GOAL: Collect at boat ramp to prevent upstream spill from spreading into Refuge

Site Number	Waterbody, River Mile	Site Name	
UIR	Upper Iowa River N/A	Upper Iowa River	
Strategy Type*	Boom Length	Land Boat Access Access	
C&C	400	Υ	Υ

Strategy Implementation (Go to Aerial View)

Contain spill from upstream at boat access above bridge. Collect from shore with vac truck. Containment and collection only possible at bridge or along unimproved levee road for half mile below. Prevent spread of spill into Refuge.

Site Access

IA Hwy 26 bridge over Upper Iowa River. Ramp on west side of road on RDB. Ramp is narrow and steep, minimal staging on site. No dock present.

Latitude: 43.474289 UTM z15: 4814897.8 Longitude: -91.295056 UTM z15: 637894.7



Looking north down ramp, Highway 26 bridge beyond

GOAL: Collect on site to prevent spilled product from spreading downstream into Refuge

Site Number	Waterbody, River Mile	Site Name	
680	Mississippi River 690.7 RDB	CP at Reno Bottoms	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	100	Y	Ν

Strategy Implementation (Go to Aerial View)

For spill in this area, contain and collect in place. No water control structure to prevent spill from continuing through refuge. Slow/no-wake to powerline. Need airboats to reach side channels. Top priority area for protection. Nesting swan pair in area.

Site Access

Along CP tracks south of Dam 8 and north of Co. Rd. 249. Locked FWS gate controls access. Nearly 300 ft. of access road may be submerged during high water.

Latitude: 43.590863 UTM z15: 4827869.0 Longitude: -91.280408 UTM z15: 638811.7



Looking south along channel, railroad track to right

GOAL: Divert spilled product from main channel to side channel boat ramp for collection

Site Number	Waterbody, River Mile	Site Name	
678	Mississippi River 678	Island 126	
Strategy Type*	Boom Length	Land Access	Boat Access
Div.	1000	Ν	N
Strategy Implementation (Go to Aerial View)			

Divert spill towards eastern shoreline. Contain at Dairyland Power Access and collect from shore. Closing dam at upper end of side channel may help setting boom.

Site Access

Upper end of Island 126. Anchor to trees on shore. May need long anchor lines for upper end of boom. Reach from boat access on south side of Dairyland Power along WI Hwy 35.

Latitude: 43.555612 UTM z15: 4824025.9 Longitude: -91.237886 UTM z15: 642327.3



View of power plant shoreline from main channel



Looking downstream at island, boat ramp beyond at left

GOAL: Divert spilled product from main	channel
to side channel boat ramp for collection	

Site Number	Waterbody, River Mile	Site	Name	
678b	Mississippi River 678.7 LDB	Dairyland Genoa Station #3		
Strategy Type*	Boom Length	Land Access	Boat Access	
Other	0	Y	Y	
Strategy Implementation				
Notify facility of upstream spill 608-689-2335. No action needed on river around water intakes unless requested by facility.				
	Site A	ccess		
Facility on west side of WI Highway 35, just south of dam 8. On bank of Mississippi River.				
Latitude: 43.559477 Longitude: -91.231206 UTM z15: 4824597.0 UTM z15: 642857.5				



Looking upstream past power plant toward Lock & Dam 8

GOAL: Collect spilled product at boat ramp to prevent further spread into Refuge

Site Number	Waterbody, River Mile	Site Name	
677d	Mississippi River 677.0 RDB	Millstone Landing	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	600	Υ	Y
Strategy Implementation (Go to Aerial View)			
Contain at ramp to prevent spill from moving further into			

Contain at ramp to prevent spill from moving further into refuge. Limited effectiveness due to location and flow, support with other strategies. Site submerged in high water.

Site Access

Half mile south of Co. Rd. 14 on east side of MN Hwy 26. Narrow, winding access lane and minimal staging at boat ramp.

