

High-Risk Response Actions and Activities in SHORELINES

Associated Vulnerable Habitats:

Beach and Sand Bar, Mudflats, Rooted Floating Aquatics, and Sedge Meadow

Deflection and Containment Activities

Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Dwarf Lake Iris (<i>Reference Description Page/Link</i>)	Dikes or berms	MI, WI	
Pitcher's Thistle	Dikes or berms	IL, IN, MI, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Dwarf Lake Iris	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, WI	
Fassett's Locoweed	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	WI	
Hall's Bulrush	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MI	
Pitcher's Thistle	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, WI	
Alligator Snapping Turtle	Booming Dikes or berms	IL, IN	
Blanding's Turtle	Booming Dikes or berms	IL, IN, MI, OH, WI	
Piping Plover <i>Critical Habitat</i>	Booming Dikes or berms	IL, IN, MI, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Rufa Red Knot	Booming Dikes or berms	IL, IN, MI, OH, WI	
Recovery Activities			
Species	Specific Activity	States of Occurrence	BMPs
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Dwarf Lake Iris	Vacuuming Sorbents	IL, IN, MI, WI	
Fassett's Locoweed	Vacuuming Sorbents	WI	
Hall's Bulrush	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Skimming Vacuuming Sorbents	MI	
Pitcher's Thistle	Vacuuming Sorbents	IL, IN, MI, WI	
Alligator Snapping Turtle	Skimming	IL, IN	

	Vacuuming Sorbents		
Blanding's Turtle	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
Piping Plover <i>Critical Habitat</i>	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Rufa Red Knot	Skimming Vacuuming	IL, IN, MI, OH, WI	USFWS Contact
Removal/Cleanup Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Dwarf Lake Iris	Flooding Flushing Steam cleaning Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning	IL, IN, MI, WI	
Fassett's Locoweed	Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning	WI	
Hall's Bulrush	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning	MI	
Pitcher's Thistle	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning	IL, IN, MI, WI	
Alligator Snapping Turtle	Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN	
Blanding's Turtle	Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MI, OH, WI	
Piping Plover <i>Critical Habitat</i>	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning	IL, IN, MI, OH, WI	
Rufa Red Knot	Flooding Flushing Steam cleaning Sandblasting	IL, IN, MI, OH, WI	

	Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning		
May affect, not likely to adversely affect due to insignificant or discountable effects			
Fassett's Locoweed	Flooding	WI	
Alligator Snapping Turtle	Flooding Flushing	IL, IN	
Blanding's Turtle	Flooding Flushing	IL, IN, MI, OH, WI	
Submerged Oil Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Hall's Bulrush	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Hall's Bulrush	Detection of non-floating/submerged oil	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Detection of non-floating/submerged oil	MI	
Wildlife Protection Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Alligator Snapping Turtle	Capture and care of contaminated species	IL, IN	
Blanding's Turtle	Capture and care of contaminated species	IL, IN, MI, OH, WI	
Piping Plover <i>Critical Habitat</i>	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH, WI	
Rufa Red Knot	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Fassett's Locoweed	Deterrence and hazing Capture and care of contaminated species	WI	
Hall's Bulrush	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Deterrence and hazing Capture and care of contaminated species	MI	
Pitcher's Thistle	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, WI	
Alligator Snapping Turtle	Deterrence and hazing	IL, IN	
Blanding's Turtle	Deterrence and hazing	IL, IN, MI, OH, WI	
Locating, Tracking, and Support Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Dwarf Lake Iris	Use of vehicles	IL, IN, MI, WI	

	<p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Creation/use of staging areas (on land)</p> <p>Access of personnel by foot traffic</p>		
Fassett's Locoweed	<p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Creation/use of staging areas (on land)</p> <p>Access of personnel by foot traffic</p>	WI	
Hall's Bulrush	<p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Creation/use of staging areas (on land)</p> <p>Access of personnel by foot traffic</p>	IL, IN, MI, OH, WI	
Houghton's Goldenrod	<p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Creation/use of staging areas (on land)</p> <p>Access of personnel by foot traffic</p>	MI	
Pitcher's Thistle	<p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Creation/use of staging areas (on land)</p> <p>Access of personnel by foot traffic</p>	IL, IN, MI, WI	
Alligator Snapping Turtle	<p>Use of vessels</p> <p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Creation/use of staging areas (on land)</p> <p>Access of personnel by foot traffic</p>	IL, IN	
Blanding's Turtle	<p>Use of vessels</p> <p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Creation/use of staging areas (on land)</p>	IL, IN, MI, OH, WI	

	Access of personnel by foot traffic		
Piping Plover <i>Critical Habitat</i>	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	IL, IN, MI, OH, WI	
Rufa Red Knot	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	IL, IN, MI, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Alligator Snapping Turtle	Use of aircraft	IL, IN	
Blanding's Turtle	Use of aircraft	IL, IN, MI, OH, WI	
Rufa Red Knot	Access of personnel by foot traffic	IL, IN, MI, OH, WI	
Special considerations needed, high level of concern			
Dwarf Lake Iris	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, WI	
Fassett's Locoweed	Natural attenuation Locating, sampling, and monitoring air, land, and water, and water	WI	
Hall's Bulrush	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI	
Pitcher's Thistle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, WI	
Alligator Snapping Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Blanding's Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Piping Plover <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Rufa Red Knot	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	

Waste Management Activities			
Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Dwarf Lake Iris	Waste handling Temporary storage (on water) Temporary storage (on land) Decontamination	IL, IN, MI, WI	
Eastern Prairie Fringed Orchid	Temporary storage (on land)	IL, IN, MI, OH, WI	
Fassett's Locoweed	Waste handling Temporary storage (on land) Decontamination	WI	
Hall's Bulrush	Waste handling Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Waste handling Temporary storage (on land) Decontamination	MI	
Michigan Monkey Flower	Temporary storage (on land)	MI	
Minnesota Dwarf Trout Lily	Temporary storage (on land)	MN	
Northern Wild Monkshood	Temporary storage (on land)	OH, WI	
Pitcher's Thistle	Temporary storage (on land) Decontamination	IL, IN, MI, WI	
Alligator Snapping Turtle	Temporary storage (on water) Temporary storage (on land) Decontamination	IL, IN	
Blanding's Turtle	Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Piping Plover <i>Critical Habitat</i>	Temporary storage (on water) Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Rufa Red Knot	Temporary storage (on water) Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Hall's Bulrush	Temporary storage (on water)	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Temporary storage (on water)	MI	
Pitcher's Thistle	Waste handling	IL, IN, MI, WI	
Alligator Snapping Turtle	Waste handling	IL, IN	
Blanding's Turtle	Waste handling Temporary storage (on water)	IL, IN, MI, OH, WI	
Piping Plover <i>Critical Habitat</i>	Waste handling	IL, IN, MI, OH, WI	
Rufa Red Knot	Waste handling	IL, IN, MI, OH, WI	

High-Risk Response Actions and Activities in PORTS, CANALS, AND INDUSTRIAL AREAS			
Associated Vulnerable Habitats: Beach and Sand Bar, Mudflats, Rooted Floating Aquatics, Open Water, and Submersed Vegetation			
Deflection and Containment Activities			
Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell (<i>Reference Description Page/Link</i>)	Booming	IL, IN, MI, OH	
Orangefoot Pimpleback	Booming	IL	
Pyramid (Pink) Pigtoe	Booming	OH	
Rough Pigtoe	Booming	IN	
Scaleshell	Booming	IL	
Winged Mapleleaf	Booming	MN, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Booming	IL, IN, MI, OH	
Fanshell	Booming	IL, IN, OH	
Fat Pocketbook	Booming	IL, IN	
Higgins' Eye Pearlymussel	Booming	IL, MN, WI	
Longsolid	Booming	IL, IN, OH	
Pink Mucket	Booming	IL, IN, OH	
Rabbitsfoot <i>Critical Habitat</i>	Booming	IL, IN, OH	
Rayed Bean	Booming	IN, MI, OH	
Round Hickorynut	Booming	IL, IN, MI, OH	
Salamander Mussel	Booming	IL, IN, MI, MN, OH, WI	
Sheepnose	Booming	IL, IN, MN, OH, WI	
Snuffbox	Booming	IL, IN, MI, OH, WI	
Spectaclecase	Booming	IL, MN, WI	
Lake Sturgeon	Booming	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Booming	IL	
Sicklefin Chub	Booming	IL	
Sturgeon Chub	Booming	IL	
Alligator Snapping Turtle	Booming	IL, IN	
Recovery Activities			
Species	Specific Activity	States of Occurrence	BMPs
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Orangefoot Pimpleback	Skimming Vacuuming Sorbents	IL	
Pyramid (Pink) Pigtoe	Skimming Vacuuming Sorbents	OH	
Rough Pigtoe	Skimming Vacuuming Sorbents	IN	
Scaleshell	Skimming Vacuuming Sorbents	IL	
Winged Mapleleaf	Skimming Vacuuming Sorbents	MN, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Skimming	IL, IN, MI, OH	

	Vacuuming Sorbents		
Fanshell	Skimming Vacuuming Sorbents	IL, IN, OH	
Fat Pocketbook	Skimming Vacuuming Sorbents	IL, IN	
Higgins' Eye Pearlymussel	Skimming Vacuuming Sorbents	IL, MN, WI	
Longsolid	Skimming Vacuuming Sorbents	IL, IN, OH	
Pink Mucket	Skimming Vacuuming Sorbents	IL, IN, OH	
Rabbitsfoot <i>Critical Habitat</i>	Skimming Vacuuming Sorbents	IL, IN, OH	
Rayed Bean	Skimming Vacuuming Sorbents	IN, MI, OH	
Round Hickorynut	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Salamander Mussel	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Sheepnose	Skimming Vacuuming Sorbents	IL, IN, MN, OH, WI	
Snuffbox	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
Spectaclecase	Skimming Vacuuming Sorbents	IL, MN, WI	
Lake Sturgeon	Skimming Vacuuming	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Skimming Vacuuming	IL	
Sicklefin Chub	Skimming Vacuuming	IL	
Sturgeon Chub	Skimming Vacuuming	IL	
Alligator Snapping Turtle	Skimming Vacuuming Sorbents	IL, IN	
Removal/Cleanup Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Orangefoot Pimpleback	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL	
Pyramid (Pink) Pigtoe	Flushing Steam cleaning Sandblasting	OH	

	Manual removal/cleaning of oil		
Rough Pigtoe	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IN	
Scaleshell	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL	
Winged Mapleleaf	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	MN, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Fanshell	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Fat Pocketbook	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN	
Higgins' Eye Pearlymussel	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, MN, WI	
Longsolid	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Pink Mucket	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Rabbitsfoot <i>Critical Habitat</i>	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Rayed Bean	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IN, MI, OH	
Round Hickorynut	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Salamander Mussel	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	

Sheepnose	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MN, OH, WI	
Snuffbox	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH, WI	
Spectaclecase	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, MN, WI	
Lake Sturgeon	Flushing Steam cleaning Sandblasting	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Flushing Steam cleaning Sandblasting	IL	
Sicklefin Chub	Flushing Steam cleaning Sandblasting	IL	
Sturgeon Chub	Flushing Steam cleaning Sandblasting	IL	
Alligator Snapping Turtle	Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN	

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

Alligator Snapping Turtle	Flushing	IL, IN	
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Submerged Oil Activities

Species	Specific Activity	States of Occurrence	BMPs ¹
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May affect, likely to adversely affect - discuss possible BMPs with Services

Northern Riffleshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Orangefoot Pimpleback	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Pyramid (Pink) Pigtoe	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	OH	
Rough Pigtoe	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN	
Scaleshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	

Winged Mapleleaf	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MN, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Fanshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Fat Pocketbook	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN	
Higgins' Eye Pearlymussel	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, MN, WI	
Longsolid	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Pink Mucket	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Rabbitsfoot <i>Critical Habitat</i>	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Rayed Bean	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN, MI, OH	
Round Hickorynut	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Salamander Mussel	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Sheepnose	Detection of non-floating/submerged oil	IL, IN, MN, OH, WI	

	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil		
Snuffbox	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Spectaclecase	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, MN, WI	
Lake Sturgeon	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Sicklefin Chub	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Sturgeon Chub	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Alligator Snapping Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN	
Wildlife Protection Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Lake Sturgeon	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Deterrence and hazing	IL	
Sicklefin Chub	Deterrence and hazing	IL	
Sturgeon Chub	Deterrence and hazing	IL	
Alligator Snapping Turtle	Capture and care of contaminated species	IL, IN	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Alligator Snapping Turtle	Deterrence and hazing	IL, IN	
Locating, Tracking, and Support Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell	Deployment of buoys	IL, IN, MI, OH	

