# Oil Spill Prevention, Administration and Response (OSPAR) Fund

# **Annual Report**

# **FY 2002**



Oil Spill, Fishing Vessel Forager, Harbor of Refuge, Point Judith

## **APRIL 2003**

# **Rhode Island Department of Environmental Management**

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#### Introduction

The Oil Spill Prevention Administration and Response (OSPAR) Fund, RIGL Chapter 46-12.7, was created in 1996 (modifying a prior statute adopted in 1990) in the aftermath of the environmentally devastating North Cape oil spill. The fund was created, and is continually supported, by the assessment a \$0.05 per barrel fee on petroleum products received at marine terminals in Rhode Island. The purpose of OSPAR is multi-faceted. It provides funds to promptly respond, contain and remediate oil spills. OSPAR funds are also utilized to maintain a state of emergency response readiness through responder training and equipment acquisition. The fund further provides, in the event of a significant release, funding for emergency loans to workers affected by a spill as well as damage compensation of claims that cannot otherwise be compensated by responsible parties or the federal government. The fund, and the operations conducted under it, are managed by the R.I. Department of Environmental Management (DEM).

Section 46-12.7-7 of the statute requires the DEM Director to submit an annual report to the legislature on the OSPAR Fund. This report summarizes the status and use of the fund for FY 2002.

#### **Revenues & Expenditures -- FY02**

On July 1, 2002, the OSPAR Fund had a balance of \$8,427,766. During FY02, the \$0.05 per barrel fee resulted in the collection of \$2,472,771, after the 7% cost recovery. The Fund received no other monies in FY02 aside from the oil tax revenue (although there were some reimbursements associated with natural resource restoration work related to the North Cape oil spill). Total expenditures under OSPAR for FY02 were \$840,810 (plus an additional \$460,000 in encumbered funds charged in FY03). A detailed review of all expenditures is provided in the following sections.

#### **Activities – FY02**

#### **Summary**

During FY02, there were three significant oil spill incidents in Rhode Island: the sinking of the F/V Forager in the Harbor of Refuge off Narragansett; a release from a heat exchanger at the Slater Screen Print Company in Cumberland, which impacted the Miller River; and the removal of oil from an abandoned excavator crane on an island in the Blackstone River. (See detailed reviews of these operations, later in this report.)

With regard to pre-spill preparedness, the OSPAR Fund was used in FY02 to cover personnel and operating expenses, the PORTS Program, and a comprehensive natural resources data base for Narragansett Bay.

Personnel costs covered by the OSPAR Fund included the following: DEM's Emergency Response Team (full salaries of Environmental Response Coordinator and an Executive Assistant, partial salaries of four other team members); DEM's GIS Supervisor

(partial); and two staff members from DEM's Office of Waste Management (partial). These salary and benefit costs totaled \$490,699. (See detailed breakdown below.)

Operating costs covered by the OSPAR Fund included the following: vehicle maintenance and lease costs (\$187,037); mobile radios (\$28,485); three new outboard engines for the Department's enforcement vessels (\$50,675); and other miscellaneous equipment and supply costs (\$33,263). These operating expenses totaled \$299,460. (See detailed breakdown below.)

OSPAR Funds were also utilized to provide continued support for the Narragansett Bay Physical Oceanographic Real-Time System (PORTS), which provides continuous, real-time tide, current, and weather information to pilots to ensure safe navigation of oil barges and other large ships up and down Narragansett Bay. Total costs for this program were \$7,564 (with an additional \$385,000 in encumbered funds charged in FY03). A detailed summary of this program is offered later in this report.

OSPAR Funds, totaling \$43,087, were also used to develop and maintain a comprehensive statewide GIS application for natural resource damage assessment (URI/Narragansett Bay National Estuarine Research Reserve Cooperative Project), further described below.

DEM's Emergency Response team -- an umbrella program that incorporates the oil spill prevention and response functions -- maintained its high level of response with respect to oil spills and hazardous material incidents in FY02. There were 773 emergency response investigations undertaken by the team during the year. The activities of the Emergency Response program resulted in removal from the environment of 17,800 gallons of hazardous material, 6,700 cubic yards of oil contaminated debris, 11,000 gallons of oil, 300 pounds of mercury, and 136 potentially explosive propane cylinders.

#### **Breakdown of Expenditures**

#### **Personnel**

Environmental/Emergency Response

\$389,545

Full salaries and benefits of DEM's Environmental Response Coordinator and an Executive Assistant; and partial support for four other members of DEM's Emergency Response Team. All six personnel serve as first responders and are principally responsible for administering the OSPAR Program, both in terms of pre-spill readiness and post-spill response.

