



**BOUCHARD B120 RELEASE  
SHORELINE SEGMENT SUMMARY**

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GeoInsight Project Number 3871-002

SEGMENT IDENTIFICATION: **E1-14**

SEGMENT NAME: **New Silver Beach (Sunset Point)**

SEGMENT LOCATION: **Falmouth, Massachusetts** (*Map attached*)

MAXIMUM DEGREE OF INITIAL OILING: Clean (Oiling Score: <1.00)

SEGMENT INSPECTION STATUS: Passed IRAC inspection on 08/28/2003.

**SITE-SPECIFIC INFORMATION**

**PHYSICAL CHARACTERISTICS:**

Primary Shoreline Type/ Geology:

- 1A: Heavily utilized, public recreational sand beaches.

Secondary Shoreline Type/ Geology:

- 1C: Mixed sand and gravel, gravel (pebble to boulder), and rip rap groins (jetties); and
- 1F: Salt marshes.

Hydrogeology:

- Wild Harbor is located to the west, Wild Harbor River to the southeast, and Buzzards Bay to the southwest. The southern portion of the segment is saltwater wetlands.

Bedrock Geology:

- Bedrock underlying this segment is identified as undivided granite, gneiss, and schist (Zen, 1983).

**ENVIRONMENTAL SENSITIVE RECEPTORS (Identified within 500 feet of segment):**

Aquifer: At segment: EPA-designated sole source and MADEP-designated medium yield potentially productive aquifer.

Protected Open Space: At segment.

Public Ground Water Supply Wells: None at segment.

Public Surface Water Supply Wells: None at segment.

Areas of Critical Environmental Concern (ACEC): None at segment.

Vernal Pools: None at segment.

Priority Habitats of Rare Species: Adjacent to segment: Buzzards Bay aquatic environment.

Estimated Habitats of Rare Wildlife: Adjacent to segment: Buzzards Bay aquatic environment.

Floodplains: At segment: 100-year floodplain.

**HUMAN SENSITIVE RECEPTORS (Identified within 500 feet of segment):**

Segment Use: Private and public beach and marsh. Residential dwellings are located within 500 feet of the segment. The segment is accessible via roadway.

Frequency of Use: Seasonal and year round residential use.

## SUMMARY OF INSPECTION ACTIVITIES

### **WRF INSPECTIONS**

(Wildlife Field Reconnaissance Form - Shoreline or On-Water Observations; Bird Transect Study.)

WRF inspections pertaining to this segment were not conducted.

### **NRDA FIELD ACTIVITIES SUMMARY**

(Natural Resource Damage Assessment)

Note: Includes Shoreline Cleanup Assessment Team (SCAT) inspections and activities. SCAT forms were completed by field inspection teams working under the direction of Unified Command.

DATE	SUMMARY OF INFORMATION RECORDED BY INSPECTION TEAM
05/19/2003	Buried oil inspection: Sporadic buried oil (approximately 1 centimeter flecks) observed. Splatter on rocks, sand, and shells observed on north side of jetty. Tarballs concentrated in two areas (approximately 50 by 6 meters and 150 by 5 meters) were observed, estimated to have a 1 to 2% surface oil distribution. Dead wildlife was observed (1 species of fish).
05/23/2003	Cleanup activities ongoing. Further maintenance warranted.
05/31/2003	Evidence of oil was not observed. Cleanup crews on-site to remove wrack and oil-absorbent material.

### **IRAC INSPECTIONS**

(Unified Command Immediate Response Action Completion inspections and activities.)

DATE	SUMMARY OF INFORMATION RECORDED BY INSPECTION TEAM
08/28/2003	Buried oil and shoreline inspection: Evidence of oil was not observed. Segment met IRAC criteria endpoints.

### **MCP FIELD ACTIVITIES SUMMARY**

(Massachusetts Contingency Plan inspections and activities under the direction of the Licensed Site Professional-of-Record.)

MCP inspections pertaining to this segment were not conducted. GeoInsight did not receive IRA citizen calls pertaining to this segment.

