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Table 1. Active Response Plans within Region 5 (January 2022)

State	Sub-Area Boundary	Coverage	Document Name	Details *
EPA Region 5 Inland Areas	-	*Any state/county not covered under a Sub-Area boundary*	*Region 5 Inland Zone Area Contingency Plan*	*https://rrt5.org/RCPInlandZoneACP.aspx*
Ohio	Great Rivers	Illinois, Indiana, and Ohio	Ohio River Umbrella Plan	https://rrt5.org/Portals/0/ResponsePlans/OhioRiverUmbrellaPlan_091415.pdf
	Detroit/SE Michigan	Southeast Michigan, Northwest Ohio, and portions of Lake Huron and Lake Erie	Northwest Ohio & Southeast Michigan Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/2019.1%20NOSMAC%20Plan.pdf
	Cincinnati	Southeast Indiana and Southwest Ohio	EPA Region 5 Sub-Area Contingency Plan for Ohio River/Cincinnati Area	https://rrt5.org/Portals/0/PDFs/OhioRiverSACP_June2021.pdf
	SE Ohio/Huntington	Southern and Southeast Ohio, Ohio River bordering WV	Huntington/Ohio River Sub-Area Response Plan	https://rrt5.org/Portals/0/docs/HERO-nps23-012606-01.pdf
	SE Ohio/Upper Ohio River	Eastern and Southeastern Ohio	SE Ohio Sub-Area Spill Response Plan Initial Incident Action Plan	https://rrt5.org/Portals/0/ResponsePlans/SE_Ohio_Sub-Area_Response_Plan_IAP_5_17_16.pdf?timestamp=1499692536162
	Great Black Swamp Island	Northwest Ohio and Southeast Michigan	Northwest Ohio & Southeast Michigan Area	https://rrt5.org/Portals/0/PDFs/2019.1%20NOSMAC%20Plan.pdf
	Upper Ohio River	Ohio River	Federal Region III Regional Response Team/ Region III Regional Oil and Hazardous	https://nrt.org/sites/72/files/2019-11-20_Final_RRT3_%20RCP_rev1.pdf
	Ohio River	Ohio River bordering Kentucky	Region 4 Regional/Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/2019_Region4_RegionalContingencyPlan.pdf
Indiana	Western Lake Superior	Coastal Zone of Lake Michigan and Navigable waters that flow into Lake Michigan	Sector Lake Michigan Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/2020_Sector_Lake_Michigan_Area_Contingency_Plan.pdf
	Great Rivers	Illinois, Indiana, and Ohio	Ohio River Umbrella Plan	https://rrt5.org/Portals/0/ResponsePlans/OhioRiverUmbrellaPlan_091415.pdf
	NW Indiana	Northwest Indiana	Coast Guard Sector Lake Michigan Area	https://rrt5.org/Portals/0/PDFs/2020_Sector_Lake_Michigan_Area_Conting
	Great Black Swamp Inland	Northeast Indiana	Northwest Ohio & Southeast Michigan Area	https://rrt5.org/Portals/0/PDFs/2019.1%20NOSMAC%20Plan.pdf
	White River	Central Indiana Surrounding the White River	Region 5 Inland Zone Area Contingency Plan	https://rrt5.org/RCPInlandZoneACP.aspx
	Patoka	Southwest Indiana	Region 5 Inland Zone Area Contingency Plan	https://rrt5.org/RCPInlandZoneACP.aspx
	Louisville/South Indiana	Southern Indiana	Region 5 Inland Zone Area Contingency Plan	https://rrt5.org/RCPInlandZoneACP.aspx
	Cincinnati	Southeast Indiana and Southwest Ohio	EPA Region 5 Sub-Area Contingency Plan for Ohio River/Cincinnati Area	https://rrt5.org/Portals/0/PDFs/OhioRiverSACP_June2021.pdf
Illinois	Western Lake Superior	Coastal Zone of Lake Michigan and Navigable waters that flow into Lake Michigan	Sector Lake Michigan Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/2020_Sector_Lake_Michigan_Area_Contingency_Plan.pdf
	Upper Mississippi River	Commercially navigable mainstem Upper Mississippi River	Upper Mississippi River Spill Response Plan & Resource Manual	https://umrba.org/sites/default/files/documents/umrplan.pdf
	Mississippi River (Pools)	Commercially navigable mainstem of Mississippi River		

Table 1. Active Response Plans within Region 5 (January 2022)

State	Sub-Area Boundary	Coverage	Document Name	Details *
Illinois (cont'd)	Chicago	Southwest Lake Michigan and Four Counties in Northwest Illinois	Greater Chicago Sub-Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/GreaterChicagoSub-areaContingencyPlan_June_2018_Public.pdf
	Chicago	Will County, Illinois	U.S. EPA Region 5 Will County, Illinois Initial Incident Action Plan (IAP)	https://rrt5.org/Portals/0/PDFs/Will%20County%20IAP%20final%209_19_18.pdf
	St. Louis	Madison, Monroe, and St. Clair Counties, Illinois	Greater St. Louis Sub-area Contingency Plan	https://rrt5.org/Portals/0/docs/Greater_StLouisSACP_2016_8_Public.pdf
	Great Rivers	Southern Illinois	Great Rivers Subarea Contingency Plan	https://rrt5.org/Portals/0/ResponsePlans/GreatRiversSACP_PublicVersion_Oct2020.pdf
	Great Rivers	Pope and Massac counties in Southern Illinois	U.S. EPA REGION 5 The Great Rivers – Paducah/Metropolis Spill Response Plan	https://rrt5.org/portals/0/PDFs/20190221_IAP%20Metropolis%20Paducah.pdf
	Great Rivers	Illinois, Indiana, and Ohio	Ohio River Umbrella Plan	https://rrt5.org/Portals/0/ResponsePlans/OhioRiverUmbrellaPlan_091415.pdf
Michigan	Western Lake Superior	Coastal Zone of Lake Michigan and Navigable waters that flow into Lake Michigan	Sector Lake Michigan Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/2020_Sector_Lake_Michigan_Area_Contingency_Plan.pdf
	North Michigan	Upper Peninsula and northern portion of lower Peninsula of Michigan	Northern Michigan Area Contingency Plan	https://rrt5.org/Portals/0/docs/ACP-NorthernMI-EPAUSCG-Aug2015.pdf
	North Lower Western Michigan	Seventeen Counties in Western Michigan	Inland Zone Sub-Area Contingency Plan (SACP) for North Lower Western Michigan	https://rrt5.org/Portals/0/PDFs/NLWM_SACP_MainBodyPlan_Aug2021_final.pdf
	Detroit/SE Michigan	Southeast Michigan, Northwest Ohio, and portions of Lake Huron and Lake Erie	Northwest Ohio & Southeast Michigan Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/2019.1%20NOSMAC%20Plan.pdf
	South Lower Western Michigan	Seven Counties in Southwestern Michigan	Western Michigan Sub-Area Contingency Plan	https://rrt5.org/Portals/0/docs/ACP_WesternMichigan.pdf
Wisconsin	Western Lake Superior	Coastal Zone of Lake Michigan and Navigable waters that flow into Lake Michigan	Sector Lake Michigan Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/2020_Sector_Lake_Michigan_Area_Contingency_Plan.pdf
	Upper Mississippi River	Commercially navigable mainstem Upper Mississippi River	Upper Mississippi River Spill Response Plan & Resource Manual	https://umrba.org/sites/default/files/documents/umrplan.pdf
	St. Croix Nation Scenic Riverway	Saint Croix and Namekagon Rivers	National Park Service St. Croix National Scenic Riverway Initial Incident Action Plan (IAP)	https://rrt5.org/Portals/0/PDFs/NPS_Initial_Incident_Action_Plan.pdf
	Green Bay/Horicon	Horicon Marsh	Horicon Marsh Initial Incident Action Plan	https://rrt5.org/Portals/0/ResponsePlans/IAP_May%202015_v8.pdf
	Milwaukee	Southeast Wisconsin	Coast Guard Sector Lake Michigan Area	https://rrt5.org/Portals/0/PDFs/2020_Sector_Lake_Michigan_Area_Conting
Minnesota	Red River Valley	Six counties in western Minnesota	Red River Valley Sub-Area Contingency Plan	https://rrt5.org/Portals/0/docs/RedRiverSD_Sep2003.pdf
	Siouxland	Five counties in northeast Minnesota	Siouxland Subarea Contingency Plan	https://rrt5.org/Portals/0/docs/SiouxlandSACP_PublicAccess_Sept2020.pdf
	Western Lake Superior	Western Lake Superior	Western Lake Superior Area Contingency Plan	https://rrt5.org/Portals/0/PDFs/WesternLakeSuperiorACP_rev_2017.pdf
	Western Lake Superior	Isle Royal National Park	Strategic Protection Plan Response Considerations: Isle Royale National Park	https://rrt5.org/Portals/0/docs/IRReport081703_full.pdf?timestamp=1499693031760
	Minneapolis/St. Paul	Minneapolis/St. Paul	Inland Zone Sub-Area Contingency Plan (SACP) for Minneapolis/St. Paul	https://rrt5.org/Portals/0/PDFs/MplsStP_SACP_MainBodyPlan%20Final%20Jan%202021.pdf

