INLET SUMMARY SHEET

INLET: Warren River (#36)

<u>DATE AND TIME SURVEYED AND TIDE STAGE</u>: 20 March 1999, 14:30-15:00. High at 09:56 (+5.3), Low at 15:11 (-1.0), at Warren Station #1173.

INLET CLASS: A/B

<u>GEOMORPHOLOGY</u>: Major river entrance without barrier spit systems across entrance. Irregular shoreline containing several marsh complexes fronted by depositional beach/berm systems.

<u>PRINCIPAL RESOURCES AT RISK:</u> Barrington and Palmer Rivers converge at Tyler Point to form Warren River. At the entrance to Warren River, there are numerous marshes and tidal flats. From Adams Pt. north to Tyler Pt., there are numerous boat piers and boat ramps. The eastern bank of the river adjacent to the town of Warren is a highly modified shoreline with seawalls, port facilities, and piers. Birds, including waterfowl (black ducks, brants, diving ducks, canada geese, puddle ducks, mergansers), raptors (osprey), and gulls utilize the area. Winter flounder, american and hickory shad, alewife, tautog, white perch, striped bass, and summer flounder may be in the area. Blue crabs as well as clams, oysters, and quahogs (Mercenaria) are present in the area. This location is a major spawning area for some fish and shellfish. Terrapin turtles can be found in 100 acre cove, located nearby. Recreational clamming and fishing occurs in the area, especially north and south of the town of Warren. The eastern bank of the river in the vicinity of the town of Warren is an important commercial (including ferry and cruise boats) and recreational harbor with a numerous piers, boat berths, and boat landings. A large number of private residences are distributed on the western bank from Adams Pt. north.

<u>PRELIMINARY PROTECTION STRATEGY</u>: Objective is to trap the majority of the incoming oil before it enters the upper reaches of Warren River. CP-2 to CP-4 are shore-based Collection Points. CP-1 is an open water skimmer. CP-2 and CP-3 are located on the eastern bank of the river, and CP-4 on the western bank. Three sediment dikes, one on the western bank at the channel to the marsh on Rumstick Neck (approximately 250 ft. long), and two on the channels to the marshes NW of Jacobs Pt. (approximately 350 ft. and 200 ft. long), should be constructed using material from the intertidal zone and adjacent beach berms to prevent oil from entering these marshes. Care should be taken not to disturb any birds that may be nesting on the beach, as well as any vegetation growing on the berm tops.

From an anchor point north of the sediment dike on Rumstick Pt., deploy protection boom in a northerly direction to protect the marshes around Smith Cove to Adams Pt.

From Adams Pt., deploy deflection boom in a NWW direction to a skimmer (CP-1) in the channel. From an anchor point west of the sediment dike at the channel adjacent to Jacobs Pt., deploy deflection boom in a NNE direction to the skimmer at CP-1. From an anchor point on the eastern side of Adams Pt., deploy protection boom in a northerly direction in front of the boat piers to a point east of the creek.

From an anchor point in the channel SW of the recreation park, deploy deflection boom in a NE direction to the sand and gravel beach (CP-2) on the NW side of the recreation park. From an anchor point in the channel deploy deflection boom in a Christmas tree configuration, in a NNW direction to the riprap headland and adjacent boat ramp (CP-4), and in a NNE direction to the cruse ship berth at CP-3.

Collection Point	Description	Access	Proposed Equipment
	Sediment dikes	Three of them:	Bulldozer, front-
		1. From the end of Rumstick Rd., access via beach at low tide (approx. 250 ft. dike).	end loader.
		2. From South Main St. in Warren, turn west towards Jacobs Pt. Access via beach at low tide (approx. 350 ft. dike)	
		3. From South Main St. in Warren, turn west towards Beach Terrace. Access via beach at low tide (approx. 200 ft. dike).	
CP-1	Skimmer	Deploy from boat ramp in the area.	Approx. 4,800 ft. deflection boom, 6,200 ft. protection boom, 110 anchor sets, skimmer.
	Protection boom	Deploy from boat.	Approx. 2,200 ft. protection boom, 22 sets of anchors.

Collection Point	Description	Access	Proposed Equipment
CP-2	Sand and gravel beach	From Hwy. 114 (South Main St.) in Warren, turn west towards the access point.	Approx. 1,100 ft. deflection boom, 11 sets of anchors.
CP-3	Seawall/boat basin	From Hwy. 114 (South Main St.) in Warren, turn west towards the berth for Bay Queen Cruises (Gate #4).	Approx. 1,700 ft. deflection boom, 17 sets of anchors.
CP-4	Riprap headland and adjacent boat ramp	From Hwy. 103 (County Rd.) in the town of Barrington, turn south on Rumstick Rd., then east on Ferry Lane to access point.	Approx. 1,500 ft. deflection boom, 15 sets of anchors.