Latitude: 43.538337	Lonaitude: -91.27669
UTM z15: 4822041.6	UTM z15: 639232.8



Millstone Landing, looking east

Site Number	Waterbody, River Mile	Site Name		
677c	Mississippi River 677.4 RDB	Island 126 Lower Light		
Strategy Type*	Boom Length	Land Access	Boat Access	
Exc.	200	N	N	
Strategy Implementation (Go to Aerial View)				
Boom across opening to prevent oil from entering refuge in high water. Low water conditions may not require action at this site.				
	Site A	ccess		
Backwater opening across main channel from lower tip of Island 126. Reach from boat access on south side of Dairyland Power along WI Hwy 35.				
Latitude: 43.545622 Longitude: -91.246453 UTM z15: 4822901.8 UTM z15: 641658.7				



Backwater opening in low water conditions



Looking upstream at navigation marker

GOAL: Contain spilled product at boat ramp to protect sensitive downstream resources

Site Number	Waterbody, River Mile	Site Name		
677b	Mississippi River 677.7 LDB	Dairyland Power Access		
Strategy Type*	Boom Length	Land Access	Boat Access	
C&C	1000	Y	Y	
Strategy Implementation (Go to Aerial View)				
Deflect product at RSP 678 and contain in slow water at ramp. Collect from ramp with vac truck and skimmer.				
	Site A	ccess		
Boat access on south side of Dairyland Power along WI Hwy 35. Large staging area with lights on site. Boat ramp is only access to shore. Power plant may have tie-offs and resources to assist response.				
Latitude: 43.551494 Longitude: -91.23469 UTM z15: 4823574.0 UTM z15: 642595.1				



Slack water next to boat ramp



Looking upstream from dock

Site Number	Waterbody, River Mile	Site	Name	
677a	Mississippi River 677.7 RDB	Island 126 Daybeacon		
Strategy	Boom Length	Land Access	Boat Access	
Exc.	200	N	N	
Strategy Implementation (Go to Aerial View)				
Boom across opening to prevent oil from entering refuge. Anchor to trees on upper and lower sides of opening. Open year-round.				
	Site A	ccess		
Upper backwater opening across main channel from Island 126. Reach from boat access on south side of Dairyland Power along WI Hwy 35.				
Latitude: 43.5 UTM z15: 4823	Latitude: 43.552942 Longitude: -91.244719 UTM z15: 4823717.7 UTM z15: 641781.6			



Fallen tree in backwater opening



Looking upstream, Dairyland Power plant at right

GOAL: Collect product spilled into backwater lakes to prevent it spreading to Refuge

Site Number	Waterbody, River Mile	Site Name	
676b	Mississippi River 676.3 LDB	Walter Lakes Outlet	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	600	Y	N

Strategy Implementation (Go to Aerial View)

For spills from rails or highway above this location, attempt to contain and collect in place before spill spreads to main channel. Boom from far shore to contain along railroad ballast or adjacent floodplain forest.

Site Access

Backwater outlet across BNSF tracks from WI Hwy 35, 3 mi. south of Genoa. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River.

Latitude: 43.531625 UTM z15: 4821380.0 Longitude: -91.227249 UTM z15: 643243.2



Looking north into Walter Lakes backwater



Looking east within lake at railroad tracks

Site Number	Waterbody, River Mile	Site Name	
676a	Mississippi River 676.4 RDB	Dark Slough	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	600	Ν	Ν
Strategy Implementation (Go to Aerial View)			

Boom across slough opening to prevent oil from entering refuge. May need to cascade boom above island. Potential collection point depending on water levels. Contain in shallows behind Twin Island, collect by boat.

Site Access

Backwater opening behind Twin Island. Reach from boat access 1.5 mi. upstream on south side of Dairyland Power along WI Hwy 35. Channel on lower side of Twin Island closed in low water conditions.

Latitude: 43.531644 UTM z15: 4821353.2 Longitude: -91.244201 UTM z15: 641873.4



Looking east into slough opening



Looking north along shore above opening

GOAL: Collect spilled product in slough to prevent it spreading further into Refuge

Site Number	Waterbody, River Mile	Site Name	
675c	Mississippi River 675.1 RDB	Ice Haul Slough	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	400	Ν	Ν

Strategy Implementation (Go to Aerial View)

For spills from rail or highway between Millstone and Visgers Landings, close small slough outlet into Ice Haul Slough. Prevent spill from continuing through refuge. Archaeological sites on islands in backwaters, contact Minnesota SHPO 800-657-3773 for guidance.