Table 1. Active Response Plans within Region 5 (January 2022)

State	Sub-Area Boundary	Coverage	Document Name	Details *
Minnesota (cont'd)	Mississippi (Pool): Mississippi River (Twin Cities Pool)	Commercially navigable mainstem Upper Mississippi River	Upper Mississippi River Spill Response Plan & Resource Manual	https://umrba.org/sites/default/files/documents/umrplan.pdf
	Upper Mississippi River	Commercially navigable mainstem Upper Mississippi River	Upper Mississippi River Spill Response Plan & Resource Manual	https://umrba.org/sites/default/files/documents/umrplan.pdf
	St. Croix Nation Scenic Riverway	Saint Croix and Namekagon Rivers	National Park Service St. Croix National Scenic Riverway Initial Incident Action Plan (IAP)	https://rrt5.org/Portals/0/PDFs/NPS_Initial_Incident_Action_Plan.pdf

* All referenced plans can be retrieved at www.rrt5.org if links are broken.

Table 2. Overview of Response Actions Anticipated to be used in R5

Primary Response Activities	
Deflection and Containment Activities	Booming Dikes or Berms Construction barriers, dams, pits, and trenches Culvert blocking
Recovery Activities	Skimming Vacuuming Sorbents
Removal/cleanup Activities	Flooding Flushing Steam Cleaning Sandblasting Mechanical (non-chemical) sand cleaning (surface, <1 inch) Mechanical (non-chemical) sand cleaning and excavation (>1 inch) Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation
Submerged Oil Activities	Detection of non-floating or submerged oil Recovery of non-floating or submerged oil Containment of non-floating or submerged oil
Wildlife Protection Activities	Deterrence and Hazing Capture and care of contaminated species or recovery of contaminated carcasses
Locating, Tracking, and Support Activities	Use of Aircraft Use of Vessels Use of Vehicles Use of machinery/supporting equipment Creation/Use of New Access Points Creation/use of Staging Areas (on land) Natural attenuation - allow habitat to recover naturally while monitoring Deployment of buoys Locating, Sampling and monitoring: Air, land, water (includes SCAT) Access of personnel by foot traffic
Secondary Response Activities	
Waste Management Activities	Waste Handling Temporary Storage (on water) Temporary Storage (on land) Decontamination
Not included in RAM	
	Disinfection Phytoremedation Air Sparging

Table 3. Impacts of Response Actions on Vulnerable Habitats within Region 5.

Vulnerable Habitat in Region 5	Description	Corresponding RAM Habitat	Response Impacts[1]		
			Least	Some	Most
Beach and Sand Bar	*Beaches:* areas infrequently flooded with non-vegetated sand or gravel. It typically includes sand spoil banks, beaches, and other sandy areas that are upland. This general class may have small inclusions of grasses or forbs (<10%), trees (<10%), or shrubs (<25%). *Sand Bar:* areas that are temporarily flooded and exposed with non-vegetated sand flats. They are typically found in or near the main channel and are often associated with wing dams, shorelines, and islands.	Shorelines Ports, Canals, Industrial Areas Coastal Nearshore Rivers and Streams Bays and Estuaries Ponds and Lakes	Sorbents/Solidifiers Low-Pressure Ambient Flushing Hand Tool/Oil Removal Cleaning	Vacuum Light Equipment Oil Removal	Sediment Removal Heavy Equipment Removal
Bog	A bog is a distinctive type of freshwater wetland that accumulates peat derived from sphagnum conditions and low oxygen levels contribute to slow decay of organic material, resulting in layers of peat that can be meters deep. Due to a lack of inflows and outflows, and the impermeability of the peat layer, most bogs receive nearly all of their water from surface rather than ground water.	Wetlands	Exclusion or Deflection Booming Sorbents/Sorbent Boom Flooding Low Pressure, Ambient-Water Flushing In-Situ Burning Collection by Direct Suction Debris/Vegetation Removal	Natural Attenuation/Phytoremediation	Light Equipment Oil Removal Peat/Sediment Removal
Calcareous Fen	Calcareous fens are one of the rarest habitat types in the United States. They typically form on or near slight slopes from upwelling groundwater trapped by a layer of peat. Like bogs, fens are characterized by a peat substrate, but are fed by a supply of cold, oxygen-deprived groundwater rich in calcium and magnesium bicarbonates. As they occur on sites of cold-water seepage, active springs and trout streams are often associated with fens.	Wetlands	Exclusion or Deflection Booming Sorbents/Sorbent Boom Flooding Low-Pressure, Ambient-Water Flushing In-Situ Burning Collection by Direct Suction Debris/Vegetation Removal	Natural Attenuation/ Phytoremediation	Light Equipment Oil Removal Peat/Sediment Removal
Deep Marsh Annuals	The deep marsh annuals habitat includes portions of lakes, ponds, marshes, or backwaters that are >10% vegetated with wild rice (Zizania). While this habitat is dominated by wild rice, it may have inclusions of submersed, non-rooted-floating aquatics, rooted-floating aquatics, or emergent vegetation. During normal water conditions, there is little flow, though there can be wind-generated currents and stronger flows at inlets and outlets. During flood conditions, these habitats can be connected to rivers or streams, have strong currents, and the potential to carry large amounts of debris.	Ponds and Lakes Wetlands	Exclusion or Deflection Booming Sorbents/Sorbent Boom Flooding Low-Pressure, Ambient-Water Flushing In-Situ Burning Debris/Vegetation Removal	Natural Attenuation/ Phytoremediation	Light Equipment Oil Removal Sediment Removal
Deep Marsh Perennials	The deep marsh perennials habitat includes portions of lakes, ponds, marshes, or backwaters that are semi-permanently flooded and more than 10% vegetated with persistent emergent vegetation During normal water conditions, there is little flow, though there can be wind-generated currents and stronger flows at inlets and outlets. During flood conditions, these habitats can be connected to rivers or streams, have strong currents, and the potential to carry large amounts of debris.	Ponds and Lakes Wetlands	Exclusion or Deflection Booming Sorbents/Sorbent Boom Flooding Low-Pressure, Ambient-Water Flushing In-Situ Burning Debris/Vegetation Removal	Natural Attenuation/ Phytoremediation	Light Equipment Oil Removal Sediment Removal

Table 3. Impacts of Response Actions on Vulnerable Habitats within Region 5.

