

Oil Spill Prevention, Administration & Response (OSPAR) Fund

Annual Report

FY2022



Rhode Island Department of Environmental Management Office of Emergency Response

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1: INTRODUCTION

The Oil Spill Prevention Administration and Response (OSPAR) Fund (RIGL Chapter 46-12.7) was created in 1996 following the environmentally devastating North Cape oil spill. The OSPAR Fund is continuously supported through a fee of \$0.05 per barrel of petroleum products received at marine terminals in Rhode Island. The purpose of OSPAR is multi-faceted. It provides funding for the prompt response, containment, and remediation of oil spills; emergency response readiness via trainings and equipment acquisition; emergency loans for affected workers in the case of significant releases; and damage compensation of legitimate claims that cannot otherwise be compensated by responsible parties or the federal government. The funds and the operations conducted in accordance with the statute are managed by the Rhode Island Department of Environmental Management (DEM).

DEM's Office of Emergency Response (OER) is funded, in part, by the OSPAR Fund as Rhode Island's first line of defense in protecting public health, safety, and welfare in an environmental emergency. Like police officers and firefighters, DEM's emergency responders are prepared to handle a great variety of incidents. These incidents may range from a spill of a few gallons to a petroleum tanker rollover, an abandoned drum to bioterror weaponry, and many other possible threats to environmental and public wellbeing. Highly trained first responders are on-call 24 hours a day and 7 days a week. They are tasked with responding to and remediating incidents posing imminent dangers.

Despite an abundance of effective preventative measures, hundreds of incidents possess the potential to threaten the environment daily. Emergency responders are prepared to limit risks from oil and chemical spills, failed tanks or pipes, fires and fumes, overturned trucks, sunken vessels, litter, weapons of mass destruction and abandoned drums amongst many other possibilities. OER responds to several hundred incidents each year. The office is also responsible for the registration and oversight of over 600 facilities with Aboveground Storage Tanks (AST) exceeding a combined capacity of 500 gallons located throughout Rhode Island. Many of these activities are supported by the OSPAR Fund.

Since the enactment of OSPAR, Rhode Island has experienced an increase in environmental impacts from climate change including intensified storms, warming air and waters, increased annual rainfall and rising sea levels. The consequences of these changes further strain our coastal and riverine habitats and infrastructure. During instances where rainfall or storm surges lead to flooding, releases of oil and hazardous materials into the environment increase and necessitate emergency actions and remediation. With our changing climate, there is a growing urgency for strong preparedness and training for responding to weather related issues.

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 FY2022.

2: REVENUES & EXPENDITURES

The OSPAR account started FY2022 with a balance forward of \$3,455,832 and ended FY2022 with a balance of \$3,148,931. During FY2022, the \$0.05 per barrel fee resulted in the collection of \$1,591,124 after the 10% cost recovery fees per RIGL 46-12.7-4.1(g). The personnel, operating and project expenditures for FY2022 totaled \$1,898,025. Overall, the OSPAR Fund remained relatively stable during FY2022, ending with a closing balance \$306,901 less than the balance forward from FY2021. This was due to an increase in expenditures. The expenditures specifically listed in sections (a) through (e) represent the larger costs associated with OSPAR funding for FY2022.

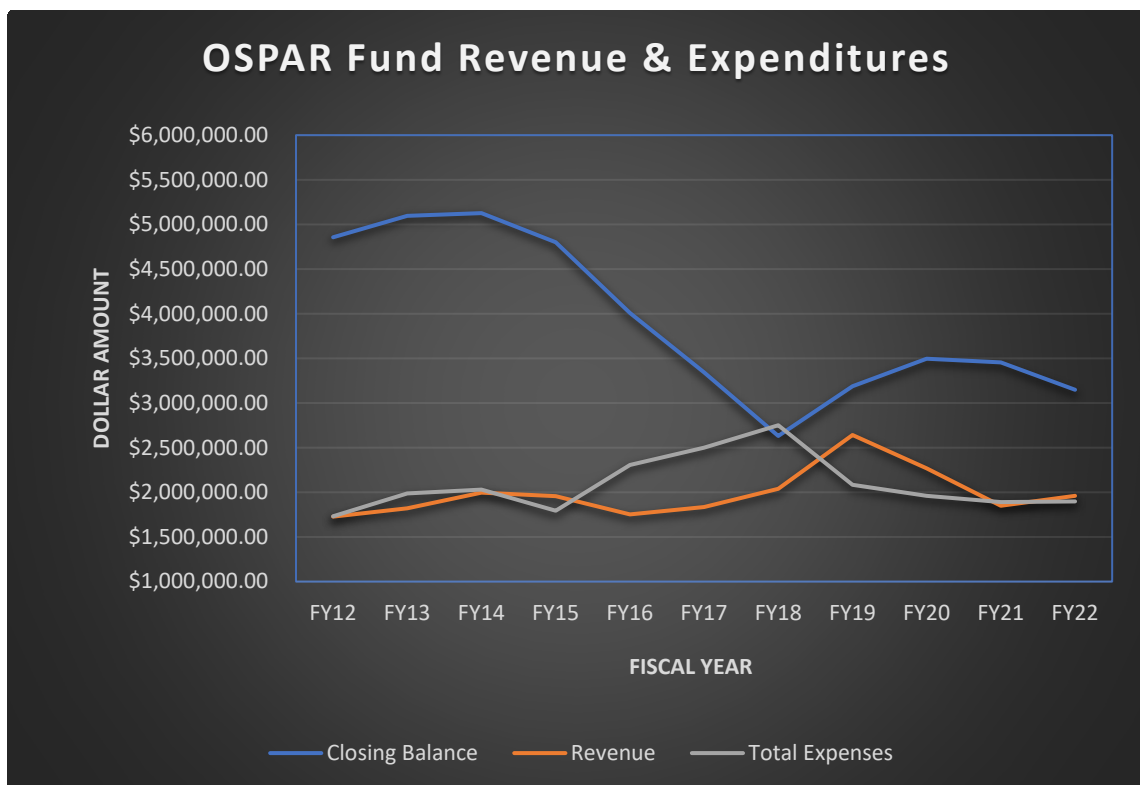


Figure 1. OSPAR Fund revenues & expenditures over the past 10 fiscal years.

