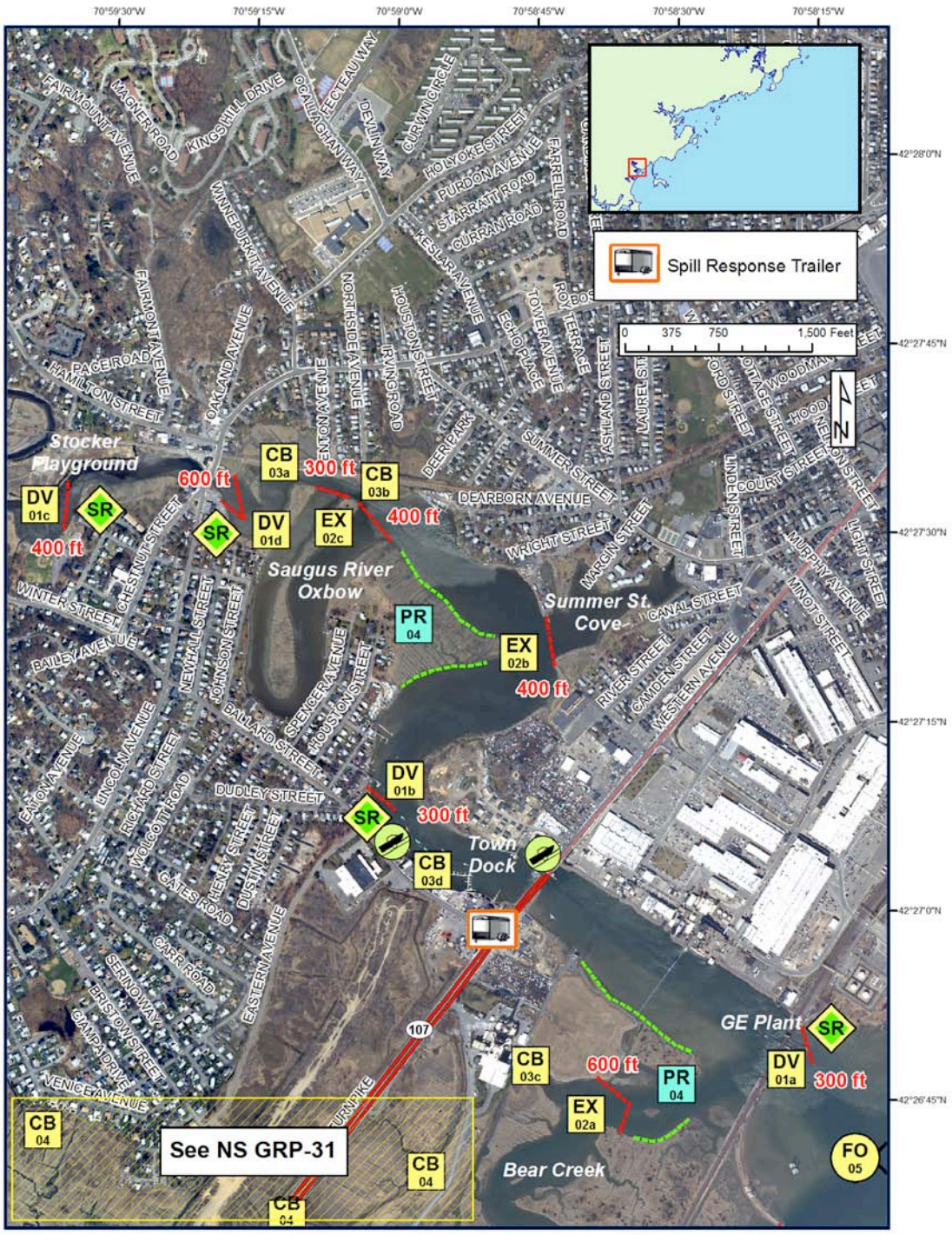

A total of 4 State Response Trailers are required to implement all of the tactics in this GRP. Responders should always consider on-scene conditions before deploying GRP tactics. Tactics may not be safe or effective under certain conditions. Responder safety should always be the first priority.

ID	Location and Description	Response Strategy	Implementation

NS-30-01
DV
	Saugus River
	(a)General Electric Plant
	Lat. 42°26'49"N
	Lon. 70°58'16"W
	
	(b)Town Dock
	Lat. 42°27'10"N
	Lon. 70°59'03"W
	
	(c)Stocker Playground
	Lat. 42°30'30"N
	Lon. 70°59'36"W
	
	(d)Lincoln Ave bridge
	Lat. 42°27'32"N
	Lon. 70°59'18"W
		Divert and Collect - Shoreside
		Place and anchor sections of protected water boom at the proper angle to the incoming oil to divert it to the identified shoreside collection locations.
			Deploy anchors and boom with skiffs.
			
			For (a) and (b) place 300 ft of 18" boom angled as shown in the diagram to divert incoming oil to the collection sites at the General Electric Plant and at the location west of the Town Dock. Set anchors every 100 ft due to current. Set up shoreside recovery and add passive recovery at the shoreline to minimize leakage and damage.
			
			For (c) extend 400 ft of 18" boom across river and angled as shown to collect oil entering marsh on a flood tide. Strategy can be reversed for oil flowing down river. Set anchors every 200 ft. Deploy only during high tide.
			For (d) place 600 ft of 18" boom in a chevron pattern with the apex mid-channel to the east of the Lincoln Ave Bridge. Set up collection point on southern shore. Place anchors every 200 ft.
			
			Tend throughout the tide.