Geographic Information System (GIS)

\$33,376

Partial support of salary and benefits of DEM's GIS Supervisor. This individual is responsible for maintaining a comprehensive internet mapping application for planning, assessment and response to oil spills or other environmental emergencies in RI

marine waters. This individual is also responsible for developing and maintaining a complete data inventory on an internal network capable of supporting responders during an oil spill or other environmental emergency. In the event of a spill, the GIS Supervisor would coordinate the collection and dissemination of locational data documenting extent of spill, fish kills, etc. In the aftermath of a spill, support would also be provided for natural resource damage assessments to aid in the collection of damages from responsible parties.

# Division of Waste Management

\$67,778

Partial support of salary and benefits of two DEM employees – a Sanitary Engineer and Environmental Scientist – in the Department's Office of Waste Management. Both individuals are routinely engaged in oil-related investigation and remediation activities, which during FY02 included: Merva site, Arco/Amoco site, Chevron site, Getty terminal, Getty pipeline, Mobil site, Unocol site, several sites along Allens Ave. in Providence, Riverside Mills clenup in Providence, and Mobil pipeline leak in Cumberland.

	\$490,699
<b>Operating</b>	
Vehicle Maintenance & Readiness	\$174,664
Safety Equip. – Emergency Response	\$4,705
Marsh-Walker repairs (low ground-pressure backhoe)	\$1,985
Educational Supplies	\$4,106
Training & Travel	\$9,176
Emergency Response Vehicle Leases	\$12,373
Outboard Motors	\$50,675
Replacement of three outboard motors for DEM's Enforcement Vessels	
Cell phones, pagers	\$7,848
Computers/Printers	\$5,443

\$299,460

# PORTS Program<sup>1</sup>

Computer Maintenance

\$7,564

See overview of PORTS Program later in this report.

\$7,564

#### **Other**

Natural Resource Data Base for Narragansett Bay

\$43,087

Under this URI/Narragansett Bay National Estuarine Research Reserve cooperative project, monitoring data pertaining to a range of natural resources – fisheries, wildlife, other biological parameters – from throughout Narragansett Bay is being gathered and incorporated into a comprehensive computerized data base. In the event of a spill, the data base can be quickly accessed to determine the type of resources likely to be found in a given area at a given time of year. With this information, scientists can initiate targeted sampling, ahead of a spill, to gauge baseline information on natural resources that might be impacted by the spill, thereby facilitating more accurate damage assessment analyses.

\$43,087

TOTAL \$840,810<sup>2,3</sup>

<sup>2</sup>Plus an additional \$460,00 in encumbered funds charged in FY03: \$385,000 for PORTS Program, and \$75,000 for development of All-Hazard Emergency Response Plan.

<sup>3</sup>A total of \$165,905 of OSPAR Funds was also used to undertake various activities associated with the restoration of natural

<sup>&</sup>lt;sup>1</sup>An additional \$375,000 was encumbered and charged in FY03 to provide the annual state contribution for operation of the PORTS system (\$250,000) and to equip the pilots with computer upgrades to improve the portable navigation system (\$135,000).

resources damaged by the 1996 North Cape oil spill (see program overview, later in this report). These expenditures were all reimbursed (or are slated to be in FY03) by the North Cape Trustee Council.

#### **Post-Spill Clean-Up Activities**

#### FV Forager Sinking in Harbor of Refuge

On February 19<sup>th</sup>, 2002, the DEM was notified that the outbound fishing vessel (FV) Forager was returning to the Port of Galilee because it had begun to take on water. The vessel was able to motor back to the Harbor of Refuge where it sank in twenty feet of water.



FV Forager, Harbor of Refuge, Point Judith

At the time the FV Forager sank it was carrying three thousand gallons of diesel fuel. Fuel was observed leaking from the vessels fuel tanks. Booms were placed around the vessel. A dive team was called upon to seal the fuel tank vents.

On February 20<sup>th</sup> the salvage contractor attempted to move the vessel to shallower water. This unauthorized repositioning of the vessel resulted in significant structural damage to the boat and the release of additional fuel. The contractor was ordered to cease the operation and remove all fuel from the vessel before any additional salvage attempts. Because of poor weather an attempt to remove the fuel was delayed until February 23<sup>rd</sup>. Less than a hundred gallons of fuel remained in the tanks when they could finally be pumped.

Concomitant with the release of fuel from the FV Forager, approximately 40 dead surf clams were observed on Wheeler Beach. A strong diesel odor was also present. As a precautionary measure the DEM issued a fishing closure for the Harbor of Refuge. The Department of Health was also consulted regarding any concerns related to salt water intakes used to supply live tanks at the various locations within the Port of Galilee. The closure of state waters to fishing remained in affect until February 25<sup>th</sup>. During this period no additional impacts were observed. Weather conditions continued to deteriorate, resulting in the breaking up of the FV Forager. On March 9<sup>th</sup> the engines and remaining flotsam of FV Forager were recovered from the Harbor of Refuge.



