

INLET SUMMARY SHEET

INLET: Dutch Island Harbor–Great Creek (#17)

DATE AND TIME SURVEYED AND TIDE STAGE: 24 March 1999, 11:00-12:10. Low at 06:57 (+0.1), High at 13:25 (+3.1), at Beavertail Point Station #1149.

INLET CLASS: C

GEOMORPHOLOGY: Very shallow cove with extensive marshes and tidal flats. Low sand and gravel beach berm/spit systems at entrance. Ebb-dominated, as evidenced by relatively large ebb-tidal shoal in entrance. Highway constricts flow, creating strong tidal currents through culvert.

PRINCIPAL RESOURCES AT RISK: Extensive salt marsh and some tidal flats are associated with Dutch Island Harbor–Great Creek. Birds, including wading birds, waterfowl (black ducks, mergansers, geese), raptors (osprey), and gulls utilize the area. Blue and green crabs, clams, oysters, and quahogs (*Mercenaria*) are present. Winter flounder, menhaden, and striped bass are reported to be in the vicinity. Dutch Island Harbor–Great Creek is part of the Marsh Meadows Wildlife Preserve (managed by Audubon Society). Dutch Island Harbor–Great Creek has recreational fishing and clamming. There is no residential development in the immediate vicinity of Dutch Island Harbor–Great Creek, but there is a golf course on the SW side of the creek, and some farming on the NW side.

PRELIMINARY PROTECTION STRATEGY: Due to the extensive nature of the marshes, and lack of accessible, adequate collection points near the inlet, the objective would be to prevent oil from entering the creek by keeping it offshore. From an anchor point located approximately 550 yards SW of the inlet, deploy protection boom from riprap in a northerly direction to an anchor point located adjacent to riprap, approximately 350 yards NW of the inlet. An open water skimmer can be deployed west of the protection boom.

As a back-up, deflection boom should be deployed from anchor points either side of the inlet near the inlet mouth. The deflection booms would be deployed in a westerly orientation and would line tidal channel until just east of the bridge crossing North Main St. Deploy protection boom in front of marsh just SE of bridge in the scoured out, natural back eddy area adjacent to Zeek's Bait Shop (CP-1).

Collection Point	Description	Access	Proposed Equipment
	Protection boom	From Jamestown go north on North Main St., turn west before the bridge crossing Great Creek to private residence to secure southernmost anchor point. For northernmost anchor point, turn west off North Main St. on to Weeden Lane. Access location at low tide by driving on beach.	Approx. 1,700 ft. protection boom, 17 anchor sets, skimmer
CP-1	Protection boom in salt marsh	From Jamestown go north on North Main St. to bridge, next to Zeek's Bait Shop.	Approx. 2,700 ft. deflection boom, 400 ft. protection boom, 31 anchor sets.

RESOURCES REQUIRED (if full strategy is implemented): Approximately 2,700 ft. of deflection boom; 2,100 ft. of protection boom; 48 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.

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
Jamestown EMA Director:	(401) 423-0062

OTHER COMMENTS:

Possible underflow dam or tide gate construction.

17 - DUTCH ISLAND HARBOR - GREAT CREEK



From USGS 7.5' topographic quads: Narragansett Pier published: 1957, photorevised 1970 and 1975; and Wickford, RI published: 1995; and Prudence Island, RI published: 1955, photorevised 1970 and 1975; and Newport, RI published: 1957, photorevised 1970, photoinspected 1975

SCALE 1 : 24,000



MILES



KILOMETERS



INLET SKETCH MAP

Inlet Name GREAT CREEK

Inlet Number 17

Recorder(s) MOH/LC/SM

Date/Time 24 MARCH 1999; 1210


Tide Stage FLOOD


Inlet Classification C


CHECKLIST


- North Arrow
- Scale
- Substrate Type

LEGEND

 R
Red Channel Marker Buoy

 G
Green Channel Marker Buoy

 Marsh







 Riprap

 Sand

 Sand & Gravel

 Gravel

POTENTIAL PROTECTION STRATEGY (FLOOD TIDE)

-  Deflection Boom
-  Protection Boom
-  Anchor Point
-  Collection Point
-  Path of Oil
-  Skimmer