Vulnerable Habitat in Region 5	Description	Corresponding RAM Habitat	Response Impacts[1]		
			Least	Some	Most
Deep Marsh Shrub	The Deep Marsh Shrub Habitat is found in or around lakes, ponds, backwaters, or shorelines that are >25% vegetated with semipermanently flooded shrubby vegetation. This general class may have inclusions of submersed, nonrooted-floating aquatics, rooted-floating aquatics, or emergent vegetation. This habitat is more common in southern aquatic systems.	Ponds and Lakes Wetlands	Exclusion or Deflection Booming Natural Attenuation Sorbents Flooding Low-Pressure, Ambient-Water Flushing Solidifiers	In-Situ Burning Vacuum Debris/Vegetation Removal Hand Tool Oil Removal/Cleaning	Light Equipment Oil Removal Sediment Removal
Floodplain Forest	Floodplain Forest represents areas on islands, near the shoreline, or around lakes, ponds, and backwaters that are >10% vegetated with seasonally flooded forests. This general class is typically found growing at or near the water table where it becomes inundated from spring flooding and high-water events.	Rivers and Streams Ponds and Lakes Wetlands	Natural Attenuation Sorbents/Solidifiers Flooding Low-Pressure, Ambient-Water Flushing	Vacuum Debris/Vegetation Removal Hand Tool Oil Removal/Cleaning	Light Equipment Oil Removal
Mudflats	Most common in tidal environments, mudflats also occupy marginal areas of backwaters, estuaries, lakes, ponds, or shorelines that are prone to seasonal flooding and subsequently exposed to non-vegetated mud. Though typically barren, incursions of emergent vegetation, forbs, grasses, or sedges of less than 10% cover may be present. Water may be present depending on season or weather patterns.	Rivers and Streams Ponds and Lakes Wetlands	Sorbents Low-Pressure, Ambient-Water Flushing Hand Tool Oil Removal/Cleaning	Vacuum Light Equipment Oil Removal	Heavy Equipment Oil Removal Sediment Removal
Open Water	The open waters habitat includes main river channels and portions of lakes, ponds, and backwaters that remain permanently flooded all year and appear less than 10% vegetated. These habitats are subject to varying currents and wave action.	Ports, Canals, and Industrial Areas Coastal Nearshore Coastal Offshore Rivers and Streams Shorelines	Sorbents/Sorbent Boom Debris/Vegetation Removal Containment Booming	In-Situ Burning	Sediment Removal
Rooted Floating Aquatics	Rooted-Floating Aquatics represent portions of lakes, ponds, marshes, backwaters, or channel borders that are >10% vegetated with water lilies (Nymphaea and Nuphar) or American Lotus (Nelumbo). This general class is dominated by rooted-floating aquatics, but may have inclusions of submersed, nonrooted-floating aquatics, or emergent vegetation.	Ports, Canals, and Industrial Areas Coastal Nearshore Rivers and Streams Bays and Estuaries Ponds and Lakes Wetlands	Containment Booming Sorbents/Sorbent Booming Debris/Vegetation Removal Natural Attenuation	Herding Agents/Physical Herding and Visco-Elastic Agents/Solidifiers In-Situ Burning	Sediment Removal
Sedge Meadow	The sedge meadows habitat includes lowland areas around lakes, ponds, backwaters, and along seasonally flooded shorelines. Similar to wet meadows, these habitats are close to 100% vegetated with perennial grasses and forbs. T Though the peat and muck soils remain saturated most of the year, there is little standing water present (except after flooding or precipitation events). Sedge meadow habitat is rare and limited in occurrence in the Upper Mississippi River system.	Ponds and Lakes Bays and Estuaries Shorelines Wetlands	Flooding Collection by Direct Suction Low-Pressure, Ambient-Water Flushing In-Situ Burning	Natural Attenuation/Phytoremediation Debris/Vegetation Removal	Light Equipment Oil Removal Sorbents Hand Tool Oil Removal/Cleaning Nutrient Enrichment Sediment Removal

Table 3. Impacts of Response Actions on Vulnerable Habitats within Region 5.

Vulnerable Habitat in Region 5	Description	Corresponding RAM Habitat	Response Impacts[1]		
			Least	Some	Most
Shallow Marsh Annuals	The shallow marsh annuals habitat includes portions of lakes, ponds, backwaters, mudflats, or shorelines that are seasonally flooded and more than 10% vegetated with annual (non-persistent) emergent vegetation. During normal water conditions, there is little flow, though there can be wind-generated currents and stronger flows at inlets and outlets. During flood conditions, these habitats can be connected to rivers or streams, with strong currents and possibly large amounts of debris.	Ponds and Lakes Wetlands	Low-Pressure, Ambient-Water Flushing Flooding Exclusion or Deflection Booming Sorbents/Sorbent Boom In-Situ Burning Debris/Vegetation Removal	Natural Attenuation/Phytoremediation	Light Equipment Oil Removal Sediment Removal
Shallow Marsh Perennials	The shallow marsh perennials habitat includes portions of lakes, ponds, backwaters, or shorelines that are seasonally flooded and more than 10% vegetated with persistent emergent vegetation. During normal water conditions, there is little flow, though there can be wind-generated currents and stronger flows at inlets and outlets. During flood conditions, these habitats can be connected to rivers or streams, with strong currents and possibly large amounts of debris.	Ponds and Lakes Wetlands	Exclusion or Deflection Booming Sorbents/Sorbent Boom Flooding Low-Pressure, Ambient-Water Flushing In-Situ Burning Debris/Vegetation Removal	Natural Attenuation/Phytoremediation	Light Equipment Oil Removal Sediment Removal
Shallow Marsh Shrub	The Shallow Marsh Shrub Habitat represents areas near the shoreline or around lakes, ponds, and backwaters that are >25% vegetated with seasonally flooded shrubby vegetation. It typically grows with mixed emergent grasses and forbs.). Shallow marsh shrubs are typically found growing in soils that are saturated or inundated with little water.	Ponds and Lakes Wetlands	Exclusion or Deflection Booming Natural Attenuation Sorbents Flooding Low-Pressure, Ambient-Water Flushing Solidifiers	In-Situ Burning Vacuum Debris/Vegetation Removal Hand Tool Oil Removal/Cleaning	Light Equipment Oil Removal Sediment Removal
Submersed Vegetation	The submersed vegetation habitat is those portions of lakes, ponds, channel borders, or backwaters that appear more than 10% of vegetation fully underwater. It generally is found in areas which are flooded year-round and have water depths between 0.5 and 2 meters. Submersed vegetation occurring at depths greater than 2 meters may be classified as open water.	Ports, Canals, and Industrial Areas Coastal Nearshore Coastal Offshore Rivers and Streams Ponds and Lakes Wetlands	Containment Booming Sorbents/Sorbent Boom Debris/Vegetation Removal Natural Attenuation	In-Situ Burning Herding Agents/Physical Herding and Visco-Elastic Agents/Solidifiers	Sediment Removal
Wet Meadow	The wet meadows habitat includes lowland areas that are close to 100% vegetated with perennial grasses and forbs. Wet meadows are common along the shores of shallow lakes, stream margins, and the edges of marshes, and can occur in areas of restricted drainage. Though the soils remain saturated most of the year, there is little standing water present (except after flooding or precipitation events).	Wetlands	Flooding Collection by Direct Suction Low-Pressure, Ambient-Water Flushing In-Situ Burning	Natural Attenuation/Phytoremediation Debris/Vegetation Removal	Light Equipment Oil Removal Hand Tool Oil Removal/Cleaning Sorbents Sediment Removal

[1] Inland Response Tactics Manual (UMBRA, 2013)

Table 4. Species considered and reviewed for the R5 Action Area.

Common Name	Scientific name	Status[1]	Occurrence in Action Area[1]						Habitat[2]	
			Critical Habitat[2]	IL	IN	MI	MN	OH	WI	Terrestrial	Aquatic
Plants											
American Hart's-tongue Fern	*Asplenium scolopendrium var.*	T				X				X	
Decurrent False Aster	*Boltonia decurrens*	T		X						X	
Dwarf Lake Iris	*Iris lacustris*	T				X			X	X	
Eastern Prairie Fringed Orchid	*Platanthera leucophaea*	T		X	X	X		X	X	X	
Fassett's Locoweed	*Oxytropis campestris var. chartacea*	T							X	X	
Houghton's Goldenrod	*Solidago houghtonii*	T				X				X	
Lakeside Daisy	*Hymenoxys herbacea*	T		X		X		X		X	
Leafy Prairie-clover	*Dalea foliosa*	E		X						X	
Leedy's roseroot	*Rhodiola integrifolia ssp. leedyi*	T					X			X	
Mead's Milkweed	*Asclepias meadii*	T		X	X				X	X	
Michigan Monkey Flower	*Mimulus michiganensis*	E				X				X	
Minnesota Dwarf Trout Lily	*Erythronium propullans*	E					X			X	
Northern Wild Monkshood	*Aconitun noveboracense*	T						X	X	X	
Pitcher's thistle	*Cirsium pitcheri*	T		X	X	X			X	X	
Prairie Bush-clover	*Lespedeza leptostachya*	T		X			X		X	X	
Short's Bladderpod	*Physaria globosa*	E	D		X					X	
Short's Goldenrod	*Solidago shortii*	E			X					X	
Small whorled pogonia	*Isotria medeoloides*	T		X		X		X		X	
Tennessee Pondweed	*Potamogeton tennesseensis*	UR						X			X
Virginia Sneezeweed	*Helenium virginicum*	T						X		X	
Virginia Spiraea	*Spirea virginiana*	T						X		X	
Western Prairie Fringed Orchid	*Platanthera praeclara*	T					X			X	
Snails											
Iowa Pleistocene Snail	*Discus macclintocki*	E		X						X	
Clams (Freshwater Mussels)											
Clubshell	*Pleurobema clava*	E		X	X	X		X			X
Fanshell	*Cyprogenia stegaria*	E		X	X			X			X
Fat Pocketbook	*Potamilus capax*	E		X	X						X
Higgins' Eye Pearlymussel	*Lampsilis higginsii*	E		X			X		X		X

Table 4. Species considered and reviewed for the R5 Action Area.

