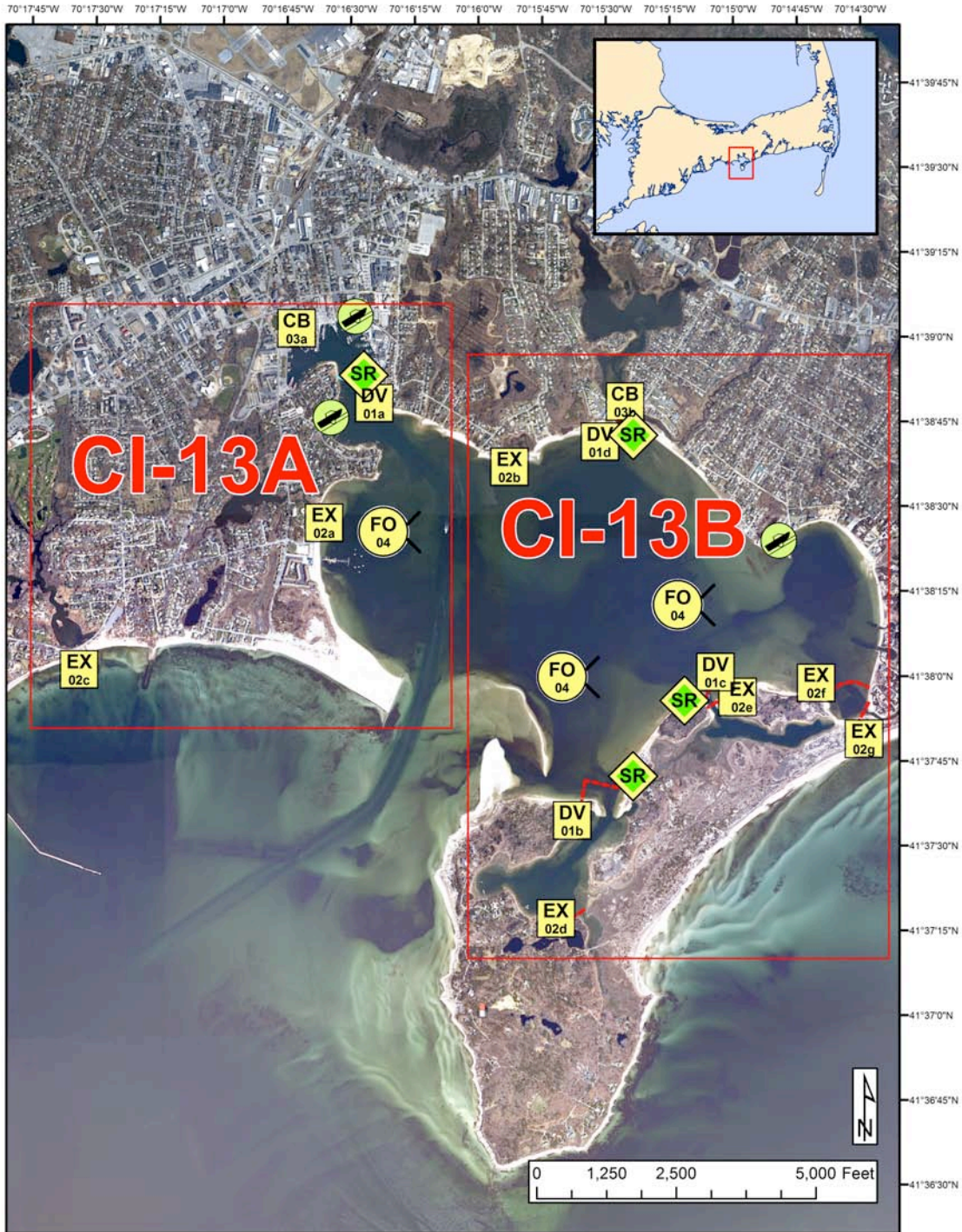




Cape and Islands Geographic Response Plan

Lewis/Hyannis CI-13



Map Legend			
BB Beach Berm	DF Deflection Booming	MD Mosquito Ditch	Protected-water Boom (Flood Tide)
CB Culvert Block	EX Exclusion Booming	U.S. Coast Guard Station	Protected-water Boom (Ebb Tide)
DV Diversion Booming	SR Shoreside Recovery	Boat Ramp	Snare or Sorbent Boom
PR Passive Recovery	FO Free-oil Recovery	Beach Berm Material	

A total of 5 State Response Trailers 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.





