













**Lake Champlain Geographic Response Plan**  
Missisquoi LC-VT-01



ID	Location and Description	Response Strategy	Implementation
<b>LC-01-01</b>  	<b>Missisquoi NWR</b> a.) Missisquoi River Delta – Lat. 45° 0'21.87"N Lon. 73° 9'46.40"W  b.) Mac's Bend – Lat. 44°58'15.47"N Lon. 73°10'2.63"W  c.) Dead Creek – Lat. 44°56'42.12"N Lon. 73° 8'47.25"W	<b>Deflection</b> Deploy boom to deflect oil away from sensitive areas and towards shoreside recovery points.	For (a) Deploy 600 ft of 12" – 18" boom as depicted to deflect oil away from the Missisquoi National Wildlife Refuge and its river delta. Set anchors every 200 ft. For (b) Deploy 250 ft of 12" – 18" boom as depicted to deflect oil toward the diversion boom array to facilitate shoreside recovery. For (c) Deploy 800 ft of 12" – 18" boom as depicted to deflect oil away from Dead Creek and nearby sensitive cultural sites. Set anchors every 200 ft. Tend as necessary based on prevailing wind and lake/river flow.
<b>LC-01-02</b>  	<b>Missisquoi River</b> a.) Mac's Bend – Lat. 44°58'18.58"N Lon. 73°10'3.58"W  b.) Louie's Landing – Lat. 44°57'27.15"N Lon. 73° 9'54.87"W	<b>Divert and Collect – Shoreside</b> Divert incoming oil to shoreside recovery locations to protect Missisquoi NWR.	Deploy anchors and boom with skiffs. For (a) Deploy 350 ft. of 12" – 18" boom at the proper angle to divert incoming oil to the collection site. For (b) Deploy 600 ft. of 12" – 18" boom in a cascade array (2-300 ft sections) at the proper angle to divert incoming oil to the collection site.
<b>LC-01-03</b>  	<b>Missisquoi River</b> a.) Rail Bridge (North) – Lat. 44°57'6.62"N Lon. 73° 9'50.16"W  b.) Rail Bridge (South) – Lat. 44°56'34.29"N Lon. 73° 9'9.15"W  c.) Dead Creek Shore – Lat. 44°56'46.64"N Lon. 73° 8'56.32"W  d.) Dead Creek – Lat. 44°56'44.74"N Lon. 73° 8'52.67"W	<b>Exclusion</b> Set boom across entrances to creeks, inlets, coves and near water treatment facilities to prevent oil from migrating into sensitive areas and critical infrastructure.  Adjust the angle and length of boom depending on oil trajectory, river flow rate, and wind.	For (a) and (b) Deploy 100 ft (a) and 150 ft (b) of 6" – 12" boom as depicted to prevent oil from migrating farther into marshland. For (c) Deploy 600 ft of 12" – 18" boom as depicted to prevent oil from impacting nearby sensitive cultural sites. For (d) Deploy 500 ft of 12" – 18" boom as depicted to prevent oil from impacting Dead Creek and nearby sensitive cultural sites. Secure with anchor stakes on shore and anchors in midstream. Deploy passive recovery using sorbents at attachment points to minimize leakage. Tend as necessary based on river flow conditions.
<b>LC-01-04</b>  	<b>Missisquoi NWR</b> Lat. 45° 0'19.29"N Lon. 73° 9'39.26"W	<b>Passive Recovery</b> Place passive recovery along shorelines to prevent oil from impacting sensitive areas.	Place snare or sorbent boom along shorelines as needed based on projected impacts from oil spills migrating north from Route 78 and rail bridge to minimize damage and facilitate recovery.  Replace as necessary to maximize recovery.





