# DRAFT RESTORATION PLAN/ ENVIRONMENTAL ASSESSMENT (RP/EA) FOR THE AUGUST 10, 1993 TAMPA BAY OIL SPILL

## **Volume 2 - Human Use and Recreational Injuries**

March 17, 2000

#### **PREPARED BY**

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION and NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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## **1.0 INTRODUCTION**

This document is the second part of a two-volume plan for restoring natural resources and resource services which were injured or lost as a result of the Tampa Bay oil spill of August 10, 1993. The first volume of the restoration plan, known as the Damage Assessment and Restoration Plan, Volume I (DARP Vol. I) - was released in June 1997. DARP Vol. I dealt solely with natural resource injuries and service losses of an ecological nature caused by the spill. The present document presents the restoration plan which the State and Federal Trustees are proposing to address the recreational services of natural resources which were also lost.

Following the spill incident, area waterways were obstructed, shoreline beaches were oiled and shell fishing areas were closed, temporarily preventing access to and use of these resources by both residents and tourists for a variety of recreational activities, including swimming, fishing, boating and sunbathing. The lost access to or use of these resources for recreation was a direct result of the spill and/or response operations. Federal and Florida laws establishing natural resource damages liability for this incident allowed the Trustees to seek compensation for the loss of these public resources for recreation and to plan and implement restoration actions which are appropriate to address such losses.

In May 1999, the United States, the State of Florida and the parties responsible for the spill achieved a final settlement resolving all the governments' claims arising from this spill incident, including claims for natural resource damages held by the Federal and State Trustees. Under the terms of that settlement, the Trustees jointly received \$2.5 million to compensate for these recreational service losses. The Trustees are required by law to use these recovered damages to plan and implement actions to restore, replace or acquire resource services comparable to those lost. These funds are being held in a federal account pending the development of a restoration plan appropriate to address these losses, i.e., to increase or enhance opportunities for recreational use of these resources, in accordance with the public losses incurred. The Trustees are responsible for the development of this plan. In doing so, the Trustees are required to identify a reasonable range of restoration alternatives, to evaluate these alternatives according to the restoration objective and other applicable criteria, and to seek public review and comment on preferred restoration alternatives prior to finalizing the restoration plan.

## **1.1 Statutory Authority**

This Draft RP/EA has been developed and prepared jointly by the Florida Department of Environmental Protection (DEP), and the National Oceanic and Atmospheric Administration (NOAA) (collectively, "the Trustees"), in accordance with their respective authorities as Trustees for natural resources injured as a result of the August 1993 Tampa Bay oil spill, including under the Oil Pollution Act of 1990 (OPA), 33 U.S.C. § 2701 *et seq.*, the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 *et seq.*, and the Florida Pollutant Discharge and Control Act (1992), Fla. Stat. 376.011 through 376.21. The Trustees are authorized under these authorities to act on behalf of the public to assess and recover natural resource damages resulting from the discharge of oil into marine environments, and to plan and implement appropriate restoration actions.

## **1.2 Public Participation**

On July 12, 1999, the Trustees published a notice in the *St. Petersburg Times* entitled "Notice of Intent to Develop Restoration Plan for Lost Recreational Use of Natural Resources from the August 10, 1993 Tampa Bay Oil Spill." That notice sought input from the public on the restoration alternatives which should be considered in the development of this Draft RP/EA. The notice identified the spill event, the trustee agencies involved, the recreational service losses to be addressed in the development of this restoration plan and the criteria to be applied in evaluating and selecting preferred restoration options.

In addition to publication of that general notice, the Trustees also sent letters to the beach municipalities in the spill area and to Pinellas County, inviting each entity to provide a current list of potential restoration projects in their community which could be considered by the Trustees in the development of this restoration plan, consistent with the objectives of restoration for the recreational losses and the selection criteria.

The Trustees received numerous public submissions in response to these requests for restoration proposals. All project proposals have been considered by the Trustees in developing this proposed restoration plan. A summary of the potential projects submitted for consideration in response to both the general public notice and the letters to public entities is included in Appendix A of this Draft RP/EA.

