

PURPOSE OF AND NEED FOR RESTORATION**CHAPTER 2**

2.1 THE NORTH CAPE OIL SPILL: SUMMARY OF INCIDENT

At approximately 2:30 p.m. on Friday, January 19, 1996, the U.S. Coast Guard (USCG) station in Point Judith, Rhode Island was contacted by the captain of the tug *Scandia*, who reported that the tug was on fire and the crew were abandoning ship. The tug was towing the tank barge *North Cape*, which contained 94,000 barrels (3.9 million gallons) of two blends of No. 2 home heating oil. Efforts to anchor the barge were unsuccessful, and at approximately 6:00 p.m. the barge and tug struck Nebraska Shoal just off Moonstone Beach in South Kingstown, Rhode Island. The location of the grounding is identified in Exhibit 2-1.

The barge grounded in the vicinity of several public and private beaches, salt ponds and two National Wildlife Refuges. Immediately to the north of the spill site are Moonstone Beach, and Trustom and Cards Ponds. Trustom Pond is part of the Trustom Pond National Wildlife Refuge (NWR). To the west of the spill lies a second Refuge, Ninigret. Several public and private beaches lie both to the east and to the west of the spill. Dominant shoreline types in the area are mixed sand and gravel beaches, sand beaches, and exposed rocky shores. The subtidal zone consists of both sandy bottom and hard bottom glacial deposits of gravel and boulders. A more detailed map of the area impacted by the spill is provided in Chapter 3 as Exhibit 3-1.

Wind direction and speed played a critical role in the drift of surface oil from the site of the grounding. Exhibit 2-2 summarizes the maximum extent of ocean surface sheens as recorded by overflight observations for the first six days after the incident. Winds were over 50 knots from the SSE during the storm on the day of the spill. Although dispersants were available, they were not used because of the high rate of natural dispersal associated with the storm event on the day of the spill.

Exhibit 2-1

**LOCATION OF THE GROUNDING OF THE BARGE *NORTH CAPE*
OFF THE COAST OF SOUTHERN RHODE ISLAND**

Exhibit 2-2

The following afternoon NW winds were blowing at 10 to 15 knots. The winds continued to shift in a clockwise direction on January 21, causing the newly released oil to spread widely. Sheens reached the southern side of Block Island by 8:00 a.m. On Tuesday, January 23, the winds shifted to the SW. Winds from the SSW reached 40 knots during a second storm on January 24, driving the oil back onto shore. The following day NW winds returned at 20 to 25 knots.

Storm conditions and the resulting heavy surf entrained (mixed) most of the oil into the water column overnight on January 19-20. Larger droplets of entrained oil resurfaced on January 20 when the winds and surf subsided to form the sheens observed. Small droplets and dissolved oil remained in the water column. Since the tidal currents run along the beach near the grounding site, the subsurface oil plume was retained in shallow waters for several days following the spill. This resulted in prolonged exposure to high concentrations of the oil's most toxic components (polynuclear aromatic hydrocarbons or PAHs) in the shallow water near the beach, which caused significant injuries to water column and bottom-dwelling organisms.

Oil skimming and booming operations began on Saturday, January 20 in an effort to control oil sheens and protect sensitive offshore and salt pond ecosystems. The west entrance to the Harbor of Refuge was boomed on January 20, but the east entrance was left open to accommodate vessel traffic from the harbor and Point Judith Pond. Booms were placed at Charlestown Breachway on January 21. Booms also were deployed in several areas within Point Judith Pond and across the channel between Point Judith Pond and Potter Pond. Contractor skimming vessels joined the USCG cleanup effort on Sunday, January 21. USCG skimming was terminated on January 23 because of low recovery rates.

Overall, an estimated 828,000 gallons of the two types of home heating oil were released into the coastal and offshore environments before the *North Cape* was refloated and moved to Newport on January 26, one week after the initial spill. Oil sheens were observed in several of the salt ponds bordering the area of the spill. The breachway to Cards Pond opened during the storm, allowing oil to enter the pond. The breachway to Trustom Pond was overwashed, but did not breach. The sand in the washover area was oil-stained, and there were patches of sheen at the pond edge against the ice, which covered most of the pond surface. Shoreline survey teams also reported areas of oil contamination in Point Judith and Potter Ponds.

Response teams reported initial indications of biological injury from the combined effects of the severe weather and spill. A total of 405 oiled birds were recovered in the nineteen days following the spill, and all but 13 died or were euthanized. Nearly 2.9 million dead and moribund lobsters were removed from southern Rhode Island beaches following the spill, with the heaviest concentration of dead lobsters found at sites adjacent to Matunuck Deep Hole. Over 18,000 of these lobsters were sexed and measured by research teams. The stranded lobsters represent a fraction of total lobster mortality throughout the entire offshore environment. Large numbers of dead surf clams and fish also were reported on the beach. In addition, United States Fish and Wildlife Service (USFWS) staff surveying Cards Pond reported a large mortality of amphipods.

