with Tower Kleber Limited Partnership to pursue dam removal, as justified in the Black Lake Sturgeon Management Plan.	Lake Sturgeon, Walleye, Sucker spp.	45.3770	-84.3145	Center point of the Tower Dam (45.362437, -84.295853) and Kleber Dam (45.391608, -84.333055)

Northern Lake Huron Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	NLH-S-F	Development of sediment rating curve for northern Michigan groundwater-fed streams.	Excessive sand in northern Michigan trout streams.	To properly prioritize stream habitat projects that are intended to improve trout populations in northern Michigan streams by attempting to address excess in-stream sediment transport and deposition, it is advisable to better understand the current sediment budgets of these streams and the factors that govern them.	Brook Trout, Brown Trout, Rainbow Trout	44.92	-84.09	Northern Lower Peninsula
Stream	NLH-S-G	Twin Bridge road crossing replacement, North Branch Au Sable River	This road crossing continues to be an issue with two perched culverts spaced widely apart. Its influence on the stream above and below the crossing is evident.	Replacing the crossing with a correctly sized and located opening will allow the stream to function in a more natural manner, helping to address the accumulation of sand above the crossing.	Brook Trout, Brown Trout	44.8275	-84.4905	

Northern Lake Michigan Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	NLM-L-D	Aquatic Plant Community Status and Trends Assessment - Marquette County	Unknown. Lakes are not known to have invasive aquatic plant (e.g., EWM) infestations at this time.	Aquatic plant community surveys have never been completed on the waters of interest in Marquette Co. (Big Shag Lake, Little Shag Lake, Little/Mehl lakes, Johnson Lake, Bass Lake (East)) to document natural community species complex, abundance, and spatial distribution.	Northern Pike, Walleye, Smallmouth Bass, Largemouth Bass, Panfish, minnow species, other fishes	46.2748	-87.3608	Point represents centroid of lakes listed

Northern Lake Michigan Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	NLM-L-E	Aquatic Plant Community Status and Trends Assessment - Luce and Mackinac counties	Unknown. Lakes are not known to have invasive aquatic plant (e.g., EWM) infestations at this time.	Aquatic plant community surveys have never been completed on the waters of interest in Luce and Mackinac Co. (North, Big, and South Manistique lakes) to document natural community species complex, abundance, and spatial distribution.	Northern Pike, Walleye, Smallmouth Bass, Largemouth Bass, Panfish, minnow species, other fishes	46.2371	-85.7706	
Lake	NLM-L-F	Aquatic Plant Community Status and Trends Assessment - Mackinac County	Unknown. Lakes are not known to have invasive aquatic plant (e.g., EWM) infestations at this time, except for Milakokia Lake.	Aquatic plant community surveys have never been completed on the waters of interest in Mackinac Co. (Millecoquins Lake, Milakokia Lake, Brevoort Lake) to document natural community species complex, abundance, and spatial distribution.	Northern Pike, Walleye, Smallmouth Bass, Largemouth Bass, Panfish, minnow species, other fishes	46.1479	-85.5129	
Lake	NLM-L-G	Gulliver Lake Shoreline Large Woody Habitat Rehabilitation	Long-term removal of shoreline woody material due to residential development.	Installation of large woody habitat in nearshore area to an abundance similar to an undeveloped lake.	Northern Pike, Smallmouth Bass, Yellow Perch, minnow species	45.9835	-86.0279	
Lake	NLM-L-H	Johnson Lake Shoreline Large Woody Habitat Rehabilitation	Long-term removal of shoreline woody material due to residential development.	Installation of large woody habitat in nearshore area to an abundance similar to an undeveloped lake.	Northern Pike, Smallmouth Bass, Yellow Perch, Bluegill	46.2659	-87.4223	
Stream	NLM-S-D	Iron River habitat enhancement	Impacts from historic mining and logging practices and runoff from ORV trail.	Add habitat to address lack of instream wood, riffles, pools, and minimal riparian buffer areas.	Brook Trout	46.0958	-88.6502	
Stream	NLM-S-E	Cooks Run Trout Hatchery Infrastructure Removal	Abandoned hatchery infrastructure located on a trout stream is causing sedimentation and increased plant growth at the site and downstream.	Remove the hatchery raceways, reconstruct the stream reach to more natural conditions and enhance trout overall habitat.	Brook Trout	46.1558	-88.8925	