The Trustees have prepared this Draft RP/EA for public review and comment. It provides information on the recreational service losses that occurred, the objectives of restoration planning to address these losses, the restoration alternatives which have been considered in the development of this plan, the process used by the Trustees to identify preferred restoration alternatives and the rationale for their selection. Public review of this Draft RP/EA is required by or is consistent with all Federal or State laws applicable to the development of this restoration plan, including Section 1006 of OPA, federal regulations at 15 C.F.R. Part 990 guiding restoration planning under OPA, and the National Environmental Policy Act (NEPA), 42 U.S.C. § 4371 *et seq.* 

This Draft RP/EA is being made available for public review for 45 days. Comments received during the public comment period will be considered by the Trustees prior to finalizing the RP/EA. A summary of comments received and the Trustees' responses thereto will be included in the final RP/EA.

The deadline for submitting comments on this Draft RP/EA is specified in a public notice issued by the Trustees to announce the availability of the document for public review and comment. Written comments on this plan should be sent by mail or fax to:

John Iliff NOAA Restoration Center 9721 Executive Center Dr. N., Suite 114 St. Petersburg, FL 33702 Fax: 727-570-5390

## **1.3 NEPA Compliance**

Actions undertaken by the Trustees to restore natural resources or resource services under OPA and other federal laws are subject to the National Environmental Policy Act (NEPA), 42 U.S.C. 4321, et seq., and the regulations guiding its implementation at 40 C.F.R. Part 1500, *et seq.* In accordance with NEPA and its implementing regulations, this Draft RP/EA summarizes the current environmental setting, describes the purpose and need for the proposed restoration actions, identifies alternative actions considered, assesses their applicability and environmental consequences and summarizes the opportunities for public participation in the decision process.

NOAA has reviewed this Draft RP/EA for consistency with NEPA requirements, and the impact of the proposed restoration actions on the quality of the human environment. This review is contained in Section 6.0.

#### **1.4 Administrative Record**

NOAA and FDEP have each maintained records documenting actions taken or information considered in developing this Draft RP/EA, including information from activities undertaken in assessing recreational service losses. These records are available for review by interested members of the public. These records facilitate public participation in the restoration planning process and will be available for use in future administrative or judicial review of Trustee actions, to the extent permitted by federal or state law. The administrative record is comprised of documents at the following two locations:

National Oceanic and Atmospheric Administration Restoration Center – Southeast Region 9721 Executive Center Drive North, Suite 114 St. Petersburg, FL 33702 727-570-5391

Florida Department of Environmental Protection Bureau of Emergency Response 8402 Laurel Fair Circle, Suite 110 Tampa, FL 33610 813-744-6462

#### 2.0 OVERVIEW OF THE AUGUST 1993 TAMPA BAY OIL SPILL

This section contains a general description of the spill incident, the affected environment and the activities undertaken by the Trustees to assess the extent of the recreational service losses caused by the spill. The information in this section supplements information on the Trustees' assessment activities which is found in the DARP Vol. I. This section contains additional information which is appropriate to consideration of the recreational service losses which occurred as a result of this spill.

#### 2.1 Description of the August 10, 1993 Spill Incident

At about 5:45 a.m. on Tuesday, August 10 1993, the tank barge "B-155" and the tank barge "OCEAN 255" collided with the freighter "BALSA 37" just south of Mullet Key near the entrance to Tampa Bay, Florida. Both barges were damaged in the collision. As a result of damage to the B-155, approximately 330,000 gallons of #6 fuel oil were discharged into lower Tampa Bay. The OCEAN 255 caught fire upon impact, burned for close to 18 hours and, during that period, released approximately 32,000 gallons of Jet A fuel, diesel, and gasoline in the same vicinity.

The surface waters of lower Tampa Bay and shoreline areas at Ft. DeSoto Park and Egmont Key were affected almost immediately. Oiling of the shoreline along Fort DeSoto Park (Mullet Key) and Egmont Key, including sandy beaches, occurred within the first day of the spill. Over the next few days, winds and outgoing tides carried much of the oil out of the lower bay and into the Gulf of Mexico about 15 to 20 miles offshore. The oil remained offshore for several days, until an approaching storm system with strong westerly winds quickly pushed the oil back toward shore. Most of the oil came ashore on August 14 and 15, stranding on the sand beaches along Pinellas County barrier islands. About 12.5 miles of beaches on the barrier islands, across the six municipalities from Redington Shores to St. Pete Beach, were affected. Oil also entered Boca Ciega Bay through tidal inlets, collecting in finger canals, oiling seawalls and stranding in fringing estuarine habitats.