Orangefoot Pimpleback	Deployment of buoys	IL	
Pyramid (Pink) Pigtoe	Deployment of buoys	OH	
Rough Pigtoe	Deployment of buoys	IN	
Scaleshell	Deployment of buoys	IL	
Winged Mapleleaf	Deployment of buoys	MN, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Deployment of buoys	IL, IN, MI, OH	
Fanshell	Deployment of buoys	IL, IN, OH	
Fat Pocketbook	Deployment of buoys	IL, IN	
Higgins' Eye Pearlymussel	Deployment of buoys	IL, MN, WI	
Longsolid	Deployment of buoys	IL, IN, OH	
Pink Mucket	Deployment of buoys	IL, IN, OH	
Rabbitsfoot <i>Critical Habitat</i>	Deployment of buoys	IL, IN, OH	
Rayed Bean	Deployment of buoys	IN, MI, OH	
Round Hickorynut	Deployment of buoys	IL, IN, MI, OH	
Salamander Mussel	Deployment of buoys	IL, IN, MI, MN, OH, WI	
Sheepnose	Deployment of buoys	IL, IN, MN, OH, WI	
Snuffbox	Deployment of buoys	IL, IN, MI, OH, WI	
Spectaclecase	Deployment of buoys	IL, MN, WI	
Lake Sturgeon	Use of vessels Deployment of buoys	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Use of vessels Deployment of buoys	IL	
Sicklefin Chub	Use of vessels Deployment of buoys	IL	
Sturgeon Chub	Use of vessels Deployment of buoys	IL	
Alligator Snapping Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas (on land) Access of personnel by foot traffic	IL, IN	
Blanding's Turtle	Access of personnel by foot traffic	IL, IN, MI, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Alligator Snapping Turtle	Use of aircraft Deployment of buoys	IL, IN	
Special considerations needed, high level of concern			
Clubshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Fanshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Fat Pocketbook	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Higgins' Eye Pearlymussel	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MN, WI	
Longsolid	Natural attenuation	IL, IN, OH	

	Locating, sampling, and monitoring air, land, and water		
Northern Riffleshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Orangefoot Pimpleback	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Pink Mucket	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Pyramid (Pink) Pigtoe	Natural attenuation Locating, sampling, and monitoring air, land, and water	OH	
Rabbitsfoot <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Rayed Bean	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, MI, OH	
Rough Pigtoe	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN	
Round Hickorynut	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Salamander Mussel	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Scaleshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Sheepnose	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MN, OH, WI	
Snuffbox	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Spectaclecase	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MN, WI	
Winged Mapleleaf	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN, WI	
Lake Sturgeon	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Sicklefin Chub	Natural attenuation	IL	

	Locating, sampling, and monitoring air, land, and water		
Sturgeon Chub	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Alligator Snapping Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Waste Management Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell	Temporary storage (on water)	IL, IN, MI, OH	
Orangefoot Pimpleback	Temporary storage (on water)	IL	
Pyramid (Pink) Pigtoe	Temporary storage (on water)	OH	
Rough Pigtoe	Temporary storage (on water)	IN	
Scaleshell	Temporary storage (on water)	IL	
Winged Mapleleaf	Temporary storage (on water)	MN, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Temporary storage (on water)	IL, IN, MI, OH	
Fanshell	Temporary storage (on water)	IL, IN, OH	
Fat Pocketbook	Temporary storage (on water)	IL, IN	
Higgins' Eye Pearlymussel	Temporary storage (on water)	IL, MN, WI	
Longsolid	Temporary storage (on water)	IL, IN, OH	
Pink Mucket	Temporary storage (on water)	IL, IN, OH	
Rabbitsfoot <i>Critical Habitat</i>	Temporary storage (on water)	IL, IN, OH	
Rayed Bean	Temporary storage (on water)	IN, MI, OH	
Round Hickorynut	Temporary storage (on water)	IL, IN, MI, OH	
Salamander Mussel	Temporary storage (on water)	IL, IN, MI, MN, OH, WI	
Sheepnose	Temporary storage (on water)	IL, IN, MN, OH, WI	
Snuffbox	Temporary storage (on water)	IL, IN, MI, OH, WI	
Spectaclecase	Temporary storage (on water)	IL, MN, WI	
Lake Sturgeon	Decanting	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Decanting	IL	
Sicklefin Chub	Decanting	IL	
Sturgeon Chub	Decanting	IL	
Alligator Snapping Turtle	Temporary storage (on water) Temporary storage (on land) Decanting Decontamination	IL, IN	

May affect, not likely to adversely affect due to insignificant or discountable effects			
Clubshell	Waste handling	IL, IN, MI, OH	
Fanshell	Waste handling	IL, IN, OH	
Fat Pocketbook	Waste handling	IL, IN	
Higgins' Eye Pearlymussel	Waste handling	IL, MN, WI	
Longsolid	Waste handling	IL, IN, OH	
Northern Riffleshell	Waste handling	IL, IN, MI, OH	
Orangefoot Pimpleback	Waste handling	IL	
Pink Mucket	Waste handling	IL, IN, OH	
Pyramid (Pink) Pigtoe	Waste handling	OH	
Rabbitsfoot <i>Critical Habitat</i>	Waste handling	IL, IN, OH	
Rayed Bean	Waste handling	IN, MI, OH	
Rough Pigtoe	Waste handling	IN	
Round Hickorynut	Waste handling	IL, IN, MI, OH	
Salamander Mussel	Waste handling	IL, IN, MI, MN, OH, WI	
Scaleshell	Waste handling	IL	
Sheepnose	Waste handling	IL, IN, MN, OH, WI	
Snuffbox	Waste handling	IL, IN, MI, OH, WI	
Spectaclecase	Waste handling	IL, MN, WI	
Winged Mapleleaf	Waste handling	MN, WI	
Lake Sturgeon	Waste handling Temporary storage (on water)	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Waste handling Temporary storage (on water)	IL	
Sicklefin Chub	Waste handling Temporary storage (on water)	IL	
Sturgeon Chub	Waste handling Temporary storage (on water)	IL	
Alligator Snapping Turtle	Waste handling	IL, IN	

High-Risk Response Actions and Activities in RIVERS AND STREAMS (INLAND)

Associated Vulnerable Habitats:

Beach and Sand Bar, Mudflats, Floodplain Forest, Rooted Floating Aquatics, Open Water, and Submersed Vegetation

Deflection and Containment Activities

Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Eastern Prairie Fringed Orchid	Dikes or berms	IL, IN, MI, OH, WI	
Western Prairie Fringed Orchid	Dikes or berms	MN	
Clubshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH	
Fanshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, OH	
Fat Pocketbook	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN	
Higgins' Eye Pearlymussel	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, MN, WI	
Longsolid	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, OH	
Northern Riffleshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH	
Orangefoot Pimpleback	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Pink Mucket	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, OH	
Pyramid (Pink) Pigtoe	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH	
Rabbitsfoot <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, OH	
Rayed Bean	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IN, MI, OH	
Rough Pigtoe	Booming Dikes or berms	IN	

	Construction barriers, dams, pits, and trenches Culvert blocking		
Round Hickorynut	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH	
Salamander Mussel	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, MN, OH, WI	
Scaleshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Sheepnose	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MN, OH, WI	
Snuffbox	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH, WI	
Spectaclecase	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, MN, WI	
Winged Mapleleaf	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MN, WI	
Illinois Cave Amphipod	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Popeye Shiner	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH	
Scioto Madtom	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH	
Topeka Shiner <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Eastern Prairie Fringed Orchid	Booming Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH, WI	

Hall's Bulrush	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Booming Construction barriers, dams, pits, and trenches Culvert blocking	MI	
Lakeside Daisy	Booming Construction barriers, dams, pits, and trenches Culvert blocking	IL, MI, OH	
Michigan Monkey Flower	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MI	
Minnesota Dwarf Trout Lily	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MN	
Northern Wild Monkshood	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH, WI	
Running Buffalo Clover	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IN	
Tennessee Pondweed	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH	
Virginia Spiraea	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH	
Western Prairie Fringed Orchid	Booming Construction barriers, dams, pits, and trenches Culvert blocking	MN	
Hungerford's Crawling Water Beetle	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MI	
Linda's Roadside Skipper	Dikes or berms Construction barriers, dams, pits, and trenches	IL	
Monarch Butterfly	Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Regal Fritillary	Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MN, OH, WI	

Lake Sturgeon	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Sicklefin Chub	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Sturgeon Chub	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Alligator Snapping Turtle	Booming Construction barriers, dams, pits, and trenches	IL, IN	
Blanding's Turtle	Booming Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Booming Construction barriers, dams, pits, and trenches	IL	
Spotted Turtle	Booming Construction barriers, dams, pits, and trenches	IL, IN, MI, OH	
Streamside Salamander	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IN, OH	
Wood Turtle	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Linda's Roadside Skipper	Booming Culvert blocking	IL	
Monarch Butterfly	Booming Culvert blocking	IL, IN, MI, MN, OH, WI	
Regal Fritillary	Booming Culvert blocking	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Booming Culvert blocking	IL, IN, MN, OH, WI	
Alligator Snapping Turtle	Dikes or berms Culvert blocking	IL, IN	
Blanding's Turtle	Dikes or berms Culvert blocking	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Culvert blocking	IL	
Spotted Turtle	Dikes or berms Culvert blocking	IL, IN, MI, OH	
Gray Bat	Booming Dikes or berms	IL, IN	

	Construction barriers, dams, pits, and trenches Culvert blocking		
Tricolored Bat	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Booming	IL, IN, MI, MN, OH, WI	
Recovery Activities			
Species	Specific Activity	States of Occurrence	BMPs
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Fanshell	Skimming Vacuuming Sorbents	IL, IN, OH	
Fat Pocketbook	Skimming Vacuuming Sorbents	IL, IN	
Higgins' Eye Pearlymussel	Skimming Vacuuming Sorbents	IL, MN, WI	
Longsolid	Skimming Vacuuming Sorbents	IL, IN, OH	
Northern Riffleshell	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Orangefoot Pimpleback	Skimming Vacuuming Sorbents	IL	
Pink Mucket	Skimming Vacuuming Sorbents	IL, IN, OH	
Pyramid (Pink) Pigtoe	Skimming Vacuuming Sorbents	OH	
Rabbitsfoot <i>Critical Habitat</i>	Skimming Vacuuming Sorbents	IL, IN, OH	
Rayed Bean	Skimming Vacuuming Sorbents	IN, MI, OH	
Rough Pigtoe	Skimming Vacuuming Sorbents	IN	
Round Hickorynut	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Salamander Mussel	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Scaleshell	Skimming Vacuuming Sorbents	IL	
Sheepnose	Skimming Vacuuming Sorbents	IL, IN, MN, OH, WI	
Snuffbox	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
Spectaclecase	Skimming Vacuuming	IL, MN, WI	

	Sorbents		
Winged Mapleleaf	Skimming Vacuuming Sorbents	MN, WI	
Illinois Cave Amphipod	Skimming Vacuuming	IL	
Popeye Shiner	Skimming Vacuuming	OH	
Scioto Madtom	Skimming Vacuuming	OH	
Topeka Shiner <i>Critical Habitat</i>	Skimming Vacuuming	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Vacuuming Sorbents	IL	
Hall's Bulrush	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
Michigan Monkey Flower	Skimming Vacuuming Sorbents	MI	
Minnesota Dwarf Trout Lily	Vacuuming Sorbents	MN	
Northern Wild Monkshood	Vacuuming Sorbents	OH, WI	
Running Buffalo Clover	Vacuuming Sorbents	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Vacuuming Sorbents	IN	
Tennessee Pondweed	Skimming Vacuuming Sorbents	OH	
Virginia Spiraea	Vacuuming Sorbents	OH	
Hungerford's Crawling Water Beetle	Skimming Vacuuming	MI	
Lake Sturgeon	Skimming Vacuuming	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Skimming Vacuuming	IL	
Sicklefin Chub	Skimming Vacuuming	IL	
Sturgeon Chub	Skimming Vacuuming	IL	
Alligator Snapping Turtle	Skimming Vacuuming Sorbents	IL, IN	
Blanding's Turtle	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Skimming Vacuuming Sorbents	IL	
Spotted Turtle	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Streamside Salamander	Skimming Vacuuming Sorbents	IN, OH	
Wood Turtle	Skimming Vacuuming Sorbents	MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Sorbents	IL, IN, MI, MN, OH, WI	

May affect, not likely to adversely affect due to insignificant or discountable effects			
Minnesota Dwarf Trout Lily	Skimming	MN	
Northern Wild Monkshood	Skimming	OH, WI	
Running Buffalo Clover	Skimming	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Skimming	IN	
Gray Bat	Skimming Vacuuming Sorbents	IL, IN	
Tricolored Bat	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Skimming Vacuuming	IL, IN, MI, MN, OH, WI	
Removal/Cleanup Activities			
Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Fanshell	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Fat Pocketbook	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN	
Higgins' Eye Pearlymussel	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, MN, WI	
Longsolid	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Northern Riffleshell	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Orangefoot Pimpleback	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL	
Pink Mucket	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	

Pyramid (Pink) Pigtoe	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	OH	
Rabbitsfoot <i>Critical Habitat</i>	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Rayed Bean	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IN, MI, OH	
Rough Pigtoe	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IN	
Round Hickorynut	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Salamander Mussel	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Scaleshell	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL	
Sheepnose	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MN, OH, WI	
Snuffbox	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH, WI	
Spectaclecase	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, MN, WI	
Winged Mapleleaf	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	MN, WI	
Illinois Cave Amphipod	Flooding Flushing Steam cleaning	IL	

