



700+ ft. of boom and associated equipment are required to implement all of the tactics in this GRP. Responders should always consider on-scene conditions before deploying GRP tactics. Tactics may not be safe or effective under certain conditions. Responder safety should always be the first priority.



**Lake Champlain Geographic Response Plan**  
Charcoal Creek LC-VT-02



ID	Location and Description	Response Strategy	Implementation
<b>LC-02-01</b> 	<b>Charcoal Creek</b> a.) North – Lat. 44°58'13.30"N Lon. 73°10'49.71"W  b.) South – Lat. 44°58'10.53"N Lon. 73°10'53.05"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 350 ft of 6” – 12” boom as depicted to prevent oil from migrating farther into marshland.  Secure with anchor stakes on shore and anchors in midstream. Deploy passive recovery using sorbents at attachment points to minimize leakage.
<b>LC-02-02</b> 	<b>Charcoal Creek, Rt 78 and rail line corridor</b> Lat. 44°58'11.46"N Lon. 73°10'51.10"W	<b>Culvert Blocking</b> Place culvert block and/or set exclusion boom to prevent oil from migrating up or downstream into Charcoal Creek and surrounding environment.	Install culvert block or set up exclusion boom. If inflatable plugs are not available, place plywood or similar sheeting material across the entrance of the culvert. Use plastic sheeting to ensure the seal. Stack adequate sandbags against the plywood sheeting to counter the out flow pressure.  Monitor the block to ensure blocking integrity.
<b>LC-02-03</b> 	<b>Charcoal Creek, Rt 78 and rail line corridor</b> Lat. 44°58'18.58"N Lon. 73°10'3.58"W	<b>Containment</b> Contain oil near the source to reduce impacts to Charcoal Creek, Missisquoi NWR and nearby sensitive resources.	Deploy anchors and boom with skiffs. Using anchors and structures, place protected-water boom in the water in the vicinity of the source. . Be aware of and compensate for flow/currents that may move oil underwater and outside containment boom.  Additional sorbent boom and/or pads may be placed inside the protected-water boom to recover oil. Replace as necessary.  If a significant amount of oil is collecting within the boom, a collection system may be established. Tend as necessary based on wind and water flow.



**Lake Champlain Geographic Response Plan**  
Charcoal Creek LC-VT-02



Response Resources	Staging Area Site Access	Resources Protected	Special Considerations	ID
<p><b>Deployment</b> <i>Equipment</i> 700 ft. 6"-12" boom 2 anchor sets 4 anchor stakes <i>Vessels</i> 1 work boat or skiff <i>Personnel/Shift</i> 2 vessel crew (per vessel)/2 shoreside responders</p> <p><b>Tending</b> <i>Vessels</i> 1 work boat or skiff <i>Personnel/Shift</i> 2 vessel crew (per vessel)/2 shoreside responders</p>	<p>Staging Area: VT F&amp;W Larry Greene Fishing Access Area or Charcoal Creek Fishing Access Area</p> <p>Site Access: VT F&amp;W Charcoal Creek Fishing Access Area</p> <p>Via marine waters for deploying and tending boom.  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.  Field tested: No</p>	<p>LC-02-01</p> <p><b>EX</b></p>
<p><b>Deployment (Per Culvert)</b> <i>Transport</i> 1 Truck <i>Equipment</i> 1 inflatable culvert block or 1 sheet of plywood 50-100 sandbags 1 polyethylene sheeting <i>Personnel/Shift</i> 4 shoreside responders</p>	<p>Staging Area: Same as LC-02-01</p> <p>Site Access: Same as LC-02-01</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-02-01</p>	<p>LC-02-02</p> <p><b>CB</b></p>
<p><b>Deployment</b> <i>Equipment</i> 6"-12" boom, anchors and stakes as needed based on incident specific containment needs <i>Vessels</i> Same as LC-02-01 <i>Personnel/Shift</i> Same as LC-02-01</p> <p><b>Tending</b> <i>Vessels</i> Same as LC-02-01 <i>Personnel/Shift</i> Same as LC-02-01</p>	<p>Staging Area: Same as LC-02-01</p> <p>Site Access: Same as LC-02-01</p>	<p>Same as LC-02-01</p>	<p>Same as LC-02-01</p>	<p>LC-02-03</p> <p><b>C</b></p>





Site Photographs and Contact Information



Charcoal Creek and surroundings from Fishing Access Area during Spring flood stage. View looks east.



Charcoal Creek culverts at Route 78 (right) and railroad (left).



Aerial view of Charcoal Creek, Route 78, railroad corridor and surrounding area.



Charcoal Creek looking south from Route 78 during Spring flood stage.

**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:  
802-741-5311

VT Emergency Mgmt & Homeland Security:  
800-347-0488

VT Fish & Wildlife Dept (Essex):  
802-878-1564

VT Hazmat Response Team:  
800-641-5005

VT Div of Historical Preservation:  
802-272-2509

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.

