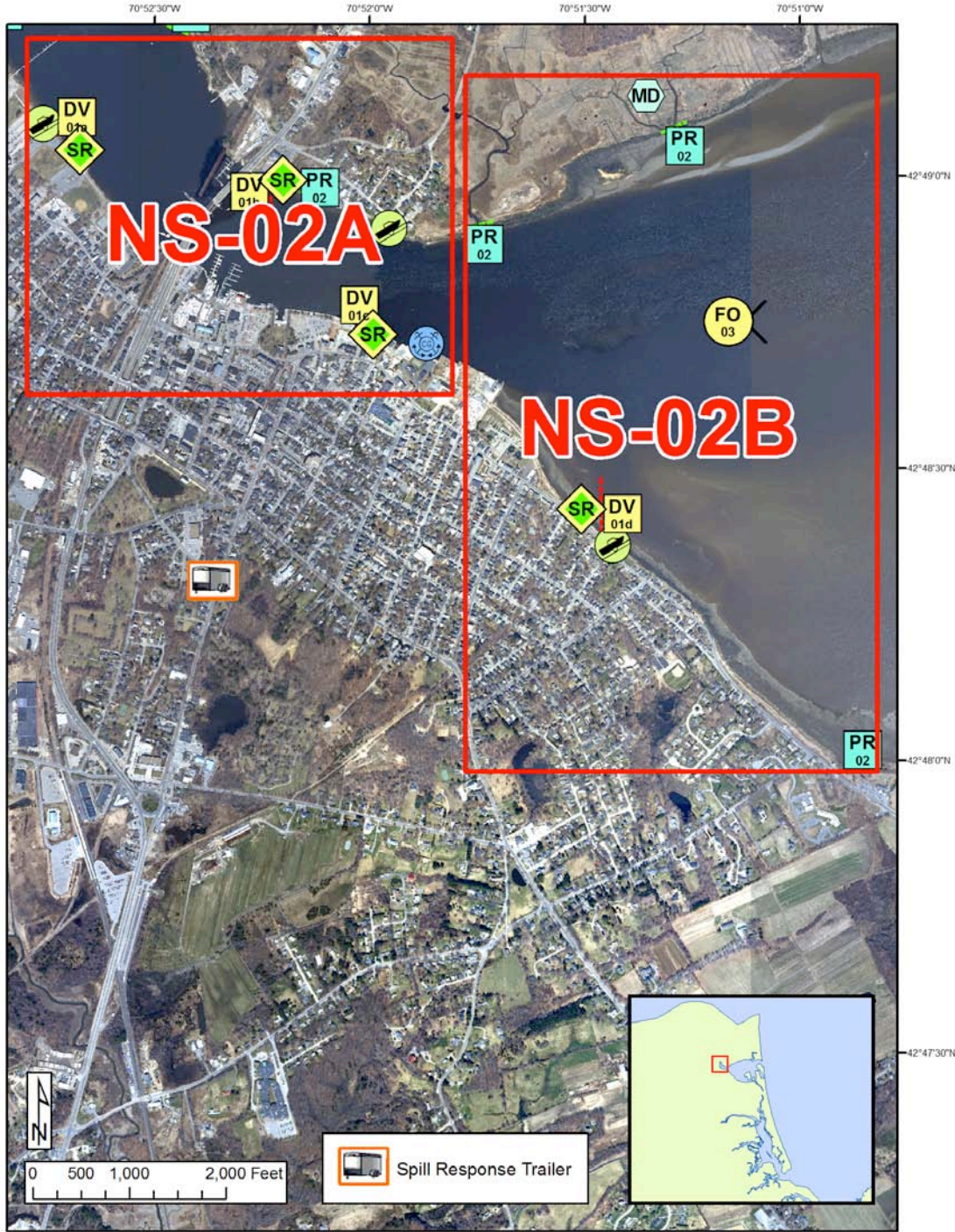




North Shore Geographic Response Plan
Newburyport NS-02



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	Shoreside Recovery	Boat Ramp	Snare or Sorbent Boom
PR Passive Recovery	FO Free-oil Recovery	Beach Berm Material	