As a result of the collisions, fire, oil spills and necessary response activities, the main shipping channel into Tampa Bay was closed beginning August 10. Closure restrictions continued in varying forms until August 19. Commercial navigation in Tampa Bay was affected by these restrictions. During the response phase, the public's access to or use of the waters of both Boca Ciega Bay and Tampa Bay for recreation was also restricted by waterway closures, the placement of absorbent booms, and other necessary response actions. The removal of oil stranded on area recreational beaches was another major component of the response. The oiling of these beaches together with the actions undertaken to effect the clean up resulted in actual or de facto closure of these beaches to public use for several weeks. These response activities continued through September 2. Following the spill, the State of Florida also acted to close shellfish beds in lower Tampa Bay and Boca Ciega Bay for public health reasons based on hydrocarbon levels detected in shellfish in exposed areas. Prior to the spill, periodic, limited recreational shellfish harvesting from beds in these areas was known to occur.

Response to the oil discharges included source control, containment, diversion, and cleanup of the oil from surface waters and affected shorelines. While effective, response actions could not

prevent losses of natural resources due to exposure to oil, including significant losses of certain resources for public recreation.

## 2.2 The Affected Environment

This subsection provides information on the physical, biological and cultural environments in the region affected by the spill (Figure 1.) It is intended to supplement the description of the affected environment found in Section 2.2 of DARP Vol. I by providing additional information relating to the use of natural resources for public recreation and the environmental setting for potential restoration actions to address such losses.

Lower Tampa Bay and Boca Ciega Bay are both part of Tampa Bay, the state's largest open water estuary. Tampa Bay covers almost 400 square miles, with its watershed encompassing about 2,300 square miles on Florida's west central coast. The health of the bay is related to activities occurring in this watershed.

The Tampa Bay estuary contains a diverse array of wildlife and habitats, sub-tropical and temperate in nature. The lower portion of Tampa Bay is an environmentally high-quality water body with extensive seagrass beds, mangrove-forested islands and fringing salt marshes. Shoreline areas in lower Tampa Bay also include sand beaches and several nature preserves, including Egmont Key and within Fort DeSoto Park.

The Tampa Bay region is a large and growing urban center, with an estimated population of 2.4 million in 1998. The economic base in the region is diverse. Agriculture, commercial fishing, port activities and tourism are substantial contributors. The estuary itself supports commercial fishing and many industries are dependent on commercial shipping into and out of the bay. Tourism in the Tampa Bay region is supported by many kinds of recreational or leisure activities in the area, including but not limited to boating, fishing, sunbathing, wildlife viewing, sight-seeing, shopping, dining, and professional sports. The climate in the region is conducive to or allows for outdoor recreation year round.

Tampa Bay and its surrounding waters and shores are used extensively by the public for a variety of recreational activities, including boating, fishing, swimming, diving, windsurfing, and wildlife viewing. Several areas within the system are subject to special management, including Ft. DeSoto Park and Egmont Key. Ft. DeSoto Park is a popular site for beachgoing, biking, picnicking, swimming, fishing and boating. It features a camping area that is open year round and is the site of the largest public boat ramp in Florida, one used by more than 2 million visitors annually. Egmont Key is accessible only by boat but is also a popular public destination for recreation. Both Ft. DeSoto Park and Egmont Key are wildlife preserves and encompass historical

Figure 1: Region Affected by the Spill



The shoreline areas from Egmont Key and Ft. DeSoto Park to Redington Shores include a mix of beach types, including isolated beaches in regional park settings, community beaches lined with homes, and beaches lined with hotels and other commercial businesses. Regardless of location, however, all beaches in this area are considered high quality recreation sites within the state. These beaches are used by the public for a variety of saltwater beach activities, including swimming, sunbathing, fishing, and windsurfing. They are easily reached from the region's largest cities - Tampa, St Petersburg, and Clearwater - but also draw and are used by visitors from other areas of the state, other parts of the United States and many foreign countries, thus providing both residents of this densely populated area and tourists with easily accessible, high quality beaches.