Only small sheens of surface oil were reported in the vicinity of Block Island. Emergency response teams reported no trace of *North Cape* oil on Block Island beaches. Nevertheless, the inlet to the Great Salt Pond on the island was boomed to protect the pond. Other than recovery of oiled birds from the surrounding marine environment, however, no evidence of injury was recorded on the island.

The Rhode Island Department of Environmental Management (RIDEM) closed coastal pond and state offshore water fisheries on January 22. The area of closure was expanded to the northeast the following day. By January 26, federal offshore waters were closed officially for all fishing and shellfishing (61 FR 3602). Areas of the lobster fishery remained closed for five months as a result of concerns regarding consumption of potentially contaminated lobsters.

2.2 AUTHORITY AND LEGAL REQUIREMENTS

This Revised Draft Restoration Plan and Environmental Assessment (Revised Draft RP/EA) has been prepared jointly by the National Oceanic and Atmospheric Administration (NOAA), the Rhode Island Department of Environmental Management (RIDEM), and the U.S. Department of the Interior (DOI) (represented by the U.S. Fish and Wildlife Service (FWS)) (collectively, "the Trustees"). Each of these agencies is a designated natural resource Trustee under the Oil Pollution Act of 1990 (OPA), 33 U.S.C. §2706(b), and the National Contingency Plan, 40 CFR Section 300.600, for natural resources injured by the *North Cape* oil spill. As a designated Trustee, each agency is authorized to act on behalf of the public under state and/or federal law to assess and recover natural resource damages, and to plan and implement actions to restore natural resources and resource services injured or lost as the result of a discharge of oil.

2.2.1 Overview of OPA Requirements

A natural resource damage assessment, as described under Section 1006 of OPA (33 U.S.C. §2706(c)) and the regulations for natural resource damage assessments under OPA at 15 CFR Part 990, consists of three phases: 1) Preassessment; 2) Restoration Planning; and 3) Restoration Implementation. The Trustees may initiate a damage assessment provided that an incident has occurred, the incident is not from a public vessel or an onshore facility subject to the Trans-Alaska Pipeline Authority Act, the incident is not permitted under federal, state or local law, and Trustee natural resources may have been injured as a result of the incident. Injury is defined as "an observable or measurable adverse change in a natural resource or impairment of a natural resource service" (15 CFR § 990.30).

Based on information collected during the Preassessment Phase, Trustees make a preliminary determination whether natural resources or services have been injured and/or are threatened by ongoing injury. Through coordination with response agencies (e.g., the USCG), Trustees next determine whether response actions will eliminate injury or the threat of ongoing injury. If injuries are expected to continue, and feasible restoration alternatives exist to address such injuries, Trustees may proceed with the Restoration Planning Phase. Restoration planning also may be necessary if injuries are not expected to continue but are suspected to have resulted in interim losses of natural resources and services from the date of the incident until the date of recovery.

The purpose of the Restoration Planning Phase is to evaluate potential injuries to natural resources and services, and use that information to determine the need for and scale of restoration actions. Natural resources are defined as "land, fish, wildlife, biota, air, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States, any state or local government or Indian tribe" (15 CFR § 990.30). This phase provides the link between injury and restoration and has two basic components: injury assessment and restoration selection. The goal of injury assessment is to determine the nature and extent of injuries to natural resources and services, thus providing a factual basis for evaluating the need for, type of and scale of restoration actions. As the injury assessment progresses, Trustees develop a plan for restoring the injured natural resources and services. Trustees must identify a reasonable range of restoration alternatives, evaluate and select the preferred alternative(s), develop a Draft Restoration Plan presenting the alternative(s) to the public, solicit public comment on the Plan, and consider those comments before issuing a Final Restoration Plan.

During the Restoration Implementation Phase, the Final Restoration Plan is presented to the Responsible Parties to implement or to fund the Trustees' costs of implementing the plan. Should the Responsible Parties decline to fund or implement the plan, OPA authorizes Trustees to bring a civil action against Responsible Parties for damages or to seek disbursement from the Oil Spill Liability Trust Fund to implement preferred restoration projects. Components of damages are specified in sections 1002(b) and 1001(5) of OPA and include the costs of damage assessment.