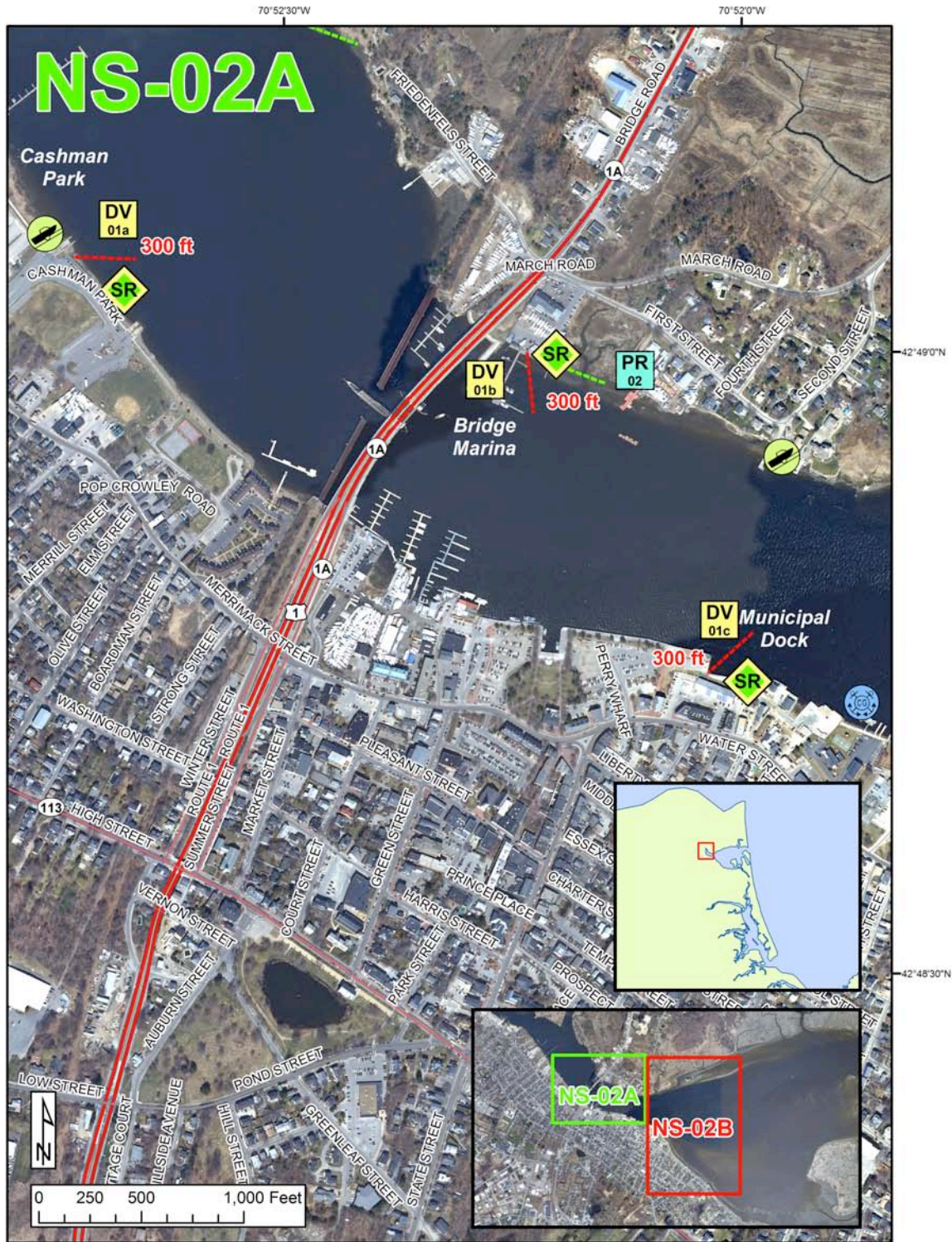
A total of 2 State Response Trailers are required to implement all of the tactics in this GRP. Responders should always consider on-scene conditions before deploying GRP tactics. Tactics may not be safe or effective under certain conditions. Responder safety should always be the first priority.