			Occurrence in Action Area[1]						Habitat[2]	
Common Name	Scientific name	Status[1]	Critical Habitat[2]	IL	IN	MI	MN	OH	WI	Terrestrial	Aquatic
Longsolid	*Fusconaia subrotunda*	P	PCH	X	X			X			X
Northern Riffleshell	*Epioblasma torulosa rangiana*	E		X	X	X		X			X
Orangefoot Pimpleback	*Plethobasus cooperianus*	E		X							X
Pink Mucket	*Lampsilis abrupta*	E		X	X			X			X
Purple Cat's Paw Pearlymussel	*Epioblasma obliquata obliquata*	E						X			X
Pyramid (Pink) Pigtoe	*Pleurobema rubrum*	UR						X			X
Rabbitsfoot	*Quadrula cylindrica cylindrica*	T	D	X	X			X			X
Rayed Bean	*Villosa fabalis*	E	PCH		X	X		X			X
Rough Pigtoe	*Pleurobema plenum*	E			X						X
Round Hickorynut	*Obovaria subrotunda*	P	PCH	X	X	X		X			X
Salamander mussel	*Simpsonaias ambigua*	UR		X	X	X	X	X	X		X
Scaleshell	*Leptodea leptodon*	E		X							X
Sheepnose	*Plethobasus cyphyus*	E	PCH	X	X		X	X	X		X
Snuffbox	*Epioblasma triquetra*	E	PCH	X	X	X		X	X		X
Spectaclecase	*Cumberlandia monodonta*	E	PCH	X			X		X		X
White Catspaw	*Epioblasma obliquata perobliqua*	E			X			X			X
Winged Mapleleaf	*Quadrula fragosa*	E					X		X		X
Crustaceans											
Illinois Cave amphipod	*Gammarus acherondytes*	E		X							X
Insects											
American Burying Beetle	*Nicrophorus americanus*	T				X		X		X	
Bog Buckmoth	*Hemileuca sp.*	UR							X	X	
Dakota Skipper	*Hesperia dacotae*	T	D				X			X	
Frosted Elfin Butterfly	*Callophrys irus*	UR		X	X	X		X	X	X	
Hine's Emerald Dragonfly	*Somatochlora hineana*	E	D	X		X			X	X	
Hungerford's Crawling Water Beetle	*Brychius hungerfordi*	E				X					X
Karner Blue Butterfly	*Lycaeides melissa samuelis*	E		X	X	X	X	X	X	X	
Linda's Roadside Skipper	*Amblyscirtes linda*	UR		X						X	
Mitchell's Satyr Butterfly	*Neonympha mitchellii mitchellii*	E			X	X		X		X	
Monarch Butterfly	*Danaus plexippus plexippus*	C		X	X	X	X	X	X	X	

Table 4. Species considered and reviewed for the R5 Action Area.

Common Name	Scientific name	Status[1]	Occurrence in Action Area[1]						Habitat[2]	
			Critical Habitat[2]	IL	IN	MI	MN	OH	WI	Terrestrial	Aquatic
Poweshiek Skipperling	*Oarisma poweshiek*	E	D			X	X		X	X	
Rattlesnake-master Borer Moth	*Papaipema eryngii*	UR		X						X	
Regal Fritillary	*Speyeria idalia*	UR		X	X	X	X	X	X	X	
Rusty Patched Bumble Bee	*Bombus affinis*	E		X	X		X	X	X	X	
Fish											
Lake Sturgeon	*Acipenser fulvescens*	UR		X	X	X	X	X	X		X
Pallid Sturgeon	*Scaphirhynchus albus*	E		X							X
Popeye Shiner	*Notropis ariommus*	UR						X			X
Scioto Madtom	*Noturus trautmani*	E						X			X
Sicklefin Chub	*Macrhybopsis meeki*	UR		X							X
Sturgeon Chub	*Macrhybopsis gelida*	UR		X							X
Topeka Shiner	*Notropis topeka*	E	D				X				X
Herptiles											
Alligator Snapping Turtle	*Macroclemys temmincki*	UR		X	X						X
Blanding's Turtle	*Emydoidea blandingii*	UR		X	X	X	X	X	X	*X	X
Copperbelly Watersnake, N. DPS	*Nerodia erythrogaster neglecta*	T			X	X		X		X	X
Eastern Massasauga	*Sistrurus catenatus*	T		X	X	X		X	X	X	X
Illinois Chorus Frog	*Pseudacris illinoensis*	UR		X						X	X
Spotted Turtle	*Clemmys guttata*	UR		X	X	X		X		X*	X
Streamside Salamander	*Ambystoma barbouri*	UR			X			X		X	X
Wood Turtle	*Glyptemys insculpta*	UR				X	X	X	X	X	X
Mammals											
Canada Lynx	*Lynx canadensis*	T	D			X	X		X	X	
Gray Bat	*Myotis grisescens*	E		X	X					X	
Gray Wolf	*Canis lupus*	DR				X	X		X	X	
Indiana Bat	*Myotis sodalis*	E	D	X	X	X		X		X	
Little brown Bat	*Myotis lucifugus*	UR		X	X	X	X	X	X	X	
Northern Bog Lemming	*Synaptomys borealis*	UR					X			X	
Northern Long-eared Bat	*Myotis septentrionalis*	T		X	X	X	X	X	X	X	

Table 4. Species considered and reviewed for the R5 Action Area.

Common Name	Scientific name	Status[1]	Occurrence in Action Area[1]						Habitat[2]	
			Critical Habitat[2]	IL	IN	MI	MN	OH	WI	Terrestrial	Aquatic
Plains Spotted Skunk	*Spilogale putorius interrupta*	UR					X			X	
Prairie Gray Fox	*Urocyon cinereoargenteus ocythous*	UR					X		X	X	
Tricolored Bat	*Perimyotis subflavus*	UR		X	X	X	X	X	X	X	
Birds											
Eastern Black Rail	*Laterallus jamaicensis ssp.*	T		X	X	X	X	X	X	X	
Golden-winged Warbler	*Vermivora chrysoptera*	UR		X	X	X	X	X	X	X	
Piping Plover, Great Lakes	*Charadrius melodus*	E	D	X	X	X	X	X	X	X	
Rufa Red Knot	*Calidiris canutus rufa*	T	PCH	X	X	X	X	X	X	X	
Whooping Crane, Non-essential Experimental Pop.	*Grus americana*	E		X	X	X	X	X	X	X	

[1] Status designations: E = endangered, T = threatened, UR = under review, P = proposed for listing, DR = delisted due to recovery, D = designated critical habitat, PCH = proposed critical habitat under review (USFWS, 2021; USFWS, 2022)

[2] Primary habitat occupied by the species. Species denoted with an asterisk are those that can occupy both terrestrial and aquatic habitats.

Table 5. Effects Analysis Summary of Response Actions on Critical Habitats within the Action Area.