Site Access

In backwaters 1 mi. northeast of New Albin, IA. Reach from Millstone Landing, 1.8 mi. upstream along MN Hwy 26. Or reach from landing at end of Army Rd., 2 mi. east of New Albin.

Latitude: 43.522879 UTM z15: 4820321.8 Longitude: -91.278465 UTM z15: 639124.9



Looking northwest into slough outlet



Wetland shore along slough

Site Number	Waterbody, River Mile	Site Name	
675b	Mississippi River 675.3 RDB	Sand Slough	
Strategy Type*	Boom Length	Land Boat	
Exc.	500	N	N
Strateg	y Implementati	on (Go to Aeria	l View)
Cascade boom from above opening and across opening to prevent oil from entering refuge. Anchor to trees. Deflect spill back into main channel.			
Site Access			
Backwater opening across main channel from mouth of			

Backwater opening across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River.

Latitude: 43.518643 UTM z15: 4819930.2 Longitude: -91.232003 UTM z15: 642889.8



Looking upstream from slough opening



Looking west into slough

Site Number	Waterbody, River Mile	Site Name	
675a	Mississippi River 675.5 RDB	675a	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	400	Ν	N
Strategy Implementation (Go to Aerial View)			

Boom across opening to prevent oil from entering refuge. Potential collection point depending on water levels. Shallow channel may close to create slack water behind wing dams.

Site Access

Backwater opening across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River. Wing dams at opening.

Latitude: 43.522362 UTM z15: 4820338.9 Longitude: -91.234469 UTM z15: 642681.7



Looking upstream from backwater opening



Looking into backwater channel in low water. Note wing dam breaching surface at left.

GOAL: Collect spilled product from slack water below island to prevent spread into Refuge

Site Number	Waterbody, River Mile	Site Name	
674b	Mississippi River 674.6 LDB	Gillette Island	
Strategy Type*	Boom Length	Land Boat Access Access	
C&C	800	Ν	Ν
Strateç	Strategy Implementation (Go to Aerial View)		
Possible collection point in low water conditions. Herd spilled product in slack water below island for collection by barge.			
Site Access			
Lower end of Gillette Island, below mouth of Bad Axe			

Lower end of Gillette Island, below mouth of Bad Axe River. Reach from boat access at mouth of Bad Axe River.

Latitude: 43.510008 UTM z15: 4818993.5 Longitude: -91.219026 UTM z15: 643959.1



Lower end of island, main channel beyond



Slack water within island

674aMississippi River 674.7 RDBIndian SloughStrategy Type*Boom LengthLand AccessBoat AccessExc.600NNStrategy Implementation (Go to Aerial View)Strategy Implementation (Go to Aerial View)Cascade boom above and across opening to prevent oil from entering refuge. Utilize closing dam in low water. Shallow channel.Southwest .8 mi. and across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River. Closing dam at opening	Site Number	Waterbody, River Mile	Site Name	
Strategy Type* Boom Length Land Access Boat Access Exc. 600 N N Strategy Implementation (Go to Aerial View) Strategy Implementation (Go to Aerial View) Cascade boom above and across opening to prevent oil from entering refuge. Utilize closing dam in low water. Shallow channel. Site Access Southwest .8 mi. and across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River. Closing dam at opening	674a	Mississippi River 674.7 RDB	Indian Slough	
Exc. 600 N N Strategy Implementation (Go to Aerial View) Strategy Implementation (Go to Aerial View) Cascade boom above and across opening to prevent oil from entering refuge. Utilize closing dam in low water. Shallow channel. Site Access Southwest .8 mi. and across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River. Closing dam at opening	Strategy Type*	Boom Length	Land Boat	
Strategy Implementation (Go to Aerial View) Cascade boom above and across opening to prevent oil from entering refuge. Utilize closing dam in low water. Shallow channel. Site Access Site Access Southwest .8 mi. and across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River. Closing dam at opening	Exc.	600	N	N
Cascade boom above and across opening to prevent oil from entering refuge. Utilize closing dam in low water. Shallow channel. Site Access Southwest .8 mi. and across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River. Closing dam at opening	Strateç	y Implementati	on (Go to Aeria	l View)
Site Access Southwest .8 mi. and across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River. Closing dam at opening	Cascade boom above and across opening to prevent oil from entering refuge. Utilize closing dam in low water. Shallow channel.			
Southwest .8 mi. and across main channel from mouth of Bad Axe River. Reach from boat access on south side of Dairyland Power or at mouth of Bad Axe River. Closing dam at opening	Site Access			