	Sandblasting Manual removal/cleaning of oil		
Popeye Shiner	Flooding Flushing Steam cleaning Sandblasting	OH	
Scioto Madtom	Flooding Flushing Steam cleaning Sandblasting	OH	
Topeka Shiner <i>Critical Habitat</i>	Flooding Flushing Steam cleaning Sandblasting	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL	
Hall's Bulrush	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, OH, WI	
Michigan Monkey Flower	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI	
Minnesota Dwarf Trout Lily	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MN	
Northern Wild Monkshood	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	OH, WI	
Running Buffalo Clover	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Flooding Flushing Steam cleaning Sandblasting	IN	

	Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil		
Tennessee Pondweed	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	OH	
Virginia Spiraea	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	OH	
Hungerford's Crawling Water Beetle	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI	
Linda's Roadside Skipper	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch)	IL	
Monarch Butterfly	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MI, MN, OH, WI	
Regal Fritillary	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MN, OH, WI	
Lake Sturgeon	Flooding Flushing Steam cleaning Sandblasting	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Flooding Flushing Steam cleaning Sandblasting	IL	
Sicklefin Chub	Flooding Flushing Steam cleaning Sandblasting	IL	
Sturgeon Chub	Flooding Flushing Steam cleaning Sandblasting	IL	
Alligator Snapping Turtle	Steam cleaning	IL, IN	

	Sandblasting Manual removal/cleaning of oil		
Blanding's Turtle	Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL	
Spotted Turtle	Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Streamside Salamander	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IN, OH	
Wood Turtle	Flooding Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI, MN, OH, WI	
Gray Bat	Sandblasting	IL, IN	
Tricolored Bat	Sandblasting	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Linda's Roadside Skipper	Manual removal/cleaning of oil	IL	
Monarch Butterfly	Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Regal Fritillary	Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Manual removal/cleaning of oil	IL, IN, MN, OH, WI	
Alligator Snapping Turtle	Flushing	IL, IN	
Blanding's Turtle	Flushing	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Flushing	IL, IN, MI, OH	
Wood Turtle	Flushing	MI, MN, OH, WI	
Gray Bat	Flooding Flushing Steam cleaning	IL, IN	

	Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil		
Tricolored Bat	Flooding Flushing Steam cleaning Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Submerged Oil Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Fanshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Fat Pocketbook	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN	
Higgins' Eye Pearlymussel	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, MN, WI	
Longsolid	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Northern Riffleshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Orangefoot Pimpleback	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Pink Mucket	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Pyramid (Pink) Pigtoe	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	OH	

	Containment of non-floating/submerged oil		
Rabbitsfoot <i>Critical Habitat</i>	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Rayed Bean	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN, MI, OH	
Rough Pigtoe	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN	
Round Hickorynut	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Salamander Mussel	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Scaleshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Sheepnose	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MN, OH, WI	
Snuffbox	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Spectaclecase	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, MN, WI	
Winged Mapleleaf	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MN, WI	
Illinois Cave Amphipod	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Popeye Shiner	Detection of non-floating/submerged oil	OH	

	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil		
Scioto Madtom	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	OH	
Topeka Shiner <i>Critical Habitat</i>	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Hall's Bulrush	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Michigan Monkey Flower	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MI	
Tennessee Pondweed	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	OH	
Virginia Spiraea	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	OH	
Hungerford's Crawling Water Beetle	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MI	
Lake Sturgeon	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Sicklefin Chub	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Sturgeon Chub	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Alligator Snapping Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN	

Blanding's Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Spotted Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Streamside Salamander	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN, OH	
Wood Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Decurrent False Aster	Detection of non-floating/submerged oil	IL	
Eastern Prairie Fringed Orchid	Detection of non-floating/submerged oil	IL, IN, MI, OH, WI	
Hall's Bulrush	Detection of non-floating/submerged oil	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Detection of non-floating/submerged oil	MI	
Lakeside Daisy	Detection of non-floating/submerged oil	IL, MI, OH	
Michigan Monkey Flower	Detection of non-floating/submerged oil	MI	
Minnesota Dwarf Trout Lily	Detection of non-floating/submerged oil	MN	
Northern Wild Monkshood	Detection of non-floating/submerged oil	OH, WI	
Running Buffalo Clover	Detection of non-floating/submerged oil	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Detection of non-floating/submerged oil	IN	
Virginia Spiraea	Detection of non-floating/submerged oil	OH	
Western Prairie Fringed Orchid	Detection of non-floating/submerged oil	MN	
Wildlife Protection Activities			
Species	Specific Activity	States of Occurrence	BMPs¹

May affect, likely to adversely affect - discuss possible BMPs with Services			
Popeye Shiner	Deterrence and hazing	OH	
Scioto Madtom	Deterrence and hazing	OH	
Topeka Shiner <i>Critical Habitat</i>	Deterrence and hazing	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Tennessee Pondweed	Deterrence and hazing Capture and care of contaminated species	OH	
Virginia Spiraea	Deterrence and hazing Capture and care of contaminated species	OH	
Lake Sturgeon	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Deterrence and hazing	IL	
Sicklefin Chub	Deterrence and hazing	IL	
Sturgeon Chub	Deterrence and hazing	IL	
Alligator Snapping Turtle	Capture and care of contaminated species	IL, IN	
Blanding's Turtle	Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Deterrence and hazing Capture and care of contaminated species	IL	
Spotted Turtle	Capture and care of contaminated species	IL, IN, MI, OH	
Streamside Salamander	Deterrence and hazing Capture and care of contaminated species	IN, OH	
Wood Turtle	Capture and care of contaminated species	MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Hall's Bulrush	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH, WI	
Michigan Monkey Flower	Deterrence and hazing Capture and care of contaminated species	MI	
Minnesota Dwarf Trout Lily	Deterrence and hazing Capture and care of contaminated species	MN	
Northern Wild Monkshood	Deterrence and hazing Capture and care of contaminated species	OH, WI	
Running Buffalo Clover	Deterrence and hazing Capture and care of contaminated species	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Deterrence and hazing Capture and care of contaminated species	IN	
Alligator Snapping Turtle	Deterrence and hazing	IL, IN	
Blanding's Turtle	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Deterrence and hazing	IL, IN, MI, OH	
Wood Turtle	Deterrence and hazing	MI, MN, OH, WI	
Gray Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN	
Tricolored Bat	Deterrence and hazing	IL, IN, MI, MN, OH, WI	

	Capture and care of contaminated species		
Locating, Tracking, and Support Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, OH	
Fanshell	Use of vessels Use of vehicles Deployment of buoys	IL, IN, OH	
Fat Pocketbook	Use of vessels Use of vehicles Deployment of buoys	IL, IN	
Higgins' Eye Pearlymussel	Use of vessels Use of vehicles Deployment of buoys	IL, MN, WI	
Longsolid	Use of vessels Use of vehicles Deployment of buoys	IL, IN, OH	
Northern Riffleshell	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, OH	
Orangefoot Pimpleback	Use of vessels Use of vehicles Deployment of buoys	IL	
Pink Mucket	Use of vessels Use of vehicles Deployment of buoys	IL, IN, OH	
Pyramid (Pink) Pigtoe	Use of vessels Use of vehicles Deployment of buoys	OH	
Rabbitsfoot <i>Critical Habitat</i>	Use of vessels Use of vehicles Deployment of buoys	IL, IN, OH	
Rayed Bean	Use of vessels Use of vehicles Deployment of buoys	IN, MI, OH	
Rough Pigtoe	Use of vessels Use of vehicles Deployment of buoys	IN	
Round Hickorynut	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, OH	
Salamander Mussel	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, MN, OH, WI	
Scaleshell	Use of vessels Use of vehicles Deployment of buoys	IL	
Sheepnose	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MN, OH, WI	
Snuffbox	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, OH, WI	
Spectaclecase	Use of vessels Use of vehicles Deployment of buoys	IL, MN, WI	
Winged Mapleleaf	Use of vessels Use of vehicles Deployment of buoys	MN, WI	
Illinois Cave Amphipod	Deployment of buoys	IL	
Popeye Shiner	Use of vessels Deployment of buoys	OH	
Scioto Madtom	Use of vessels	OH	

	Deployment of buoys		
Topeka Shiner <i>Critical Habitat</i>	Use of vessels Deployment of buoys	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Locating, sampling, and monitoring air, land, and water Access of personnel by foot traffic	IL	
Hall's Bulrush	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, OH, WI	
Michigan Monkey Flower	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI	
Minnesota Dwarf Trout Lily	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	MN	
Northern Wild Monkshood	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	OH, WI	
Running Buffalo Clover	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	IN	

Tennessee Pondweed	<p>Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Natural attenuation Deployment of buoys Locating, sampling, and monitoring air, land, and water Access of personnel by foot traffic</p>	OH	
Virginia Spiraea	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Natural attenuation Deployment of buoys Locating, sampling, and monitoring air, land, and water</p>	OH	
Hungerford's Crawling Water Beetle	<p>Use of vehicles Use of machinery/supporting equipment Deployment of buoys</p>	MI	
Linda's Roadside Skipper	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas</p>	IL	
Monarch Butterfly	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas</p>	IL, IN, MI, MN, OH, WI	
Regal Fritillary	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas</p>	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas</p>	IL, IN, MN, OH, WI	
Lake Sturgeon	<p>Use of vessels Deployment of buoys</p>	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	<p>Use of vessels</p>	IL	

	Deployment of buoys		
Sicklefin Chub	Use of vessels Deployment of buoys	IL	
Sturgeon Chub	Use of vessels Deployment of buoys	IL	
Alligator Snapping Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	IL, IN	
Blanding's Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	IL, IN, MI, OH, WI	
Illinois Chorus Frog	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 Natural attenuation Locating, sampling, and monitoring air, land, and water Access of personnel by foot traffic	IL	
Spotted Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	IL, IN, MI, OH	
Streamside Salamander	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	IN, OH	
Wood Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	MI, MN, OH, WI	
Gray Bat	Use of aircraft Use of vessels Use of vehicles	IL, IN	

	Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas		
Tricolored Bat	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	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	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 Deployment of buoys	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	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 Deployment of buoys	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Alligator Snapping Turtle	Use of aircraft Deployment of buoys	IL, IN	
Blanding's Turtle	Use of aircraft Deployment of buoys	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Deployment of buoys	IL	
Spotted Turtle	Use of aircraft Deployment of buoys	IL, IN, MI, OH	
Streamside Salamander	Use of vessels Deployment of buoys	IN, OH	
Wood Turtle	Use of aircraft Deployment of buoys	MI, MN, OH, WI	
Special considerations needed, high level of concern			
Decurrent False Aster	Natural attenuation	IL	
Hall's Bulrush	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Michigan Monkey Flower	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI	
Minnesota Dwarf Trout Lily	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN	
Northern Wild Monkshood	Natural attenuation	OH, WI	

	Locating, sampling, and monitoring air, land, and water		
Running Buffalo Clover	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN	
Clubshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Fanshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Fat Pocketbook	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Higgins' Eye Pearlymussel	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MN, WI	
Longsolid	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Northern Riffleshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Orangefoot Pimpleback	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Pink Mucket	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Pyramid (Pink) Pigtoe	Natural attenuation Locating, sampling, and monitoring air, land, and water	OH	
Rabbitsfoot <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Rayed Bean	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, MI, OH	
Rough Pigtoe	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN	
Round Hickorynut	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Salamander Mussel	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Scaleshell	Natural attenuation	IL	

	Locating, sampling, and monitoring air, land, and water		
Sheepnose	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MN, OH, WI	
Snuffbox	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Spectaclecase	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MN, WI	
Winged Mapleleaf	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN, WI	
Illinois Cave Amphipod	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Hungerford's Crawling Water Beetle	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI	
Linda's Roadside Skipper	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Monarch Butterfly	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Regal Fritillary	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MN, OH, WI	
Lake Sturgeon	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Popeye Shiner	Natural attenuation Locating, sampling, and monitoring air, land, and water	OH	
Scioto Madtom	Natural attenuation Locating, sampling, and monitoring air, land, and water	OH	
Sicklefin Chub	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Sturgeon Chub	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Topeka Shiner <i>Critical Habitat</i>	Natural attenuation	MN	

	Locating, sampling, and monitoring air, land, and water		
Alligator Snapping Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Blanding's Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Spotted Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Streamside Salamander	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, OH	
Wood Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, MN, OH, WI	
Gray Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Tricolored Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Waste Management Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Temporary storage (on water)	IL, IN, MI, OH	
Fanshell	Temporary storage (on water)	IL, IN, OH	
Fat Pocketbook	Temporary storage (on water)	IL, IN	
Higgins' Eye Pearlymussel	Temporary storage (on water)	IL, MN, WI	
Longsolid	Temporary storage (on water)	IL, IN, OH	
Northern Riffleshell	Temporary storage (on water)	IL, IN, MI, OH	
Orangefoot Pimpleback	Temporary storage (on water)	IL	
Pink Mucket	Temporary storage (on water)	IL, IN, OH	
Pyramid (Pink) Pigtoe	Temporary storage (on water)	OH	
Rabbitsfoot <i>Critical Habitat</i>	Temporary storage (on water)	IL, IN, OH	
Rayed Bean	Temporary storage (on water)	IN, MI, OH	
Rough Pigtoe	Temporary storage (on water)	IN	