3: PERSONNEL COSTS

- Partial salary and benefits for the members of the DEM Emergency Response team. All four personnel serve as first responders and are also responsible for administering the OSPAR Program both in terms of pre-spill readiness and post-spill response.
- Partial salary and benefits for the DEM Emergency Response Administrator.

- An Administrative Officer who supports the Emergency Response Office and the OSPAR program.
- A State Meteorologist to provide weather information before, during, and after spill response activities, as well as trending climatological information for pre-spill preparedness.
- A Tier II Specialist to provide information on petroleum and chemical storage facilities regarding amounts, storage locations, site plans and emergency contact information.
- Partial support of salary and benefits of DEM geographic information system (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 Rhode Island 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 coordinates the collection and dissemination of spatial data, documenting the extent of spills, fish kills, etcetera. In the aftermath of a spill, support is also provided for natural resource damage assessments to aid in the collection of damages from responsible parties.
- Partial salaries and benefits for personnel from the DEM Office of Land Revitalization & Sustainable Materials Management, who oversee the investigation and cleanup of properties contaminated from the release of oil.

a. Personnel Costs	\$1,066,254
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b. Major Operating Expenses	\$301,131
Vehicle Purchases, Maintenance & Readiness	\$56,632
Cell Phones & IT Support	\$9,947
Safeware Inc.	\$107,953
Hazardous Waste and Petroleum Emergency Response	\$89,266
Refunds	\$11,644
Supplies: Office, Scientific, Miscellaneous Expenses	\$25,689
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c. Capital Projects	\$40,769
Bowditch Navigation Computers & GyroPilot Co.	\$40,769
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d. Other Projects Supported by OSPAR	\$489,871
Audubon Society – Narragansett Bay Estuarine Program	\$103,876
Save the Bay Assistance at Quonnie Boat Ramp	-

Coastal and Estuarine Habitat Restoration Trust Fund	-
Water Quality Monitoring Team	\$385,995
EMA Marine Strike Team	-

e. Total Expenditures \$1,898,025

4: EMERGENCY RESPONSE CLEANUP COST

a. Response Cost Reimbursement Procedures

The OER utilizes OSPAR funding for the prompt response, containment, and remediation of releases. These activities can require responders to hire contractors for responses to incidents without a responsible party (RP) available on-site, incidents on state properties (highways, parks, or land), or incidents posing third party consequences to public health and the environment. When incidents require cleanup, the RP is financially responsible for covering any subsequent costs. Cleanup costs recovered by OER are then funneled back into the OSPAR fund. Therefore, in instances devoid of a viable RP, the OER cannot recover OSPAR funds. However, in many cases, after thorough research, investigation, and review of available information, the OER seeks reimbursement of expenditures from identified RPs. The OER provides two opportunities for the RP to pay for the incident caused by their actions. OER notifies the RP with a first letter and request for reimbursement. If that goes unpaid, a second letter from OER requiring cost reimbursement for expenditures goes out a month later. When the RP fails to pay for the cleanup cost, a package of our expenditures is sent to the Central Collections Unit (CCU) within the Department of Revenue (DOR). When the debt is referred to CCU, collection actions may include, but are not limited to, the following:

1. Interception of Rhode Island tax refunds,
2. A civil suit brought against the RP in state court by the CCU,
3. Attachment of wages or other compensation being paid to the RP,
4. Garnishment, seizure, or levy against bank accounts.

We continue to work with CCU and supply information upon request for the recovery of expenditures from delinquent RPs. All recovered funds go back into the OSPAR account.

b. Response Cost Reimbursement Via National Pollution Fund Center (NPFC)

When possible, the OER also utilizes the United States Coast Guard (USCG) National Pollution Funds Center (NPFC) as an alternative to reimburse OSPAR funding. General claim requirements under the NPFC rely upon guidelines set by the Oil Pollution Act (OPA). Any claims submitted through this fund must have occurred after 1990 and include the discharge of oil or substantial threat of an oil discharge to navigable waters in the United States. The OER works frequently with the USCG on incidents involving our state's

coastal waters, including the Narragansett Bay. This funding solution offers an alternative to reimburse the OSPAR funds especially when a RP cannot be identified. It also allows money to be allocated elsewhere.

c. Cost Recovered

Since we started working with CCU in FY2019, we had 108 Cost Recovery Cases totaling \$157,208.42. Of those cases, 85 have been resolved by OER for a total requested amount of \$130,119.33. As part of settlement agreements with these 85 RPs, OER has accepted \$129,325.52 as payment in full. Some of the RPs agreed to established payment plans with DEM but have since stopped paying. In FY2020, \$93,868.20 was recovered, in FY2021 \$18,651.05 and in FY2022 \$16,806.27. To date, 13 cases have been referred to CCU for a total amount of \$26,197.47. However, a portion of these funds were collected by OER prior to CCU beginning collection activities. CCU has resolved 5 of the 13 cases for \$9,945.29 with a remaining outstanding balance of \$16,252.18.

5: EMERGENCY RESPONSE ACTIVITIES

a. Response Activities

The Office of Emergency Response (OER) operates as an all-hazard response program, incorporating the oil spill prevention and response functions carried out by DEM in Rhode Island. In FY2022, there were 546 emergency response cases handled by the OER responders. While some annual variation persists, yearly trends largely remain constant for OER response activities. This fiscal year the total response activities were similar to the previous year. However, as the country continues to bounce back from the COVID-19 pandemic, the number of incidents will likely return to pre-pandemic figures. All incidents are broken down into two primary categories: oil spills and hazardous material responses. Below is a graph showing the number of incidents across the past decade.