Latitude: 43.511068 UTM z15: 4819098.3 Longitude: -91.226548 UTM z15: 643348.5



Looking upstream from slough opening



Looking west into slough

Site Number	Waterbody, River Mile	Site Name	
673a	Mississippi River 673.5	Lost Channel	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	400	Ν	Ν
Strateg	Strategy Implementation (Go to Aerial View)		
Boom across opening to prevent oil from entering refuge. Anchor to trees on both sides.			
	Site Access		
Backwater opening on RDB, 1 mi. south of Gillette Island. Reach by boat from Blackhawk Park, 2.2 mi. downstream on LDB. Closing dam across opening.			
Latitude: 43.495757 Longitude: -91.220211 UTM z15: 4817408.8 UTM z15: 643897.2		1.220211 397.2	



Looking upstream from backwater opening



Looking west into opening

GOAL: Collect spilled product at ramp to prevent further spread into Refuge

Site Number	Waterbody, River Mile	Site Name	
673b	Mississippi River 673.4 RDB	New Albin Access	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	800	Ν	N
Strategy Implementation (Go to Aerial View)			
Cascade boom across slough to contain spill in side channel by upper ramp or in slack water below lower ramp. Collect from shore with vac truck and skimmer.			
	Site A	ccess	
From Main St. in New Albin, go southeast 4 blocks on Elm St., then continue east 2 miles to end of Army Rd. Two docks and ramps at landing.			
Latitude: 43.492673 Longitude: -91.248492 UTM z15: 4817017 7 UTM z15: 641617 8		1.248492 617.8	

Looking upstream at upper ramp, side channel at left



Looking east over lower ramp

GOAL: Collect spilled product by barge to prevent further spread into Refuge

Site Number	Waterbody, River Mile	Site Name	
672	Mississippi River 672.2 RDB	Minnesota Slough Oxbow	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	1000	Ν	N
Strategy Implementation (Go to Aerial View)			

Contain spills that spread into Minnesota Slough. Boom across slough to contain in side pool. Must collect by barge. Mussel beds and fish habitat in slough, consult trustees for guidance.

Site Access

Oxbow at bend in Minnesota Slough, 1.5 mi. north and west of Upper Iowa River mouth. Reach by boat from Blackhawk Park, 1.8 mi. east and south on LDB. Or reach from landing 1 mile upstream at end of Army Rd., 2 mi. east of New Albin.

Latitude: 43.477923 UTM z15: 4815391.8 Longitude: -91.241355 UTM z15: 642229.5



South shore of Minnesota Slough below oxbow



Looking south into oxbow

GOAL: Collect spilled product by barge to prevent further spread into Refuge

Site Number	Waterbody, River Mile	Site Name	
671c	Mississippi River 671.8 RDB	Old Upper Iowa Mouth	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	750	Ν	Ν

Strategy Implementation (Go to Aerial View)

Contain spills that spread into Minnesota Slough. Contain product in dead end slough above river mouth. Boom across slough to deflect oil into opening. Collect by barge.

Site Access

Backwater opening .3 mi. north of Upper Iowa River mouth. Reach by boat from Blackhawk Park, 1 mi. south and east on LDB. Or reach from landing 1.5 miles upstream at end of Army Rd., 2 mi. east of New Albin.

Latitude: 43.471997 UTM z15: 4814746.7 Longitude: -91.233705 UTM z15: 642862.1



Looking upstream into Minnesota Slough from old mouth



Looking west into old river mouth

GOAL: Collect spilled product in side channel to protect sensitive downstream resources

Site Number	Waterbody, River Mile	Site Name	
671b	Mississippi River 671.4 LDB	Blackhawk - Vernon Co. Landing	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	800	Y	Y
Otrata multimelana antatian (O a ta A anial Miana)			

Strategy Implementation (Go to Aerial View)

Close culvert at road with weir dam. Cascade boom main channel to contain in side channel and collect from road. Archaeological sites in area, contact Wisconsin SHPO 608-261-2457 for guidance.