135

DUTCH ISLAND HARBOR

CHANNEL

EBB-TIDAL DELTA

CHANNEL

SAND & PEBBLE BEACH BERM

MARSH

TIDAL CHANNEL

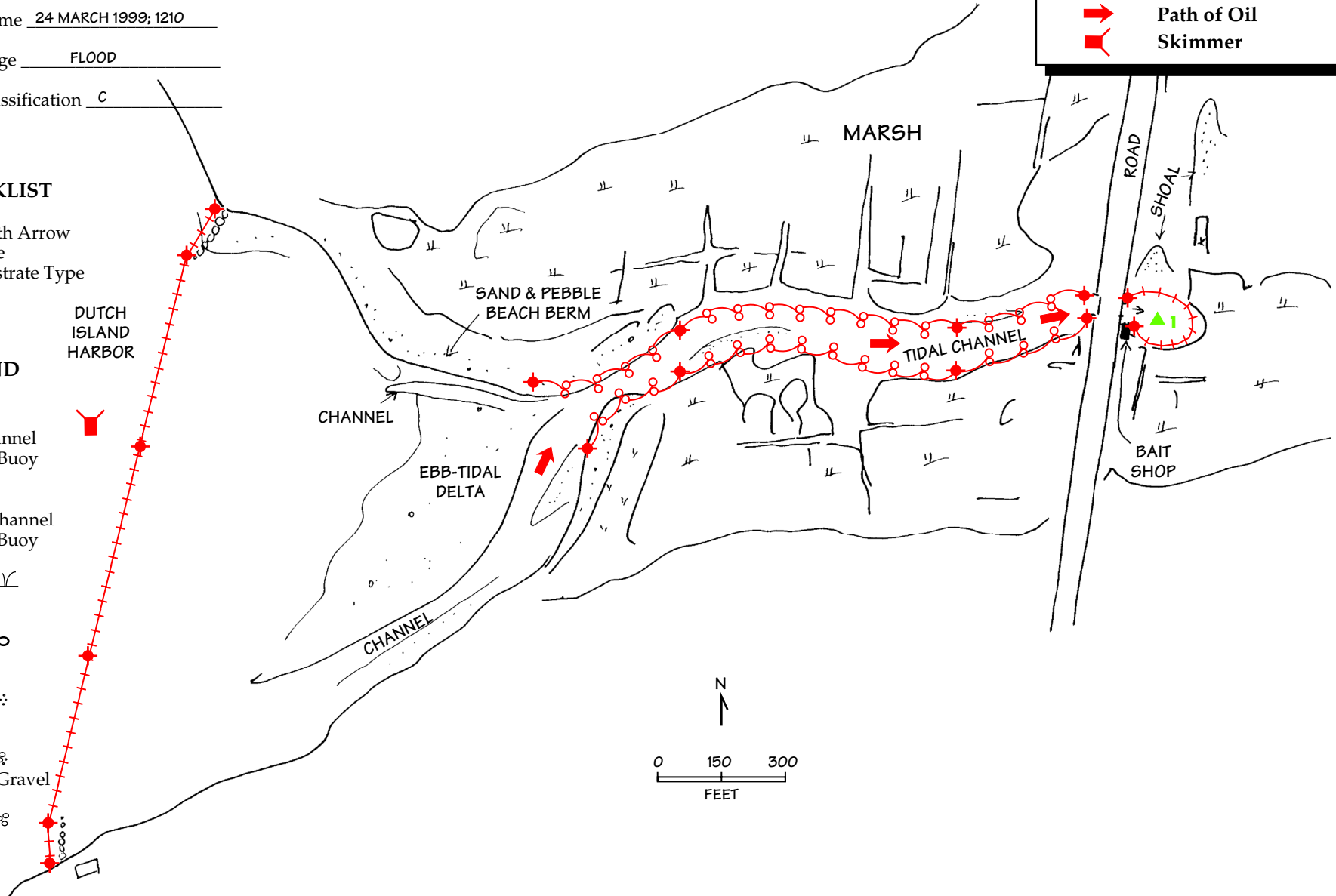
ROAD

SHOAL

BAIT SHOP

N

0 150 300
FEET



17 - DUTCH ISLAND HARBOR - GREAT CREEK



From USGS NAPP: roll #8355, frame #218; March 1995; scale -1:40,000

0 1 2 MILES



Looking east at CP-1 at flood (near high) tide on 24 March 1999, Dutch Island Harbor–Great Creek (#17).



Looking east at low tide on 17 March 1999, Dutch Island Harbor–Great Creek (#17).