Debris from the FV Forager

#### **Abandoned Crane in Blackstone River**

In 2002, the Blackstone River Watershed Council notified the DEM of an abandoned excavator located on an island in the Blackstone River. The island is north of Pratt Dam and was once part of the JM Mills Landfill operation. It is believed that the machine was abandoned on the Island over 25 years ago. The excavator is visible from the bike path as it runs from Rt. 123 to Rt. 116 in Lincoln. The excavator had sat in relative obscurity until the increased recreational use of the area brought about by the bike path. Investigation of the excavator by DEM revealed that the condition of the fuel and hydraulic tanks was poor. Vandalism and time had seriously compromised their integrity. The tanks were extremely susceptible to rainfall infiltration. Damage to the engine appurtenances was allowing small amounts of oil to discharge. It was also evident that under certain meteorological conditions the island flooded. Further investigation determined that there were approximately 600 gallons of fuel and hydraulic oil contained within the excavator. The department made the decision to remove the oil from the excavator to prevent a future oil spill from the excavator into the Blackstone River.

The oil removal method required the utilization of 600 feet of suction hose which was traversed from the island, suspended over the river, and terminated at a tank truck that had to be maneuvered onto the bike path. The removal operation progressed smoothly, the fluids were removed the tanks stenciled "MT" and a large potential oil release was eliminated. The cost of the project was \$8,000, which is 10 to 20 times less the cost of a cleanup had the oil been released from the excavator.



Abandoned Excavator, Blackstone River



Oil recovery operation across the Blackstone River

# Oil Spill in Miller River

On April 15, 2002 DEM responded to a complaint of oil in the Miller River in Cumberland. Upon inspection, oil sludge was observed along the bank of the river for several hundred feet. The Department initiated removal activities and began an investigation to determine the source of the oil. The river was traced upstream to a culvert that ran beneath Rte. 295. The storm drain served an industrial park. The industrial park drainage system was inspected, and it was determined that the oil originated from a heat exchanger at the Slater Screen Print company. The company took responsibility for the spill and assumed all cleanup costs. Remediation of the impacted reaches of the Miller River required ten days to complete. Over 300 of tons oil-contaminated debris were removed as well as 3000 gallons of oil and contaminated water. Water samples collected downstream of the spill area were analyzed. No oil or oil constituents were detected, which indicated that the oil did not reach the Pawtucket Reservoir system.



Oil Spill, Miller Stream, Cumberland

# **PORTS Program**

OSPAR continues to support the Narragansett Bay Physical Oceanographic Real-Time System (PORTS) that began operation in June 2000. PORTS, which is operated by the National Oceanic and Atmospheric Administration (NOAA), is comprised of five monitoring stations located in Narragansett Bay that monitor stage of the tide, currents and weather. This data is reported every six minutes to a central receiving computer, which processes the information. Real-time information regarding tides, current and weather can be accessed by telephone at 401-849-8236 and 1-888-301-9983 or on the internet at <a href="www.coops.nos.noaa.gov/nbports/nbport">www.coops.nos.noaa.gov/nbports/nbport</a>. NOAA continuously monitors the in-water sensors and conducts data validation. This 24/7 quality control allows NOAA to guarantee the accuracy of the data. As a result, the state-licensed pilots who guide the largest vessels into port in Narragansett Bay are able to make decisions on vessel movements with real time information. Accurate information to make navigational decisions is extremely critical because it is not unusual for a vessel to have less than three feet of clearance between its keel and the bottom of the channel.

State-licensed pilots can directly access PORTS information while traversing Narragansett Bay using the STARLINK portable navigation system purchased with OSPAR Funds. The systems have wireless capability that allows the acquisition of real-time data from PORTS as well as real weather information from the National Weather Service. The navigation systems are extremely sophisticated, utilizing a Differential Global Positioning System that accurately and safely determines the position of a vessel being piloted through the bay. The system uses the U.S. Department of Defense Global Positioning System and the Canadian Coast Guard network of differential radio beacons to provide accurate navigation

information in conjunction with accurately surveyed maritime charts provided by the U.S. Army Corps of Engineers.