North Shore Geographic Response Plan

Newburyport NS-02



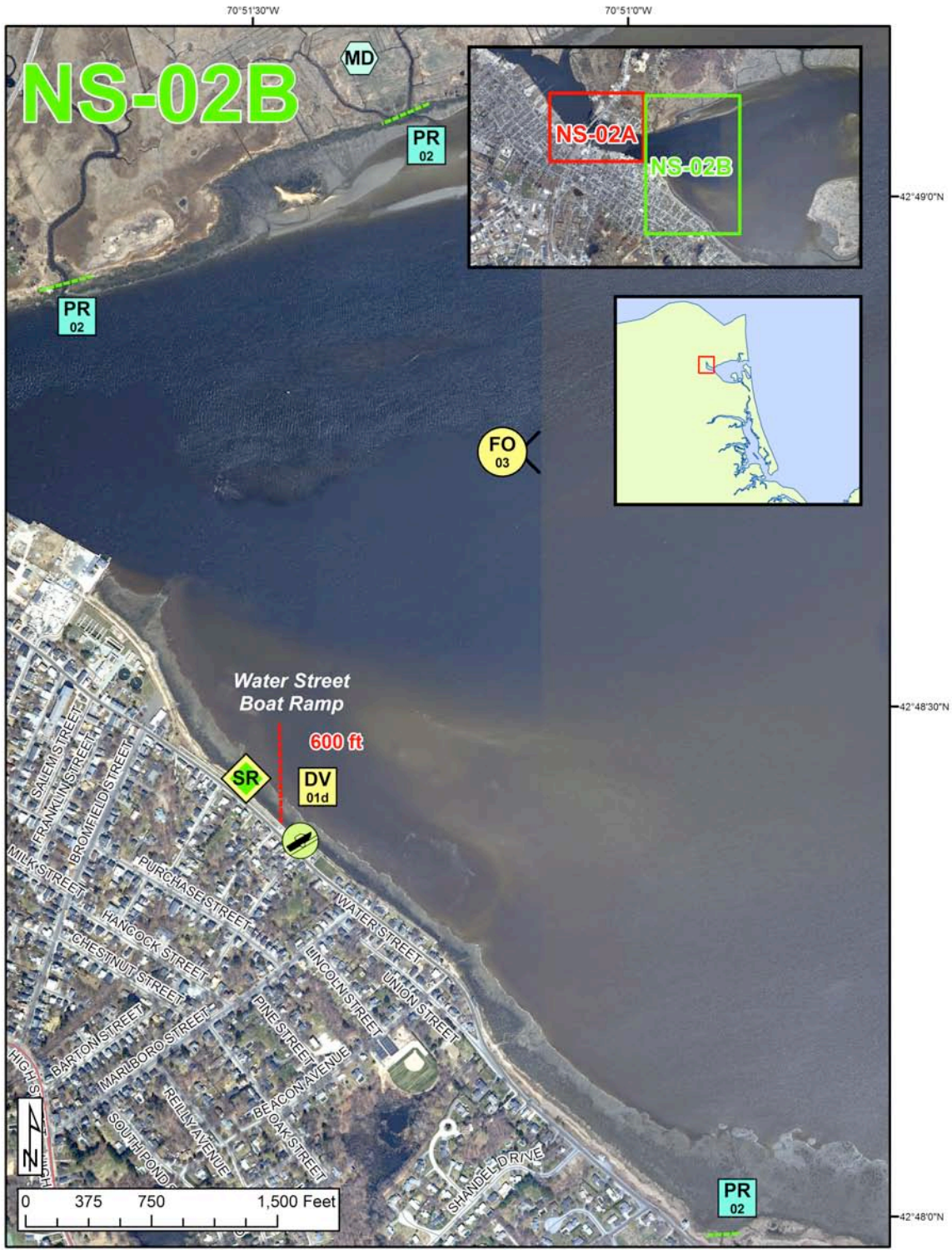
Map Legend			
BB Beach Berm	DF Deflection Booming	MD Mosquito Ditch	Protected-water Boom (Flood Tide)
CB Culvert Block	EX Exclusion Booming	U.S. Coast Guard Station	Protected-water Boom (Ebb Tide)
DV Diversion Booming	SR Shoreside Recovery	Boat Ramp	Beach Berm Material
PR Passive Recovery	FO Free-oil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





North Shore Geographic Response Plan

Newburyport NS-02






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








North Shore Geographic Response Plan
Newburyport NS-02

ID	Location and Description	Response Strategy	Implementation
NS-02-01 	Newburyport (a) Cashman Park Lat. 42°49'6"N Lon. 70°52'44"W (b) Bridge Marina Lat. 42°49'0"N Lon. 70°52'15"W (c) Municipal Dock Lat. 42°48'44"N Lon. 70°52'2"W (d) Water Street Boat Ramp - Newburyport Lat. 42°48'21"N Lon. 70°51'26"W	Divert and Collect – Shoreside Position a leg of boom to catch oil migrating south on an ebb tide or north on a flood tide and divert oil to shoreline area for recovery.	Oil trajectory is depicted on an inbound tide from the east. For (a), (b) and (c) place 300-ft sections of 18” boom to divert oil to collection sites. Set anchors every 100 ft to account for strong tidal current. Tactic (b) may be inverted to divert and collect oil spilled from bridge. This tactic may also be moved to the western side of the bridge. For (d) place a 600-ft section of 18” boom to divert oil to collection site. Boom will capture inbound oil that has been diverted by outgoing fresh water current and/or will capture oil on an outbound tide. Set anchors every 200 ft. Angle of boom should be adjusted depending on strength of current and direction of flow. Set boom at slack water if time permits. Tend boom throughout tidal change.
NS-02-02 	Various Locations	Passive Recovery Place passive recovery tactics to recover oil and prevent it from entering sensitive areas and to prevent lateral movement of oil into smaller creeks.	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. If oil threatens to enter mosquito ditches, use available materials to close off the ditch channel to prevent oil from migrating further into the area. Line with sorbent or snare boom to absorb any oil that migrates into the mosquito ditch. Replace as necessary to maximize the recovery.
NS-02-03 	Merrimack River – Newburyport/Salisbury	Free-Oil Recovery Maximize free-oil recovery in the offshore & nearshore environment of Newburyport and Salisbury 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.