Round Hickorynut	Temporary storage (on water)	IL, IN, MI, OH	
Salamander Mussel	Temporary storage (on water)	IL, IN, MI, MN, OH, WI	
Scaleshell	Temporary storage (on water)	IL	
Sheepnose	Temporary storage (on water)	IL, IN, MN, OH, WI	
Snuffbox	Temporary storage (on water)	IL, IN, MI, OH, WI	
Spectaclecase	Temporary storage (on water)	IL, MN, WI	
Winged Mapleleaf	Temporary storage (on water)	MN, WI	
Popeye Shiner	Decanting	OH	
Scioto Madtom	Decanting	OH	
Topeka Shiner <i>Critical Habitat</i>	Decanting	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Temporary storage (on land) Decontamination	IL	
Hall's Bulrush	Waste handling Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Michigan Monkey Flower	Waste handling Temporary storage (on land) Decontamination	MI	
Minnesota Dwarf Trout Lily	Temporary storage (on land) Decontamination	MN	
Northern Wild Monkshood	Temporary storage (on land) Decontamination	OH, WI	
Running Buffalo Clover	Temporary storage (on land) Decontamination	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Temporary storage (on land) Decontamination	IN	
Tennessee Pondweed	Waste handling Temporary storage (on water) Temporary storage (on land) Decanting Decontamination	OH	
Virginia Spiraea	Waste handling Temporary storage (on water) Temporary storage (on land) Decanting Decontamination	OH	
Hungerford's Crawling Water Beetle	Decanting	MI	
Linda's Roadside Skipper	Temporary storage (on land) Decontamination	IL	
Monarch Butterfly	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Regal Fritillary	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Temporary storage (on land)	IL, IN, MN, OH, WI	

	Decontamination		
Lake Sturgeon	Decanting	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Decanting	IL	
Sicklefin Chub	Decanting	IL	
Sturgeon Chub	Decanting	IL	
Alligator Snapping Turtle	Temporary storage (on water) Temporary storage (on land) Decanting Decontamination	IL, IN	
Blanding's Turtle	Temporary storage (on land) Decanting Decontamination	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Waste handling Temporary storage (on water) Temporary storage (on land) Decanting Decontamination	IL	
Spotted Turtle	Temporary storage (on land) Decanting Decontamination	IL, IN, MI, OH	
Streamside Salamander	Waste handling Temporary storage (on land) Decanting Decontamination	IN, OH	
Wood Turtle	Temporary storage (on land) Decanting Decontamination	MI, MN, OH, WI	
Gray Bat	Temporary storage (on land) Decontamination	IL, IN	
Tricolored Bat	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Temporary storage (on water) Temporary storage (on land) Decanting Decontamination	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Temporary storage (on water) Temporary storage (on land) Decanting Decontamination	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Decurrent False Aster	Waste handling	IL	
Hall's Bulrush	Temporary storage (on water)	IL, IN, MI, OH, WI	
Michigan Monkey Flower	Temporary storage (on water)	MI	
Minnesota Dwarf Trout Lily	Waste handling	MN	
Northern Wild Monkshood	Waste handling	OH, WI	
Running Buffalo Clover	Waste handling	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Waste handling	IN	
Clubshell	Waste handling	IL, IN, MI, OH	
Fanshell	Waste handling	IL, IN, OH	

Fat Pocketbook	Waste handling	IL, IN	
Higgins' Eye Pearlymussel	Waste handling	IL, MN, WI	
Longsolid	Waste handling	IL, IN, OH	
Northern Riffleshell	Waste handling	IL, IN, MI, OH	
Orangefoot Pimpleback	Waste handling	IL	
Pink Mucket	Waste handling	IL, IN, OH	
Pyramid (Pink) Pigtoe	Waste handling	OH	
Rabbitsfoot <i>Critical Habitat</i>	Waste handling	IL, IN, OH	
Rayed Bean	Waste handling	IN, MI, OH	
Rough Pigtoe	Waste handling	IN	
Round Hickorynut	Waste handling	IL, IN, MI, OH	
Salamander Mussel	Waste handling	IL, IN, MI, MN, OH, WI	
Scaleshell	Waste handling	IL	
Sheepnose	Waste handling	IL, IN, MN, OH, WI	
Snuffbox	Waste handling	IL, IN, MI, OH, WI	
Spectaclecase	Waste handling	IL, MN, WI	
Winged Mapleleaf	Waste handling	MN, WI	
Illinois Cave Amphipod	Waste handling Temporary storage (on water)	IL	
Hungerford's Crawling Water Beetle	Waste handling Temporary storage (on water)	MI	
Linda's Roadside Skipper	Waste handling	IL	
Monarch Butterfly	Waste handling	IL, IN, MI, MN, OH, WI	
Regal Fritillary	Waste handling	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Waste handling	IL, IN, MN, OH, WI	
Lake Sturgeon	Waste handling Temporary storage (on water)	IL, IN, MI, MN, OH, WI	
Pallid Sturgeon	Waste handling Temporary storage (on water)	IL	
Popeye Shiner	Waste handling Temporary storage (on water)	OH	
Scioto Madtom	Waste handling Temporary storage (on water)	OH	
Sicklefin Chub	Waste handling Temporary storage (on water)	IL	
Sturgeon Chub	Waste handling Temporary storage (on water)	IL	
Topeka Shiner <i>Critical Habitat</i>	Waste handling Temporary storage (on water)	MN	
Alligator Snapping Turtle	Waste handling	IL, IN	
Blanding's Turtle	Waste handling Temporary storage (on water)	IL, IN, MI, OH, WI	

Spotted Turtle	Waste handling Temporary storage (on water)	IL, IN, MI, OH	
Streamside Salamander	Temporary storage (on water)	IN, OH	
Wood Turtle	Waste handling Temporary storage (on water)	MI, MN, OH, WI	
Gray Bat	Waste handling	IL, IN	
Tricolored Bat	Waste handling	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Waste handling	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Waste handling	IL, IN, MI, MN, OH, WI	

High-Risk Response Actions and Activities in BAYS AND ESTUARIES

Associated Vulnerable Habitats:

Beach and Sand Bar, Rooted Floating Aquatics, Open Water, and Sedge Meadow

Deflection and Containment Activities

Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, OH	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, OH	
Rayed Bean	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IN, MI, OH	
Round Hickorynut	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, OH	
Salamander Mussel	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Snuffbox	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, OH, WI	
Lake Sturgeon	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Booming Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Booming Construction barriers, dams, pits, and trenches	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Blanding's Turtle	Dikes or berms	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Dikes or berms	IL, IN, MI, OH	
Rufa Red Knot	Booming	IL, IN, MI, MN, OH, WI	
Recovery Activities			
Species	Specific Activity	States of Occurrence	BMPs
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell	Skimming Vacuuming Sorbents	IL, IN, MI, OH	

May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Rayed Bean	Skimming Vacuuming Sorbents	IN, MI, OH	
Round Hickorynut	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Salamander Mussel	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Snuffbox	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
Lake Sturgeon	Skimming Vacuuming	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Sorbents	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Rufa Red Knot	Skimming Vacuuming	IL, IN, MI, MN, OH, WI	
Removal/Cleanup Activities			
Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell	Flooding Manual removal/cleaning of oil	IL, IN, MI, OH	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Flooding Manual removal/cleaning of oil	IL, IN, MI, OH	
Rayed Bean	Flooding Manual removal/cleaning of oil	IN, MI, OH	
Round Hickorynut	Flooding Manual removal/cleaning of oil	IL, IN, MI, OH	
Salamander Mussel	Flooding Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Snuffbox	Flooding Manual removal/cleaning of oil	IL, IN, MI, OH, WI	
Lake Sturgeon	Flooding	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Manual removal/cleaning of oil	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Flooding Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MI, MN, OH, WI	

	Manual removal/cleaning of oil		
Rufa Red Knot	Flooding Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Blanding's Turtle	Flooding Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Flooding Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MI, OH	
Submerged Oil Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Northern Riffleshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Rayed Bean	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN, MI, OH	
Round Hickorynut	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Salamander Mussel	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Snuffbox	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Lake Sturgeon	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	

	Containment of non-floating/submerged oil		
Spotted Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Wildlife Protection Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Lake Sturgeon	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Capture and care of contaminated species	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Blanding's Turtle	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Deterrence and hazing	IL, IN, MI, OH	
Locating, Tracking, and Support Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect – discuss possible BMPs with Services			
Northern Riffleshell	Deployment of buoys	IL, IN, MI, OH	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Clubshell	Deployment of buoys	IL, IN, MI, OH	
Rayed Bean	Deployment of buoys	IN, MI, OH	
Round Hickorynut	Deployment of buoys	IL, IN, MI, OH	
Salamander Mussel	Deployment of buoys	IL, IN, MI, MN, OH, WI	
Snuffbox	Deployment of buoys	IL, IN, MI, OH, WI	
Lake Sturgeon	Use of vessels Deployment of buoys	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, OH, WI	
Spotted Turtle	Use of vessels Use of vehicles	IL, IN, MI, OH	

	Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic		
Piping Plover <i>Critical Habitat</i>	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 Deployment of buoys	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	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 Deployment of buoys	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Blanding's Turtle	Use of aircraft Deployment of buoys	IL, IN, MI, OH, WI	
Spotted Turtle	Use of aircraft Deployment of buoys	IL, IN, MI, OH	
Special considerations needed, high level of concern			
Clubshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Northern Riffleshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Rayed Bean	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, MI, OH	
Round Hickorynut	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Salamander Mussel	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Snuffbox	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Lake Sturgeon	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Natural attenuation	IL, IN, MI, OH, WI	

	Locating, sampling, and monitoring air, land, and water		
Spotted Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Waste Management Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Lake Sturgeon	Decanting	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Temporary storage (on land) Decanting Decontamination	IL, IN, MI, OH, WI	
Spotted Turtle	Temporary storage (on land) Decanting Decontamination	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Temporary storage (on land) Decanting Decontamination	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Temporary storage (on land) Decanting Decontamination	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Clubshell	Waste handling	IL, IN, MI, OH	
Northern Riffleshell	Waste handling	IL, IN, MI, OH	
Rayed Bean	Waste handling	IN, MI, OH	
Round Hickorynut	Waste handling	IL, IN, MI, OH	
Salamander Mussel	Waste handling	IL, IN, MI, MN, OH, WI	
Snuffbox	Waste handling	IL, IN, MI, OH, WI	
Lake Sturgeon	Waste handling	IL, IN, MI, MN, OH, WI	
Blanding's Turtle	Waste handling Temporary storage (on water)	IL, IN, MI, OH, WI	
Spotted Turtle	Waste handling Temporary storage (on water)	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Waste handling	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Waste handling	IL, IN, MI, MN, OH, WI	

High-Risk Response Actions and Activities in POND AND LAKES (INLAND)

Associated Vulnerable Habitats:

Beach and Sand Bar, Deep Marsh Vegetation (Annuals, Perennials, Shrubs), Floodplain Forest, Mudflats, Open Water, Rooted Floating Aquatics, Sedge Meadow, Shallow Marsh Vegetation (Annuals, Perennials, Shrubs), and Submersed Vegetation

Deflection and Containment Activities

Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH	
Fanshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, OH	
Fat Pocketbook	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN	
Higgins' Eye Pearlymussel	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, MN, WI	
Longsolid	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, OH	
Northern Riffleshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH	
Orangefoot Pimpleback	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Pink Mucket	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, OH	
Pyramid (Pink) Pigtoe	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH	
Rabbitsfoot <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, OH	
Rayed Bean	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IN, MI, OH	
Rough Pigtoe	Booming Dikes or berms	IN	

	Construction barriers, dams, pits, and trenches Culvert blocking		
Round Hickorynut	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH	
Salamander Mussel	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, MN, OH, WI	
Scaleshell	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Sheepnose	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MN, OH, WI	
Snuffbox	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH, WI	
Spectaclecase	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, MN, WI	
Winged Mapleleaf	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MN, WI	
Topeka Shiner <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Fassett's Locoweed	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	WI	
Hall's Bulrush	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, MI, WI	
Lake Sturgeon	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, MN, OH, WI	

