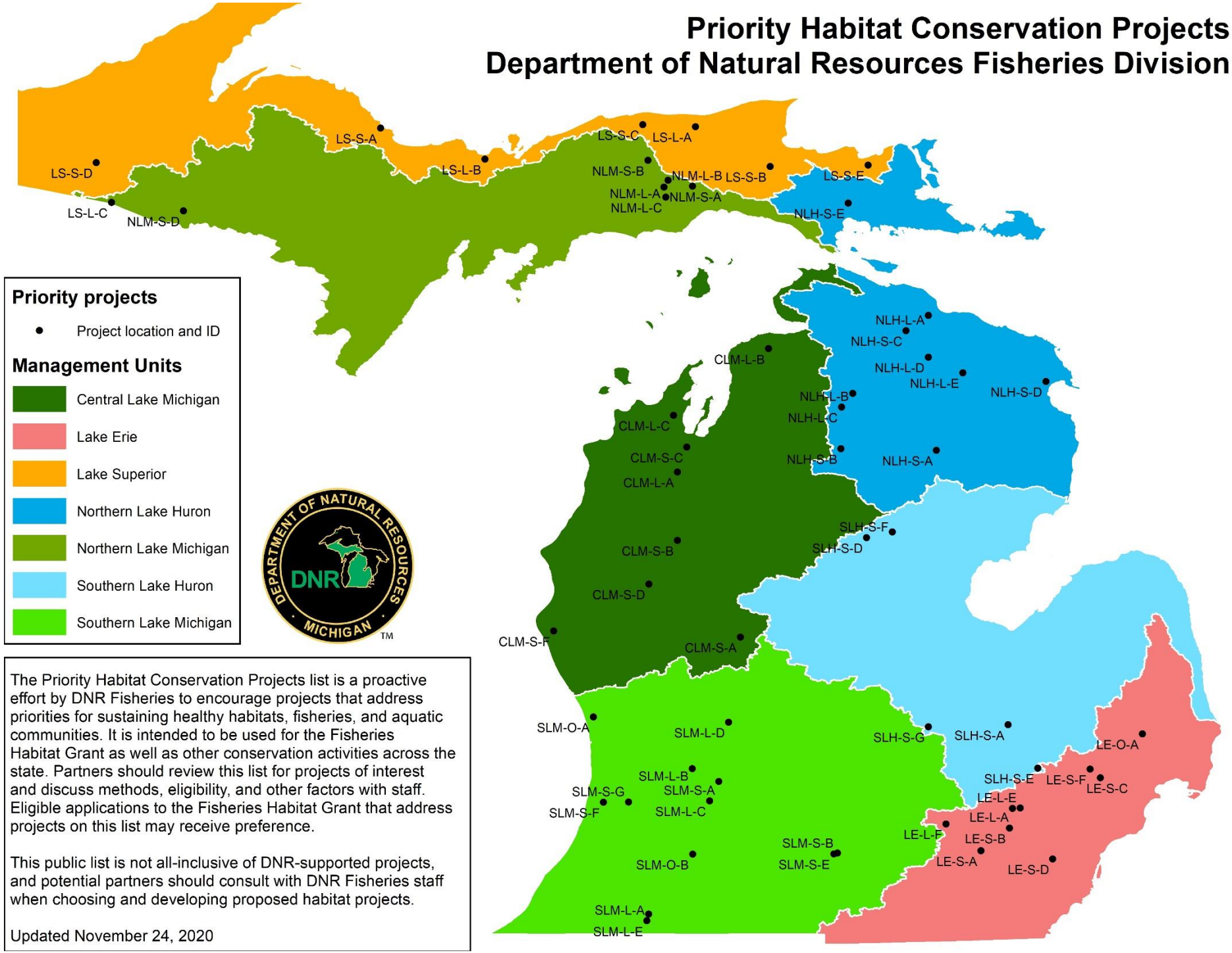
Priority Habitat Conservation Projects
Department of Natural Resources Fisheries Division



Priority projects

- 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 November 24, 2020

Priority Habitat Conservation Projects List
Department of Natural Resources Fisheries Division

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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.