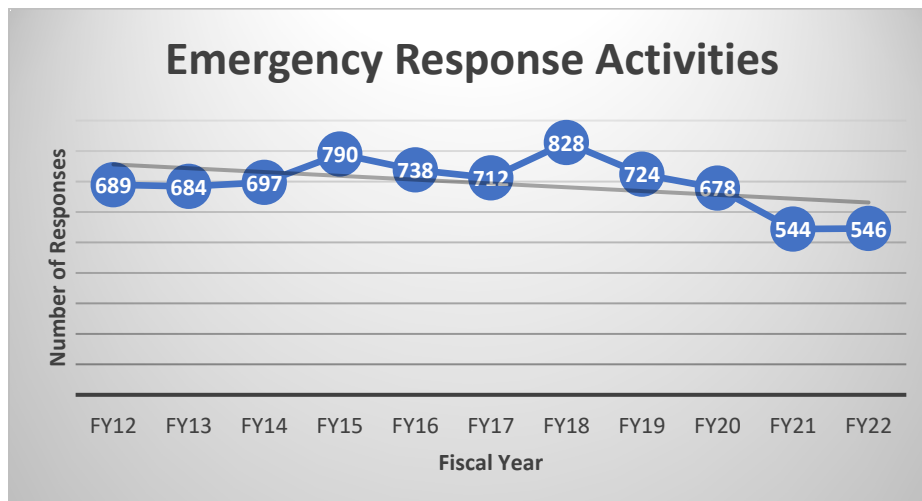


Figure 2. The number of emergency response activities for the previous 10 fiscal years.

b. Oil Spill Response

The OER response team responded to 419 oil spills in FY2021. Oil spills amassed 76.7% of the total number of incidents responded to by OER responders. The amount of oil product and debris remediated during these incidents is estimated to be 12,447 gallons of product and water mixture, 576 tons of oil spill debris. Remediation work was completed by the OER, responsible parties, or contractors hired by either the OER or responsible parties. To ensure compliance with State and Federal regulations, all remediation work was overseen by the OER staff.

Circumstances causing oil spills and their consequential environmental impacts vary. The primary categories of oil spills and their relative percentages for FY2022 are charted below:

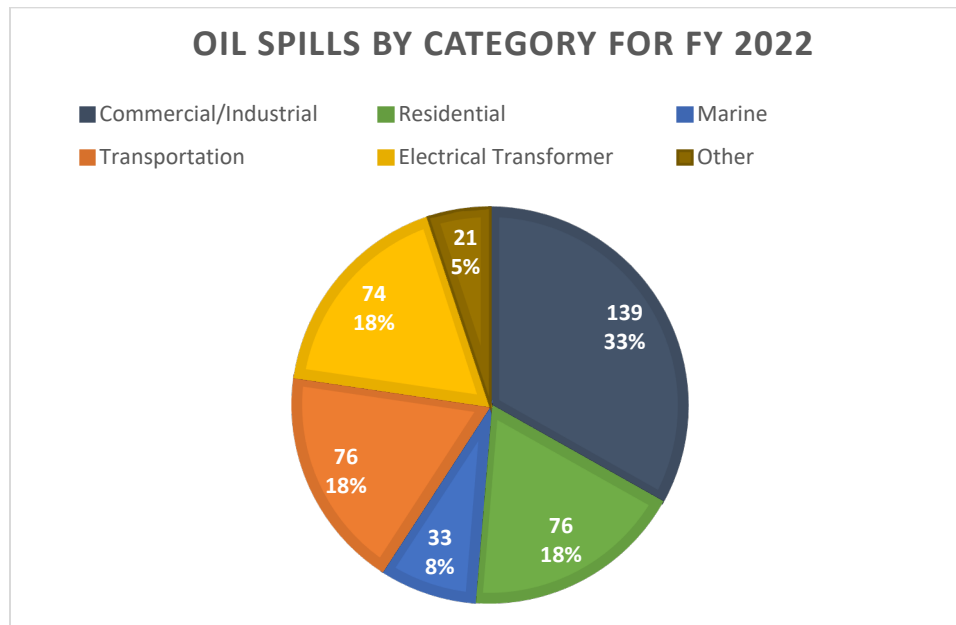


Figure 3. The breakdown of oil spill incidents responded to by the OER in FY2022.

The greatest percentage of oil spills during FY2022 was caused by commercial/industrial incidents at 33%. This is a return to normal, as last year residential spills surpassed commercial/industrial for the first time in over a decade, which was likely attributable to the COVID-19 pandemic. In FY2022, there were 76 residential oil spills reported to the OER. Oil spills in residential areas can be quite concerning as drinking water wells, ground water, and soil can be contaminated, thus compromising water quality for affected individuals. Additionally, septic systems can become fouled and require replacement, odor and health problems can infiltrate homes, and nearby storm water drains, sewers, ditches, and surface water tributaries are at risk for contamination. The OER webpage provides a [pamphlet for residential oil tank information](#) to help homeowners minimize

the risk of oil spills. DEM continues to conduct public outreach through press releases, television special reports, and presentations to oil companies via insurance seminars.