Species with Critical Habitat[1]:	Environment (Habitat) within Action Area[2]						
	1) Shoreline (beach/land)	2) Ports, Canals, Industrial Areas	3) Rivers and Streams	4) Bays and Estuaries	5) Ponds and Lakes	6) Wetlands	7) Upland Areas
Short's Bladderpod (*Physaria globosa*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Sandblasting Mechanical sand cleaning (<1 inch) Mechanical sand cleaning/excavation (>1 inch) Manual removal /Cleaning Booming Creation/Use of New Access Points Creation/use of Staging Areas (on land) Access of personnel by foot traffic Temporary Storage (on land) Decontamination Waste Handling
Rabbitsfoot (*Quadrula cylindrica cylindrica*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Booming Skimming Vacuuming Sorbents Flushing Steam Cleaning Sandblasting Manual removal /Cleaning Detection of oil Recovery of oil Containment of oil Deployment of buoys Temporary Storage (on water) Waste Handling	Booming Dikes or Berms Construction of barriers, etc. Culvert blocking Skimming Vacuuming Sorbents Flooding Flushing Steam Cleaning Sandblasting Manual removal /Cleaning Detection of oil Recovery of oil Containment of oil Use of Vessels Use of Vehicles Deployment of buoys Temporary Storage (on water) Waste Handling	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.
Round Hickorynut (*Obovaria subrotunda*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Booming Skimming Vacuuming Sorbents Flushing Steam Cleaning Sandblasting Manual removal /Cleaning Detection of oil Recovery of oil Containment of oil Deployment of buoys Temporary Storage (on water) Waste Handling	Booming Dikes or Berms Construction of barriers, etc. Culvert blocking Skimming Vacuuming Sorbents Flooding Flushing Steam Cleaning Sandblasting Manual removal /Cleaning Detection of oil Recovery of oil Containment of oil Use of Vessels Use of Vehicles Deployment of buoys Temporary Storage (on water) Waste Handling	Booming Skimming Vacuuming Sorbents Flushing Steam Cleaning Sandblasting Manual removal /Cleaning Detection of oil Recovery of oil Containment of oil Deployment of buoys Temporary Storage (on water) Waste Handling	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.
Dakota Skipper (*Hesperia dacotae*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Booming Dikes or Berms Construction of barriers, etc. Mechanical sand cleaning (<1 inch) Mechanical sand cleaning/excavation (>1 inch) Manual removal /Cleaning Use of Vehicles Creation/Use of New Access Points Creation/use of Staging Areas (on land) Access of personnel by foot traffic Temporary Storage (on land) Decontamination Waste Handling

Table 5. Effects Analysis Summary of Response Actions on Critical Habitats within the Action Area.

Species with Critical Habitat[1]:	Environment (Habitat) within Action Area[2]						
	1) Shoreline (beach/land)	2) Ports, Canals, Industrial Areas	3) Rivers and Streams	4) Bays and Estuaries	5) Ponds and Lakes	6) Wetlands	7) Upland Areas
Hine's Emerald Dragonfly (*Somatochlora hineana*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Booming Dikes or Berms Construction of barriers, etc. Culvert blocking Flooding Flushing Mechanical sand cleaning (<1 inch) Mechanical sand cleaning/excavation (>1 inch) Manual removal /Cleaning Creation/Use of New Access Points Access of personnel by foot traffic Waste Handling	No Effect
Poweshiek Skipperling (*Oarisma poweshiek*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Mechanical sand cleaning (<1 inch) Mechanical sand cleaning/excavation (>1 inch) Booming Dikes or Berms Construction of barriers, etc. Culvert blocking Flooding Flushing Manual removal /Cleaning Deterrence and Hazing Capture and Care Use of Vehicles Use of machinery/supporting equipment Creation/Use of New Access Points Access of personnel by foot traffic Waste Handling	*Upland concern is for runoff and impacts to hydrology* Booming Dikes or Berms Construction of barriers, etc. Flooding Flushing Manual removal /Cleaning Creation/Use of New Access Points Access of personnel by foot traffic Creation/use of Staging Areas (on land) Temporary Storage (on land) Decontamination Waste Handling
Topeka Shiner (*Notropis topeka*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Booming Dikes or Berms Construction of barriers, etc. Culvert blocking Skimming Vacuuming Flooding Flushing Steam Cleaning Sandblasting Detection of oil Recovery of oil Containment of oil Deterrence and Hazing Use of Vessels Deployment of Buoys Waste Handling Temporary Storage (on water)	Not Applicable due to species and habitat not identified as occurring in this environment.	Booming Dikes or Berms Construction of barriers, etc. Skimming Vacuuming Flooding Flushing Steam Cleaning Sandblasting Detection of oil Recovery of oil Containment of oil Deterrence and Hazing Use of Vessels Deployment of Buoys Waste Handling Temporary Storage (on water)	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.
Canada Lynx (*Lynx canadensis*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Use of Vehicles Use of Vessels Booming Skimming Manual removal /Cleaning Deterrence and Hazing Capture and Care Creation/Use of New Access Points Creation/use of Staging Areas (on land) Access of personnel by foot traffic Waste Handling Temporary Storage (on land) Decontamination

Table 5. Effects Analysis Summary of Response Actions on Critical Habitats within the Action Area.

Species with Critical Habitat[1]:	Environment (Habitat) within Action Area[2]						
	1) Shoreline (beach/land)	2) Ports, Canals, Industrial Areas	3) Rivers and Streams	4) Bays and Estuaries	5) Ponds and Lakes	6) Wetlands	7) Upland Areas
Indiana Bat (*Myotis sodalis*)	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.	Booming Skimming Deterrence and Hazing Use of Aircraft Capture and Care Creation/Use of New Access Points Creation/use of Staging Areas (on land) Access of personnel by foot traffic Temporary Storage (on land) Decontamination Manual removal /Cleaning Use of Vehicles Waste Handling	Booming Skimming Deterrence and Hazing Use of Aircraft Capture and Care Creation/Use of New Access Points Creation/use of Staging Areas (on land) Access of personnel by foot traffic Temporary Storage (on land) Decontamination Manual removal /Cleaning Use of Vehicles Waste Handling
Piping Plover, Great Lakes Population (*Charadrius melodus*)	Booming Dikes or Berms Skimming Vacuuming Sorbents Flooding Flushing Steam Cleaning Sandblasting Mechanical sand cleaning (<1 inch) Mechanical sand cleaning/excavation (>1 inch) Manual removal /Cleaning Deterrence and Hazing Capture and Care Use of Aircraft Use of Vehicles Use of machinery/supporting equipment Creation/Use of New Access Points Creation/use of Staging Areas (on land) Deployment of buoys Access of personnel by foot traffic Temporary Storage (on water) Temporary Storage (on land) Decontamination Waste Handling	Not Applicable due to species and habitat not identified as occurring in this environment.	Booming Dikes or Berms Construction of barriers, etc. Skimming Vacuuming Sorbents Flooding Flushing Steam Cleaning Sandblasting Mechanical sand cleaning (<1 inch) Mechanical sand cleaning/excavation (>1 inch) Manual removal /Cleaning Detection of oil Recovery of oil Deterrence and Hazing Capture and Care Use of Aircraft Use of Vessels Use of Vehicles Use of machinery/supporting equipment Creation/Use of New Access Points Creation/use of Staging Areas (on land) Deployment of buoys Access of personnel by foot traffic Temporary Storage (on water) Temporary Storage (on land) Decontamination Waste Handling	Booming Dikes or Berms Construction of barriers, etc. Skimming Vacuuming Sorbents Flooding Flushing Steam Cleaning Sandblasting Mechanical sand cleaning (<1 inch) Mechanical sand cleaning/excavation (>1 inch) Manual removal /Cleaning Detection of oil Recovery of oil Deterrence and Hazing Capture and Care Use of Aircraft Use of Vessels Use of Vehicles Use of machinery/supporting equipment Creation/Use of New Access Points Creation/use of Staging Areas (on land) Deployment of buoys Access of personnel by foot traffic Temporary Storage (on water) Temporary Storage (on land) Decontamination Waste Handling	Booming Dikes or Berms Skimming Vacuuming Sorbents Flooding Flushing Steam Cleaning Sandblasting Mechanical sand cleaning (<1 inch) Mechanical sand cleaning/excavation (>1 inch) Manual removal /Cleaning Deterrence and Hazing Capture and Care Use of Aircraft Use of Vehicles Use of machinery/supporting equipment Creation/Use of New Access Points Creation/use of Staging Areas (on land) Deployment of buoys Access of personnel by foot traffic Temporary Storage (on water) Temporary Storage (on land) Decontamination Waste Handling	Not Applicable due to species and habitat not identified as occurring in this environment.	Not Applicable due to species and habitat not identified as occurring in this environment.

[1] Species listed are those designated or with proposed Primary Constituent Elements within the Action Area.