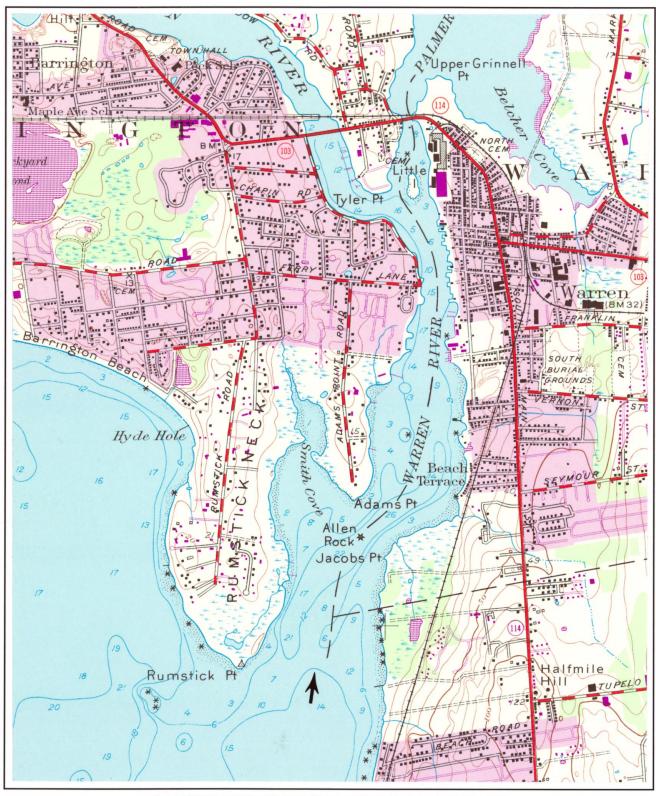
RESOURCES REQUIRED (if full strategy is implemented): Approximately 9,100 ft. of deflection boom; 8,400 ft. protection boom; 175 anchor sets minimum. One JBF 420 Skimmer System with skimming capacity of 225 bbl/hr, and onboard storage capacity of 1,320 gals. Vacuum trucks (2,000-5,000 gal. capacity) with skimmer heads, additional storage capacity, and other equipment as needed. Construction equipment (such as front-end loaders, bulldozers, or other similar equipment that are available). Standard beach cleaning equipment and personnel necessary for beach clean-up operations.

CONTACT INFORMATION:

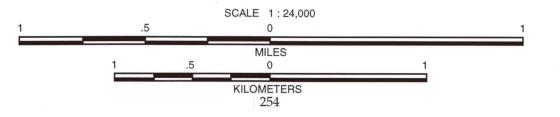
Rhode Island Dept. of Env. Mgmt. Emergency Response:	(401) 222-3070
U.S. Fish and Wildlife:	(401) 364-9124
U.S. Coast Guard:	(401) 435-2300
Coastal Resources Management Council:	(401) 783-3370
Barrington EMA Director:	(401) 247-1900
Warren EMA Director:	(401) 245-7011

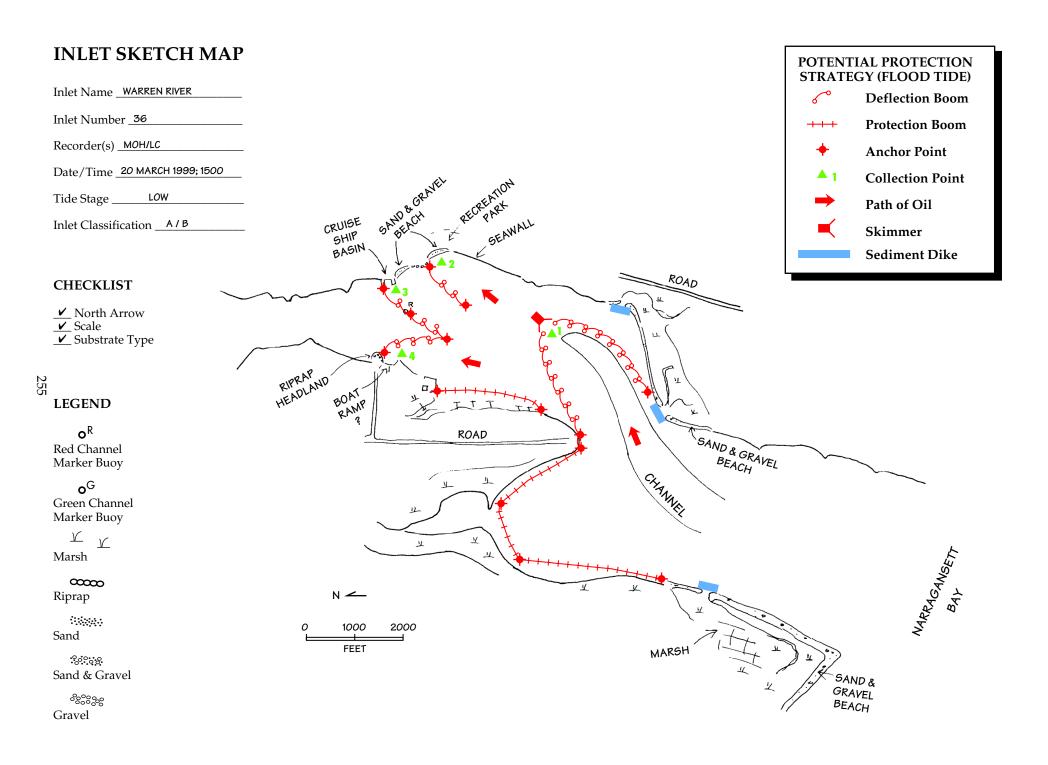
OTHER COMMENTS:

36 - WARREN RIVER



From USGS 7.5' topographic quad: Bristol, RI-Mass, published: 1955, photorevised 1970 and 1975





36 - WARREN RIVER



From USGS NAPP: roll #8356, frame #34; March 1995; scale -1:40,000 $\,256\,$

1 2 MILES



Looking SE at CP-2 at low tide on 20 March 1999, Warren River (#36).



Looking NNE at low tide on 17 March 1999, Warren River (#36).