The second largest percentage of oil spills were residential and transportation. Both totaled 76 incidents, thus comprising 18% of total oil spills. Close behind were electrical transformer oil spills totaling 74 incidents. Electrical transformer spills comprised around 18% of total oil spills which marks a decade high for the category. The primary causes of electrical transformer releases are damage inflicted by motor vehicle accidents or high wind weather events, the latter being far more prevalent. During FY2022, high winds were the cause of 33 electrical transformer releases, totaling approximately 45% of all electrical transformer related incidents. Electrical transformer spills will likely continue to increase in the future as climate change spurs increasingly severe weather events. OER personnel engage with electric companies to discuss electrical transformer issues and ensure proper cleanup of mineral oil dielectric fluid (MODF) releases and PCB contaminated transformer oil. Marine incidents were responsible for 8% of all oil spills, the continuation of a decade long trend. DEM and the United States Coast Guard (USCG) conduct workshops at the Port of Galilee to reduce oil spills in the Narragansett Bay. In these workshops commercial fishermen are educated on State and Federal requirements for proper containment and disposal of any generated oily waste.

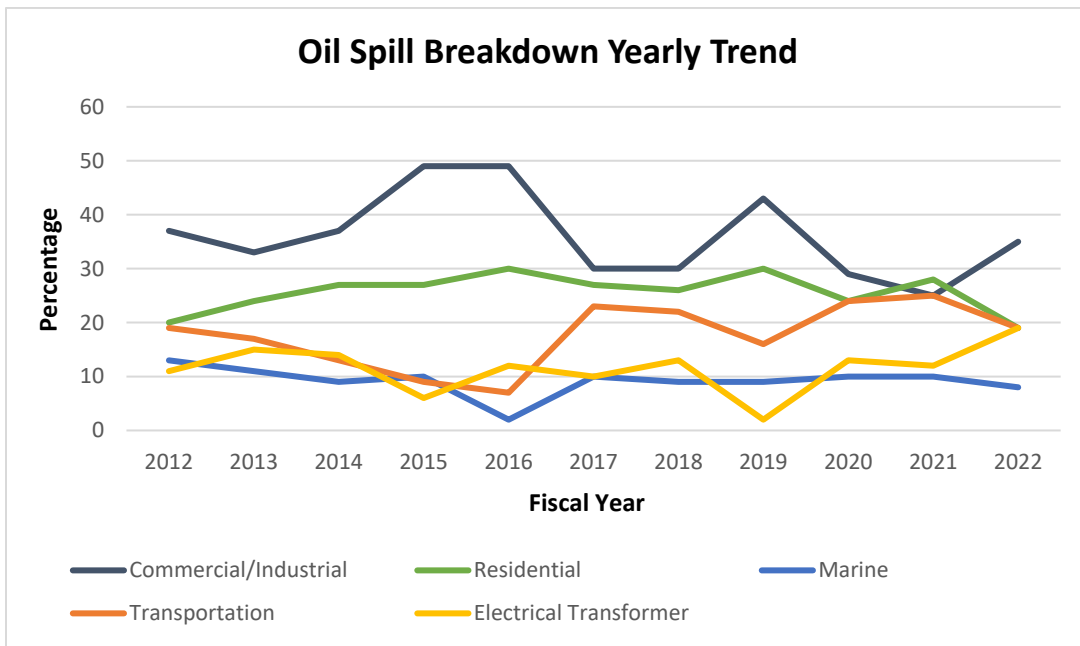


Figure 4. The trend of oil spill categories across the previous 10 fiscal years.

c. Hazardous Material Response

The OER response team responded to 37 hazardous material incidents during FY2022, significantly down from previous years. These incidents amassed 6.8% of all OER response activities. It is estimated that 13,985 gallons and 1580 pounds of hazardous waste was remediated from the environment. Remediation work was completed by the OER, responsible parties, or contractors hired by either the OER or responsible parties. To ensure compliance with State and Federal regulations, all remediation work was overseen by the OER staff.

6: EMERGENCY RESPONSE INCIDENTS AND EXERCISES

a. Playin' Hooky Vessel Release at the Upper Point Judith Pond

On May 9, 2022, DEM OER responded to an incident at Marina Bay Docking in South Kingstown. The marina was located on Upper Point Judith Pond. Over the previous weekend, several diesel sheens were found covering large portions of the pond. Several complaints from boat owners indicated there was a heavy diesel odor emanating from the water. OER personnel arrived at the marina and met with the South Kingstown harbormaster. The responsible boat was identified to be the 40 foot fishing vessel "Playin' Hooky". Diesel was being pumped out of the boat's bilge every hour or so, releasing directly into the water and traveling across the pond. Soft boom was placed around the vessel, and the United States Coast Guard (USCG)

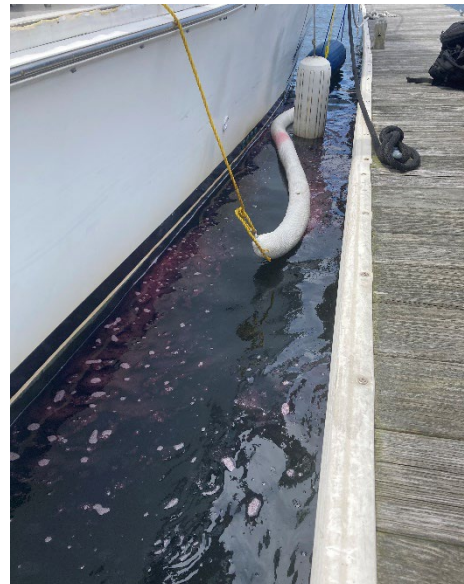


Image 6.1 - Diesel being pumped from the bilge

was contacted along with the boat and marina owners. A USCG petty officer, the marina owner, and a representative from the boat's owner all responded to the scene.