Site Access

Reach by boat from Blackhawk Park main access. From WI Hwy 35, turn west across railroad tracks on Blacktop Rd. to riverbank. Limited space at inlet, stage at larger parking area .2 mi. south.

Latitude: 43.466744 UTM z15: 4814184.8 Longitude: -91.221263 UTM z15: 643881.0



Public boat ramp at Blackhawk Park



Looking west at side channel opening

GOAL: Collect spilled product in side channel to protect sensitive downstream resources

Site Number	Waterbody, River Mile	Site Name	
671a	Mississippi River 671.8 LDB	Blackhawk - Inflow	
Strategy Type*	Boom Length	Land Boat	
C&C	800	Y	N
Strateg	jy Implementati	on (Go to Aeria	l View)
Close culvert at road with stop log or weir dam. Cascade boom main channel to contain in side channel and collect from shore. Archaeological sites in area, contact Wisconsin SHPO 608-261-2457 for guidance.			
	Site A	ccess	
Reach by boat from Blackhawk Park main access. By land from WI Hwy 35, turn west across railroad tracks on Co. Rd. B to private lots at end.			
Latitude: 43.4713 Longitude: -91.21852 UTM z15: 4814695.5 UTM z15: 644092.0		1.21852)92.0	



Looking north at side channel opening

GOAL:	Exclude from slough opening to keep
spilled	product in main channel

Site Number	Waterbody, River Mile	Site I	Name
670b	Mississippi River 670.1 RDB	Little S	Slough
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	400	Ν	N
Strategy Implementation (Go to Aerial View)			
Cascade boom above and across opening to keep spill in main channel. Closing structures slow flow, but it is still strong. Barge may also be useful to block opening.			
Site Access			
Second RDB opening below Upper Iowa River mouth. Reach from Blackhawk Park, across river on LDB.			
Latitude: 43.4 UTM z15: 4812	50505 2358.6	Longitude: -97 UTM z15: 6428	1.23436 359.8



Upstream side of slough opening



Looking west into slough

GOAL: Exclude from slough opening to keep spilled product in main channel

Site Number	Waterbody, River Mile	Site Name	
670a	Mississippi River 670.5 LDB	Big Slough	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	800	Ζ	Ν
Strategy Implementation (Go to Aprial View)			

Cascade boom above opening to prevent spill from entering refuge. Closing structures slow flow, but it is still strong. Cascade boom or use barge to deflect spilled product back into main channel.

Site Access

First RDB opening below Upper Iowa River mouth. Reach from Blackhawk Park, across river on LDB. Significant inflow, most Upper Iowa River flow enters slough.

Latitude: 43.45771 UTM z15: 4813156.6 Longitude: -91.235672 UTM z15: 642736.7



Looking upstream at slough opening



Looking west into slough

Site Number	Waterbody, River Mile	Site Name	
669	Mississippi River 669.4 RDB	Launsom Lake Inlet	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	600	Ν	Ν
Strategy Implementation (Go to Aerial View)			

Cascade boom above opening to keep spill in main channel. Channel has riprap banks. Deflect from embayment to keep spilled product in main channel.

Site Access

Third RDB opening below Upper Iowa River mouth. Reach from Blackhawk Park, 1.5 mi. upstream on LDB. Lower inlet only open in high water conditions. Closing structures at opening and within slough.

Latitude: 43.440648	Longitude: -91.228013
UTM z15: 4811274.0	UTM z15: 643396.6



Looking west at backwater inlet



Looking upstream from inlet

GOAL: Collect product spilled into backwaters to prevent it spreading into Refuge

Site Number	Waterbody, River Mile	Site Name	
668	Mississippi River 668.2 LDB	De Soto Bay	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	1000	Y	Ν

Strategy Implementation (Go to Aerial View)

For spills from rail into DeSoto Bay, contain at mouth and collect by barge. Close bay outlet to contain spill along tracks. Anchor to trees on island to deflect product to LDB. Fish overwintering area. Important bird area.

Site Access

Backwater opening .3 mi. upstream of DeSoto. Can only reach by land via railroad tracks, contact BNSF for safety support. Reach by boat from DeSoto access along WI Hwy 35.