## 2.3 Summary of Preassessment Activities

As noted in DARP Vol. I, the Trustees acted quickly following the spill to initiate investigations and other data gathering activities needed to assess the potential for injuries to natural resources, including any interim lost services, and to preserve data that might be needed to fully quantify such resource injuries or losses in later stages of the damage assessment process. The primary goal of this "preassessment" phase was to determine the need for further assessment action by the Trustees to address natural resource injuries or losses attributable to the spill.

With respect to the spill's effects on human uses of natural resources, the Trustees' initial investigations focused on documenting the waterways and areas of shoreline exposed to oil, documenting the waterway, park, beach and shellfish bed closures and their duration, documenting any immediately observable changes in human use of resources in closed areas, and obtaining information on baseline human uses of affected resources. These initial investigations continued for several months and included the following activities:

- Documentation of the oil trajectory and pathways of resource exposure;
- Documentation by professional land surveyors of shoreline areas oiled;
- Aerial and ground photography of the oiling of shorelines and waterways;
- Documentation of closures and/or limitations on access to waterways, parks and beaches;
- Consultations with appropriate local agencies to determine the typical types and levels of human use of natural resources which may have been affected by the spill; and,
- Collection of local records providing information on typical types and levels of the public's use of natural resources in affected area.

Based on information obtained in this initial assessment phase, the Trustees decided to proceed with a formal assessment of natural resource damages for the Tampa Bay spill. This decision to proceed with a formal assessment encompassed interim recreational uses or services lost to the public. The decision to proceed is documented in the "Preassessment Screen and Determination for the August 10. 1993 Tampa Bay Oil Spill," dated November 2, 1993, which is included in DARP Vol. I at Appendix A.

## 2.4 Summary of Natural Resource Service Losses to Humans

Information available to the Trustees as a result of preassessment investigations indicated the spill resulted in significant losses of resource uses and services to humans. Three categories or types of lost resource services to humans initially identified by the Trustees were retained for further consideration in the assessment process:

1) <u>Lost Use of Shoreline for Recreation</u> - The initial oiling of shorelines and associated cleanup activities impeded access to beach areas on Egmont Key and within Ft. DeSoto Park and to most of the public beaches from Redington Shores to Egmont Key. Some periodic and limited re-oiling of beaches due to storms (which remobilized offshore deposits of submerged oil) occurred after September 2, the date when initial beach cleanup activities were considered complete. These events resulted in a significant public loss of access and use of these beaches for recreation and other shoreline activities, such as fishing and swimming.

2) <u>Lost Use of Surface Water for Recreation</u> - The presence of oil in surface waters over large areas of Tampa Bay, the Gulf of Mexico and Boca Ciega Bay, along with associated cleanup and response activities, resulted in a loss of public access and use of those waters for recreational activities, such as boating and fishing.

3) <u>Lost Use of Shellfish Beds for Recreational Harvest</u> - The spill prompted DEP to close shellfish beds known to be used by recreational shellfishers in lower Tampa Bay and Boca Ciega Bay. These closures were initiated and continued due to petroleum hydrocarbon levels detected in shellfish from within these areas.

Another category or type of lost resource use by humans was initially identified by the Trustees the lost use of Tampa Bay surface waters for commercial navigation due to the waterway closures and restrictions imposed for the main shipping channel following the incident. This category of loss, however, was not retained by the Trustees for further consideration in the assessment process due to the limited period within which public losses associated with commercial use restrictions could have occurred, the substantial information required to reliably assess public claims in this area, particularly given the expanded opportunity for related private claims under OPA, and the anticipated high cost of collecting and analyzing the necessary information.

For the three categories of loss retained for further consideration, additional details or information from the preassessment phase are included in Section 3.0 of this Draft RP/EA, as necessary, to summarize the Trustees' further actions or determinations for these losses in the assessment process.

## 3.0 ASSESSMENT OF RECREATIONAL SERVICE LOSSES

The Trustees made substantial progress in their assessment of recreational service losses and in identifying potential restoration options appropriate to address losses of this nature prior to the settlement of natural resource damage claims. Information available from the ongoing assessment was important in determining acceptable monetary compensation for these lost recreational services, with due consideration given to the funds needed to support meaningful restoration of resource access or services like those lost due to the spill. This section summarizes the assessment activities which were undertaken by the Trustees to assess the lost access to or use of affected shoreline beaches, surface waters and shellfish beds for public recreation and the information from that assessment process which has been used by the Trustees in developing this Draft RP/EA.