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	44.53018	-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	Residential development	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	
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	43.53973	-85.3088	

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-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	44.12104	-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	44.68016	-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).
Stream	CLM-S-D	Railroad erosion site repair on Rainbow Club property (Pere Marquette River)	Railroad tracks at site have destabilized stream bank, creating potential for catastrophic train accident.	Stream bank should be stabilized to avoid train accident that could potentially contaminate river with liquid cargo.	Brown Trout, Steelhead, Chinook Salmon, Coho Salmon	43.85937	-85.858	
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	43.57752	-86.4296	

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-A	Kent Lake natural lake level restoration	Annual winter water level drawdown	Unnatural flow regime and lake levels disrupt native aquatic vegetation and reduce spawning habitat for Northern Pike and other native species.	Northern Pike, Bluegill, Black Crappie, herptile species, Largemouth Bass, Smallmouth Bass	42.51304	-83.676	
Lake	LE-L-B	Large woody debris and shoreline buffer restoration in low disturbance watersheds	Shoreline development	Loss of riparian buffer and in-water large woody debris, with a focus on lakes identified as low disturbance watersheds in Midwest Glacial Lakes Partnership Conservation Planner (midwestglaciallakes.org/resources/conservationplanner).	Forage fishes, Bluegill, Largemouth Bass, Smallmouth Bass, aquatic insects, Yellow Perch, Black Crappie	42.26001	-83.8659	Center point represents many lakes throughout the Management UYnit.
Lake	LE-L-D	Shoreline softening and bioengineered shoreline protection on publicly owned inland lake parcels in Southeast Michigan	Conversion of natural shorelines to hardened shorelines with riprap or vertical seawalls.	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	42.26001	-83.8659	Center point represents many lakes throughout the Management Unit.
Lake	LE-L-E	Watershed Conservation in Southeast Michigan Cisco lakes	Nutrient inputs 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.	Cisco, Northern Pike, Bluegill	42.51572	-83.6298	Center point represents many lakes throughout the Management Unit.
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	42.42045	-84.0752	Point represents middle of shoreline transect

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	Redside Dace, Orangethroat Darter, Southern Redbelly Dace, Silver Shiner, Rayed Bean Mussel, Northern Clubshell Mussel	42.26001	-83.8659	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 and the Lower Rouge River	Perched and/or improperly sized culverts.	Identify road crossings that are limiting aquatic organism passage and natural flow regimes, and repair perched culverts and other obstacles to aquatic organism passage.	Smallmouth Bass, Logperch, Gizzard Shad, White Sucker, White Bass, Emerald Shiner, Brook Trout, Darter spp., Sucker spp.	42.39569	-83.6943	Center point of a larger site; map of entire area available upon request
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	42.69714	-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	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-F	Bald Mountain pond removal	Dam on a tributary to Trout Creek	Remove dam to improve water quality and aquatic organism passage	Brown Trout, Mottled Sculpin	42.74932	-83.2111	
Other Aquatic Habitats	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.	42.95987	-82.8965	Reference point for a larger area in two watersheds; map of entire area available upon request

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-A	Aquatic plant status and trend assessment	Weed treatments/invasions: Changes in 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.	Native aquatic plant, fish, and invertebrate communities.	46.60018	-85.5791	All lakes in the management unit; the point represents the center of those lakes