Latitude: 43.430116 UTM z15: 4810142.2 Longitude: -91.206637 UTM z15: 645151.7



Looking west at island point, main channel beyond



Railroad tracks along east shore of bay

GOAL: Equipment staging and river access for response in Pool 9

Site Number	Waterbody, River Mile	Site N	Name
667b	Mississippi River 667.6 LDB	De Soto	
Strategy Type*	Boom Length	Land Access	Boat Access
Other	0	Y	Y
Strategy Implementation (Go to Aerial View)			
Small parking lot at boat ramp can be used to stage equipment. Access to river limited due to passage under railroad bridge.			
Site Access			
DeSoto staging area at boat access along WI Hwy 35.			
Latitude: 43.4 UTM z15: 4808	18082 3820.5	Longitude: -91 UTM z15: 6458	1.198155 367.1



View of railroad bridge from boat ramp



Boat ramp and dock

Site Number	Waterbody, River Mile	Site	Name
667a	Mississippi River 667.4 RDB	Big Lake Inlet	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	400	Ν	N
Strategy Implementation (Go to Aerial View)			
Boom across openings to prevent spill from entering refuge. Anchor to trees. Currents may keep oil on LDB, monitor spread to see if inlet needs protection.			
Site Access			
Backwater openings directly across from DeSoto. Reach by boat from access along WI Hwy 35.			
Latitude: 43.4 UTM z15: 4808	Latitude: 43.418821 Longitude: -91.205368 UTM z15: 4808889 9 UTM z15: 645281 4		



Looking west into upper Big Lake inlet



Log jam in lower Big Lake inlet

GOAL: Exclude from backwater opening to protect sensitive species and backwater habitat

Site Number	Waterbody, River Mile	Site Name	
666	Mississippi River 666.1 RDB	Hummingbird Slough	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	500	Ν	Ν
Strategy Implementation (Go to Aerial View)			

Boom across opening to prevent spill from entering refuge. Anchor to trees on both sides, set one deflection above opening if needed. T&E mussels and fish in area. Wing dam outside opening and in channel.

Site Access

Backwater opening on RDB 1.3 mi. downstream of DeSoto. Reach by boat from access along WI Hwy 35. Log jam blocking opening in 2017.

Latitude: 43.4011 UTM z15: 4806929.1 Longitude: -91.201242 UTM z15: 645657.9



Downstream side of channel opening



Looking west along upstream shore of channel opening

Site Number	Waterbody, River Mile	Site Name	
665c	Mississippi River 665.2 LDB	Henderson Slough	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	300	N	N
Strategy Implementation (Go to Aerial View)			

Cascade boom across opening to prevent spill from entering backwaters. Current naturally pushes material here, may be able to divert spill through slough to collect at RSP 665b. May be able to deflect with barge.

Site Access

Backwater opening above RM 665 LDB. Reach by boat from accesses along WI Hwy 82 bridge.

Latitude: 43.386878 UTM z15: 4805356.0 Longitude: -91.197606 UTM z15: 645986.5



Looking south into Henderson Slough



Looking east at shore along slough opening

GOAL: Collect spilled product from road to protect sensitive downstream resources

Site Number	Waterbody, River Mile	Site	Name		
665b	Mississippi River 665.4 LDB	Henderson - Hwy 82			
Strategy Type*	Boom Length	Land Access	Boat Access		
C&C	300	Y	Y		
Strategy Implementation (Go to Aerial View)					
Set boom from upstream shore W of bridge to collect at riprap on southwest end of bridge. Collect from road. Nearby staging area at boat ramp.					
Site Access					
WI Hwy 82 bridge over slough. Reach by boat from accesses along WI Hwy 82 bridge. Limited parking on shoulder, request support from WI Highway Patrol for worker safety.					
Latitude: 43.3 UTM z15: 4805	8636 5320.9	Longitude: -91 UTM z15: 6470	Longitude: -91.184783		



Google image looking west up Henderson Slough from Highway 82

GOAL: Collect spilled product at boat ramp to protect sensitive downstream resources

Site Number	Waterbody, River Mile	Site I	Name	
665a	Mississippi River 665.8 LDB	WI Hwy 82 Bridge		
Strategy	Boom Length	Land Access	Boat Access	
C&C	800	Y	Y	
Strategy Implementation (Go to Aerial View)				
Cascade boom across slough to contain spilled product at ramp. Collect from shore to prevent spread into sensitive backwaters.				
Site Access				
Small boat ramp above WI Hwy 82 bridge. Reach via WI Hwy 35 between DeSoto and Ferryville, or via WI Hwy 82 from Lansing, IA, Small staging on site.				