Image 6.2 - Diesel being recovered from the bilge

The boat owner's representative concluded that a damaged fuel line in the boat was leaking diesel into the bilge, which was consequently being pumped out into the water. According to the boat owner, the boat was filled to capacity with diesel prior to entering the water. At the time of the incident, the tank was approximately three quarters full. Since the tank was 300 gallons, it was estimated that around 75 gallons total released into the pond, a significant amount of diesel. Soft boom was utilized during the cleanup to remove as much diesel as possible. . During the cleanup and repair operations, several 5-gallon buckets of diesel were recovered from the bilge, and a total of approximately 20 gallons were recovered. The repairs were ultimately made to the vessel's fuel line, and the diesel was no

longer being pumped into the pond.

b. Illegal Waste Oil Dumping in Providence

On June 1, 2022, DEM OER received a call regarding several abandoned drums of waste oil in a parking lot. Providence Fire Department claimed that some oil leaked and formed three small puddles across the pavement. They deployed 14 bags of speedy dry



Image 6.3 - pools of waste oil gathered on the asphalt parking lot



Image 6.4 - abandoned drums of oil and organic solvents

absorbent material to soak up the spilled oil. OER responded to the scene and observed several drums of waste oil, along with multiple puddles with waste oil and chewed up asphalt.

The drums were not labeled, and some were tilted on their side or completely toppled over. The OER responder righted two drums which contained around 10 gallons of solidified waste oil sludge and 20 gallons of an organic solvent and waste oil mixture. Due to the forecast predicting light rain, a contractor was hired to remediate the incident, which consisted of excavating the impacted asphalt and removing the drums. Rain can complicate oil spills, as the water mixes with oil to create rainbow sheens. These sheens can travel long distances along the roadway and become an eyesore to the surrounding public. Sheens can also travel through catch basins and drain out into the Narragansett Bay, contaminating everything in its path. It does not take a significant amount of oil to cause these extensive sheens. Following cleanup activities, confirmatory soil samples were also taken to ensure the site was compliant with DEM regulations. Unfortunately, there were no cameras present at the site nor elsewhere in the vicinity of the dumping. The guilty party was never identified.

c. [Tabletop Exercise for a 1,000 Barrel Home Heating Oil Spill](#)

On November 16, 2021, OER participated in a tabletop exercise (TTX) for a hypothetical heating oil spill at Inland Fuel Terminals in Tiverton, RI. The TTX was hosted at Tiverton Casino Hotel. Agencies in attendance included RIDEM OER, RIDEM Marine Fisheries, USCG Sector Southeastern New England, Massachusetts Department of Environmental Protection, Tiverton Fire Department, Portsmouth EMA, Fall River Fire Department, Moran Environmental Recovery, and Inland Fuel Terminals. The hypothetical oil spill consisted of 1000 barrels, or 42,000 gallons, of heating oil released from a faulty hose during an offload transfer. The body of water affected was Mount Hope Bay, and GRP #46 was utilized for the environmentally sensitive Nannaquaket Pond. The spill trajectory was calculated using hypothetical weather conditions generated by NOAA, and the oil spill spread south of the release impacting the coastline of Tiverton, Portsmouth and Fall River. When spills occur in coastal waters impacting multiple states, the event becomes a cross-border incident. In this case, Rhode Island would work with neighboring states such as Massachusetts to mitigate environmental damages. Rhode Island and Massachusetts will conduct more cross-border drills in the future to facilitate our preparedness.

An ICS-201 Incident Briefing Form was used to outline initial response objectives for the TTX. Primary response objectives included: provide for the safety and security of responders, and maximize protection of public health and welfare; initiate actions to stop or control the release source and minimize total volume released; contain, treat and



Image 6.5 - RIDEM and USCG personnel conversing at the exercise

recover spilled materials from the water; conduct and assessment and begin shoreline cleanup efforts; identify and protection environmentally sensitive areas; and maintain situational awareness. Primary objectives for the TTX meeting included: validating internal and external notification procedures; evaluating the composition of Unified Command; identifying the facility, local, state and federal capabilities for responding to a significant oil spill; assessing the existing GRPs; and examining air monitoring response efforts.

The first objective was accomplished by decoding a line of notifications to be used by responders on scene. Members from each participating organization reported out the list of other organizations they would contact upon responding to the incident. The second objective was accomplished by establishing a predetermined unified command of the three leading agencies. Additionally, it was determined the local Tiverton Fire Chief would also be of help in the Unified Command post joining the DEM OER Chief, the federal on-scene USCG coordinator, and the responsible party. The third objective was accomplished through agencies reporting out the resources they have on-hand in the case of a significant environmental emergency, including the location of their resources and how they are deployed. Examples of such resources include boom as well as personnel. The fourth objective was accomplished by presenting the current GRP for the area of interest for this TTX, and discussing the details of GRPs, including their content and creation. The fifth and final objective was accomplished with a brief discussion of air monitoring, including its importance in legal issues and long-term environmental assessment. Agencies reported out their air monitoring capabilities and explained the different processes behind monitoring for air pollution. The TTX ended with a quick "parking lot" where topics necessitating elaboration were expanded upon and eventually concluded. The USCG took away highlights from the TTX and noted improvements they would be making in their Area Contingency Plan (ACP). Ultimately, the TTX was a massive success!

d. Passeonkquis Cove Tabletop Exercise and Drill

On October 15, 2021, the Office of Emergency Response (OER) team met with Shell terminal personnel to conduct a tabletop exercise (TTX) for a hypothetical release of diesel fuel into Passeonkquis Cove in Warwick, RI. The scenario was as follows:

On Friday, October 15, 2021 at approximately 08:00, the “Marine Vessel Bad Day” was discharging its cargo of Ultra Low Sulfur Diesel (ULSD) into Tank 2 at the Shell terminal. Another vessel called “Marine Vessel Really Bad Day” was transiting outbound from another terminal when it apparently lost steering and crashed into the dock between the ship and shore, thus causing a back feeding of ULSD from Tank 2 into the Providence River through a break in the dock line. The ship shut down its cargo operations immediately. Response time to the tank was approximately 10 minutes (5 minute reaction time to get to tank, and 5 minute closure time). Based on this estimate of events, a ship discharge rate at 12000 barrels per hour, and the back flow gravity rate from tank, it is estimated that between 75000 and 100000 gallons of ULSD were lost into the coastal waters.