**TABLE 1**  
**SAMPLE SUMMARY**  
**BUZZARDS BAY, MASSACHUSETTS**  
**SEGMENT: E1-14**  
**New Silver Beach (Wild Harbor), Falmouth**

Sample ID	Date Collected	Matrix	Analysis	Laboratory	Sampling Program	Sample Location Coordinates		Sample Location Description	Comments
						Latitude	Longitude		
WH-SED-S	5/13/2003	Sediment	PAH, TOC, EPH	B&B GAI	NRDA Pre- Assessment	N41°38.190'	W°70°38.650'	Subtidal sediment	Composite Sample

NOTES:

1. B&B: B&B Laboratories.
2. GAI: Groundwater Analytical, Inc.

**TABLE 2**  
**SUMMARY OF ANALYTICAL RESULTS**  
**BUZZARDS BAY, MASSACHUSETTS**  
**SEGMENT: E1-14**  
**New Silver Beach (Wild Harbor), Falmouth**

Analyte	WH-SED-S	Effects Range-Low Benchmarks Marine Sediments ER-L
	Subtidal Sediment	
	5/13/2003	
<b>EPH</b>		
C <sub>9</sub> -C <sub>18</sub> Aliphatic Hydrocarbons	ND(37)	NA
C <sub>19</sub> -C <sub>36</sub> Aliphatic Hydrocarbons	ND(37)	NA
C <sub>11</sub> -C <sub>22</sub> Aromatic Hydrocarbons	ND(37)	NA
<b>PAH by GC/MS-SIM by method 8270C</b>		
Naphthalene	<b>0.0011</b>	<b>0.160</b>
2-Methylnaphthalene	<b>0.0002j</b>	<b>0.070</b>
Acenaphthylene	ND(0.0002)	<b>0.044</b>
Acenaphthene	ND(0.0001)	<b>0.016</b>
Fluorene	<b>0.0001j</b>	<b>0.019</b>
Phenanthrene	<b>0.0003</b>	<b>0.240</b>
Anthracene	<b>0.0001j</b>	<b>0.085</b>
Fluoranthene	<b>0.0003</b>	<b>0.600</b>
Pyrene	<b>0.0004</b>	<b>0.665</b>
Benzo(a)anthracene	<b>0.0002</b>	<b>0.261</b>
Chrysene	<b>0.0005</b>	<b>0.384</b>
Benzo(b)fluoranthene	<b>0.0003</b>	NA
Benzo(k)fluoranthene	<b>0.0001j</b>	NA
Benzo(a)pyrene	<b>0.0002j</b>	<b>0.430</b>
Indeno(1,2,3-c,d)pyrene	<b>0.0002j</b>	NA
Dibenzo(a,h)anthracene	<b>0.0001j</b>	<b>0.063</b>
Benzo(g,h,i)perylene	<b>0.0003</b>	NA
<b>Total Organic Carbon (%)</b>	<b>0.09</b>	NA
<b>Total Petroleum Hydrocarbons</b>	NS	NA

NOTES:

1. Results in mg/Kg (milligrams per kilogram).
2. EPH: Extractable Petroleum Hydrocarbons.
3. ND(x): Constituent not detected at practical quantitation limits (PQL) noted in parentheses.
4. PAH by GC/MS-SIM: Polynuclear Aromatic Hydrocarbon analysis by Gas Chromatography/Mass Spectrometry with Selected Ion Monitoring.
5. j: Estimated concentration/ detected below standard laboratory reporting limits.
6. Bold values exceed laboratory PQL.
7. ER-L: Effect Range LOW (Long and Morgan 1991).
8. NA: Not Applicable.
9. NS: Not Sampled.