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Response Resources	Staging Area Site Access	Resources Protected	Special Considerations	ID
<p><b>Deployment</b></p> <p><b>Equipment</b></p> <p>1650 ft. 12"-18" boom</p> <p>9 anchor sets</p> <p>6 anchor stakes</p> <p><b>Vessels</b></p> <p>2 work boats or skiffs</p> <p><b>Personnel/Shift</b></p> <p>2 vessel crew (per vessel)/2 shoreside responders</p> <p><b>Tending</b></p> <p><b>Vessels</b></p> <p>2 work boats or skiffs</p> <p><b>Personnel/Shift</b></p> <p>2 vessel crew (per vessel)/2 shoreside responders</p>	<p>Staging Area: VT F&amp;W Larry Greene Fishing Access Area</p> <p>Site Access:</p> <p>a.) VT F&amp;W Larry Greene Fishing Access Area</p> <p>b.) Mac's Bend Rd Boat Ramp – Rt 78 to Mac's Bend Rd.</p> <p>c.) Louie's Landing Boat Ramp – at Rt 78</p> <p>Via marine waters for deploying and tending boom.</p> <p>Chart 14781</p>	<p>Fish- Fish Species of Special Concern, Lake Sturgeon, Sand Darter</p> <p>Invertebrates-shellfish, urchins</p> <p>Birds-Black Tern, Common Nighthawk, Common Tern, Nesting Sites, Shorebirds, Wildlife and Migratory Bird Habitat</p> <p>Threatened/Endangered Species – Fishes, Plants, Rare habitat &amp; species, Species of Special Concern/Conservation Need, Sturgeon</p>	<p>Lake and river conditions including flow rate and flood stage vary depending on time of year and heavy rain and/or snowfall. Survey site prior to deployment and modify deployment tactics and techniques as appropriate based on observed river conditions. If ice is present GRP tactics and strategies must be reevaluated. Vessel operators should have local knowledge and experience operating in riverine environments. Entire site surveyed: 04/25/17</p> <p>Field tested: No</p>	<p>LC-01-01</p> <p><b>DF</b></p>
<p><b>Deployment</b></p> <p><b>Equipment</b></p> <p>850 ft. 12"-18" boom</p> <p>3 anchor sets</p> <p>6 anchor stakes</p> <p>2 shoreside recovery systems</p> <p><b>Vessels</b></p> <p>Same as LC-01-01</p> <p><b>Personnel/Shift</b></p> <p>Same as LC-01-01</p> <p><b>Tending</b></p> <p>Same as LC-01-01</p>	<p>Staging Area: Louie's Landing Boat Ramp – at Rt 78</p> <p>Site Access:</p> <p>a.) Mac's Bend Rd Boat Ramp – Rt 78 to Mac's Bend Rd.</p> <p>b.) Louie's Landing Boat Ramp – at Rt 78</p>	<p>Cultural Resources-Historical/Archaeological Sites, Native American Tribal Lands</p> <p>Human use-boat ramp, park</p> <p>Land Management-Conservation Area, Exemplary Wetland Natural Community, Nat'l Wildlife Refuge, State Management Area, State Park</p>	<p>Same as LC-01-01</p>	<p>LC-01-02</p> <p><b>DV</b></p>
<p><b>Deployment</b></p> <p><b>Equipment</b></p> <p>1350 ft. 6"-18" boom</p> <p>1 anchor sets</p> <p>10 anchor stakes</p> <p><b>Vessels</b></p> <p>Same as LC-01-01</p> <p><b>Personnel/Shift</b></p> <p>Same as LC-01-01</p> <p><b>Tending</b></p> <p><b>Vessels</b></p> <p>Same as LC-01-01</p> <p><b>Personnel/Shift</b></p> <p>Same as LC-01-01</p>	<p>Staging Area: VT F&amp;W Larry Greene Fishing Access Area</p> <p>Site Access:</p> <p>a.) VT F&amp;W Larry Greene Fishing Access Area</p> <p>b.) Mac's Bend Rd Boat Ramp – Rt 78 to Mac's Bend Rd.</p> <p>c.) Louie's Landing Boat Ramp – at Rt 78</p>		<p>Same as LC-01-01</p>	<p>LC-01-03</p> <p><b>EX</b></p>
<p><b>Deployment</b></p> <p><b>Equipment</b></p> <p>Snare or sorbent boom as needed based on product type, amount and trajectory</p> <p><b>Vessels</b></p> <p>1 work boat or skiff</p> <p><b>Personnel/Shift</b></p> <p>4 total (1 vessel operator + 1 responder per vessel, 2 shoreside responders)</p>	<p>Same as LC-01-01</p>		<p>Same as LC-01-01</p>	<p>LC-01-04</p> <p><b>PR</b></p>



Site Photographs and Contact Information



Mouth of Missisquoi River near DF-01a during Spring flood stage. View looks east/southeast.



Entrance to Dead Creek at Missisquoi River. Missisquoi River flows from right to left.



Aerial view of Missisquoi National Wildlife Refuge and surrounding area.

**CONTACT INFORMATION:**

- All VT Fire Departments: **Call 911**
- EPA Region 1 Tribal Program: 617-918-1123
- Missisquoi National Wildlife Refuge: 802-868-4781
- National Response Center: 800-424-8802**
- VT Comm. on Native American Affairs:  
802-779-7015
- VT DEC (24-Hour): 800-641-5005**
- VT Drinking Water & Groundwater:  
1-802-741-5311
- VT Emergency Mgmt & Homeland Security:  
800-347-0488
- VT Fish & Wildlife Dept (Essex): 802-878-1564
- VT Hazmat Response Team: 1-800-641-5005
- VT Div of Historical Preservation: 802-272-2509



Boat ramp at Larry Green Fishing Access Area. View looks west.

Lake Champlain GRPs have been incorporated into EPA Region One’s Inland Area Contingency Plan (ACP) and is available at the following website: [https://nrtqa.ert.org/site/doc\\_list.aspx?site\\_id=38](https://nrtqa.ert.org/site/doc_list.aspx?site_id=38) or accessed via QR reader-enabled smartphones by scanning the QR code at right.