#### **Emergency Response Preparedness**

In the aftermath of September 11<sup>th</sup>, the role of emergency responders continues to be redefined. It has become necessary to allocate a greater percentage of the Department's limited emergency response resources to terrorism response and domestic preparedness. During FY 2002 the DEM emergency response program transitioned into a new mission. The five-member Emergency Response team is an integral part of the state's terrorism preparedness and consequence response plan. The team provides on-scene, first responder capabilities, as well as incident management as part of the state emergency operations center (EOC). The response team in conjunction with the Fire Marshall's Office provide the only state agency, weapons of mass destruction (WMD) first responder asset. Since the beginning of the Anthrax scare and continuing through FY02 over 450 suspicious items have been investigated and screened by the emergency response team. Through a Department of Justice (DOJ) grant secured by the Rhode Island Emergency Management Agency (RIEMA) the DEM emergency response program has received specialized equipment for addressing the consequence of a terrorist incident. The equipment includes personnel protective equipment and detection equipment for chemical, radiological and biological agents. The team has participated in several drills and training exercises. DEM personnel have also participated in the DOJ training programs for chemical weapon response, which included a live chemical nerve agent exercise, and incident response to terrorist bombing.

While much of the above-described activity does not relate to oil spill incidents per se, the OSPAR Program has become an integral component of the State's overall disaster response readiness program, with many of the same individuals serving in overlapping capacities. The integration of oil spill response readiness and environmental emergency response generally has led to significant enhancements in both efficiency and effectiveness.

#### **Natural Resource Restoration**

During FY02 the North Cape Oil Spill Trustees continued to carry out restoration projects for the natural resources damaged during the oil spill pursuant to the October 2000 Consent Decree. These projects included the following significant restoration activities.

Several shellfish restoration projects that seeded quahogs and scallops in the coastal ponds were successfully carried out. Over 97 volunteers contributed approximately 400 hours in the reseeding of 640,000 bay scallop seed in Point Judith Salt Pond. An expanded program, which will also include oysters, is scheduled for 2003. In addition, forty-four pair of piping plovers nesting along Rhode Island's beaches were provided protection through the Rhode Island Piping Plover Restoration and Education Project, funded by the North Cape settlement funds. The 44 pairs produced 90 chicks that survived to achieve fledging. This is the highest productivity recorded during the history of the project.

DEM and the National Oceanic and Atmospheric Administration also participated in the monitoring of the responsible party's stocking of in excess of 200,000 lobsters in 2002 in accordance with the North Cape Oil Spill settlement requirements. The settlement mandates restocking 1.248 million female v-notched legal-sized lobsters into the waters off Block Island Sound to compensate for the nearly 9 million lobsters that were killed by the oil spill.

## **Outlook & Projections**

The Department will continue to upgrade and maintain its oil spill response capabilities in FY 2003. The FY03 outlook includes some additional provisions, which are described below. Aside from these additional provisions, projected OSPAR-related expenditures during FY03 are expected to be about the same as FY02. Taking these factors into account, and barring any major spills and associated response needs, the balance of the Fund is projected to drop to \$6.5 million at the close of FY03, and then to \$3.7 million at the close of FY04.

#### All-Hazards Response Plan

During the summer of 2002, DEM launched the development of an A*ll Hazards* response plan, aimed at better coordinating the department's response to oil spills and other natural and man-made incidents that threaten public health and safety as well as the environment. This project, funded in part of OSPAR, will be completed in FY 2003.

# Coastal Habitat Restoration - \$250,000 Appropriation

In June 2002, the RI General Assembly enacted legislation (*RIGL 46-23.1*) that established a coastal and estuarine habitat restoration program administered by the Coastal Resources Management Council (CRMC). The bill provides \$250,000 in OSPAR funding in FY 2003. The new program aims to restore degraded coastal and estuarine habitats. The \$250,000 in seed funding will also be used to leverage additional federal funding for similar restoration projects.

# <u>Providence River Dredging – \$3.2 Million Appropriation</u>

With the FY 2003 budget, the RI General Assembly committed \$5.4 million from the OSPAR Fund cover the first portion of the state's share (\$9 million total) of the Providence River and Harbor Maintenance Dredging Project (with the \$3.6 million balance to be drawn from the Fund in FY04). The initial \$9 million estimate has since been reduced to \$7.3 million. Accordingly, \$3.2 million is now slated to be drawn from the Fund in FY03, with the balance of \$4.1 million to be drawn in FY04. When the dredging project is completed, 6 million cubic yards of material will be dredged and a seven-mile stretch of the Providence River Channel will be returned to its federally authorized dimensions of 40 feet of depth and 600 feet of width, helping to ensure safe passage of ships, including those delivering oil, into and out of the Port of Providence.

## **Contact Information**

For further information regarding this report or the activities of the emergency response team or OSPAR, contact Michael Mulhare, RIDEM Environmental Response Administrator, at 401-222-4700 extension 7124 or at mmulhare@dem.state.ri.us.