Cape and Islands Geographic Response Plan

Lewis/Hyannis CI-13







Map Legend			
Beach Berm	Deflection Booming	Mosquito Ditch	Protected-water Boom (Flood Tide)
Culvert Block	Exclusion Booming	U.S. Coast Guard Station	Protected-water Boom (Ebb Tide)
Diversion Booming	Shoreside Recovery	Boat Ramp	Snare or Sorbent Boom
Passive Recovery	Free-oil Recovery	Beach Berm Material	









Cape and Islands Geographic Response Plan
Lewis/Hyannis CI-13

ID	Location and Description	Response Strategy	Implementation
<p>CI-13-01</p> 	<p>Lewis Bay/ Hyannis Harbor</p> <p>a. Lat. 41°38'53.1"N Lon. 70°16'29.1"W Uncle Robert's Cove</p> <p>b. Lat. 41°37'37.0"N Lon. 70°15'31.9"W Pine Island</p> <p>c. Lat. 41°42'41.6"N Lon. 69°58'21.7"W Mill Creek</p> <p>d. Lat. 41°42'41.6"N Lon. 69°58'21.7"W</p>	<p>Divert and Collect-Shoreside</p> <p>Use 16 to 18" boom in the identified patterns in the Lewis Bay/Hyannis Harbor complex to divert oil to the identified shoreside collection locations.</p>	<p>Deploy anchors and boom with skiffs.</p> <p>(a) is shown as an ebb-tide deployment for spills occurring within the harbor. Place 2x300 ft. sections of 16 to 18" boom at an adequate angle to divert oil to the collection sites. This strategy may be adapted to capture oil coming into the harbor using the same resources and collection on the opposite shore. The array must be attended to allow for vessel traffic.</p> <p>For (b) place 1200 ft. 16 to 18" boom in chevron pattern that will direct oil to the shoreside collection site.</p> <p>For (c) is a 300 ft. 16 to 18" boom section placed at an adequate angle to direct oil to a collection site.</p> <p>For (d) cascade 2x200ft. 16 to 18" boom sections to divert oil to the collection site necessitated by the volume of oil and tend throughout the tide.</p>
<p>CI-13-02</p> 	<p>Lewis Bay/ Hyannis Harbor</p> <p>a. Lat. 41°38'53.1"N Lon. 70°16'29.1"W</p> <p>b. Lat. 41°38'39.9"N Lon. 70°15'49.4"W</p> <p>c. Lat. 41°42'41.6"N Lon. 69°58'21.7"W</p> <p>d. Lat. 41°42'41.6"N Lon. 69°58'21.7"W</p> <p>e. Lat. 41°37'37.0"N Lon. 70°15'31.9"W</p> <p>f. Lat. 41°42'41.6"N Lon. 69°58'21.7"W</p> <p>g. Lat. 41°42'41.6"N Lon. 69°58'21.7"W</p>	<p>Exclusion</p> <p>Exclude oil from entering the identified streams and intertidal areas.</p>	<p>Deploy anchors and boom with skiffs at high tide.</p> <p>For (a, b & c) exclude oil by either creating an earthen berm, an underflow dam, or a small length of boom across the stream mouth. Select tactic based on available materials and time. 100 ft. sections of 16 to 18" boom across the mouth to the small tidal ponds would be sufficient.</p> <p>For (d) place 300 ft. of 16 to 18" boom across the mouth of Uncle Roberts Cove.</p> <p>For (e), in the event of failure of DV-01c, place 300 ft. of boom across the mouth to the pond.</p> <p>For (f) place 1000 ft. of boom in a semicircle pattern. If (f) is not able to be maintained, establish (g) by moving the boom (only 400 ft. necessary) further into the mouth of the stream.</p> <p>Secure with anchor stakes on shore and anchors in midstream.</p> <p>Tend throughout the tide.</p>
<p>CI-13-03</p> 	<p>Lewis Bay/ Hyannis Harbor</p> <p>a. Bay Street Lat. 41°38'56.0"N Lon. 70°16'45.9"W</p> <p>b. Shore Road Lat. 41°38'48.6"N Lon. 70°15'26.1"W</p>	<p>Culvert Blocking</p> <p>Exclude the flow of oil through the storm-water culvert in the Shore Road area.</p>	<p>At low tide place an inflatable culvert plug in the culvert. Note that although it is preferable to block the culvert on the ebb tide, it is most important to implement as early as possible.</p> <p>If the inflatable plug is 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 from the intertidal area.</p> <p>Monitor the block to ensure blocking integrity.</p>
<p>CI-13-04</p> 	<p>Lewis Bay/ Hyannis Harbor</p> <p>Nearshore waters in the general area of: Lat. 41°43'37.2"N Lon. 69°58'4.0"W</p>	<p>Free-oil Recovery</p> <p>Maximize free-oil recovery in the offshore & nearshore environment of Lewis Bay/ Hyannis Harbor depending on spill location and trajectory.</p>	<p>Deploy free-oil recovery strike teams upwind and up current of the Lewis Bay/Hyannis Harbor.</p> <p>Use aerial surveillance to locate incoming slicks.</p> <p>Ensure that responders have experience with on-water free-oil recovery.</p>