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-B	AuTrain Lake riparian improvements	Shoreline development by riparian owners have decreased the amount of large woody habitat in AuTrain Lake.	Install large woody debris and nearshore habitat structures (brush shelters/bundles)	All minnow species, Yellow Perch, forage base for Walleye and Northern Pike.	46.40476	-86.8421	Beginning on the northeastern corner of the lake, working counterclockwise to the southern end of the lake.
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.	46.14644	-89.0828	
Stream	LS-S-A	Compeau Creek upstream culvert improvement	Undersized perched culvert.	Replace undersized culvert to allow for aquatic organism passage and to reduce sedimentation.	Coldwater stream species such as Brook Trout, dace spp., darter spp., sculpin spp. Potentially potamodromous species and adfluvial Brook Trout.	46.59142	-87.4686	
Stream	LS-S-B	Shelldrake Flooding aquatic organism passage	Shelldrake Dam has been in place since the 1960s, blocking passage to all fish species. The dam acts as a lamprey barrier. Alternatives need to be considered for passing fish here.	Develop fish passage above the barrier for species including Steelhead, sucker spp., and other migratory species.	Steelhead, suckers spp., and other migratory fish species.	46.36102	-85.1298	

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-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	46.61245	-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)
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.	46.38545	-89.1743	
Stream	LS-S-E	Waishka River-road stream crossings	Land use practices combined with poor placement of road stream crossings. Road stream crossings need to be updated and brought to meet standard bankfull dimensions in this flashy watershed.	Replace road-stream crossings to reduce sedimentation and improve sediment and wood transport, floodplain connectivity, and water quality.	All (see Waishka River Plan)	46.37004	-84.543	Center point of a set of sites in the draft Waishka River Watershed Management Plan inventory

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	45.46995	-84.1804	Center point represents many lakes throughout the Management Unit.
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.	44.92041	-84.7013	
Lake	NLH-L-D	Tomahawk Creek Flooding Dam, levee, and riser structure restoration	Fisheries Division-owned dam and infrastructure 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	45.21855	-84.1802	

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-E	Water quality improvements on Long Lake, Black Lake, and Twin Lakes	Declines in water quality threaten Cisco populations in Long Lake, Montmorency County and Black Lake and Twin Lakes, Cheboygan County by limiting the amount of cold, oxygenated water. These lakes currently have high water quality and are identified as a priority for protection to maintain Cisco habitat.	Residential, urban, and agricultural development in the watershed and along the shoreline are anticipated to threaten water quality in the future. The major current and expected nutrient sources for the lake should be identified and addressed, potentially including addressing septic effluent, shoreline erosion and runoff, and watershed inputs.	Cisco	45.12576	-83.9734	
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	44.66101	-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	44.67034	-84.7054	

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-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.	45.37702	-84.3145	Center point of the Tower Dam (45.362437, -84.295853) and Kleber Dam (45.391608, -84.333055)
Stream	NLH-S-D	Thunder Bay River dam removals	Critical aquatic organism passage (Lake Sturgeon, Walleye, salmonids) and sediment movement remain hindered by the Ninth St. Dam and Four Mile Dam.	Work with Eagle Creek Renewable Energy to pursue dam removal as justified in the Thunder Bay River Assessment to restore stream conditions including high gradient sections used for fish spawning.	Walleye, Coho Salmon, Steelhead, Atlantic Salmon, in the future Lake Sturgeon	45.07324	-83.4756	Center point of the Ninth Street Dam (45.072114, -83.437394) and Four Mile (45.093347, -83.502303)
Stream	NLH-S-E	Eastern Upper Peninsula road stream crossing inventory	Substandard road stream crossings impair instream habitat conditions and inhibit aquatic organism passage.	Prior to initiating improvement efforts, an inventory of road stream crossings is necessary to prioritize them in terms of impairments, so that resource benefits can be maximized.	Brook Trout and other migratory fishes	46.14249	-84.6612	Point represents entire Eastern Upper Peninsula

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-A	Big Manistique Lake watershed conservation and shoreline/ littoral conservation	Shoreline development and increased nutrient inputs from residential properties.	This lake supports a Cisco population. It currently has low levels of watershed disturbance and medium levels of shoreline disturbance. Projects should seek to decrease nutrients from shoreline sources and protect the healthy watershed.	Cisco, Walleye, Northern Pike, Smallmouth Bass	46.238	-85.767	