Northern Lake Michigan Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	NLM-S-F	Stanley Lake Dam Removal (Little Fox River)	Dam blocks fish passage, disrupts flow of sediment and woody habitat, and warms stream temperatures.	Remove the dam and restore the stream in the former impoundment.	Brook Trout	46.4853	-86.1486	
Stream	NLM-S-G	Little Fox River Off Road Vehicle Crossing	Off road vehicles fording stream and associated erosion of streambanks.	Restoration of the stream and installation of a bridge to provide off road vehicle passage without disturbing the stream.	Brook Trout	46.4853	-86.1486	
Stream	NLM-S-I	Tacoosh River Headwater Reaches	Improper road-stream crossings.	Replace perched culverts with bottomless culverts or bridges.	Brook trout, native minnow species	45.9839	-87.0720	

Southern Lake Huron Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	SLH-L-C	Sage Lake Fish Habitat	Development, vegetation removal, and lack of woody habitat.	Shoreline softening, littoral plantings, and fish habitat structures.	Yellow Perch, Walleye, Bluegill, Pumpkinseed Sunfish, Black Crappie, Largemouth Bass, Smallmouth Bass, Northern Pike, Rock Bass	44.3511	-83.9509	
Lake	SLH-L-D	Rifle Lake Riparian Restoration	Development, shoreline hardening, increased nutrient inputs from residential properties.	Bioengineered shoreline and buffer strips should be installed to address riparian degradation.	Yellow Perch, Walleye, Bluegill, Pumpkinseed Sunfish, Black Crappie, Largemouth Bass, Northern Pike, Rock Bass	44.4117	-83.9796	

Southern Lake Huron Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	SLH-L-E	Lake Chemung Riparian Restoration	Development, shoreline hardening, increased nutrient inputs from residential properties.	Bioengineered shoreline and buffer strips should be installed to address riparian degradation.	Yellow Perch, Walleye, Bluegill, Pumpkinseed Sunfish, Black Crappie, Largemouth Bass, Northern Pike, Rock Bass, Redear Sunfish, Warmouth	42.5830	-83.8472	
Stream	SLH-S-A	Flint River connectivity and shoreline softening	Dams and shoreline hardening due to urbanization.	Aquatic organism passage through dam removal and shoreline softening.	Walleye, Smallmouth Bass, Lake Sturgeon, Sucker spp.	43.0151	-83.7022	Center of larger site along the developed portions of the Flint River
Stream	SLH-S-G	Owosso/ Corunna connectivity	Weirs and causeway impeding aquatic organism passage for resident and migratory fish species.	Remove aquatic organism passage obstructions in Corunna/Owosso corridor of Shiawassee River.	Smallmouth Bass, Walleye, Lake Sturgeon, Sucker spp.	43.0023	-84.1810	Center point of upstream weir (42.99798, -84.1743), middle weir (43.00184, -84.18738) and downstream weir (43.00723, -84.18147), 42.98836, -84.0926 (Meridian Brick causeway)
Stream	SLH-S-I	North Branch Cedar River road crossing at Gladwin Field Trial Area	Beaver activity and improper road crossing infrastructure.	Sedimentation, channel widening, and beaver activity.	Brook Trout, Brown Trout	44.1411	-84.5669	

Southern Lake Michigan Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	SLH-S-J	Cass River Caro Dam – Fish Passage Feasibility	Non-operational dam.	Impairments include lack of fish passage, impacted flow regime, and unnatural sedimentation. This dam is no longer functional. A feasibility study is needed to evaluate the options, costs, and tradeoffs for all options including dam repair and reservoir rehabilitation, dam modification for fish passage, or dam removal.	Walleye, Smallmouth Bass, Logperch, White Sucker, Lake Sturgeon	43.4600	-83.4091	
Stream	SLH-S-K	Rifle Creek Fisk Dam Removal	Non-operational dam.	Impairments include lack of fish passage, impacted flow regime, and unnatural sedimentation.	Brown Trout and Brook Trout	44.2776	-84.2078	
Lake	SLM-L-A	Birch Lake watershed rehabilitation	Increased nutrient inputs from residential and agricultural properties.	Runoff of nutrient-rich water from residential properties adjacent to the lake and agricultural land within the watershed. This lake supports a remnant Cisco population that is threatened by high levels of shoreline and watershed disturbance.	Cisco, Rainbow Trout	41.88	-85.86	
Lake	SLM-L-C	Lime Lake watershed protection	Lakeshore development and increased nutrient inputs from residential properties.	Potential for accelerated eutrophication which would threaten the existing Cisco population. Conservation easements* would protect the portion of the shoreline that currently is open for development.	Cisco	42.5582	-85.4939	
Lake	SLM-L-D	Murray Lake watershed and littoral zone conservation	Increased nutrient inputs from residential and agricultural properties and loss of natural shorelines due to seawall construction.	Accelerated eutrophication which threatens the existing Cisco population. Loss of nearshore vegetation which is critical habitat for Pugnose Shiner and important game species.	Cisco	43.03	-85.38	

*Conservation easements are not currently eligible for funding from the Fisheries Habitat Grant, but they may be eligible in future grant cycles.