Cape and Islands Geographic Response Plan
Lewis/Hyannis CI-13

ID	Response Resources	Staging Area Site Access	Resources Protected	Special Considerations
CI-13-01 	Deployment Equipment 2500 ft. 16 to 18" boom 11 anchor systems 9 anchor stakes 4 shoreside recovery systems Vessels 3 skiffs Personnel/Shift 14 possible total (1 vessel operator + 1 responders per vessel, 2 shoreside responder per collection site) Tending Vessels 2 skiffs Personnel/Shift 8 possible total (1 vessel operator + 1 responders per vessel, 1 shoreside responder per site)	Hyannis Inner Harbor and boat ramp in West Yarmouth Road access is available to the shoreline. Boat ramps may not be useable at low tide. Via marine waters for deploying and tending boom. Chart 13229-1	Fish-shellfish, finfish Birds-waterfowl concentration Habitat- marsh, sheltered tidal flats Human Use-aquaculture, high-use recreational area Threatened/Endangered species- Piping Plovers (April 1 – August 31), Roseate Terns (foraging mid-July thru Sept 30)	Vessel master should have local knowledge. Heavy commercial and recreational vessel traffic in the vicinity of DV-01; need to coordinate any boom deployment with the USCG and the Harbormaster. Use caution in sandy dunes during months when plovers are present. Nesting areas may include beaches, sandspits, foredunes, and washover areas in dunes. Consult with USFWS as early as possible regarding shoreline collection areas and access plans. Use caution operating in nearshore areas when Roseate Terns are foraging. Consult with USFWS as early as possible. Entire site surveyed: 10/17/07. Tested: 10/21/09
CI-13-02 	Deployment Equipment 1600 ft. 16 to 18" boom 5 small anchor systems 10 anchor stakes Vessels/Personnel/Shift Same as CI-13-01 Tending Vessels/Personnel/Shift Same as CI-13-01	The Englewood Boat Ramp would be the easiest place to deploy boom for tactics on the Eastern side of the harbor. From Rt 28, turn on to Berry Ave, turn right on New Hampshire Ave.	Same as CI-13-01	Vessel master should have local knowledge. Tested: not yet
CI-13-03 	Deployment Transport 1 Truck Equipment 2 Inflatable Culvert Blockers OR 2 sheets of plywood 100-200 sandbags 2 Polyethylene Sheeting Vessels/Personnel/Shift & Tending Same as CI-13-01	Same as CI-13-01	Same as CI-13-01	Use a full block if the water will not threaten the road and can be maintained with tidal flow. If the area requires continued draining use an underflow dam or adjustable wire to exclude incoming oil. A 24" culvert plug may not be sufficient to close off the flow of water. Consider using or building a larger block.
CI-13-04 	Deploy multiple free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Same as CI-13-01	Same as CI-13-01	Vessel master should have local knowledge. Use extreme caution, shoal waters with rocks & continually shifting sand bars. Currents and winds are locally variable and can create dangerous operating environments.





Site Photographs and Contact Information



Clockwise from above (1) Lewis Bay Entrance looking northwest. (2) Hyannis Harbor looking northeast. (3) Lewis Bay EX-02b looking northwest. (4) Uncle Roberts Cove looking northeast. (5) Hyannis inner harbor looking north. (6) Lewis Bay DV01c, EX-02e & f, looking northwest.

Contact Information:

Barnstable Harbormaster: (508) 790-6272
Barnstable-Fire: (508) 362-3312
Hyannis-Fire: (508) 775-1300
Nantucket Soundkeeper: (508) 775-9767
Steamship Authority Hyannis Office: (508) 771-4000
Yarmouth-Fire: (508) 398-2211
Yarmouth-DNR (Oil Spill Coordinator): (508) 760 4800
USFWS: (413) 539-3194

