



North Shore Geographic Response Plan

Plum Island Sound Entrance NS-10



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





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.





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ID	Location and Description	Response Strategy	Implementation
NS-10-01 	Plum Island Sound (a) Stage Island Lat. 42°42'36"N Lon. 70°47'17"W (b) Little Neck Lat. 42°41'58"N Lon. 70°47'30"W (alt) Ipswich Bay YC	Divert and Collect – Shoreside Divert incoming oil to collection sites to allow for shoreside collection.	Deploy anchors and boom with skiffs. For (a) place 4x200-ft sections of 18” boom at the proper angle to divert incoming oil to the collection site. For (b) or (alt) place a 300-ft section of 18” boom at the proper angle to divert incoming oil to the collection site. Vessel moorings and marine structures may be used as attachment points. Set up shoreside recovery and tend throughout the tide.
NS-10-02 	Various Locations	Passive Recovery Place passive recovery tactics to recover oil and prevent it from entering sensitive areas.	Place and anchor snare or sorbent boom along the riverfront to prevent lateral movement of oil into smaller creeks. See diagram for suggested locations. Replace as necessary to maximize the recovery.
NS-10-03 	Stage Island Road Lat. 42°42'44"N Lon. 70°46'45"W	Culvert Block Install and monitor culvert block to keep oil from entering coastal pond.	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 more important to implement as early as possible. If an 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 outflow pressure from the intertidal area. Monitor the block to ensure blocking integrity.
NS-10-04 	Plum Island Sound	Free-Oil Recovery Maximize free-oil recovery in the offshore & nearshore environment in Plum Island Sound depending on spill location and trajectory.	Deploy free-oil recovery strike teams upwind and up current of the port area. Use aerial surveillance to locate incoming slicks. Ensure that responders have experience with on-water free-oil recovery. Stay in main channels during low tide.





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ID	Response Resources	Staging Area Site Access	Resources Protected	Special Considerations
NS-10-01 	Deployment Equipment (Sites a & b) 1100 ft 18" boom 10 anchor systems 2 anchor stakes 2 shoreside recovery systems Vessels 2 skiffs Personnel/Shift 8 total (1 vessel operator + 1 responder per vessel, 8 shoreside responders) Tending Vessels 1 skiff Personnel/Shift 4 total (1 vessel operator + 1 responder per vessel, 2 shoreside responders)	Staging Area: Ipswich Fire Department, 55 Central St (Rt 1A) Site Access: (a) Via Newburyport on Plum Island Turnpike to Island Drive to Stage Island. (b) From Manning Rd to East St, to Jeffery's Neck Rd to Little Neck Rd. Chart 13282-1	Fish -Anadromous, finfish Birds -Bald Eagle, Seabirds, Plover, Roseate Tern, Least Tern, Nesting Areas Invertebrates -Shellfish, Lobster, Crab, Shrimp Habitat -Marsh/Swamp, Tidal Flats, Riprap Human use -Boat Ramps, Marinas	Tide range of 7 - 9 ft. Extensive tidal flats exposed during low tides. Tidal Current max speed of 2-3 kts in main channel. Less than 1 kt in side creeks. Vessel master should have local knowledge and experience operating in strong currents. Vessel master should also take notice of mooring fields and consider loading boom on to vessel. Sandy Point (the southeastern most point in the diagram) is a shorebird nesting area and should be avoided from April 1 to August 31. Responders both on vessels and on shore should have handheld radios. Entire site surveyed: 06/26/09. Tested: 06/08/10
NS-10-02 	Deployment Equipment 1200 ft of snare or sorbent boom 12 anchor stakes Vessels 1 skiff Personnel/Shift 4 shoreside responders	Site Access: Same as NS-10-01.	Same as NS-10-01.	Use snare boom for persistent oils and sorbent boom for non-persistent oils.
NS-10-03 	Deployment Transport 1 Truck Equipment 1 inflatable culvert blocker or 1 sheet of plywood 50-100 sandbags 1 polyethylene sheet Personnel/Shift 4 shoreside responders	Site Access: Via Newburyport on Plum Island Turnpike to Island Drive to Stage Island.	Same as NS-10-01.	Coordinate with DPW. Culvert plug should be tested and stored at appropriate location. Tested: not yet.
NS-10-04 	Deploy multiple free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Site Access: Vessel Platform Via marine waters. Chart 13282-1	Same as NS-10-01.	Vessel master should have local knowledge.





Site Photographs and Contact Information



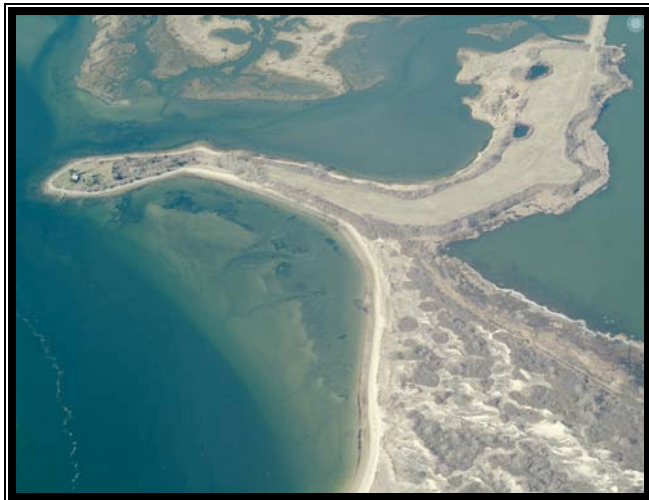
Stage Island at mid-tide on 21 May 2009. View looks north.



North Ridge of Great Neck. MassDep, 08 April 2008.



Little Neck. MassDEP, 08 April 2008.



Stage Island. MassDEP 08 April 2008

Contact Information:

Ipswich Fire Department: 978-356-6630
Ipswich Harbormaster: 508-356-4343
Ipswich DPW: 978-356-6612
Mass Bays Estuary Assn: 978-374-0519
U.S.C.G. Station Merrimack: 978-462-3428
Mass Division of Marine Fisheries: 617-626-1520
Environmental Police: 800-632-8075
Mass Dept of Fish and Game: 617-626-1500