Southern Lake Michigan Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Lake	SLM-L-E	Shavehead Lake watershed protection or rehabilitation	Increased nutrient inputs from residential and agricultural properties.	Runoff of nutrient-rich water from residential properties adjacent to the lake and agricultural land within the watershed. This lake supports a strong Cisco population which is threatened by high levels of shoreline and watershed disturbance. Impairments could be addressed through installation of best management practices or protection (e.g., conservation easements*) on currently undeveloped lakefront parcels.	Cisco	41.84	-85.87	
Lake	SLM-L-G	Clinton Lakes Habitat Improvement	Historic sand mine lakes with little vegetation or habitat features.	Creation of a more defined littoral zone and establishment of native vegetation.	Rainbow Trout, Bluegill, Largemouth Bass (two separate lakes)	43.0548	-84.5807	
Other	SLM-O-A	Grand River bayous and wetland protection and rehabilitation	Draining of wetlands, residential and urban development in the riparian zone, and installation of undersized or perched culverts.	Loss of wetlands and disrupted connections between the Grand River and off-channel bayous and wetlands. The Ottawa County portion of the Grand River watershed was identified as a priority conservation area in both the Big Rivers and the Great Lakes Marsh and Inland Emergent Wetlands sections of the Wildlife Action Plan. Impairments could be addressed through protection (e.g., conservation easements*) of existing high-quality wetlands, wetland restoration, or replacement of undersized culverts.	Northern Pike, Muskellunge, Yellow Perch, and Spotted Gar	43.0615	-86.1904	Center point of a larger site; map of entire area available upon request

**Conservation easements are not currently eligible for funding from the Fisheries Habitat Grant, but they may be eligible in future grant cycles.*

Southern Lake Michigan Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Other	SLM-O-B	Portage Creek Basin wetland protection and rehabilitation	Drainage of wetlands for residential and urban development.	Loss of wetlands. Impairments can be addressed through protection of existing high-quality wetlands, wetland creation, or restoration of historic wetlands. Existing wetlands provide habitat for Eastern Massasauga and other threatened and endangered species.	Brown Trout and Smallmouth Bass	42.2392	-85.5956	Center point of a larger site; map of entire area available upon request
Stream	SLM-S-E	Albion dams: removal or aquatic organism passage	There are two dams on the South Branch Kalamazoo River and three dams on the North Branch Kalamazoo River.	The existing dams block upstream aquatic organism passage. The College Dam on the North Branch splits the flow between the historic channel and a constructed mill race which has failing seawalls. The dams interfere with downstream transport of sediment, nutrients, and large woody debris. The dams also create a safety hazard for paddlers and a kayaker drowned at one of the dams on the North Branch in 2019.	Smallmouth Bass, sucker spp., and mussel spp.	42.2408	-84.7485	Center point of five structures
Stream	SLM-S-F	North Branch Black River rehabilitation	Historic dredging and channelization near and within the Allegan State Game Area – Fennville Farm Unit.	The river is essentially a ditch with tall, steep banks. It lacks floodplain connectivity, sinuosity, coarse woody structure, riffles, and pools.	Smallmouth Bass, Walleye, and Northern Pike	42.5499	-86.1311	Center point of a larger site; map of entire area available upon request
Stream	SLM-S-G	Swan Creek aquatic organism passage/dam removal	Two dams exist at 118th Ave and 121st Ave that are impacting trout populations.	The dams segment this coldwater fishery preventing fish migration and the impoundments warm water temperatures. Sediment and wood movement is disrupted by both dams.	Brown Trout, Steelhead, Coho Salmon, and Chinook Salmon	42.5523	-85.9805	118th Ave. Dam. 121st Ave. Dam is downstream 2 miles.

Southern Lake Michigan Management Unit (continued)

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
Stream	SLM-S-H	Elijah Root Dam removal on Portage Creek	Remnants of an old mill dam remain in the river.	The existing structure is a barrier to fish passage, interferes with sediment and nutrient transport, impounds high gradient habitat, and increases summer water temperatures in downstream reaches.	Brown Trout	42.4002	-85.5756	
Stream	SLM-S-I	North Lansing Dam Removal or Modification	Existing dam that no longer is used for hydropower production.	The existing structure is a barrier to fish passage, interferes with sediment and nutrient transport, impounds high gradient habitat, and increases summer water temperatures in downstream reaches. Existing fish ladder only passes salmonids and is even less efficient now that the gates on the dam are not functional.	Smallmouth Bass, Coho Salmon, Steelhead, and mussel spp.	42.7456	-84.5500	