Alligator Snapping Turtle	Booming Construction barriers, dams, pits, and trenches	IL, IN	
Blanding's Turtle	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Dikes or berms	IN, MI, OH	
Eastern Massasauga	Dikes or berms	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL	
Spotted Turtle	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Alligator Snapping Turtle	Dikes or berms	IL, IN	
Gray Bat	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN	
Tricolored Bat	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Booming	IL, IN, MI, MN, OH, WI	
Recovery Activities			
Species	Specific Activity	States of Occurrence	BMPs
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Fanshell	Skimming Vacuuming Sorbents	IL, IN, OH	
Fat Pocketbook	Skimming Vacuuming Sorbents	IL, IN	
Higgins' Eye Pearlymussel	Skimming Vacuuming Sorbents	IL, MN, WI	
Longsolid	Skimming Vacuuming Sorbents	IL, IN, OH	
Northern Riffleshell	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Orangefoot Pimpleback	Skimming Vacuuming Sorbents	IL	
Pink Mucket	Skimming Vacuuming Sorbents	IL, IN, OH	
Pyramid (Pink) Pigtoe	Skimming Vacuuming	OH	

	Sorbents		
Rabbitsfoot <i>Critical Habitat</i>	Skimming Vacuuming Sorbents	IL, IN, OH	
Rayed Bean	Skimming Vacuuming Sorbents	IN, MI, OH	
Rough Pigtoe	Skimming Vacuuming Sorbents	IN	
Round Hickorynut	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Salamander Mussel	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Scaleshell	Skimming Vacuuming Sorbents	IL	
Sheepnose	Skimming Vacuuming Sorbents	IL, IN, MN, OH, WI	
Snuffbox	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
Spectaclecase	Skimming Vacuuming Sorbents	IL, MN, WI	
Winged Mapleleaf	Skimming Vacuuming Sorbents	MN, WI	
Topeka Shiner <i>Critical Habitat</i>	Skimming Vacuuming	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Fassett's Locoweed	Vacuuming Sorbents	WI	
Hall's Bulrush	Skimming Vacuuming Sorbents	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Skimming Vacuuming Sorbents	MI	
Lake Sturgeon	Skimming Vacuuming	IL, IN, MI, MN, OH, WI	
Alligator Snapping Turtle	Skimming Vacuuming Sorbents	IL, IN	
Blanding's Turtle	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Skimming Vacuuming Sorbents	IL	
Spotted Turtle	Skimming Vacuuming Sorbents	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Skimming Vacuuming Sorbents	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Sorbents	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Gray Bat	Skimming Vacuuming Sorbents	IL, IN	
Tricolored Bat	Skimming Vacuuming	IL, IN, MI, MN, OH, WI	

	Sorbents		
Rufa Red Knot	Skimming Vacuuming	IL, IN, MI, MN, OH, WI	
Removal/Cleanup Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Fanshell	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Fat Pocketbook	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN	
Higgins' Eye Pearlymussel	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, MN, WI	
Longsolid	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Northern Riffleshell	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Orangefoot Pimpleback	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL	
Pink Mucket	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	
Pyramid (Pink) Pigtoe	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	OH	
Rabbitsfoot <i>Critical Habitat</i>	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, OH	

Rayed Bean	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IN, MI, OH	
Rough Pigtoe	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IN	
Round Hickorynut	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Salamander Mussel	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Scaleshell	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL	
Sheepnose	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MN, OH, WI	
Snuffbox	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH, WI	
Spectaclecase	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, MN, WI	
Winged Mapleleaf	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	MN, WI	
Topeka Shiner <i>Critical Habitat</i>	Flooding Flushing Steam cleaning Sandblasting	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Fassett's Locoweed	Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	WI	
Hall's Bulrush	Flooding Flushing Steam cleaning	IL, IN, MI, OH, WI	

	Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil		
Houghton's Goldenrod	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Flooding Flushing Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, MI, WI	
Lake Sturgeon	Flooding Flushing Steam cleaning Sandblasting	IL, IN, MI, MN, OH, WI	
Alligator Snapping Turtle	Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN	
Blanding's Turtle	Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Flooding Flushing Steam cleaning Sandblasting Manual removal/cleaning of oil	IL	
Spotted Turtle	Steam cleaning Sandblasting Manual removal/cleaning of oil	IL, IN, MI, OH	
Gray Bat	Sandblasting	IL, IN	
Tricolored Bat	Sandblasting	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Fassett's Locoweed	Flooding	WI	
Alligator Snapping Turtle	Flushing	IL, IN	
Blanding's Turtle	Flushing	IL, IN, MI, MN, OH, WI	
Spotted Turtle	Flushing	IL, IN, MI, OH	
Gray Bat	Flooding Flushing	IL, IN	

	Steam cleaning Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil		
Tricolored Bat	Flooding Flushing Steam cleaning Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Submerged Oil Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Fanshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Fat Pocketbook	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN	
Higgins' Eye Pearlymussel	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, MN, WI	
Longsolid	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Northern Riffleshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Orangefoot Pimpleback	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Pink Mucket	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Pyramid (Pink) Pigtoe	Detection of non-floating/submerged oil	OH	

	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil		
Rabbitsfoot <i>Critical Habitat</i>	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, OH	
Rayed Bean	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN, MI, OH	
Rough Pigtoe	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN	
Round Hickorynut	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Salamander Mussel	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Scaleshell	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Sheepnose	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MN, OH, WI	
Snuffbox	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Spectaclecase	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, MN, WI	
Winged Mapleleaf	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MN, WI	
Topeka Shiner <i>Critical Habitat</i>	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	MN	

	Containment of non-floating/submerged oil		
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Hall's Bulrush	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MI	
Lake Sturgeon	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Alligator Snapping Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN	
Blanding's Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Spotted Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Hall's Bulrush	Detection of non-floating/submerged oil	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Detection of non-floating/submerged oil	MI	
Wildlife Protection Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Topeka Shiner <i>Critical Habitat</i>	Deterrence and hazing	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Lake Sturgeon	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Alligator Snapping Turtle	Capture and care of contaminated species	IL, IN	

Blanding's Turtle	Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Capture and care of contaminated species	IL	
Spotted Turtle	Capture and care of contaminated species	IL, IN, MI, OH	
Piping Plover <i>Critical Habitat</i>	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Fassett's Locoweed	Deterrence and hazing Capture and care of contaminated species	WI	
Hall's Bulrush	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Deterrence and hazing Capture and care of contaminated species	MI	
Alligator Snapping Turtle	Deterrence and hazing	IL, IN	
Blanding's Turtle	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Deterrence and hazing	IL	
Spotted Turtle	Deterrence and hazing	IL, IN, MI, OH	
Gray Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN	
Tricolored Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Locating, Tracking, and Support Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, OH	
Fanshell	Use of vessels Use of vehicles Deployment of buoys	IL, IN, OH	
Fat Pocketbook	Use of vessels Use of vehicles Deployment of buoys	IL, IN	
Higgins' Eye Pearlymussel	Use of vessels Use of vehicles Deployment of buoys	IL, MN, WI	
Longsolid	Use of vessels Use of vehicles Deployment of buoys	IL, IN, OH	
Northern Riffleshell	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, OH	
Orangefoot Pimpleback	Use of vessels Use of vehicles Deployment of buoys	IL	
Pink Mucket	Use of vessels Use of vehicles Deployment of buoys	IL, IN, OH	
Pyramid (Pink) Pigtoe	Use of vessels Use of vehicles Deployment of buoys	OH	
Rabbitsfoot <i>Critical Habitat</i>	Use of vessels Use of vehicles	IL, IN, OH	

	Deployment of buoys		
Rayed Bean	Use of vessels Use of vehicles Deployment of buoys	IN, MI, OH	
Rough Pigtoe	Use of vessels Use of vehicles Deployment of buoys	IN	
Round Hickorynut	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, OH	
Salamander Mussel	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, MN, OH, WI	
Scaleshell	Use of vessels Use of vehicles Deployment of buoys	IL	
Sheepnose	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MN, OH, WI	
Snuffbox	Use of vessels Use of vehicles Deployment of buoys	IL, IN, MI, OH, WI	
Spectaclecase	Use of vessels Use of vehicles Deployment of buoys	IL, MN, WI	
Winged Mapleleaf	Use of vessels Use of vehicles Deployment of buoys	MN, WI	
Topeka Shiner <i>Critical Habitat</i>	Use of vessels Deployment of buoys	MN	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Fassett's Locoweed	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	WI	
Hall's Bulrush	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Creation/use of new access points Access of personnel by foot traffic	IL, MI, WI	
Lake Sturgeon	Use of vessels Deployment of buoys	IL, IN, MI, MN, OH, WI	

Alligator Snapping Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN	
Blanding's Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	Access of personnel by foot traffic	IN, MI, OH	
Eastern Massasauga	Access of personnel by foot traffic	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL	
Spotted Turtle	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	IL, IN, MI, OH	
Gray Bat	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	IL, IN	
Tricolored Bat	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	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Use of aircraft Use of vessels Use of vehicles	IL, IN, MI, MN, OH, WI	

	Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Deployment of buoys		
Rufa Red Knot	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 Deployment of buoys	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Alligator Snapping Turtle	Use of aircraft	IL, IN	
Blanding's Turtle	Use of aircraft	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Use of vessels	IL	
Spotted Turtle	Use of aircraft	IL, IN, MI, OH	
Special considerations needed, high level of concern			
Fassett's Locoweed	Natural attenuation Locating, sampling, and monitoring air, land, and water	WI	
Hall's Bulrush	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI	
Clubshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Fanshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Fat Pocketbook	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Higgins' Eye Pearlymussel	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MN, WI	
Longsolid	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Northern Riffleshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Orangefoot Pimpleback	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Pink Mucket	Natural attenuation	IL, IN, OH	

	Locating, sampling, and monitoring air, land, and water		
Pyramid (Pink) Pigtoe	Natural attenuation Locating, sampling, and monitoring air, land, and water	OH	
Rabbitsfoot <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, OH	
Rayed Bean	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, MI, OH	
Rough Pigtoe	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN	
Round Hickorynut	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Salamander Mussel	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Scaleshell	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Sheepnose	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MN, OH, WI	
Snuffbox	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Spectaclecase	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MN, WI	
Winged Mapleleaf	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN, WI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MI, WI	
Lake Sturgeon	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Topeka Shiner <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN	
Alligator Snapping Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Blanding's Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Natural attenuation	IL	

	Locating, sampling, and monitoring air, land, and water		
Spotted Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Gray Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Tricolored Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Waste Management Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Clubshell	Temporary storage (on water)	IL, IN, MI, OH	
Fanshell	Temporary storage (on water)	IL, IN, OH	
Fat Pocketbook	Temporary storage (on water)	IL, IN	
Higgins' Eye Pearlymussel	Temporary storage (on water)	IL, MN, WI	
Longsolid	Temporary storage (on water)	IL, IN, OH	
Northern Riffleshell	Temporary storage (on water)	IL, IN, MI, OH	
Orangefoot Pimpleback	Temporary storage (on water)	IL	
Pink Mucket	Temporary storage (on water)	IL, IN, OH	
Pyramid (Pink) Pigtoe	Temporary storage (on water)	OH	
Rabbitsfoot <i>Critical Habitat</i>	Temporary storage (on water)	IL, IN, OH	
Rayed Bean	Temporary storage (on water)	IN, MI, OH	
Rough Pigtoe	Temporary storage (on water)	IN	
Round Hickorynut	Temporary storage (on water)	IL, IN, MI, OH	
Salamander Mussel	Temporary storage (on water)	IL, IN, MI, MN, OH, WI	
Scaleshell	Temporary storage (on water)	IL	
Sheepnose	Temporary storage (on water)	IL, IN, MN, OH, WI	
Snuffbox	Temporary storage (on water)	IL, IN, MI, OH, WI	
Spectaclecase	Temporary storage (on water)	IL, MN, WI	
Winged Mapleleaf	Temporary storage (on water)	MN, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			

Fassett's Locoweed	Waste handling Temporary storage (on land) Decontamination	WI	
Hall's Bulrush	Waste handling Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Waste handling Temporary storage (on land) Decontamination	MI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Decanting Decontamination	IL, MI, WI	
Lake Sturgeon	Decanting	IL, IN, MI, MN, OH, WI	
Alligator Snapping Turtle	Temporary storage (on water) Temporary storage (on land) Decontamination	IL, IN	
Blanding's Turtle	Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Waste handling Temporary storage (on land) Decanting Decontamination	IL	
Spotted Turtle	Temporary storage (on land) Decontamination	IL, IN, MI, OH	
Gray Bat	Temporary storage (on land) Decontamination	IL, IN	
Tricolored Bat	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Temporary storage (on water) Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Temporary storage (on water) Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Hall's Bulrush	Temporary storage (on water)	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Temporary storage (on water)	MI	
Clubshell	Waste handling	IL, IN, MI, OH	
Fanshell	Waste handling	IL, IN, OH	
Fat Pocketbook	Waste handling	IL, IN	
Higgins' Eye Pearlymussel	Waste handling	IL, MN, WI	
Longsolid	Waste handling	IL, IN, OH	
Northern Riffleshell	Waste handling	IL, IN, MI, OH	
Orangefoot Pimpleback	Waste handling	IL	
Pink Mucket	Waste handling	IL, IN, OH	
Pyramid (Pink) Pigtoe	Waste handling	OH	
Rabbitsfoot <i>Critical Habitat</i>	Waste handling	IL, IN, OH	
Rayed Bean	Waste handling	IN, MI, OH	