Image 6.6 - OER Staff meeting with the Shell Terminal Staff

OER personnel addressed next steps for the simulated incident with Shell Terminal staff. The next steps determined were the following activities: ensuring proper notifications, containing the release, setting up an incident command post and staging area, obtaining sample of the spill source material, instituting Geographic Response Plans (GRPs), evaluating environmentally sensitive areas,

utilizing oil skimmers to remediate the impacted waters, conducting Shoreline Cleanup Assessment Techniques and reconnaissance, setting up decontamination areas, working in conjunction with the United States Coast Guard, notifying through the chain-of-command, obtaining fractionation tanks and reviewing decanting requirements. Following this TTX, OER staff headed to Passeonkquis Cove to test the booming strategy for the specific area utilizing the relevant GRP.

As a part of the drill, curtain boom was deployed by OER staff to protect an inlet in Passeonkquis Cove. OER arrived onsite at 09:15 following the TTX at Shell Terminal. The OER boat and boom trailer were brought to the drill site. They first set the anchor points with metal fence post tied off in a series of three post on each side of the inlet to connect the boom. Next, DEM personnel



Image 6.7 - OER staff successfully deployed the curtain boom to block the inlet

removed the curtain boom from the trailer and towed it out onto the water. The boom was stretched from the south shore to the north shore of the cove at the inlet. The wind and tide started to push the boom into the inlet and bowing the boom. The bow allowed water to underflow the boom and pass under as oil would do. Responders then set anchors to bow the boom in the opposite direction. The outward facing bow will force oil to run along the boom and collect at the intersection of the beach and the boom. The boom had to be adjusted throughout the tide cycle but appeared to be working very well. The exercise was a success, and the GRP was successfully tested!

7: PORTS PROGRAM

The OSPAR Fund 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 monitoring stations located in Narragansett Bay that monitor the tide, currents, and weather. The data is reported every six minutes to a central receiving computer which processes the information. This real-time information can be accessed at [PORTS: Narragansett Bay PORTS - NOAA Tides & Currents](#). 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 can make decisions on vessel movements with real-time information.

State-licensed pilots can directly access real-time data from PORTS while traversing Narragansett Bay using the new Navicom Dynamics GyroPilot purchased with OSPAR funds. It can also obtain real-time weather information from the National Weather Service. The new GyroPilot system is one of the most accurate systems at much less the cost. The Navicom system is a situational awareness tool for Pilots, who require an independent mGNSS position for more precise operations or manoeuvres and to augment the information coming from the pilot plug. Pilot Plug

devices provides the means to enable pilots and other mariners to connect their own laptop PC or other portable device to a vessel's Automatic Identification System (AIS). With the Gyro Pilot's ability to wirelessly link to the Pilots software and charts, the system is an accessible option to upgrade to higher performance, accuracy, and safety for determining the position of a vessel being piloted through the bay, providing sub-meter accuracy necessary for precise navigation in Rhode Island waters. The goal of the program is to provide the greatest degree of safety possible for commercial ship traffic in Narragansett Bay, and the Ports of Providence, and Quonset.

8: TRAINING ACTIVITIES

34-Hour TIMS Training
24-Hours Public Safety CBRNE Sampling at Camp Fogarty, East Greenwich
3-Hour Virtual APRA Training from DOA
2-Hour ERMA Virtual Training from NOAA
2-Hour Toxic Release Inventory EPA Virtual Training
24-PER-354 Radiation Operations Training from Counterterrorism Operations Support (CTOS)
2-Hour PHMSA Training from Paradigm Services
1-Hour NOAA PHMSA Training
4-CERES Plume Modeling Software Training
12-Hour Shoreline Cleanup Assessment Technic Training
24-Hour HazMat Operations Training from EPA
2-Hour HazMat Training at Camp Fogarty
2-Hour Doffing and Donning Training at DEM
4-Hours SCBA Training at DEM
4-Hour PER-355 Radiation Instruments from CTOS
4-Hour PER-354 Radiation Instruments Operations from CTOS
4-Hour Regional Response Meeting between the EPA, USCG & NE States
1-Hour Climate Change Webinar at URI
4-Hour November 26 Training & Calibrations
1-Hour Seagrant Webinar
4-Hour Environmental Business Committee Presentations
2-Hour PFAS Dark Waters Webinar
4-Hour Southern Drift TTX
1-Hour Webinar EPA GenX
8-Hour Critical Infrastructure/Key Resources AWR-213
2-Hour Chernobyl Lecture from the University of Salford
1-Hour Active Shooter Training
3-Hour HazMat Training at Dawley Park
1-Hour Oil Animal Training from the Tri-State Rehabilitation
2-Hour AP4C Training
2-Hour Tabletop Exercise (TTX) At USCG for Inland Fuels Spill
8-Hour Operation Safe Return TTX from the EMA
2-Hour Shell Drill TTX
5-Hour GRP Testing Muddy Cove
1-Hour Melamine Webinar Collaborative on Health & Environment
1.5-Hour Toxic Release Inventory, an EPA Webinar
9-Hour Full Scale Exercise CRICEX at the Putnam Wheelabrator
4-Hour TTX CRICES at the Putnam Safety Complex
3-Hour HazMat Training at Dawley Park
3-Hour CAMEO Training

2-Hour Lessons Learned from COVID from the Oil Spill Task Force
1-Hour Environmental Justice Screening & Mapping Webinar
1-Hour MX908 Refresher Lesson
2-Hour ToxiRAE Pro Basic Maintenance Course
2-Hour MultiRAE Pro Basic Maintenance Course
8-Hour Basics of RI COOP and BOLD Planning Course at URI
6-Hour Traffic Incident Management Systems Training
80-Hour Hazardous Materials Technicians Course