North Shore Geographic Response Plan
Newburyport NS-02

ID	Response Resources	Staging Area Site Access	Resources Protected	Special Considerations
NS-02-01 	Deployment <i>Equipment (All sites)</i> 1500 ft 18" boom 15 anchor systems 4 anchor stakes 4 shoreside recovery systems Vessels 2 skiffs Personnel/Shift 8 total (1 vessel operator + 1 responder per vessel, 4 shoreside responders) Tending Vessels 1 skiff Personnel/Shift 4 total (1 vessel operator + 1 responder per vessel, 2 shoreside responders)	Staging Area: Newburyport Fire Station, 4 Greenleaf St; High St (Rt 113), to Greenleaf St. Site Access: From High St to (a) Boardman St, (b) From Rt 1A to March Rd. (c) From High St to Green St to Merrimack St. (d) Marlboro St, to Water St. *Water Street Boat Ramp may only be accessible from mid to high tide. Chart 13282	Fish -Anadromous, finfish Invertebrates -Shellfish, Crab, Shrimp Birds -Bald Eagle, Seabirds, Roseate Tern Habitat -Marsh/Swamp, Tidal Flats, Riprap Human use -Boat Ramps, Marinas	Tide range 7 – 10 ft. Extensive mud flats at low tide. Maximum currents of 3 – 4 kts. Surface current tends to flow counter clockwise off the Water Street site as it meets the outgoing freshwater river current. Two marine fueling stations and USCG station. Entire site surveyed: 06/26/09. Tested: not yet.
NS-02-02 	Deployment Equipment 2000 ft of snare or sorbent boom 20 anchor stakes Personnel/Shift 8 shoreside responders	Site Access: Same as NS-02-01.	Same as NS-02-01.	Use snare boom for persistent oils and sorbent boom for non-persistent oils.
NS-02-03 	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-02-01.	Vessel master should have local knowledge. Free-oil recovery should only be attempted if conditions permit and by experienced responders.





Site Photographs and Contact Information



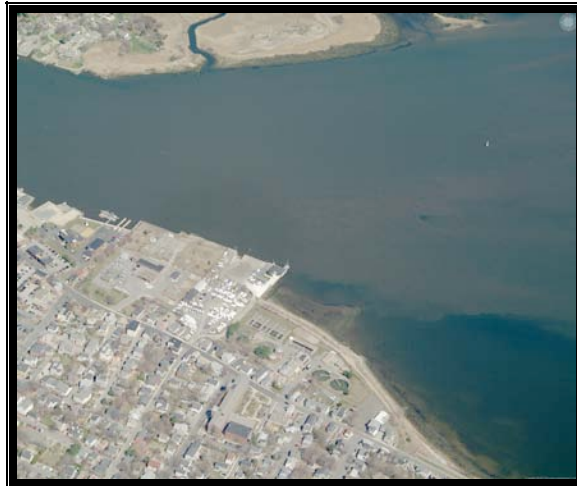
Newburyport waterfront at high tide on 20 May 2009. View looks south.



Newburyport. MassDEP, 15 April 2008.



Cushman Park at high tide on 20 May 2009. View looks southeast



Coffin Point. MassDEP, 15 April 2008.



Bridge Marina shoreside recovery location at high tide on 20 May 2009. View looks northwest.

Contact Information:

Newburyport Fire Department: 978-465-4427
 Newburyport Harbormaster: 978-462-3746
 Salisbury Fire Department: 978-465-3631
 Salisbury Harbormaster: 978-499-0740
 Mass Bays Estuary Assn: 978-3740519
 U.S.C.G. Station Merrimack: 978-462-3428
 Mass Division of Marine Fisheries: 617-626-1520
 Environmental Police: 800-632-8075