Rough Pigtoe	Waste handling	IN	
Round Hickorynut	Waste handling	IL, IN, MI, OH	
Salamander Mussel	Waste handling	IL, IN, MI, MN, OH, WI	
Scaleshell	Waste handling	IL	
Sheepnose	Waste handling	IL, IN, MN, OH, WI	
Snuffbox	Waste handling	IL, IN, MI, OH, WI	
Spectaclecase	Waste handling	IL, MN, WI	
Winged Mapleleaf	Waste handling	MN, WI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Waste handling	IL, MI, WI	
Lake Sturgeon	Waste handling Temporary storage (on water)	IL, IN, MI, MN, OH, WI	
Topeka Shiner <i>Critical Habitat</i>	Waste handling Temporary storage (on water)	MN	
Alligator Snapping Turtle	Waste handling	IL, IN	
Blanding's Turtle	Waste handling Temporary storage (on water)	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Temporary storage (on water)	IL	
Spotted Turtle	Waste handling Temporary storage (on water)	IL, IN, MI, OH	
Gray Bat	Waste handling	IL, IN	
Tricolored Bat	Waste handling	IL, IN, MI, MN, OH, WI	
Piping Plover <i>Critical Habitat</i>	Waste handling	IL, IN, MI, MN, OH, WI	
Rufa Red Knot	Waste handling	IL, IN, MI, MN, OH, WI	

High-Risk Response Actions and Activities in WETLANDS

Associated Vulnerable Habitats:

Bog, Calcareous Fen, Deep Marsh Vegetation (Annuals, Perennials, Shrubs), Floodplain Forest, Mudflats, Rooted Floating Aquatics, Sedge Meadow, Shallow Marsh Vegetation (Annuals, Perennials, Shrubs), Submersed Vegetation, and Wet Meadow

Deflection and Containment Activities

Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Dwarf Lake Iris	Dikes or berms	MI, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL	
Dwarf Lake Iris	Booming	MI, WI	
Eastern Prairie Fringed Orchid	Booming Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH, WI	
Hall's Bulrush	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MI	
Michigan Monkey Flower	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MI	
Tennessee Pondweed	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH	
Virginia Sneezeweed	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	OH	
Western Prairie Fringed Orchid	Booming Construction barriers, dams, pits, and trenches Culvert blocking	MN	
American Burying Beetle	Booming	MI, OH	
Bog Buckmoth	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	WI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, MI, WI	
Linda's Roadside Skipper	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL	

	Culvert blocking		
Mitchell's Satyr Butterfly	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IN, MI, OH	
Monarch Butterfly	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	MI, MN, WI	
Regal Fritillary	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IL, IN, MN, OH, WI	
Blanding's Turtle	Booming	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IN, MI, OH	
Eastern Massasauga	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL	
Spotted Turtle	Booming	IL, IN, MI, OH	
Wood Turtle	Booming	MI, MN, OH, WI	
Indiana Bat	Booming	IL, IN, MI, OH	
Northern Bog Lemming	Booming	MN	
Northern Long-Eared Bat	Booming	IL, IN, MI, MN, OH, WI	
Eastern Black Rail	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Booming	IL, IN, MI, MN, OH, WI	
Recovery Activities			
Species	Specific Activity	States of Occurrence	BMPs
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Vacuuuming Sorbents	IL	
Dwarf Lake Iris	Vacuuuming Sorbents	MI, WI	
Hall's Bulrush	Skimming Vacuuuming Sorbents	IL, IN, MI, OH, WI	

Houghton's Goldenrod	Skimming Vacuuming Sorbents	MI	
Michigan Monkey Flower	Skimming Vacuuming Sorbents	MI	
Tennessee Pondweed	Skimming Vacuuming Sorbents	OH	
Virginia Sneezeweed	Skimming Vacuuming Sorbents	OH	
Blanding's Turtle	Skimming	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Skimming	IN, MI, OH	
Eastern Massasauga	Skimming	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Skimming Vacuuming Sorbents	IL	
Spotted Turtle	Skimming	IL, IN, MI, OH	
Wood Turtle	Skimming	MI, MN, OH, WI	
Indiana Bat	Skimming	IL, IN, MI, OH	
Northern Bog Lemming	Skimming	MN	
Northern Long-Eared Bat	Skimming	IL, IN, MI, MN, OH, WI	
Eastern Black Rail	Skimming	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Skimming	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Skimming	IL, IN, MI, MN, OH, WI	
Removal/Cleanup Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Linda's Roadside Skipper	Mechanical sand cleaning (<1 inch and >1 inch)	IL	
Mitchell's Satyr Butterfly	Mechanical sand cleaning (<1 inch and >1 inch)	IN, MI, OH	
Monarch Butterfly	Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Mechanical sand cleaning (<1 inch and >1 inch)	MI, MN, WI	
Regal Fritillary	Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Mechanical sand cleaning (<1 inch and >1 inch)	IL, IN, MN, OH, WI	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL	
Dwarf Lake Iris	Flooding Flushing Steam cleaning Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI, WI	
Hall's Bulrush	Flooding Flushing	IL, IN, MI, OH, WI	

	Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil		
Houghton's Goldenrod	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI	
Michigan Monkey Flower	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI	
Tennessee Pondweed	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	OH	
Virginia Sneezeweed	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	OH	
American Burying Beetle	Manual removal/cleaning of oil	MI, OH	
Bog Buckmoth	Flooding Flushing Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	WI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Flooding Flushing Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, MI, WI	
Linda's Roadside Skipper	Flooding Flushing Manual removal/cleaning of oil	IL	
Mitchell's Satyr Butterfly	Flooding Flushing Manual removal/cleaning of oil	IN, MI, OH	
Monarch Butterfly	Flooding Flushing Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Flooding Flushing Manual removal/cleaning of oil	MI, MN, WI	

Regal Fritillary	Flooding Flushing Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Flooding Flushing Manual removal/cleaning of oil	IL, IN, MN, OH, WI	
Blanding's Turtle	Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IN, MI, OH	
Eastern Massasauga	Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Flooding Flushing Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL	
Spotted Turtle	Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, OH	
Wood Turtle	Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI, MN, OH, WI	
Northern Bog Lemming	Flooding Flushing Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MN	
Eastern Black Rail	Flooding Flushing Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Flooding Flushing Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Flooding Flushing Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Indiana Bat	Manual removal/cleaning of oil	IL, IN, MI, OH	
Northern Long-Eared Bat	Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Submerged Oil Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			

Hall's Bulrush	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MI	
Michigan Monkey Flower	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MI	
Tennessee Pondweed	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	OH	
Virginia Sneezeweed	Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	OH	
Blanding's Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IN, MI, OH	
Eastern Massasauga	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
Spotted Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL, IN, MI, OH	
Wood Turtle	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	MI, MN, OH, WI	
Eastern Black Rail	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Detection of non-floating/submerged oil	IL, IN, MI, MN, OH, WI	

	Recovery of non-floating/submerged oil		
May affect, not likely to adversely affect due to insignificant or discountable effects			
Decurrent False Aster	Detection of non-floating/submerged oil	IL	
Eastern Prairie Fringed Orchid	Detection of non-floating/submerged oil	IL, IN, MI, OH, WI	
Hall's Bulrush	Detection of non-floating/submerged oil	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Detection of non-floating/submerged oil	MI	
Lakeside Daisy	Detection of non-floating/submerged oil	IL, MI, OH	
Michigan Monkey Flower	Detection of non-floating/submerged oil	MI	
Virginia Sneezeweed	Detection of non-floating/submerged oil	OH	
Western Prairie Fringed Orchid	Detection of non-floating/submerged oil	MN	
Wildlife Protection Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Tennessee Pondweed	Deterrence and hazing Capture and care of contaminated species	OH	
Linda's Roadside Skipper	Deterrence and hazing Capture and care of contaminated species	IL	
Mitchell's Satyr Butterfly	Deterrence and hazing Capture and care of contaminated species	IN, MI, OH	
Monarch Butterfly	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Deterrence and hazing Capture and care of contaminated species	MI, MN, WI	
Regal Fritillary	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Deterrence and hazing Capture and care of contaminated species	IL, IN, MN, OH, WI	
Blanding's Turtle	Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Capture and care of contaminated species	IN, MI, OH	
Eastern Massasauga	Capture and care of contaminated species	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Capture and care of contaminated species	IL	
Spotted Turtle	Capture and care of contaminated species	IL, IN, MI, OH	
Wood Turtle	Capture and care of contaminated species	MI, MN, OH, WI	
Indiana Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH	
Northern Bog Lemming	Deterrence and hazing Capture and care of contaminated species	MN	
Northern Long-Eared Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	

Eastern Black Rail	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Hall's Bulrush	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Deterrence and hazing Capture and care of contaminated species	MI	
Michigan Monkey Flower	Deterrence and hazing Capture and care of contaminated species	MI	
Virginia Sneezeweed	Deterrence and hazing Capture and care of contaminated species	OH	
Blanding's Turtle	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Deterrence and hazing	IN, MI, OH	
Eastern Massasauga	Deterrence and hazing	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Deterrence and hazing	IL	
Spotted Turtle	Deterrence and hazing	IL, IN, MI, OH	
Wood Turtle	Deterrence and hazing	MI, MN, OH, WI	
Locating, Tracking, and Support Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Locating, sampling, and monitoring air, land, and water Access of personnel by foot traffic	IL	
Dwarf Lake Iris	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI, WI	
Hall's Bulrush	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	IL, IN, MI, OH, WI	

	Access of personnel by foot traffic		
Houghton's Goldenrod	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI	
Michigan Monkey Flower	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI	
Tennessee Pondweed	Use of vessels Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Natural attenuation Deployment of buoys Locating, sampling, and monitoring air, land, and water Access of personnel by foot traffic	OH	
Virginia Sneezeweed	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	OH	
American Burying Beetle	Creation/use of new access points Access of personnel by foot traffic	MI, OH	
Bog Buckmoth	Creation/use of new access points Access of personnel by foot traffic	WI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Creation/use of new access points Access of personnel by foot traffic	IL, MI, WI	
Linda's Roadside Skipper	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Access of personnel by foot traffic	IL	
Mitchell's Satyr Butterfly	Use of vehicles	IN, MI, OH	

	<p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Access of personnel by foot traffic</p>		
Monarch Butterfly	<p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Access of personnel by foot traffic</p>	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	<p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Access of personnel by foot traffic</p>	MI, MN, WI	
Regal Fritillary	<p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Access of personnel by foot traffic</p>	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	<p>Use of vehicles</p> <p>Use of machinery/supporting equipment</p> <p>Creation/use of new access points</p> <p>Access of personnel by foot traffic</p>	IL, IN, MN, OH, WI	
Blanding's Turtle	<p>Creation/use of new access points</p> <p>Creation/use of staging areas</p> <p>Access of personnel by foot traffic</p>	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	<p>Creation/use of new access points</p> <p>Creation/use of staging areas</p> <p>Access of personnel by foot traffic</p>	IN, MI, OH	
Eastern Massasauga	<p>Creation/use of new access points</p> <p>Creation/use of staging areas</p> <p>Access of personnel by foot traffic</p>	IL, IN, MI, OH, WI	
Illinois Chorus Frog	<p>Creation/use of new access points</p> <p>Creation/use of staging areas</p> <p>Access of personnel by foot traffic</p>	IL	
Spotted Turtle	<p>Creation/use of new access points</p> <p>Creation/use of staging areas</p> <p>Access of personnel by foot traffic</p>	IL, IN, MI, OH	

Wood Turtle	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI, MN, OH, WI	
Indiana Bat	Use of aircraft Creation/use of new access points Creation/use of new staging areas Access of personnel by foot traffic	IL, IN, MI, OH	
Northern Bog Lemming	Use of aircraft Use of vessels Creation/use of new access points Access of personnel by foot traffic	MN	
Northern Long-Eared Bat	Use of aircraft Creation/use of new access points Creation/use of new staging areas Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
Eastern Black Rail	Use of aircraft Use of vessels Creation/use of new access points Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Use of aircraft Use of vessels Creation/use of new access points Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Use of aircraft Use of vessels Creation/use of new access points Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Blanding's Turtle	Use of aircraft Use of vessels	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	Use of vessels	IN, MI, OH	
Eastern Massasauga	Use of vessels	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Use of vessels	IL	
Spotted Turtle	Use of aircraft Use of vessels	IL, IN, MI, OH	
Streamside Salamander	Use of vessels	IN, OH	
Wood Turtle	Use of aircraft Use of vessels	MI, MN, OH, WI	
Indiana Bat	Use of vehicles	IL, IN, MI, OH	
Northern Long-Eared Bat	Use of vehicles	IL, IN, MI, MN, OH, WI	
Special considerations needed, high level of concern			
Decurrent False Aster	Natural attenuation	IL	
Dwarf Lake Iris	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, WI	
Hall's Bulrush	Natural attenuation	IL, IN, MI, OH, WI	