9: HABITAT RESTORATION PROGRAM

In June 2002, the Rhode Island General Assembly enacted legislation (RIGL 46-23.1) that established a coastal and estuarine habitat restoration program administered by the Rhode Island Coastal Resources Management Council (CRMC). Funding from OSPAR continues to be transferred to CRMC in accordance with RIGL § 46-23.1-3. The financial support is funded through the Rhode Island Coastal and Estuarine Habitat Restoration Trust Fund (CEHRTF). Habitat restoration projects are selected from recommendations by the Technical Advisory Committee and approved by the CRMC. Each year, with approval from the CRMC, the CEHRTF advisory committee allocates up to \$225,000 from the OSPAR Fund to habitat restoration projects throughout Rhode Island.

In general, proposals are evaluated based on the following: the type of habitat; the extent of the project's restoration efforts, whether the project has been identified as a priority through any statewide or regional planning efforts; the potential community benefits, and the capacity of the lead entity to carry out, maintain and monitor the project. In recent years, climate change and sea level rise considerations have been added into the scoring criteria.

Since the inception of the CEHRTF, CRMC awarded \$3.6 million for 136 projects which have leveraged more than \$28 million in matching funds. In its 17 years, the CEHRTF has helped to restore over 300 acres of Rhode Island habitat. The following short project descriptions are taken from the CRMC website. Additional information can be found on the CRMC website at [RI CRMC Habitat Restoration](#).

a. Norman Bird Sanctuary Habitat Restoration: Invasive Removal and Native Planting - **\$25,000 (Middletown)**

This native and invasive plant species project includes two priority restoration sites on Norman Bird Sanctuary's preserved 300+ acre property in Middletown, Rhode Island. The sites include the Third Beach Road site and the Hanging Rocks Road site. Funding from the Rhode Island Coastal and Estuary Habitat Restoration Fund has previously supported several small dune planting projects at the



Image 9.1 - Norman Bird Sanctuary (courtesy of www.normanbirdsanctuary.org)

Sanctuary's beachfront property at Third Beach. These two vulnerable areas were selected to address habitat areas that are priority areas for invasive plant removal and are also vulnerable to changing habitat types due to the implications of climate change. This is a construction project consisting of the removal of invasive plants and the planting of native plant species. The benefits of habitat restoration with native plant species will assist with the reduction of the spread of invasive species, the creation of improved wildlife habitat, the increase in biodiversity, and the construction of resilient and diverse habitat that help to better withstand the effects of climate change. In addition, the educational components of this project present an opportunity to enhance community resilience.

b. Improving Fish Passage on the Saugatucket River - **\$50,000 (South Kingstown)**

This project focuses on the improvement of fish passage on the Saugatucket River in Wakefield. The goal of the project is to improve diadromous fish access to 300 acres of spawning and rearing habitat. Benefits to this project include the improvement of upstream and downstream passage for the diadromous fish runs in the Saugatucket River. Additionally, it will increase the size of the sustainable population and eventual supply of forage species to recreational and commercial fish in the coastal stream, Point Judith Pond, Block Island Sound, and the Western North Atlantic.

c. Woonasquatucket River Streambank Stabilization: San Souci Drive - **\$50,000 (Providence)**

This project looks to stabilize the streambank of the Woonasquatucket River along San Souci Drive in Providence. In FY2019, the project was awarded \$16,900 in funds. The restoration technique utilized for this project consists of streambank stabilization, buffer restoration and revegetation. Both short-term and long-term outcomes include creating a flood and weather resistant stable streambank that improves habitat for pollinators and mammals. Over the

long- term this project will prevent further bank slumping and degradation of the recently installed multi-use trail at the top of the bank. The river in this area of Providence is channelized due to dense industrial, commercial, and residential development along its banks. As climate change brings higher intensity and



Image 9.2 - bike lane bordering the Woonasquatucket River on San Souci Drive (courtesy of www.vhb.com)

more frequent storms, erosion along this bend in the river has become worse over the last ten years. It must be stabilized before it degrades completely. This project also takes place in and will benefit an environmental justice community. The proposed project takes place in the Olneyville neighborhood of Providence in an area identified by the Narragansett Bay Estuary Program as their highest environmental justice priority area: Priority Index 4.

- d. Salt marsh restoration and adaptation at Fogland Point, the Haile Preserve on the Palmer River and Canonchet Marsh on the Narrow River - **\$50,000** (Tiverton)

The Fogland Beach marsh, Haile Farm Preserve marsh and Canonchet Farm marsh are all experiencing varying levels of degradation, including impounded water on the marsh platform, vegetation die-off and degradation of marsh substrate. This salt marsh restoration project involves the restoration of tidal hydrology through the use of runnels. The key benefit to this project is the restorations of marsh function and value by facilitating drainage of impounded water on the marsh surface and allowing marsh revegetation. The ultimate goal is to achieve this benefit by restoring health and function to the salt marshes.



Image 9.3 - Fogland Beach marsh (courtesy of www.alltrails.com)

Improving the health and function of the salt marshes by providing shallow drainage of expanding impounded water areas will allow plants to recolonize the marshes, stabilize the peat and unconsolidated sediments, and increase the ability of the salt marshes to keep pace with accelerated sea level rise due to climate change.

e. Ten Mile River Reservation Dam Removal Assessment - \$50,000 (Pawtucket)

This project entails the assessment of the removal of the Ten Mile River Reservation Dam. In FY2021, \$5,000 was awarded for an initial assessment study. This FY2022 assessment looks



Image 9.4 - Ten Mile River Reservation Dam (courtesy of www.trailink.com)

further into sediment characterization and hydrologic and hydraulic modeling. Long term goals for this project include restoration of aquatic connectivity by restoring a free-flowing river, improving flood resiliency by reducing upstream flood elevations and downstream flood impacts, and improving water and habitat quality in the stretch of the river

that is currently an impoundment. Benefits to a possible dam removal include improved connectivity for aquatic life, increased water quality by removing impoundment and revegetation of forested wetland and shrub swamp along the riverbanks.