E1-14

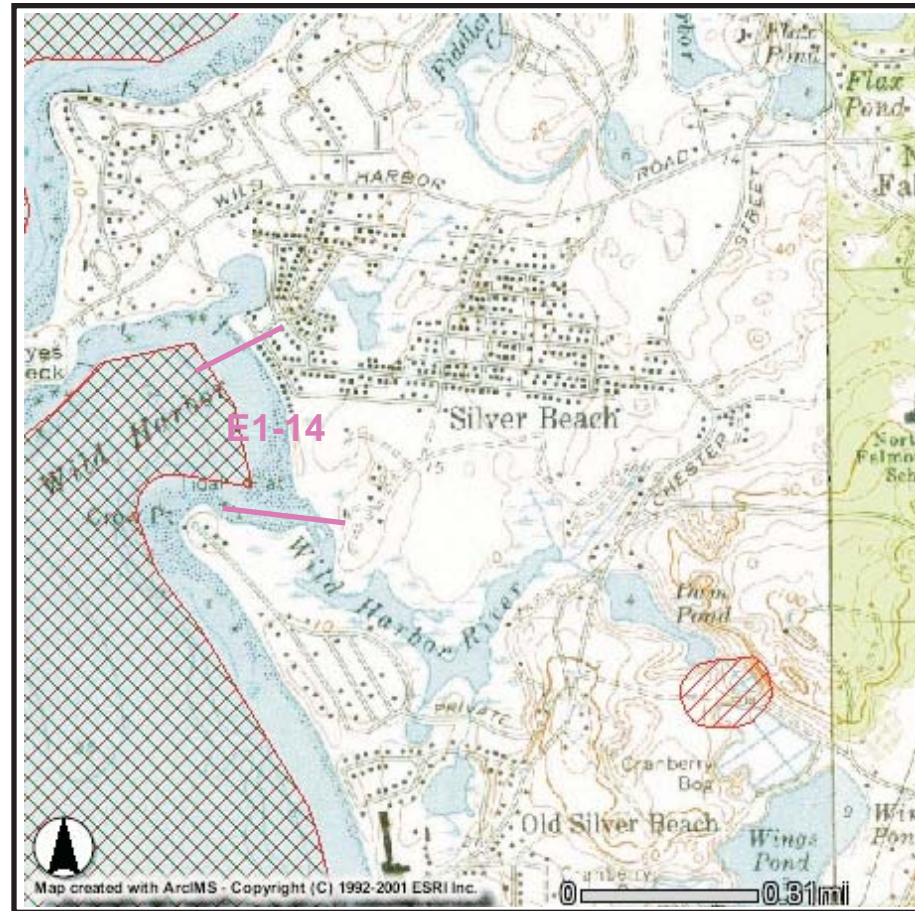


0 250 500 1,000 Feet

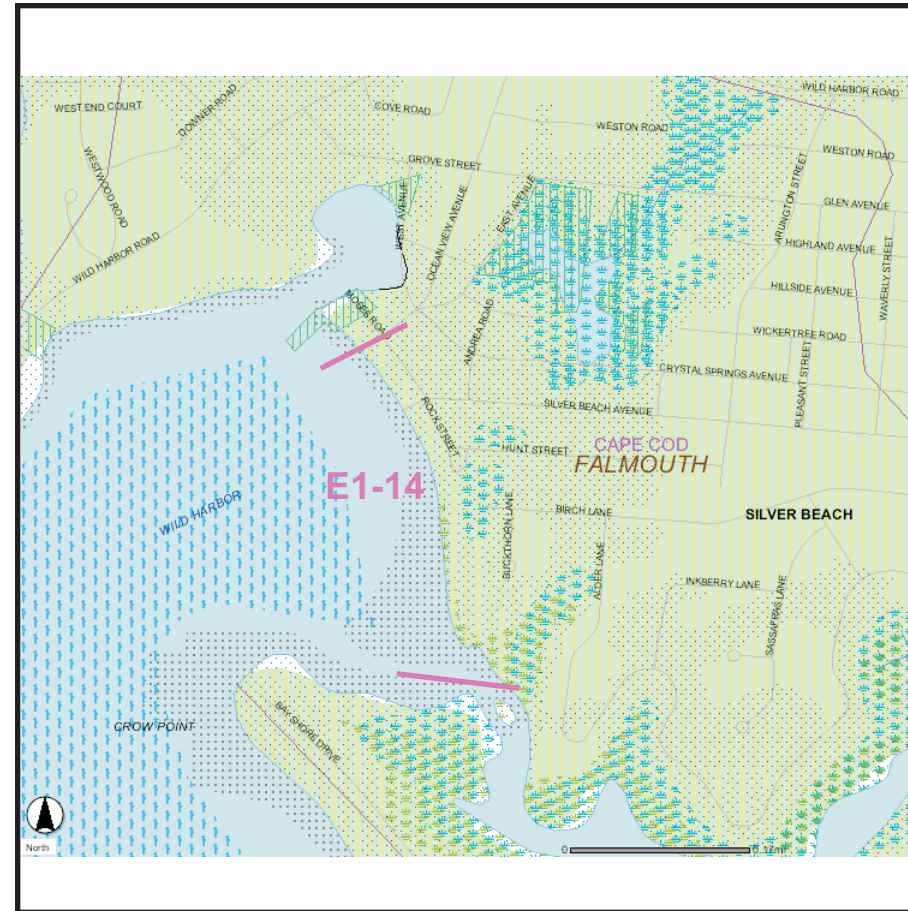


<b>E N T R I X</b>
<b>E1-14</b>
<b>New Silver Beach</b>
<b>Bouchard B No. 120 Oil Spill</b>
<b>Buzzards Bay, MA</b>

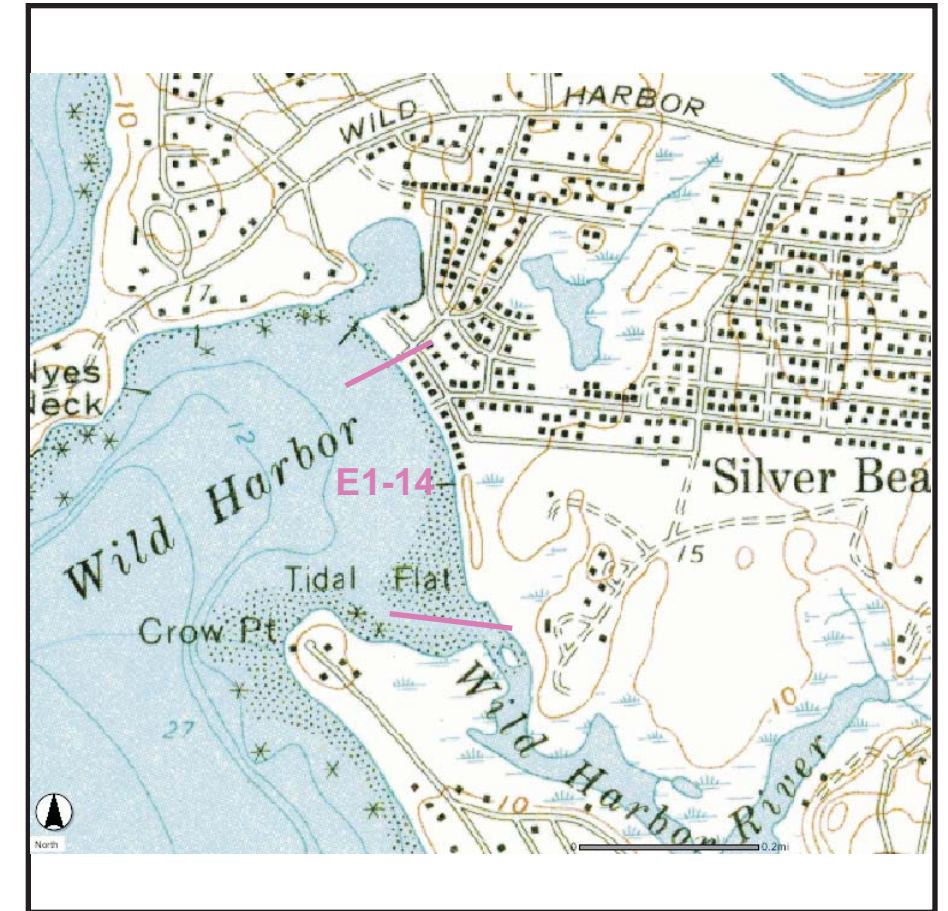