Latitude: 43.390906 UTM z15: 4805831.5

Longitude: -91.181598 UTM z15: 647273.3



Boat ramp with Highway 82 bridge beyond



View of boat ramp from Winneshiek Slough

GOAL: Collect spilled product from road to protect sensitive downstream resources

Site Number	Waterbody, River Mile	Site Name	
664c	Mississippi River 664.7 LDB	Stevens - Hwy 82	
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	400	Y	Ν

Strategy Implementation (Go to Aerial View)

If exclusion fails at sites 664a and 665c, set boom to contain product along either end on upstream side of bridge. Collect from road by vac truck. Request assistance from Highway Patrol to ensure worker safety.

Site Access

WI Hwy 82 bridge over slough. Reach by boat from accesses along WI Hwy 82 bridge. Limited parking on shoulder, request support from WI Highway Patrol for worker safety.

 Latitude:
 43.377213
 Longitude:
 -91.194136

 UTM z15:
 4804288.7
 UTM z15:
 646290.8



Looking up Stevens Slough from road shoulder



Google image of collection site

Site Number	Waterbody, River Mile	Site N	lame
664b	Mississippi River 664.0 LDB	664 LDB	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	100	Ν	Ν
Strategy Implementation (Go to Aerial View)			
Boom across opening to prevent spill from entering side channel. Current naturally pushes material here. Anchor to trees on both sides of opening.			
Site Access			
Backwater opening at RM 664 LDB. Reach by boat from access along WI Hwy 82 bridge near Lansing, IA.			

Latitude: 43.371563 UTM z15: 4803638.9 Longitude: -91.206899 UTM z15: 645270.3



Looking south into backwater opening



Looking upstream along shore, navigation marker at left

Site Number	Waterbody, River Mile	Site	Name
664a	Mississippi River 664.9 LDB	Stevens Slough	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	100	N	N
Strategy Implementation (Go to Aerial View)			
Boom across opening to prevent spill from entering refuge. May only be necessary in high water conditions. Very shallow and stagnant in low water.			
Site Access			
Backwater opening below RM 665 LDB. Reach by boat from accesses along WI Hwy 82 bridge.			

Latitude: 43.383294 UTM z15: 4804953.4 Longitude: -91.200173 UTM z15: 645787.2



Looking west at upper shore of slough opening

GOAL: Exclude spilled product to protect marina and boats

Site Number	Waterbody, River Mile	Site	Name
663b	Mississippi River 663.5 RDB	Lansing	Marina
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	300	Y	Ν
Strategy Implementation (Go to Aerial View)			
Boom across opening to protect marina. Anchor to end			

Boom across opening to protect marina. Anchor to end of jetty, pull downstream end of boom to shore below marina. Two 1000 gallon fuel tanks on site. CP Rail tracks along shore behind marina.

Site Access

N Front St. in Lansing, just upstream of the bridge. No boat ramp, but dock, fuel and food available in season.

Latitude: 43.368263 UTM z15: 4803253.5

Longitude: -91.217785 UTM z15: 644396.2



View of marina from main channel, jetty at right



Riprap shore below marina

GOAL: Collect spilled product at boat ramp to protect sensitive downstream resources

Site Number	Waterbody, River Mile	Site	Name
663a	Mississippi River 663.7 LDB	Lafayette	e Slough
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	1000	Y	Y
Strategy Implementation (Go to Agrial View)			

No collection sites at Lansing, use this site. Set cascade boom above slough in main channel to divert spill into upper slough. Contain at boat ramp on RDB. Collect from shore with vac truck and skimmer. If contained in LDB side channel, collect from road.

Site Access

WI Highway 82 bridge over slough, .4 mi. east of Lansing. Reach by boat from access on site. Side channel across from boat ramp could also be used to contain spill.