	Locating, sampling, and monitoring air, land, and water		
Houghton's Goldenrod	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI	
Michigan Monkey Flower	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI	
Virginia Sneezeweed	Natural attenuation Locating, sampling, and monitoring air, land, and water	OH	
American Burying Beetle	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, OH	
Bog Buckmoth	Natural attenuation Locating, sampling, and monitoring air, land, and water	WI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MI, WI	
Linda's Roadside Skipper	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Mitchell's Satyr Butterfly	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, MI, OH	
Monarch Butterfly	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, MN, WI	
Regal Fritillary	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MN, OH, WI	
Blanding's Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, MI, OH	
Eastern Massasauga	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Spotted Turtle	Natural attenuation	IL, IN, MI, OH	

	Locating, sampling, and monitoring air, land, and water		
Wood Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, MN, OH, WI	
Indiana Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Northern Bog Lemming	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN	
Northern Long-Eared Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Eastern Black Rail	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Waste Management Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Decurrent False Aster	Temporary storage (on land) Decontamination	IL	
Dwarf Lake Iris	Waste handling Temporary storage (on water) Temporary storage (on land) Decontamination	MI, WI	
Hall's Bulrush	Waste handling Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Waste handling Temporary storage (on land) Decontamination	MI	
Michigan Monkey Flower	Waste handling Temporary storage (on land) Decontamination	MI	
Tennessee Pondweed	Waste handling Temporary storage (on water) Temporary storage (on land) Decanting Decontamination	OH	
Virginia Sneezeweed	Waste handling Temporary storage (on land) Decontamination	OH	

American Burying Beetle	Decontamination	MI, OH	
Bog Buckmoth	Decanting	WI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Decanting Decontamination	IL, MI, WI	
Linda's Roadside Skipper	Decanting	IL	
Mitchell's Satyr Butterfly	Decanting	IN, MI, OH	
Monarch Butterfly	Decanting	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Decanting	MI, MN, WI	
Regal Fritillary	Decanting	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Decanting	IL, IN, MN, OH, WI	
Blanding's Turtle	Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	Decontamination	IN, MI, OH	
Eastern Massasauga	Decontamination	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Decanting Decontamination	IL	
Spotted Turtle	Decontamination	IL, IN, MI, OH	
Wood Turtle	Temporary storage (on land) Decontamination	MI, MN, OH, WI	
Indiana Bat	Temporary storage (on land) Decontamination	IL, IN, MI, OH	
Northern Long-Eared Bat	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Eastern Black Rail	Decontamination	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Decontamination	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Decontamination	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Decurrent False Aster	Waste handling	IL	
Hall's Bulrush	Temporary storage (on water)	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Temporary storage (on water)	MI	
Michigan Monkey Flower	Temporary storage (on water)	MI	
Virginia Sneezeweed	Temporary storage (on water)	OH	
American Burying Beetle	Waste handling	MI, OH	
Bog Buckmoth	Waste handling	WI	
Hine's Emerald Dragonfly <i>Critical Habitat</i>	Waste handling	IL, MI, WI	
Linda's Roadside Skipper	Waste handling	IL	
Mitchell's Satyr Butterfly	Waste handling	IN, MI, OH	
Monarch Butterfly	Waste handling	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Waste handling	MI, MN, WI	
Regal Fritillary	Waste handling	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Waste handling	IL, IN, MN, OH, WI	
Blanding's Turtle	Waste handling	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	Waste handling	IN, MI, OH	
Eastern Massasauga	Waste handling	IL, IN, MI, OH, WI	

Spotted Turtle	Waste handling	IL, IN, MI, OH	
Wood Turtle	Waste handling	MI, MN, OH, WI	
Indiana Bat	Waste handling	IL, IN, MI, OH	
Northern Bog Lemming	Waste handling	MN	
Northern Long-Eared Bat	Waste handling	IL, IN, MI, MN, OH, WI	
Eastern Black Rail	Waste handling	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Waste handling	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Waste handling	IL, IN, MI, MN, OH, WI	

High-Risk Response Actions and Activities in UPLANDS

Associated Vulnerable Habitats:

None

Deflection and Containment Activities

Species	Specific Activity	States of Occurrence	BMPs ¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Dwarf Lake Iris	Dikes or berms	MI, WI	
Iowa Pleistocene Snail	Booming	IL	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
American Hart's-tongue Fern	Booming	MI	
Dwarf Lake Iris	Booming	MI, WI	
Fassett's Locoweed	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	WI	
Lakeside Daisy	Booming	IL, MI, OH	
Leafy Prairie-clover	Booming	IL	
Leedy's Roseroot	Booming	MN	
Mead's Milkweed	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, WI	
Minnesota Dwarf Trout Lily	Booming	MN	
Northern Wild Monkshood	Booming	OH, WI	
Pitcher's Thistle	Booming	IL, IN, MI, WI	
Prairie Bush-clover	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, MN, WI	
Running Buffalo Clover	Booming Dikes or berms Construction barriers, dams, pits, and trenches Culvert blocking	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Booming	IN	
Short's Goldenrod	Booming	IN	
Small Whorled Pogonia	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, MI, OH	
Western Prairie Fringed Orchid	Booming	MN	
American Burying Beetle	Booming Dikes or berms	MI, OH	
Dakota Skipper <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches	MN	
Frosted Elfin Butterfly	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, OH, WI	
Karner Blue Butterfly	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Linda's Roadside Skipper	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL	

Monarch Butterfly	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Booming Dikes or berms Construction barriers, dams, pits, and trenches	MI, MN, WI	
Rattlesnake-master Borer Moth	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL	
Regal Fritillary	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MN, OH, WI	
Blanding's Turtle	Booming	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Booming	IN, MI, OH	
Eastern Massasauga	Booming	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL	
Spotted Turtle	Booming	IL, IN, MI, OH	
Streamside Salamander	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IN, OH	
Wood Turtle	Booming	MI, MN, OH, WI	
Gray Bat	Booming	IL, IN	
Indiana Bat	Booming	IL, IN, MI, OH	
Little Brown Bat	Booming	IL, IN, MI, MN, OH, WI	
Northern Long-Eared Bat	Booming	IL, IN, MI, MN, OH, WI	
Tricolored Bat	Booming	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Booming Dikes or berms Construction barriers, dams, pits, and trenches	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Canada Lynx	Booming	MI, MN, WI	
Gray Wolf	Booming	MI, MN, WI	
Plains Spotted Skunk	Booming	MN	
Prairie Gray Fox	Booming	MN, WI	
Recovery Activities			
Species	Specific Activity	States of Occurrence	BMPs
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Dwarf Lake Iris	Vacuating Sorbents	MI, WI	
Fassett's Locoweed	Vacuating Sorbents	WI	
Pitcher's Thistle	Skimming	IL, IN, MI, WI	
Blanding's Turtle	Skimming	IL, IN, MI, MN, OH, WI	
Illinois Chorus Frog	Skimming Vacuating	IL	

	Sorbents		
Spotted Turtle	Skimming	IL, IN, MI, OH	
Wood Turtle	Skimming	MI, MN, OH, WI	
Gray Bat	Skimming	IL, IN	
Indiana Bat	Skimming	IL, IN, MI, OH	
Little Brown Bat	Skimming	IL, IN, MI, MN, OH, WI	
Northern Long-Eared Bat	Skimming	IL, IN, MI, MN, OH, WI	
Tricolored Bat	Skimming	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Skimming	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Minnesota Dwarf Trout Lily	Skimming	MN	
Running Buffalo Clover	Skimming	IN, OH	
Copperbelly Watersnake, Northern DPS	Skimming	IN, MI, OH	
Eastern Massasauga	Skimming	IL, IN, MI, OH, WI	
Streamside Salamander	Skimming	IN, OH	
Canada Lynx	Skimming	MI, MN, WI	
Gray Wolf	Skimming	MI, MN, WI	
Plains Spotted Skunk	Skimming	MN	
Prairie Gray Fox	Skimming	MN, WI	
Removal/Cleanup Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
American Hart's-tongue Fern	Sandblasting Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI	
Iowa Pleistocene Snail	Manual removal/cleaning of oil	IL	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Dwarf Lake Iris	Flooding Flushing Steam cleaning Mechanical sand cleaning (<1 inch and >1 inch) Manual removal/cleaning of oil	MI, WI	
Fassett's Locoweed	Flushing Steam cleaning Sandblasting Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	WI	
Lakeside Daisy	Manual removal/cleaning of oil	IL, MI, OH	
Leafy Prairie-clover	Manual removal/cleaning of oil	IL	
Leedy's Roseroot	Manual removal/cleaning of oil	MN	
Mead's Milkweed	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, WI	
Minnesota Dwarf Trout Lily	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	MN	

Northern Wild Monkshood	Manual removal/cleaning of oil	OH, WI	
Pitcher's Thistle	Manual removal/cleaning of oil	IL, IN, MI, WI	
Prairie Bush-clover	Manual removal/cleaning of oil	IL, MN, WI	
Running Buffalo Clover	Manual removal/cleaning of oil	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Manual removal/cleaning of oil	IN	
Short's Goldenrod	Manual removal/cleaning of oil	IN	
Small Whorled Pogonia	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, MI, OH	
Western Prairie Fringed Orchid	Manual removal/cleaning of oil	MN	
Iowa Pleistocene Snail	Flooding Flushing Steam cleaning Sandblasting Mechanical sand cleaning (<1 inch and >1 inch)	IL	
Illinois Cave Amphipod	Flooding Flushing	IL	
American Burying Beetle	Manual removal/cleaning of oil	MI, OH	
Dakota Skipper <i>Critical Habitat</i>	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	MN	
Frosted Elfin Butterfly	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, OH, WI	
Karner Blue Butterfly	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Linda's Roadside Skipper	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL	
Monarch Butterfly	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Manual removal/cleaning of oil	MI, MN, WI	
Rattlesnake-master Borer Moth	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL	
Regal Fritillary	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MN, OH, WI	
Blanding's Turtle	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Mechanical sand removal (<1 inch and >1 inch)	IN, MI, OH	

	Manual removal/cleaning of oil		
Eastern Massasauga	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Flooding Flushing Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL	
Spotted Turtle	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, OH	
Streamside Salamander	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IN, OH	
Wood Turtle	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	MI, MN, OH, WI	
Golden-Winged Warbler	Mechanical sand removal (<1 inch and >1 inch) Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Canada Lynx	Manual removal/cleaning of oil	MI, MN, WI	
Gray Bat	Manual removal/cleaning of oil	IL, IN	
Gray Wolf	Manual removal/cleaning of oil	MI, MN, WI	
Indiana Bat	Manual removal/cleaning of oil	IL, IN, MI, OH	
Little Brown Bat	Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Northern Long-Eared Bat	Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Plains Spotted Skunk	Manual removal/cleaning of oil	MN	
Prairie Gray Fox	Manual removal/cleaning of oil	MN, WI	
Tricolored Bat	Manual removal/cleaning of oil	IL, IN, MI, MN, OH, WI	
Submerged Oil Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
Illinois Chorus Frog	Detection of non-floating/submerged oil Recovery of non-floating/submerged oil Containment of non-floating/submerged oil	IL	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Running Buffalo Clover	Detection of non-floating/submerged oil	IN, OH	
Wildlife Protection Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			

Blanding's Turtle	Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Capture and care of contaminated species	IN, MI, OH	
Eastern Massasauga	Capture and care of contaminated species	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Capture and care of contaminated species	IL	
Spotted Turtle	Capture and care of contaminated species	IL, IN, MI, OH	
Streamside Salamander	Capture and care of contaminated species	IN, OH	
Wood Turtle	Capture and care of contaminated species	MI, MN, OH, WI	
Gray Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN	
Indiana Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH	
Little Brown Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Northern Long-Eared Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Tricolored Bat	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Whooping Crane, Non-Essential Population	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Fassett's Locoweed	Deterrence and hazing Capture and care of contaminated species	WI	
Mead's Milkweed	Deterrence and hazing Capture and care of contaminated species	IL, IN, WI	
Minnesota Dwarf Trout Lily	Deterrence and hazing Capture and care of contaminated species	MN	
Pitcher's Thistle	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, WI	
Prairie Bush-clover	Deterrence and hazing Capture and care of contaminated species	IL, MN, WI	
Running Buffalo Clover	Deterrence and hazing Capture and care of contaminated species	IN, OH	
Small Whorled Pogonia	Deterrence and hazing Capture and care of contaminated species	IL, MI, OH	
Dakota Skipper <i>Critical Habitat</i>	Deterrence and hazing Capture and care of contaminated species	MN	
Frosted Elfin Butterfly	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, OH, WI	
Karner Blue Butterfly	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Linda's Roadside Skipper	Deterrence and hazing	IL	