[2] Some response actions have been abbreviated for use in this table; refer to the Response Action Matrix for full descriptions of responses used in the Action Area

No effect due to no overlap between species and action or no impacts on species from action.

This applied to individuals whose habitat did not overlap with the action area habitats defined in Section 3.1 and 3.2 and was not identified for the response action. Example: Freshwater mussels do not occur nor are individuals found along shorelines (per the definition in Section 3.1); therefore, all response actions and interrelated actions occurring on Shoreline Habitat would not affect mussels due to no overlap.

May affect, not likely to adversely affect due to insignificant or discountable effects

May affect, not likely to adversely affect due to implementation of BMPs to minimize impact; For example, birds whose habitat for feeding, nesting, or otherwise includes Shoreline Habitat, may be affected by the response action occurring in Shoreline Habitats, but impacts are reduced by utilizing BMP's (color coded as orange on Species Action Matrix).

May affect, likely to adversely affect - discuss possible BMPs with Services

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Shoreline (beach/land)

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decontamination
Plants																																
American Hart's-tongue Fern	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Decurrent False Aster	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dwarf Lake Iris			■	■	■					■					■	■	■	■	■	■	■												
Eastern Prairie Fringed Orchid	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Fassett's Locoweed					■										■	■	■			■	■						■						
Houghton's Goldenrod																				■	■						■						
Lakeside Daisy	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Leafy Prairie-clover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Leedy's Roseroot	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mead's Milkweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Michigan Monkey Flower	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Minnesota Dwarf Trout Lily	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Wild Monkshood	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pitcher's Thistle			■	■	■										■	■	■			■	■						■						
Prairie Bush-clover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Short's Bladderpod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Short's Goldenrod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Small whorled pogonia	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tennessee Pondweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Virginia Sneezeweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Virginia Spiraea	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Western Prairie Fringed Orchid	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snails																																
Iowa Pleistocene Snail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Clams (Freshwater Mussels)																																
Clubshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fanshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fat Pocketbook	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Higgins' Eye Pearlymussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Longsolid	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Riffleshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Orangefoot Pimpleback	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pink Mucket	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Purple Cat's Paw Pearlymussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pyramid (Pink) Pigtoe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rabbitsfoot	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rayed Bean	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rough Pigtoe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Shoreline (beach/land)

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decontamination
Clams (Freshwater Mussels) cont'd																																
Round Hickorynut	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Salamander mussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Scaleshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sheepnose	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snuffbox	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Spectaclecase	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
White Catspaw	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Winged Mapleleaf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Crustaceans																																
Illinois Cave Amphipod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Insects																																
American Burying Beetle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Bog Buckmoth	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dakota Skipper	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Frosted Elfin Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hine's Emerald Dragonfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hungerford's Crawling Water Beetle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Karner Blue Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Linda's Roadside Skipper	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mitchell's Satyr Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monarch Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Poweshiek Skipperling	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Adjacent to Occupied Wetland																																
Unoccupied Cricital Habitat																																
Rattlesnake-master Borer Moth	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Regal Fritillary	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rusty Patched Bumble Bee	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fish																																
Lake Sturgeon	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pallid Sturgeon	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Popeye Shiner	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Scioto Madtom	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sicklefin Chub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sturgeon Chub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Topeka Shiner	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Shoreline (beach/land)

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decontamination
Herptiles																																
Alligator Snapping Turtle			■	■											■	■	■										■						
Blanding's Turtle			■	■											■	■	■										■						
Copperbelly Watersnake, N. DPS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Eastern Massasauga	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Illinois Chorus Frog	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Spotted Turtle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Streamside Salamander	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Wood Turtle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mammals																																
Canada Lynx	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Gray Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Gray Wolf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Indiana Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Little Brown Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Bog Lemming	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Long-eared Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Plains Spotted Skunk	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Prairie Gray Fox	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tricolored Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Birds																																
Eastern Black Rail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Golden-winged Warbler	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Kirtland’s Warbler	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Piping Plover, Great Lakes Population			■	■											■	■	■				■											
Rufa Red Knot			■	■											■	■	■				■											
Whooping Crane, Non-essential Experimental Pop.	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Rivers and Streams

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring: Air, land, water (includes SCAT)	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Plants																																		
American Hart's-tongue Fern	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Decurrent False Aster					■										■		■	■	■	■	■							■			■		■	■	
Dwarf Lake Iris	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Eastern Prairie Fringed Orchid					■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fassett's Locoweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Houghton's Goldenrod		■			■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Lakeside Daisy		■			■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Leafy Prairie-clover		■			■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Leedy's Roseroot		■			■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mead's Milkweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Michigan Monkey Flower																				■	■							■					■	
Minnesota Dwarf Trout Lily															■		■											■		■			■	
Northern Wild Monkshood															■		■											■		■			■	
Pitcher's Thistle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Prairie Bush-clover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Short's Bladderpod															■		■											■		■			■	
Short's Goldenrod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Small whorled pogonia	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tennessee Pondweed																				■														
Virginia Sneezeweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Virginia Spiraea					■															■	■								■					
Western Prairie Fringed Orchid					■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snails																																		
Iowa Pleistocene Snail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Clams (Freshwater Mussels)													■	■				■	■				■	■	■				■			■	■	■
Clubshell													■	■				■	■	■			■	■	■				■			■	■	■
Fanshell													■	■				■	■	■			■	■	■				■			■	■	■
Fat Pocketbook													■	■				■	■	■			■	■	■				■			■	■	■
Higgins' Eye Pearlymussel													■	■				■	■	■			■	■	■				■			■	■	■
Longsolid													■	■				■	■	■			■	■	■				■			■	■	■
Northern Riffleshell													■	■				■	■	■			■	■	■				■			■	■	■
Orangefoot Pimpleback													■	■				■	■	■			■	■	■				■			■	■	■
Pink Mucket													■	■				■	■	■			■	■	■				■			■	■	■
Purple Cat's Paw Pearlymussel													■	■				■	■	■			■	■	■				■			■	■	■
Pyramid (Pink) Pigtoe													■	■				■	■	■			■	■	■				■			■	■	■
Rabbitsfoot													■	■				■	■	■			■	■	■				■			■	■	■
Rayed Bean													■	■				■	■	■			■	■	■				■			■	■	■
Rough Pigtoe													■	■				■	■	■			■	■	■				■			■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Rivers and Streams

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring: Air, land, water (includes SCAT)	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Clams (Freshwater Mussels) cont'd																																		
Round Hickorynut													■	■				■	■	■			■	■	■				■			■	■	■
Salamander mussel													■	■				■	■	■			■	■	■				■			■	■	■
Scaleshell													■	■				■	■	■			■	■	■				■			■	■	■
Sheepnose													■	■				■	■	■			■	■	■				■			■	■	■
Snuffbox													■	■				■	■	■			■	■	■				■			■	■	■
Spectaclecase													■	■				■	■	■			■	■	■				■			■	■	■
White Catspaw													■	■				■	■	■			■	■	■				■			■	■	■
Winged Mapleleaf													■	■				■	■	■			■	■	■				■			■	■	■
Crustaceans																																		
Illinois Cave Amphipod							■						■	■		■		■	■	■	■	■	■	■	■				■			■	■	■
Insects																																		
American Burying Beetle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Bog Buckmoth	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dakota Skipper	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Frosted Elfin Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hine's Emerald Dragonfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hungerford's Crawling Water Beetle							■									■		■	■	■	■			■	■				■			■		■
Karner Blue Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Linda's Roadside Skipper					■	■	■								■	■	■	■	■	■	■								■	■	■	■			
Mitchell's Satyr Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monarch Butterfly					■	■	■								■	■	■	■	■	■	■								■	■	■	■			
Poweshiek Skipperling	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Adjacent to Occupied Wetland																																		
Unoccupied Cricital Habitat																																		
Rattlesnake-master Borer Moth	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Regal Fritillary					■	■	■								■	■	■	■	■	■	■								■	■	■	■			
Rusty Patched Bumble Bee					■	■	■								■	■	■	■	■	■	■								■	■	■	■			
Fish																																		
Lake Sturgeon							■					■	■	■					■	■		■	■	■	■				■			■		■
Pallid Sturgeon							■					■	■	■					■	■		■	■	■	■				■			■		■
Popeye Shiner							■					■	■	■					■	■		■	■	■	■				■			■		■
Scioto Madtom							■					■	■	■					■	■		■	■	■	■				■			■		■
Sicklefin Chub							■					■	■	■					■	■		■	■	■	■				■			■		■
Sturgeon Chub							■					■	■	■					■	■		■	■	■	■				■			■		■
Topeka Shiner							■					■	■	■					■	■		■	■	■	■				■			■		■