NATURAL HERITAGE AND ENDANGERED SPECIES MAP



2IE PRIORITY RESOURCE MAP



TOPOGRAPHIC MAP





























LEGEND


 NHESP 2005 MA PRIORITY HABITATS FOR STATE-PROTECTED RARE SPECIES

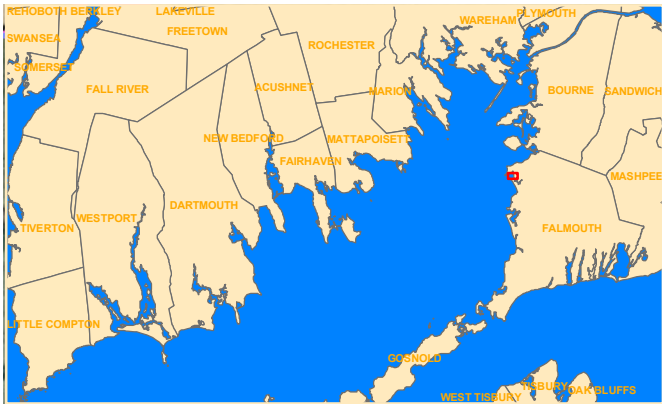
 NHESP 2005 MA ESTIMATED HABITATS OF RARE WILDLIFE