NS-30-02
EX
	Saugus River
	(a)Bear Creek
	Lat. 42°26'45"N
	Lon. 70°58'36"W
	(b)Summer St Cove
	Lat. 42°27'20"N
	Lon. 70°59'36"W
	(c)Saugus River oxbows
	Lat. 42°27'32"N
	Lon. 70°59'05"W
		Exclusion
		Exclude oil from entering identified areas to minimize impact and protect sensitive areas. Place soft boom at attachment points to minimize leakage.
			For (a) place 600 ft and for (b) place 400 ft of 18" boom across the entrance to coves. These strategies can be used as containment strategies for an oil spill from inside either cove. Use one or two anchor sets mid-channel.
			For (c) place one 400 ft and one 300 ft section of 18" boom across the two entrances to the oxbow. Use one anchor set mid-channel for each entrance.
			Line the shoreside attachments with passive recovery and tend all boom arrays throughout the tide.

NS-30-03 CB	**Saugus River** (a) & (b) Old Railroad Culverts Lat. 42°27'36"N Lon. 70°59'6"W (c) Resco Plant Culvert Lat. 42°26'47"N Lon. 70°58'47"W (d) Town Dock Culvert Lat. 42°27'2"N Lon. 70°58'56"W	**Culvert/Outfall Blocking** Place culvert blocks and/or set exclusion boom to prevent oil from entering the marsh area behind the culverts.	Install culvert blocks or set up exclusion boom 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. Monitor the block to ensure blocking integrity.
NS-30-04 PR	**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 tidal marshes to reduce impacts on marsh areas. See diagram for suggested locations. Tend through tide cycle and replace oiled sorbents at low tide, as needed.
NS-30-05 FO	**Saugus River/Pines River**	**Free-Oil Recovery** Maximize free-oil recovery in the offshore & nearshore environment of Saugus and Pines Rivers 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.

ID	Response Resources	Staging Area Site Access	Resources Protected	Special Considerations
NS-30-01 DV	**Deployment** ***Equipment (All sites)*** 1600 ft 18" boom 8 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:** Saugus Fire Department, 27 Hamilton St; From Rt 1 to Main St to Hamilton St. **Site Access:** From Hamilton St to Boston St. to; (a)Summer St to Western Ave. (b)Lincoln Ave to Ballard St to Harvard Ave. (c) & (d) Lincoln Ave to Chestnut St to Winter St. Chart 13275-1	**Birds** – Nesting sites, Seabirds, Shorebirds **Invertebrates** – Shellfish, Urchins **Habitat** – Beach, Rocky Shore, Tidal Flats, Marsh **Human Use** – Marina, Boat Ramp, Port/Harbor, Industrial	Tide range 7 – 11 ft. Vessel master should have local knowledge. Large number of recreational vessels. Developed shoreline with riprap, pier pilings, docks and floats. Moored vessels may need to be moved. Two bascule bridges, call VHF channel 13. Entire site surveyed: 06/02/09. Tested: not yet.
NS-30-02 EX	**Deployment** ***Equipment (All sites)*** 1700 ft 18" boom 5 anchor systems 8 anchor stakes ***Vessels*** 2 skiffs ***Personnel/Shift*** Same as DV-01 **Tending** ***Vessels*** 1 skiff ***Personnel/Shift*** Same as DV-01	**Site Access:** From Hamilton St to Boston St to; (a)Lincoln Ave to Bollard St to Salem Turnpike and via marine waters. (b)Summer St to Wright St. (c)Via marine waters, use Bollard St Boat Ramp.	Same as NS-30-01.	Same as NS-30-01. *Water Intake structures are located at the RESCO and GE facilities.
NS-30-03 CB	**Deployment** ***Transport*** 1 Truck ***Equipment*** 4 inflatable culvert blocks or 4 sheets of plywood 200 sandbags 4 polyethylene sheets ***Personnel/Shift*** 4 shoreside responders	**Site Access:** (a) & (b) From Hamilton St to Boston St to Old Rail Trail. (c) Western Ave to Salem Turnpike to Access Road. (d) Lincoln Ave to Ballard St to Harvard Ave.	Same as NS-30-01.	Coordinate with DPW. Culvert blocks should be tested and stored at appropriate locations. Tested: not yet.
NS-30-04 PR	**Deployment** ***Equipment*** 2000 ft snare or sorbent boom 20 anchor stakes ***Personnel/Shift*** 4 shoreside responders	**Site Access:** Vessel Platform Via marine waters. Chart 13275-1	Same as NS-30-01.	Use snare boom for persistent oils and sorbent boom for non-persistent oils. Use caution operating in marshes.
NS-30-05 FO	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 13275-1	Same as NS-30-01.	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

Marsh near General Electric Plant at high tide on 09 July 2009. View looks north.

Ballard St boat ramp at high tide on 09 July 2009. View looks south.

Old rail trail culverts at high tide on 09 July 2009. View looks north.

Saugus River and Bear Creek. MassDEP, 14 April 2009.

Saugus River oxbow. MassDEP, 14 April 2009.

Contact Information:
Lynn Fire Department: 781-593-1234
Lynn Harbormaster: 781-592-6010
Lynn DPW: 781-477-7099
Saugus Fire Department: 781-231-4155
Saugus Harbormaster: 781-248-3020
Saugus DPW: 781-231-4145
Saugus River Watershed Council: 781-233-5046
U.S.C.G. Station Gloucester: 978-283-0705
Mass Division of Marine Fisheries: 617-626-1520
Environmental Police: 800-632-8075