



# South Shore Geographic Response Plan

## Plymouth Harbor SS-12



Map Legend		
<b>BB</b> Beach Berm	<b>DF</b> Deflection Booming	<b>TG</b> Tide Gate
<b>CB</b> Culvert Block	<b>EX</b> Exclusion Booming	Boat Ramp
<b>DV</b> Diversion Booming	<b>SR</b> Shoreside Recovery	Beach Berm Material
<b>PR</b> Passive Recovery	<b>FO</b> Free-oil Recovery	GRP Trailer Locations
		Protected-water Boom (Flood Tide)
		Snare or Sorbent Boom






A total of 2 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. The strategies contained within this plan have been designed to mitigate a potential off-shore or off-site release that could impact the subject plan area. When responding to other types of spills these tactics will likely require significant modification.





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ID	Location and Description	Response Strategy	Implementation
SS-12-01 	<b>Mouth of Eel River</b> Lat. 41°56'49.56"N Lon. 70°37'49.20"W	<b>Exclusion Booming</b> Exclude oil entering the Eel River.	Deploy 1500ft boom in a closed chevron formation at the mouth of the Eel River. At low tide, tend hard boom and line with passive recovery along the exposed tidal flats.  Deploy anchors every 200ft and tend throughout the tidal cycle.
SS-12-02 	<b>Stream near Nelson Street</b> Lat. 41°58'5.14"N Lon. 70°40'20.09"W	<b>Beach Berm</b> Prevent oil from entering the stream.	Build a beach berm approximately 50ft long. Use local beach and inter-tidal bar sediments. Do not destroy any part of foredune. If the dike is expected to remain in place for more than a few days, place one or more 20' x 12" pipe in the channel and build the dike on top of the pipe. Use culvert plugs to control water flow through the pipe.  Responders should not construct a berm unless directed by Unified Command.
SS-12-03 	<b>Culvert on Water Street</b> Lat. 41°57'22.07"N Lon. 70°39'42.51"W	<b>Culvert Blocking</b> Exclude the flow of oil through the culvert.	At low tide, 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.  The predominant flow is outbound into the harbor. This tactic would only be used where astronomical high tides or storm surges create the risk of marine waters flowing upriver.
SS-12-04 	<b>Plymouth Harbor</b>	<b>Free-Oil Recovery</b> Maximize free-oil recovery in the offshore & nearshore environment of Plymouth Harbor depending on spill location and trajectory.	Deploy free-oil recovery strike teams upwind and up current of the area. Use aerial surveillance to locate incoming slicks. Ensure that responders have experience with on-water free-oil recovery.
SS-12 	<b>Plymouth Beach</b> Lat. 41°58'5.11"N Lon. 70°38'36.45"W	<b>Shoreside Recovery</b> Deploy shoreside recovery tactics in areas with shoreline access.	Set up shoreside recovery tactics inside Plymouth Long Beach. An ideal location for shoreside recovery would be along a road, where a Vac Truck would have easy access to the shore.





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ID	Response Resources	Staging Area Site Access	Resources Protected	Special Considerations
SS-12-01 	<b>Deployment</b> <b>Equipment</b> 1500 ft 18" boom 4 anchor systems 2 anchor stakes 2 shoreside recovery systems <b>Vessels</b> 2 skiffs <b>Personnel/Shift</b> 6-8 total (1 vessel operator + 1 responder per vessel, 4 shoreside responders) <b>Tending</b> <b>Vessels</b> 1 skiff <b>Personnel/Shift</b> 3-4 total (1 vessel operator + 1 responder per vessel, 2 shoreside responders)	To access the Town Boat Ramp: From Rt 3A/Court Street, turn on to S Park Ave, take the third exit in the rotary onto Water Street. The ramp is located at the breakwater near 173 Water Street.  NOAA Chart 13253	<b>Marine Mammals</b> – Harbor Seals  <b>Fish</b> – Anadromous Fish  <b>Invertebrates</b> – Lobster, crab, shrimp  <b>Birds</b> – Shorebirds, Seabirds, Nesting Areas  <b>Threatened Species</b> – Piping Plover, Roseate Tern  <b>Human Use</b> – Beach, Boat Ramp, Ferry, Marina, Recreational Fishing, Water Intake  <b>Habitat</b> - Beach, Marsh, Rocky, Riprap, Tidal Flats	Vessel master should have local knowledge.  Consider the time of year and relative presence of recreational boats when preparing to implement these strategies. Consult with the local harbormaster to develop a plan to address the presence of recreational boaters. Consider encouraging the immediate removal of recreational boats from target areas in the event of a spill if time allows.  Exposed tidal flats and marshes are located on both sides of EX-01. Passive Recovery should be set up on each shore.  There is fuel located at the State Pier.  Tested: not yet
SS-12-02 	<b>Deployment</b> <b>Equipment</b> Local beach material 1 tractor with front end loader 2 pipes (20" x 12") 2 culvert plugs 24 sand bags 2 spade shovels 1 air pump <b>Personnel/Shift</b> 3-4 shoreside responders	To access the beach at Nelson Park for staging: From Rt 3A/Court Street, turn onto Nelson Street. Continue on Nelson Street until it reaches the shore.	Same as SS-12-01	During good weather and peak Summer months, there is high recreational use of Nelson Park.
SS-12-03 	<b>Deployment</b> <b>Transport</b> 1 Truck <b>Equipment</b> 2 sheets of plywood 100-200 sandbags 2 Polyethylene Sheeting <b>Vessels/Personnel/Shift &amp; Tending</b> Same as SS-12-01	The culvert is located along Water Street at the waterfront.	Same as SS-12-01	Responders implementing this strategy should immediately consult with UC and appropriate local officials knowledgeable in the operation and limitations of the culvert. If this strategy is implemented, the culvert system must be monitored throughout the tidal cycle. Special considerations include potential localized flooding and personnel injury.
SS-12-04 	Deploy multiple free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Same as SS-12-01	Same as SS-12-01	Vessel master should have local knowledge. Free-oil recovery should only be attempted if conditions permit and by experienced responders.
SS-12 	<b>Deployment</b> <b>Equipment</b> Vac Truck or shoreside recovery system.	To access this location from the shore: From Rt 3A/Warren Ave, turn on to Ryder Way.	Same as SS-12-01	Ryder Way is an unpaved road and requires a 4WD vehicle.  Plovers and Terns nest on Long Beach from May – Sept. A town escort may be necessary to avoid nesting areas. Contact the Plymouth Environmental Manager before using the beach.





**Site Photographs and Contact Information**



View looking southwest towards the mouth of Eel River. (EX-01)



View looking southeast towards the opening of the Eel River. (EX-01)



View looking north across the small creek at Nelson Park where the beach berming tactic would be constructed. (BB-02)



View looking northwest towards the creek at Nelson Park. (BB-02)



Culvert at Water Street.

**Contacts:**

Mass. Dept of Environmental Protection (24 Hours):  
888-304-1133  
Plymouth Conservation Commission: 508-747-1620  
Plymouth Dept of Emergency Management: 508-833-5801  
Plymouth Environmental Manager: 508-747-1620 (x134)  
Plymouth Fire Dept: 508-830-4213  
Plymouth Harbormaster: 508-830-4182  
U.S. Coast Guard (24 Hours): 617-223-5750