DEP MCP 21e Map Legend

-  Zone IIs
  -  IWPAs
  -  Zone A
  -  Sole Source Aquifers
  -  Solid Waste Sites
  -  Protected Openspace
  -  ACECs
  -  NHESP Estimated Habitat of Rare Wildlife in Wetland Areas
  -  Certified Vernal Pools 2003 NHESP
  -  Subbasins
  -  Mass Major Basins
  -  DEP Region
  -  Town Arcs
  -  County Boundaries
-  HIGH YIELD
  -  MEDIUM YIELD
  -  HIGH YIELD
  -  MEDIUM YIELD
  -  HIGH YIELD
  -  MEDIUM YIELD
  -  100 YEAR FLOODPLAIN
  -  WATER
  -  RESERVOIR
  -  WETLANDS
  -  SALT WATER WETLANDS
  -  FLATS SHOALS
  -  PERENNIAL
  -  INTERMITTENT
  -  SHORELINE
  -  MAN MADE SHORE
  -  DAM
  -  AQUEDUCT
  -  LIMITED ACCESS HIGHWAY
  -  MULTILANE HWY, NOT LIMITED ACCESS
  -  OTHER NUMBERED HWY
  -  MAJOR ROAD - COLLECTOR
  -  MINOR STREET OR ROAD, RAMP
  -  TRACK
  -  TRAIL
  -  PIPELINE
  -  POWERLINE
  -  TRAIN



		PROJECT: B120 OIL SPILL		
		LOCATION: NEW SILVER BEACH (SUNSET PT) BUZZARDS BAY, MA		
TITLE: PHASE II SUPPORTING MAPS				
DESIGNED: LAC	DRAWN: JKB	CHECKED: KDT	APPROVED: MJW	FIGURE #: <b>EI-14</b>
SCALE: AS SHOWN	DATE: 01/05/06	FILE: 3871EI-14	PROJECT #: 3871-002	



**Trench Location**

- 11/2004
- 10/2004
- 09/2004
- 08/2004
- 07/2004
- 06/2004
- 04/2004
- 03/2004
- 01/2004
- 12/2003
- 11/2003
- 10/2003
- 09/2003

- ✿ Nearshore Subtidal Sediment Sampling Location 2004
- ✿ Deep Subtidal Sediment Sampling Location 2004
- ✿ Subtidal Sediment Sampling Location 2003
- ▲ Qualitative Shellfish Surveys 2004
- ◆ Marsh Sampling Location 2004
- ◆ Marsh Core Sampling Location 2004
- Water Sampling Location 2004
- Water Sampling Location 2003
- ★ Intertidal Sediment Sampling Location 2003
- ★ Intertidal Sediment Sampling Location 2004

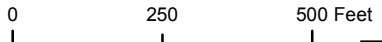
- ✿ Shellfish Sampling Location
- ▲ Chain Drag Location 2003
- ▲ Chain Drag Location 2004
- Lobster Pot Sampling Location 2003
- Absorbent Pad Sampling Location 2003
- Dive Sites
- Wetlands
- Nests
- Vernal Pool
- NHESP 2003 Priority Habitats for State-Protected Rare Species

**OILING**

- NO DATA
- CLEAN
- VERY LIGHT
- LIGHT
- MEDIUM
- HEAVY

**IRAC ESI**

- Public-Private Sand Beach (1A/1B)
- Mixed Sand and Gravel (1C)
- Marsh (1F)
- Rocky Shoreline (1E)
- Riprap, Groin, Jetty (1D)
- Visual Inspection of Marsh Area



ENTRIX

**E1-14**  
**New Silver Beach, Falmouth**  
**Comprehensive Activities**  
**Bouchard B No. 120 Oil Spill**  
**Buzzards Bay, MA**