Latitude: 43.367745 UTM z15: 4803212.6 Longitude: -91.208231 UTM z15: 645171.6



Public boat ramp below Highway 82 bridge



Looking upstream from boat ramp toward main channel

GOAL: Collect spilled product in creek mouth to protect sensitive mussel beds downstream

Site Number	Waterbody, River Mile	Site I	Name
662b	Mississippi River 662.1 RDB	Village	Creek
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	600	Y	Y
Strategy Implementation (Go to Aerial View)			

Cascade boom main channel to contain spill in creek mouth. Collect from shore. Steep, 25 ft. high riprap shore. Vac truck needs pump assist. Prevent spill from spreading downstream to protect critical mussel habitat.

Site Access

Mouth of creek at railroad and highway bridges. Reach by boat from Village Creek Landing along Lansing Harpers Rd. Excellent staging and boat access. Passage under bridge may be difficult in high water.

Latitude: 43.34744 UTM z15: 4800965.6 Longitude: -91.203536 UTM z15: 645600.5



Looking west into creek mouth



Looking east along riprap shore containment area

GOAL: Exclude spilled product to protect marina and boats

Site Number	Waterbody, River Mile	Site	Name
662a	Mississippi River 662.5 RDB	S&S Rentals	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	400	Y	N
Strategy Implementation (Go to Aerial View)			
Cascade boom from shore to keep spilled product in main channel and protect marina. Set boom across marina if needed.			
Site Access			
S Front St. & Wall St. in Lansing, IA. Crane boat lift on site. Moderate boat ramp and limited parking. Fuel tank and pump on shore.			
Latitude: 43.352529 Longitude: -91.208218 UTM z15: 4801522.8 UTM z15: 645208.9			1.208218 208.9



Boat lift at S&S Rentals



Main dock and fuel tank seen from main channel

GOAL:	Exclude from island channel to keep
spilled	product in main channel

Site Number	Waterbody, River Mile	Site I	Name
657	Mississippi River 657.8	Capoli Slough	
Strategy Type*	Boom Length	Land Access	Boat Access
Exc.	400	N	N
Strategy Implementation (Go to Aerial View)			
If winds push spilled product to island, boom across opening to keep spill in main channel. Only likely necessary in high water with west winds. Approach from downstream, mouth may be silted in.			

Site Access

Island channel at RM 657.7. Reach from Village Creek Landing, RM 662.1 RDB.

Latitude: 43.325448 UTM z15: 4798667.8 Longitude: -91.122552 UTM z15: 652219.2



Looking east at upper end of island, slough to right

GOAL: Collect spilled product at boat ramp to prevent spread downstream into Pool 10

Site Number	Waterbody, River Mile	Site I	Name
653	Mississippi River 654.5 RDB	Upper Harp	pers Slough
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	1000	Ν	Ν

Strategy Implementation (Go to Aerial View)

Cascade boom main channel to divert spill into slough. Boom to contain product at ramp inlet behind CP Rail tracks. Collect from shore. Difficult response due to wide channels, but is last viable Pool 9 collection site on RDB.

Site Access

Upper end of Harpers Slough. Reach by boat from Heytmans Landing. From Co. Rd. X52, go east and south 2.5 mi. on Lafayette Ridge Dr., then southeast 2 mi. on Heytman Dr. to ramp.

Latitude: 43.282937 UTM z15: 4794003.2 Longitude: -91.091757 UTM z15: 654823.9



Looking west at bend, Harpers Slough begins at left



Looking east from Heytmans Landing toward river

GOAL: Contain spilled product in creek mouth to prevent spread downstream into Pool 10

Site Number	Waterbody, River Mile	Site I	Name
651	Mississippi River 651.0 LDB	Lyn>	wille
Strategy Type*	Boom Length	Land Access	Boat Access
C&C	1000	Y	Y

Strategy Implementation (Go to Aerial View)

Cascade boom from main channel to contain spill in slack water of creek mouth behind railroad bridge. Shallow water with slow flow. Marshy shores may require herding oil to ramp for collection. Good staging area.

Site Access

Small access along Harbor Rd. in Lynxville. Channel to river crossed by WI Hwy 35 and railroad tracks. May need high water for larger boats. Boat ramp on river 1000 ft. north of creek mouth not suitable for response.

Latitude: 43.2442	Longitude: -91.058836
UTM z15: 4789762.7	UTM z15: 657595.0



Looking east from main channel to inlet



Boat ramp at Lynxville