10: FLAMMABLE LIQUIDS TASK FORCE & PORT OF PROVIDENCE MARINE STRIKE TEAM

For the period of July 1, 2019 through June 30, 2024, a Memorandum of Agreement (MOA) was established between the Rhode Island Department of Environmental Management (DEM) and the Rhode Island Emergency Management Agency (RIEMA). This MOA was written for the purpose of the Port of Providence Marine Strike Team (PPMST) and the Rhode Island Flammable Liquids Task Force (FLTF). As the administrator of the OSPAR Fund, DEM agrees to provide an annual grant of no more than \$172,000 to RIEMA for the purchasing of supplies and maintenance, personnel and training expenses associated with the PPMST and FLTF.

The PPMST is a waterside asset created for the mitigation of chemical, incendiary, environmental and life safety incidents that occur in the Port of Providence. In the event of an oil spill, the PPMST is capable of deploying boom, serving as a platform for water sampling, and conducting air monitoring. The team consists of one boat each from the Providence, Warwick, East Providence and Cranston Fire Departments. The OSPAR Fund investment provides for the funding of two trainings per calendar year and the maintenance of the vessels. The ultimate goal of this team is to better protect the Port of Providence and surrounding waters from environmental and human health impacts.

The FLTF mission is to protect life, property and critical infrastructure by using available assets to contain, control and extinguish fires or releases and spills involving flammable or combustible

liquids or gases, including oil and petroleum products. The FLTF consists of one Williams foam trailer each from the Providence, East Providence, Woonsocket, Johnston, Warwick and Valley Falls Fire Departments. The OSPAR Fund investment provides funding for two trainings per calendar year and the maintenance of equipment. This funding allows the task force to train members on how to properly operate equipment and ensure that equipment is functioning properly and maintained in a state of readiness for emergency incidents.

11: WATER QUALITY MONITORING

Effective July 1, 2015, amendments to Rhode Island General Law (RIGL) 46-12.7-13 authorized DEM to direct the use of up to \$250,000 in OSPAR funding annually for environmental monitoring purposes. The Water Quality Management Plan Advisory Committee (WQMPAC) selects the strategic investments.

a. Cooperative Agreement with the United States Geological Survey

As authorized by the WQMPAC, DEM continued its cooperative agreement with the United States Geological Survey (USGS) to maintain long-term monitoring programs that collect data on streamflow, groundwater levels, and water quality in Rhode Island's largest rivers. The 2022 OSPAR contribution was \$250,000, and the other funding came from the USGS match. Funding from the Rhode Island Water Resources Board also contributed to the jointly negotiated program of activities. During FY2022, pursuant to the combined joint funding agreement, the OSPAR Fund supported the following three monitoring programs:

Streamflow Measurements: USGS operated and maintained 21 streamflow gage stations that provided continuous measurements of streamflow elevations. The streamflow data is made available on a real-time basis via the [USGS website](#). The data are used by multiple agencies for several programs including flood forecasting, drought management, water quality restoration, water management, and permitting.

Groundwater Elevation Measurements: USGS collected monthly groundwater elevation readings from nine observation wells located throughout Rhode Island. Five wells are equipped for continuous measurement. The data can have applicability to drought management, permitting, and water management programs.

Large River Water Quality: USGS continued its monthly water quality sampling program for Rhode Island's three largest rivers. Three stations are located near the mouths of the Blackstone, Pawtuxet, and Pawcatuck Rivers since they are representative of the pollutant loadings from these tributaries into coastal waters. With one exception, five stations were sampled monthly on the Blackstone River and its tributaries, the Branch River, the Pawtuxet River, and the Pawcatuck River for a range of water quality parameters including nutrients and pathogens. Samples are additionally analyzed quarterly for metals. Due to rising costs, monthly sampling at the Pawcatuck Station was eliminated from the agreement for the months of November, January, and February. The data undergoes federal quality assurance procedures and is made available

through the USGS information system – NWIS. It is important for evaluating long-term trends and tracking pollutant loadings into the upper bay from the rivers and is used in various state water programs.

12: OUTLOOK & PROJECTIONS

FY2022 showed a continued decline in revenue, which may be attributed to the COVID-19 pandemic and the use of electric vehicles. With Rhode Islanders continuing to work from home and utilizing more delivery services, their demand for gasoline decreased. However, expenditures rose in FY2022 – mostly due to a vehicle purchase, maintenance, and readiness costs and some new equipment. Consequently, the OSPAR Fund closing balance fell \$306,901 between FY2021 and FY2022.

The current trends in revenue and expenditures are concerning. The office must continue to invest in new equipment to replace obsolete items to ensure response capabilities. As climate change manifests environmental issues such as intensified storms, the need for emergency readiness costs will rise. Additionally, the Office of Emergency Response will be replacing personnel in FY2023 after experiencing a shortage due to retirements at the end of calendar year 2022. Unfortunately, while OSPAR Fund expenditures will likely rise, revenues are not. When combining the predicted rise in expenditures and fall in revenue, the OSPAR Fund balance will continuously slowly diminish over future fiscal years.

13: CONTACT INFORMATION

For further information regarding this report, activities conducted by the Office of Emergency Response, or the OSPAR Fund, please contact the DEM Emergency Response Administrator, James Ball, at james.ball@dem.ri.gov or (401) 222-4700 ext. 2777129.