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Rivers and Streams

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring: Air, land, water (includes SCAT)	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Herptiles																																		
Alligator Snapping Turtle								■					■	■															■					
Blanding's Turtle								■					■	■															■					
Copperbelly Watersnake, N. DPS	■	■	■		■	■	■	■	■	■	■	■	■	■				■	■	■	■	■	■	■	■		■		■	■	■	■	■	■
Eastern Massasauga	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■
Illinois Chorus Frog	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■
Spotted Turtle								■					■	■															■					
Streamside Salamander																				■									■					
Wood Turtle																													■					
Mammals																																		
Canada Lynx	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Gray Bat															■	■	■											■		■		■		■	
Gray Wolf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Indiana Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Little Brown Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Bog Lemming	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Long-eared Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Plains Spotted Skunk	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Prairie Gray Fox	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tricolored Bat															■	■	■											■		■		■		■	
Birds																																		
Eastern Black Rail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Golden-winged Warbler	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Kirtland's Warbler	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Piping Plover, Great Lakes Population				■													■												■					
Rufa Red Knot				■													■												■					
Whooping Crane, Non-essential Experimental Pop.	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Ponds and Lakes

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring: Air, land, water (includes SCAT)	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Plants																																	
American Hart's-tongue Fern	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Decurrent False Aster	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dwarf Lake Iris	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Eastern Prairie Fringed Orchid	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fassett's Locoweed					■										■	■	■			■	■						■				■		■	
Houghton's Goldenrod																				■	■						■						■	
Lakeside Daisy		■			■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Leafy Prairie-clover		■			■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Leedy's Roseroot		■			■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mead's Milkweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Michigan Monkey Flower																				■	■						■					■	
Minnesota Dwarf Trout Lily															■		■										■		■			■	
Northern Wild Monkshood															■		■										■		■			■	
Pitcher's Thistle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Prairie Bush-clover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Short's Bladderpod															■		■										■		■			■	
Short's Goldenrod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Small whorled pogonia	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tennessee Pondweed																				■													
Virginia Sneezeweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Virginia Spiraea					■															■	■								■				
Western Prairie Fringed Orchid					■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snails																																	
Iowa Pleistocene Snail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Clams (Freshwater Mussels)																																	
Clubshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fanshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fat Pocketbook	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Higgins' Eye Pearlymussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Longsolid	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Riffleshell													■	■				■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■
Orangefoot Pimpleback	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pink Mucket	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Purple Cat's Paw Pearlymussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pyramid (Pink) Pigtoe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rabbitsfoot													■	■				■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■
Rayed Bean													■	■				■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■
Rough Pigtoe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Ponds and Lakes

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring: Air, land, water (includes SCAT)	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Clams (Freshwater Mussels) cont'd																																	
Round Hickorynut	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Salamander mussel													■	■				■	■	■	■	■	■	■	■				■			■	■	■
Scaleshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sheepnose	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snuffbox													■	■				■	■	■	■	■	■	■	■				■			■	■	■
Spectaclecase	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
White Catspaw	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Winged Mapleleaf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Crustaceans																																	
Illinois Cave Amphipod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Insects																																	
American Burying Beetle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Bog Buckmoth	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dakota Skipper	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Frosted Elfin Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hine's Emerald Dragonfly					■	■	■			■	■					■	■	■	■	■	■	■	■		■		■				■		
Hungerford's Crawling Water Beetle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Karner Blue Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Linda's Roadside Skipper	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mitchell's Satyr Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monarch Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Poweshiek Skipperling	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Adjacent to Occupied Wetland																																	
Unoccupied Cricital Habitat																																	
Rattlesnake-master Borer Moth	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Regal Fritillary	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rusty Patched Bumble Bee	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fish																																	
Lake Sturgeon							■					■	■	■					■	■		■	■	■	■				■			■		■
Pallid Sturgeon	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Popeye Shiner	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Scioto Madtom	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sicklefin Chub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sturgeon Chub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Topeka Shiner							■					■	■	■					■	■		■	■	■	■				■			■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Ponds and Lakes

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and care of contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring: Air, land, water (includes SCAT)	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Herptiles																																	
Alligator Snapping Turtle				■				■					■	■													■					■	
Blanding's Turtle				■				■					■	■													■					■	
Copperbelly Watersnake, N. DPS	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■
Eastern Massasauga	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■
Illinois Chorus Frog				■									■	■						■							■							
Spotted Turtle				■				■					■	■													■					■	
Streamside Salamander	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Wood Turtle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mammals																																	
Canada Lynx	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Gray Bat				■											■	■	■											■		■		■		■	
Gray Wolf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Indiana Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Little Brown Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Bog Lemming	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Long-eared Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Plains Spotted Skunk	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Prairie Gray Fox	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tricolored Bat				■											■	■	■											■		■		■		■	
Birds																																	
Eastern Black Rail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Golden-winged Warbler	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Kirtland's Warbler	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Piping Plover, Great Lakes Population				■													■											■				■		
Rufa Red Knot				■													■											■				■		
Whooping Crane, Non-essential Experimental Pop.	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Wetlands

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and Care of Contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Plants																																		
American Hart's-tongue Fern	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Decurrent False Aster		■	■	■	■	■	■	■	■	■	■		■	■	■		■	■	■	■	■	■	■				■		■	■	■	■	■	
Dwarf Lake Iris			■	■	■					■						■	■	■	■	■	■						■		■			■		
Eastern Prairie Fringed Orchid					■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fassett's Locoweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Houghton's Goldenrod																					■	■					■							
Lakeside Daisy	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Leafy Prairie-clover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Leedy's Roseroot	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mead's Milkweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Michigan Monkey Flower																				■	■						■					■		
Minnesota Dwarf Trout Lily	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Wild Monkshood	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pitcher's Thistle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Prairie Bush-clover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Short's Bladderpod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Short's Goldenrod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Small whorled pogonia	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tennessee Pondweed																				■														
Virginia Sneezeweed																				■	■						■					■		
Virginia Spiraea	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Western Prairie Fringed Orchid					■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snails																																		
Iowa Pleistocene Snail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Clams (Freshwater Mussels)																																		
Clubshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fanshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fat Pocketbook	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Higgins' Eye Pearlymussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Longsolid	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Riffleshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Orangefoot Pimpleback	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pink Mucket	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Purple Cat's Paw Pearlymussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pyramid (Pink) Pigtoe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rabbitsfoot	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rayed Bean	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rough Pigtoe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Wetlands

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and Care of Contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Clams (Freshwater Mussels) cont'd																																		
Round Hickorynut	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Salamander mussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Scaleshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sheepnose	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snuffbox	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Spectaclecase	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
White Catspaw	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Winged Mapleleaf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Crustaceans																																		
Illinois Cave Amphipod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Insects																																		
American Burying Beetle		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■		■		■			■	■	■		
Bog Buckmoth					■	■	■			■	■				■		■	■	■	■	■	■	■		■		■			■	■			
Dakota Skipper	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Frosted Elfin Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hine's Emerald Dragonfly					■	■	■			■	■				■		■	■	■	■	■	■	■		■		■			■	■			
Hungerford's Crawling Water Beetle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Karner Blue Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Linda's Roadside Skipper					■	■	■			■	■				■	■	■			■	■		■		■		■			■	■			■
Mitchell's Satyr Butterfly					■	■	■			■	■				■	■	■			■	■		■		■		■			■	■			■
Monarch Butterfly					■	■	■			■	■				■	■	■			■	■		■		■		■			■	■			■
Poweshiek Skipperling					■	■	■			■	■				■	■	■			■	■		■		■		■			■	■			■
Adjacent to Occupied Wetland																																		
Unoccupied Cricital Habitat																																		
Rattlesnake-master Borer Moth	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Regal Fritillary					■	■	■			■	■				■	■	■			■	■		■		■		■			■	■			■
Rusty Patched Bumble Bee					■	■	■			■	■				■	■	■			■	■		■		■		■			■	■			■
Fish																																		
Lake Sturgeon	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pallid Sturgeon	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Popeye Shiner	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Scioto Madtom	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sicklefin Chub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sturgeon Chub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Topeka Shiner	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