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-B	North Manistique Lake watershed conservation and shoreline/ littoral conservation	Shoreline development and increased nutrient inputs from residential properties.	This lake supports a Cisco population. It currently has low levels of watershed disturbance and medium levels of shoreline disturbance. Projects should seek to decrease nutrients from shoreline sources and protect the healthy watershed.	Cisco, Walleye	46.279	-85.743	
Lake	NLM-L-C	South Manistique Lake watershed conservation and shoreline/ littoral conservation	Shoreline development and increased nutrient inputs from residential properties.	This lake supports a Cisco population. It currently has low levels of watershed disturbance and medium levels of shoreline disturbance. Projects should seek to decrease nutrients from shoreline sources and protect the healthy watershed.	Cisco, Walleye, Northern Pike, Smallmouth Bass, Largemouth Bass	46.178	-85.757	
Stream	NLM-S-A	McAlpine Creek Dam removal	Dam was built at the headwaters of a small coldwater stream.	Remove dam to allow aquatic organism passage, uninterrupted transport of sediments, and improved water quality.	Brook Trout	46.243	-85.597	
Stream	NLM-S-B	Spring Creek Dam removal	Dam was built at the headwaters of a small coldwater stream.	Remove dam to allow aquatic organism passage, uninterrupted transport of sediments, and improved water quality.	Brook Trout	46.398	-85.864	
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	46.09588	-88.6502	

Southern Lake Huron Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
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.	43.01513	-83.7022	Center of larger site along the developed portions of the Flint River

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
Stream	SLH-S-D	North Branch Cedar road stream crossing at Three Tubes	Three perched and undersized culverts that have an improper design.	Aquatic organism passage, erosion control, and proper design for expected flows.	Brook Trout, Brown Trout	44.13798	-84.552	
Stream	SLH-S-E	Shiawassee connectivity projects	Dams impeding aquatic organism passage as well as nutrient and large woody debris transport	Dam removal on the Davisburg Trout Pond, Davisburg Mill Pond Dam, and former Peet Packing Plant sites.	Rainbow Darter, stream cyprinids	42.75446	-83.5248	Center of two points represent Davisburg Trout Pond (42.75446, -83.524771) and the former Peet Packing Plant (43.196692, -84.114133) dams
Stream	SLH-S-F	West Tittabawassee River Dam Removal	Dam structure is blocking aquatic organism passage to ~5.4 miles of upstream coldwater habitat. Brook Trout and Brown Trout are present downstream of the dam but cannot pass the dam structure.	Complete dam removal to provide connectivity in the watershed.	Brook Trout, Brown Trout	44.17222	-84.3979	
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.	43.00235	-84.1811	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)

Southern Lake Michigan Management Unit

Project type	ID	Project name	Cause of habitat decline	Project explanation / impairments	Target/Priority species	Lat.	Long.	Geography notes
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-B	Green 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 that 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	42.75167	-85.5981	
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	42.55829	-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	
Stream	SLM-S-A	Glass Creek/ M-179 crossing replacement	Crossing is undersized and perched.	The existing crossing is a barrier to upstream aquatic organism passage. It also is obstructing natural downstream transport of sediment and potentially increasing summer water temperatures downstream of the crossing.	Brown Trout	42.67487	-85.4386	
Stream	SLM-S-B	North Branch Kalamazoo River / 29½ Mile Road crossing replacement	The existing crossing is undersized and consists of several culverts.	The existing crossing interferes with aquatic organism passage and downstream sediment transport. It also is a navigation barrier for recreational users.	Smallmouth Bass, sucker spp., and mussel spp.	42.24584	-84.7268	
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.	42.24089	-84.7485	Center point of five structures

**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
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	42.54991	-86.1312	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	42.55235	-85.9805	118th Ave. Dam. 121st Ave. Dam is downstream 2 miles.
Other Aquatic Habitats	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	43.06157	-86.1904	Center point of a larger site; map of entire area available upon request
Other Aquatic Habitats	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	42.23921	-85.5956	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.*