	Capture and care of contaminated species		
Monarch Butterfly	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Rattlesnake-master Borer Moth	Deterrence and hazing Capture and care of contaminated species	IL	
Regal Fritillary	Deterrence and hazing Capture and care of contaminated species	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Deterrence and hazing Capture and care of contaminated species	IL, IN, MN, OH, WI	
Blanding's Turtle	Deterrence and hazing	IL, IN, MI, MN, OH, WI	
Copperbelly Watersnake, Northern DPS	Deterrence and hazing	IN, MI, OH	
Eastern Massasauga	Deterrence and hazing	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Deterrence and hazing	IL	
Spotted Turtle	Deterrence and hazing	IL, IN, MI, OH	
Streamside Salamander	Deterrence and hazing	IN, OH	
Wood Turtle	Deterrence and hazing	MI, MN, OH, WI	
Canada Lynx	Deterrence and hazing Capture and care of contaminated species	MI, MN, WI	
Gray Wolf	Deterrence and hazing Capture and care of contaminated species	MI, MN, WI	
Plains Spotted Skunk	Deterrence and hazing Capture and care of contaminated species	MN	
Prairie Gray Fox	Deterrence and hazing Capture and care of contaminated species	MN, WI	
Locating, Tracking, and Support Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Iowa Pleistocene Snail	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL	
May affect, not likely to adversely affect due to implementation of BMPs to minimize impact			
American Hart's-tongue Fern	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI	
Dwarf Lake Iris	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI, WI	
Fassett's Locoweed	Use of vehicles Use of machinery/supporting equipment	WI	

	Creation/use of new access points Creation/use of staging areas Access of personnel by foot		
Lakeside Daisy	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, MI, OH	
Leafy Prairie-clover	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL	
Leedy's Roseroot	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MN	
Mead's Milkweed	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, WI	
Minnesota Dwarf Trout Lily	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas	MN	
Northern Wild Monkshood	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	OH, WI	
Pitcher's Thistle	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, WI	
Prairie Bush-clover	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, MN, WI	
Running Buffalo Clover	Use of vehicles	IN, OH	

	<p>Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas</p>		
<p>Short's Bladderpod <i>Critical Habitat</i></p>	<p>Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic</p>	IN	
<p>Short's Goldenrod</p>	<p>Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic</p>	IN	
<p>Small Whorled Pogonia</p>	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic</p>	IL, MI, OH	
<p>Western Prairie Fringed Orchid</p>	<p>Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic</p>	MN	
<p>American Burying Beetle</p>	<p>Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic</p>	MI, OH	
<p>Dakota Skipper <i>Critical Habitat</i></p>	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic</p>	MN	
<p>Frosted Elfin Butterfly</p>	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic</p>	IL, IN, MI, OH, WI	
<p>Karner Blue Butterfly</p>	<p>Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas</p>	IL, IN, MI, MN, OH, WI	

	Access of personnel by foot traffic		
Linda's Roadside Skipper	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL	
Monarch Butterfly	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI, MN, WI	
Rattlesnake-master Borer Moth	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL	
Regal Fritillary	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Use of vehicles Use of machinery/supporting equipment Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MN, OH, WI	
Blanding's Turtle	Use of vehicles Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	Use of vehicles Creation/use of new access points	IN, MI, OH	

	Creation/use of staging areas Access of personnel by foot traffic		
Eastern Massasauga	Use of vehicles Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL	
Spotted Turtle	Use of vehicles Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, OH	
Streamside Salamander	Use of vehicles Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IN, OH	
Wood Turtle	Use of vehicles Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI, MN, OH, WI	
Canada Lynx	Use of aircraft Use of vehicles	MI, MN, WI	
Gray Bat	Use of aircraft Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN	
Gray Wolf	Use of aircraft Use of vehicles	MI, MN, WI	
Indiana Bat	Use of aircraft Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, OH	
Little Brown Bat	Use of aircraft Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
Northern Long-Eared Bat	Use of aircraft Creation/use of new access points Creation/use of staging areas	IL, IN, MI, MN, OH, WI	

	Access of personnel by foot traffic		
Plains Spotted Skunk	Use of aircraft Use of vehicles	MN	
Prairie Gray Fox	Use of aircraft Use of vehicles	MN, WI	
Tricolored Bat	Use of aircraft Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Use of aircraft Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
Blanding's Turtle	Use of aircraft	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Use of vessels	IL	
Spotted Turtle	Use of aircraft	IL, IN, MI, OH	
Wood Turtle	Use of aircraft	MI, MN, OH, WI	
Canada Lynx	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI, MN, WI	
Gray Wolf	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MI, MN, WI	
Indiana Bat	Use of vehicles	IL, IN, MI, OH	
Northern Long-Eared Bat	Use of vehicles	IL, IN, MI, MN, OH, WI	
Plains Spotted Skunk	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MN	
Prairie Gray Fox	Creation/use of new access points Creation/use of staging areas Access of personnel by foot traffic	MN, WI	
Tricolored Bat	Use of vehicles	IL, IN, MI, MN, OH, WI	
Special considerations needed, high level of concern			
American Hart's-tongue Fern	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI	
Dwarf Lake Iris	Natural attenuation Locating, sampling, and monitoring air, land, and water Access of personnel by foot traffic	MI, WI	
Fassett's Locoweed	Natural attenuation	WI	

	Locating, sampling, and monitoring air, land, and water		
Lakeside Daisy	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MI, OH	
Leafy Prairie-clover	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Leedy's Roseroot	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN	
Mead's Milkweed	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, WI	
Minnesota Dwarf Trout Lily	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN	
Northern Wild Monkshood	Natural attenuation Locating, sampling, and monitoring air, land, and water	OH, WI	
Pitcher's Thistle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, WI	
Prairie Bush-clover	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MN, WI	
Running Buffalo Clover	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN	
Short's Goldenrod	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN	
Small Whorled Pogonia	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, MI, OH	
Western Prairie Fringed Orchid	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN	
Iowa Pleistocene Snail	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
American Burying Beetle	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, OH	
Dakota Skipper <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN	
Frosted Elfin Butterfly	Natural attenuation	IL, IN, MI, OH, WI	

	Locating, sampling, and monitoring air, land, and water		
Karner Blue Butterfly	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Linda's Roadside Skipper	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Monarch Butterfly	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, MN, WI	
Rattlesnake-master Borer Moth	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Regal Fritillary	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MN, OH, WI	
Blanding's Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, MI, OH	
Eastern Massasauga	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL	
Spotted Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Streamside Salamander	Natural attenuation Locating, sampling, and monitoring air, land, and water	IN, OH	
Wood Turtle	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, MN, OH, WI	
Canada Lynx	Natural attenuation Locating, sampling, and monitoring air, land, and water	MI, MN, WI	
Gray Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN	
Gray Wolf	Natural attenuation	MI, MN, WI	

	Locating, sampling, and monitoring air, land, and water		
Indiana Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, OH	
Little Brown Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Northern Long-Eared Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Plains Spotted Skunk	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN	
Prairie Gray Fox	Natural attenuation Locating, sampling, and monitoring air, land, and water	MN, WI	
Tricolored Bat	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Natural attenuation Locating, sampling, and monitoring air, land, and water	IL, IN, MI, MN, OH, WI	
Waste Management Activities			
Species	Specific Activity	States of Occurrence	BMPs¹
May affect, likely to adversely affect - discuss possible BMPs with Services			
Iowa Pleistocene Snail	Temporary storage (on land) Decontamination	IL	
May affect, likely to adversely affect due to implementation of BMPs to minimize impact			
American Hart's-tongue Fern	Temporary storage (on land) Decontamination	MI	
Decurrent False Aster	Temporary storage (on land)	IL	
Dwarf Lake Iris	Waste handling Temporary storage (on water) Temporary storage (on land) Decontamination	MI, WI	
Eastern Prairie Fringed Orchid	Temporary storage (on land)	IL, IN, MI, OH, WI	
Fassett's Locoweed	Waste handling Temporary storage (on land) Decontamination	WI	
Hall's Bulrush	Temporary storage (on land)	IL, IN, MI, OH, WI	
Houghton's Goldenrod	Temporary storage (on land)	MI	
Lakeside Daisy	Temporary storage (on land) Decontamination	IL, MI, OH	
Leafy Prairie-clover	Temporary storage (on land) Decontamination	IL	

Leedy's Roseroot	Temporary storage (on land) Decontamination	MN	
Mead's Milkweed	Temporary storage (on land) Decontamination	IL, IN, WI	
Michigan Monkey Flower	Temporary storage (on land)	MI	
Minnesota Dwarf Trout Lily	Temporary storage (on land) Decontamination	MN	
Northern Wild Monkshood	Temporary storage (on land) Decontamination	OH, WI	
Pitcher's Thistle	Temporary storage (on land) Decontamination	IL, IN, MI, WI	
Prairie Bush-clover	Temporary storage (on land) Decontamination	IL, MN, WI	
Running Buffalo Clover	Temporary storage (on land) Decontamination	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Temporary storage (on land) Decontamination	IN	
Short's Goldenrod	Temporary storage (on land) Decontamination	IN	
Small Whorled Pogonia	Temporary storage (on land) Decontamination	IL, MI, OH	
Western Prairie Fringed Orchid	Temporary storage (on land) Decontamination	MN	
American Burying Beetle	Temporary storage (on land) Decontamination	MI, OH	
Dakota Skipper <i>Critical Habitat</i>	Temporary storage (on land) Decontamination	MN	
Frosted Elfin Butterfly	Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Karner Blue Butterfly	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Linda's Roadside Skipper	Temporary storage (on land) Decontamination	IL	
Monarch Butterfly	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Temporary storage (on land) Decontamination	MI, MN, WI	
Rattlesnake-master Borer Moth	Temporary storage (on land) Decontamination	IL	
Regal Fritillary	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Temporary storage (on land) Decontamination	IL, IN, MN, OH, WI	
Blanding's Turtle	Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	

Copperbelly Watersnake, Northern DPS	Temporary storage (on land) Decontamination	IN, MI, OH	
Eastern Massasauga	Temporary storage (on land) Decontamination	IL, IN, MI, OH, WI	
Illinois Chorus Frog	Waste handling Decanting Decontamination	IL	
Spotted Turtle	Temporary storage (on land) Decontamination	IL, IN, MI, OH	
Streamside Salamander	Waste handling Temporary storage (on land) Decontamination	IN, OH	
Wood Turtle	Temporary storage (on land) Decontamination	MI, MN, OH, WI	
Gray Bat	Temporary storage (on land) Decontamination	IL, IN	
Indiana Bat	Temporary storage (on land) Decontamination	IL, IN, MI, OH	
Little Brown Bat	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Northern Long-Eared Bat	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Tricolored Bat	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Temporary storage (on land) Decontamination	IL, IN, MI, MN, OH, WI	
May affect, not likely to adversely affect due to insignificant or discountable effects			
American Hart's-tongue Fern	Waste handling	MI	
Lakeside Daisy	Waste handling	IL, MI, OH	
Leafy Prairie-clover	Waste handling	IL	
Leedy's Roseroot	Waste handling	MN	
Mead's Milkweed	Waste handling	IL, IN, WI	
Minnesota Dwarf Trout Lily	Waste handling	MN	
Northern Wild Monkshood	Waste handling	OH, WI	
Pitcher's Thistle	Waste handling	IL, IN, MI, WI	
Prairie Bush-clover	Waste handling	IL, MN, WI	
Running Buffalo Clover	Waste handling	IN, OH	
Short's Bladderpod <i>Critical Habitat</i>	Waste handling	IN	
Short's Goldenrod	Waste handling	IN	
Small Whorled Pogonia	Waste handling	IL, MI, OH	
Western Prairie Fringed Orchid	Waste handling	MN	
Iowa Pleistocene Snail	Waste handling	IL	
American Burying Beetle	Waste handling	MI, OH	
Dakota Skipper <i>Critical Habitat</i>	Waste handling	MN	
Frosted Elfin Butterfly	Waste handling	IL, IN, MI, OH, WI	
Karner Blue Butterfly	Waste handling	IL, IN, MI, MN, OH, WI	
Linda's Roadside Skipper	Waste handling	IL	
Monarch Butterfly	Waste handling	IL, IN, MI, MN, OH, WI	
Poweshiek Skipperling <i>Critical Habitat</i>	Waste handling	MI, MN, WI	

Rattlesnake-master Borer Moth	Waste handling	IL	
Regal Fritillary	Waste handling	IL, IN, MI, MN, OH, WI	
Rusty Patched Bumble Bee	Waste handling	IL, IN, MN, OH, WI	
Blanding's Turtle	Waste handling	IL, IN, MI, OH, WI	
Copperbelly Watersnake, Northern DPS	Waste handling	IN, MI, OH	
Eastern Massasauga	Waste handling	IL, IN, MI, OH, WI	
Spotted Turtle	Waste handling	IL, IN, MI, OH	
Wood Turtle	Waste handling	MI, MN, OH, WI	
Canada Lynx	Waste handling	MI, MN, WI	
Gray Bat	Waste handling	IL, IN	
Gray Wolf	Waste handling	MI, MN, WI	
Indiana Bat	Waste handling	IL, IN, MI, OH	
Little Brown Bat	Waste handling	IL, IN, MI, MN, OH, WI	
Northern Long-Eared Bat	Waste handling	IL, IN, MI, MN, OH, WI	
Plains Spotted Skunk	Waste handling	MN	
Prairie Gray Fox	Waste handling	MN, WI	
Tricolored Bat	Waste handling	IL, IN, MI, MN, OH, WI	
Golden-Winged Warbler	Waste handling	IL, IN, MI, MN, OH, WI	