2.2.2 NEPA Compliance

Any restoration of natural resources under OPA must comply with the National Environmental Policy Act (NEPA) (40 CFR Section 1500, *et seq.*) and the Council on Environmental Quality (CEQ) regulations implementing NEPA. In compliance with NEPA and the CEQ regulations, this Revised Draft RP/EA summarizes the current environmental setting, describes the purpose and need for action, identifies alternative actions, assesses their applicability and environmental consequences, and summarizes opportunities for public participation in the decision process.

2.3 COORDINATION WITH THE RESPONSIBLE PARTY

The OPA regulations require the Trustees to invite Responsible Parties to participate in the damage assessment process. Although Responsible Parties may contribute to the process in many ways, final authority to make determinations regarding injury and restoration rests solely with the Trustees.

Accordingly, the Trustees delivered a formal invitation pursuant to the OPA regulations for participation in the damage assessment to Eklof Marine, the Responsible Party for the *North Cape* oil spill, on June 13, 1996.¹ A Trustee-Responsible Party Memorandum of Understanding

¹ Eklof Marine owns Odin Marine Corp. and Thor Towing Corp., the two other Responsible Parties for the *North Cape* oil spill.

was signed by the Responsible Party on October 25, 1996. The designated technical representatives of Eklof Marine participated actively in the damage assessment following the spill; they were involved in the design, performance and funding of many studies completed as part of this assessment. They also participated actively in Technical Work Groups (TWGs), which were created to design and interpret the studies and evaluate potential injuries. Coordination between the Trustees and the Responsible Party helped reduce duplication of studies, increase the cost-effectiveness of the assessment process, and increase sharing of information and experts. Input from the Responsible Party was sought and considered throughout the damage assessment and restoration planning process.

2.4 PUBLIC PARTICIPATION

The original Draft RP/EA was placed in the Administrative Record on September 14, 1998. Since publication of the Draft RP/EA, the Trustees have received comments from the public as well as additional information from Trustee and RP technical experts. In response to this input, the Trustees have made several changes to underlying technical reports and the Draft RP/EA.

Public review of the Draft and Revised Draft RP/EA is an integral component of the restoration planning process. Through the public review process, the Trustees seek public comment on the analyses used to define and quantify natural resource injuries and the methods proposed to restore injured natural resources or replace lost resource services. The Draft and Revised Draft RP/EA provide the public with current information about the nature and extent of the natural resource injuries identified and restoration alternatives evaluated.

Following a public notice, the Revised Draft RP/EA will be available to the public for a 21 day comment period. Written comments received during the public comment period will be considered by the Trustees before finalizing the document. Public review of the Revised Draft RP/EA is consistent with all state and federal laws and regulations that apply to the natural resource damage assessment process, including Section 1006 of OPA, the regulations for Natural Resource Damage Assessment under OPA (15 CFR Part 990), NEPA (42 USC §4371, *et seq.*) and the regulations implementing NEPA (40 CFR Part 1500, *et seq.*).

The deadline for submitting written comment on the Revised Draft RP/EA will be specified in one or more public notices issued by the Trustees to announce the document's availability for public review and comment. Comments on this draft should be sent to Sarah Thompson at Industrial Economics, Incorporated, at the address provided below. Industrial Economics, Incorporated is assisting the Trustees in the preparation of this RP/EA.

Industrial Economics, Incorporated
2067 Massachusetts Avenue
Cambridge, MA 02140

2.4.1 Administrative Record

The Trustees have maintained records to document the information considered by the Trustees as they have planned and implemented assessment activities and addressed restoration and compensation issues and decisions. These records are compiled in an administrative record, which is available for public review at either of the addresses listed below. The administrative record facilitates public participation in the assessment process and will be available for use in future administrative or judicial review of Trustee actions to the extent provided by federal or state law. A list of those documents that have been designated for the administrative record to date is attached as Appendix A to this document. Additional information and documents, including public comments received on the Draft and Revised Draft RP/EA, the Final RP/EA and restoration planning documents will be included in the administrative record at a later date.

Documents within the administrative record can be viewed at the following two locations:

Office of Waste Management
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, RI 02908
Contact: Warren Angell, (401) 277-3872, and

Pell Marine Science Library
University of Rhode Island
South Ferry Road
Narragansett, RI 02882
Contact: Eleanor Uhlinger, (401) 874-6161

Arrangements should be made in advance to review the record at the Rhode Island Department of Environmental Management or to obtain copies of documents in the record by contacting Warren Angell at the listed address or calling him at (401) 277-3872. The Pell Marine Library is open to the public, and operates during regular business hours and most evenings and weekends. The administrative record is kept on the reserve shelf of the library for in-library use only. To inquire about hours of operation call (401) 874-6161.