Wetlands

	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and Care of Contaminated species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Herptiles																																		
Alligator Snapping Turtle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Blanding's Turtle		■	■	■		■	■	■	■	■	■										■	■	■	■				■			■		■	
Copperbelly Watersnake, N. DPS				■		■	■	■	■	■	■									■		■	■				■			■	■	■	
Eastern Massasauga				■		■	■	■	■	■	■									■		■	■				■			■	■		
Illinois Chorus Frog				■						■	■									■		■	■				■			■	■		
Spotted Turtle		■	■	■						■	■											■	■				■			■	■	■	
Streamside Salamander	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Wood Turtle		■	■	■		■	■	■	■	■	■											■	■				■			■		■	
Mammals																																		
Canada Lynx	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Gray Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Gray Wolf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Indiana Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Little Brown Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Bog Lemming		■	■	■		■	■			■	■				■	■	■				■		■		■		■				■	■	■	
Northern Long-eared Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Plains Spotted Skunk	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Prairie Gray Fox	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Tricolored Bat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Birds																																		
Eastern Black Rail				■		■	■			■	■						■				■		■		■						■	■	■	
Golden-winged Warbler				■		■	■			■	■						■				■		■		■						■	■	■	
Kirtland's Warbler	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Piping Plover, Great Lakes Population	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rufa Red Knot	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Whooping Crane, Non-essential Experimental Pop.		■	■	■		■	■			■	■						■				■		■		■						■	■	■	

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

	Uplands																																		
	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and Care of Unharmed species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Plants																																			
American Hart's-tongue Fern		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		
Decurrent False Aster	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	
Dwarf Lake Iris			■	■	■					■					■	■	■	■	■	■	■	■					■					■		■	
Eastern Prairie Fringed Orchid	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fassett's Locoweed					■											■	■	■			■	■					■					■		■	
Houghton's Goldenrod	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Lakeside Daisy		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		■	
Leafy Prairie-clover		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		■	
Leedy's Roseroot		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		■	
Mead's Milkweed				■	■	■	■	■	■	■	■				■	■	■			■	■						■			■		■		■	
Michigan Monkey Flower	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■
Minnesota Dwarf Trout Lily		■	■	■		■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		■	
Northern Wild Monkshood		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		■	
Pitcher's Thistle		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		■	
Prairie Bush-clover				■	■	■	■	■	■	■	■				■	■	■			■	■						■			■		■		■	
Short's Bladderpod		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		■	
Short's Goldenrod				■	■	■	■	■	■	■	■				■	■	■			■	■						■			■		■		■	
Small whorled pogonia				■	■	■	■	■	■	■	■				■	■	■			■	■						■			■		■		■	
Tennessee Pondweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Virginia Sneezeweed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Virginia Spiraea	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Western Prairie Fringed Orchid		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■			■		■		■	
Snails																																			
Iowa Pleistocene Snail		■	■	■	■	■	■								■	■	■	■	■	■	■	■	■				■			■		■		■	
Clams (Freshwater Mussels)																																			
Clubshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fanshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fat Pocketbook	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Higgins' Eye Pearlymussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Longsolid	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Riffleshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Orangefoot Pimpleback	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pink Mucket	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Purple Cat's Paw Pearlymussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pyramid (Pink) Pigtoe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rabbitsfoot	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rayed Bean	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rough Pigtoe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 6. Summary of No-Effect by Response within an Effected Environment for Listed Species in Region 5.

	Uplands																																		
	Booming	Dikes or Berms	Construction barriers, dams, pits, and trenches	Culvert blocking	Skimming	Vacuuming	Sorbents	Flooding	Flushing	Sandblasting	Steam Cleaning	Manual removal /Cleaning of oil, oiled sediment, debris, or vegetation	Mechanical (non-chemical) sand cleaning (surface, <1 inch)	Mechanical (non-chemical) sand cleaning and excavation (>1 inch)	Detection of non-floating or submerged oil	Recovery of non-floating or submerged oil	Containment of non-floating or submerged oil	Deterrence and Hazing	Capture and Care of Unharmed species or recovery of contaminated carcasses	Use of Aircraft	Use of Vessels	Use of Vehicles	Use of Machinery/Supporting Equipment	Creation/Use of New Access Points	Creation/use of Staging Areas (on land)	Natural attenuation - allow habitat to recover naturally while monitoring	Deployment of buoys	Locating, Sampling and monitoring	Access of personnel by foot traffic	Waste Handling	Temporary Storage (on water)	Temporary Storage (on land)	Decanting	Decontamination
Clams (Freshwater Mussels) cont'd																																			
Round Hickorynut	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Salamander mussel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Scaleshell	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sheepnose	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Snuffbox	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Spectaclecase	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
White Catspaw	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Winged Mapleleaf	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Crustaceans																																			
Illinois Cave Amphipod	■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Insects																																			
American Burying Beetle			■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■				■		■		
Bog Buckmoth	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dakota Skipper				■	■	■	■	■	■	■	■				■	■	■			■	■						■				■		■		
Frosted Elfin Butterfly				■	■	■	■	■	■	■	■				■	■	■			■	■						■				■		■		
Hine's Emerald Dragonfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Hungerford's Crawling Water Beetle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Karner Blue Butterfly				■	■	■	■	■	■	■	■				■	■	■			■	■						■				■		■		
Linda's Roadside Skipper				■	■	■	■	■	■	■	■				■	■	■			■	■						■				■		■		
Mitchell's Satyr Butterfly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Monarch Butterfly				■	■	■	■	■	■	■	■				■	■	■			■	■						■				■		■		
Poweshiek Skipperling																																			
Adjacent to Occupied Wetland				■	■	■	■			■	■		■	■	■	■	■	■	■	■	■	■	■		■		■				■	■	■		
Unoccupied Cricital Habitat		■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■	■	■				■				■		■		
Rattlesnake-master Borer Moth				■	■	■	■	■	■	■	■				■	■	■			■	■						■				■		■		
Regal Fritillary				■	■	■	■	■	■	■	■				■	■	■			■	■						■				■		■		
Rusty Patched Bumble Bee				■	■	■	■	■	■	■	■				■	■	■			■	■						■				■		■		
Fish																																			
Lake Sturgeon	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pallid Sturgeon	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Popeye Shiner	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Scioto Madtom	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sicklefin Chub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Sturgeon Chub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Topeka Shiner	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

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Herptiles																																			
Alligator Snapping Turtle	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Blanding's Turtle		■	■	■		■	■	■	■	■	■				■	■	■				■		■				■				■		■		
Copperbelly Watersnake, N. DPS		■	■	■		■	■	■	■	■	■				■	■	■			■	■		■				■				■		■		
Eastern Massasauga		■	■	■		■	■	■	■	■	■				■	■	■			■	■		■				■				■		■		
Illinois Chorus Frog				■						■	■									■		■	■				■				■	■			
Spotted Turtle		■	■	■		■	■	■	■	■	■				■	■	■				■		■				■				■		■		
Streamside Salamander				■		■	■	■	■	■	■				■	■	■			■	■		■				■				■		■		
Wood Turtle		■	■	■		■	■	■	■	■	■				■	■	■				■		■				■				■		■		
Mammals																																			
Canada Lynx		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■		■				■				■		■		
Gray Bat		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■	■	■				■				■		■		
Gray Wolf		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■		■				■				■		■		
Indiana Bat		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■		■				■				■		■		
Little Brown Bat		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■	■	■				■				■				
Northern Bog Lemming	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Northern Long-eared Bat		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■		■				■				■		■		
Plains Spotted Skunk		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■		■				■				■		■		
Prairie Gray Fox		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■		■				■				■		■		
Tricolored Bat		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■		■				■				■		■		
Birds																																			
Eastern Black Rail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Golden-winged Warbler				■		■	■	■	■	■	■				■	■	■				■	■	■				■				■		■		
Kirtland's Warbler		■	■	■		■	■	■	■	■	■		■	■	■	■	■				■	■	■				■				■		■		
Piping Plover, Great Lakes Population	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Rufa Red Knot	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Whooping Crane, Non-essential Experimental Pop.	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■