## 3.1 Shoreline Recreation

## 3.1.1 Injury Determination

Based on data and information available from preassessment phase activities, the Trustees determined that approximately 13 miles of shoreline characterized by recreational beaches were oiled and the site of significant response actions disrupting public access or use of these natural shorelines for recreation. This included beach areas on Egmont Key and on Mullet Key in Ft. DeSoto Park and a total of about 12.45 miles of recreational beaches across six municipalities bordering the Gulf of Mexico: St. Pete Beach - 4.05 miles; Treasure Island - 3.5 miles; Madeira Beach - 2 miles; Redington Beach - 1 mile; North Redington Beach - .8 mile; and Redington Shores - 1.1 mile.

The public's use of beach areas at Egmont Key and in Fort DeSoto Park (Mullet Key) was substantially disrupted beginning on August 10, 1993, the first day of the spill. The oiling of beaches and response actions at St Pete Beach, Madeira Beach, Treasure Island, Redington Beach, North Redington Beach, and Redington Shores began on August 14. Oiling of these beaches alone limited the public's opportunity to use and enjoy these beaches as it immediately rendered them unsuitable for continued recreational uses. Further, all these beaches were either officially closed or de facto closed to the public as a result of the hazardous conditions created by the oil and necessary response actions. As a result of response actions undertaken, all beach areas were designated as clean and reopened to the public by September 1, 1993.

#### 3.1.2 Summary of Assessment Activities

To quantify the lost recreational use of these shoreline areas due to the spill, data indicating the level of recreational use of these beaches that would normally occur during this period under non-spill conditions was needed. Unfortunately, the Trustees found that no data or information indicating the baseline recreational use levels on the affected beaches existed. DEP's Division of Recreation and Parks periodically collects summary information on the use of public beaches and other recreation areas within the state. This information is published about every 5 years in a Statewide Comprehensive Outdoor Recreation Plan (SCORP). The information, however, is only compiled on a regional basis and information collected for the Tampa Bay region encompasses

recreation in Hillsborough, Pinellas, Manatee, and Pasco Counties. The Trustees found it was not possible to deconstruct the SCORP data so that use levels at the affected beaches could be individually determined. Therefore, the Trustees found it necessary to undertake site specific data collection to quantify the baseline recreational use levels of the relevant beaches during this period under non-spill conditions.

To estimate baseline beach use levels, the Trustees implemented ground and aerial surveys to produce counts of beach users on the spill zone beaches during August and September 1994, one year after the spill. These surveys were designed to quantify the level of normal recreational use that would have occurred at the same time of year as the spill occurred. Analyses of data from these surveys indicated that approximately 280,000 "beach user days" normally occur in the spill zone beaches at the time of year and during the period affected by the spill. Aerial photography of oiled beach areas during the incident indicate that beach use levels were substantially impacted, to the point of having virtually no recreational use during the affected period. Studies to further evaluate these losses were initiated, but not complete at the time of settlement.

## 3.2 Recreational Boating

## 3.2.1 Injury Determination

Based on data and information available from preassessment phase activities, the Trustees determined that the spill and associated response actions resulted in a loss of access to and use of area surface waters in lower Tampa Bay, Boca Ciega Bay, and adjacent waters of the Gulf of Mexico. The U. S. Coast Guard restricted access to portions of lower Tampa Bay and Boca Ciega Bay for a total of 9 days due to hazardous conditions and necessary response actions in these areas. Boats were prevented from moving through closed or boomed areas or were otherwise unable to access waters open to boating. Absorbent boom placed in parts of Boca Ciega Bay to contain and collect oil entering the bay through John's Pass limited ingress and egress to portions of the bay, and in some instances precluded use of boats altogether. Many boats located at marinas or docks were prevented from leaving dockside. Additionally, popular boat ramps in the spill area providing access to surface waters were either closed for normal usage or allowed only limited use by the public due to response activities.

#### 3.2.2 Summary of Assessment Activities

As with the lost recreational use of the shoreline beaches, estimating the recreational boating losses caused by this spill requires data on the level of boating that would normally occur under non-spill conditions and the changes in use of area waters for boating as result of the spill and response activities. The Trustees searched for but found only limited, useable data from existing sources. The Trustees obtained information from the U. S. Coast Guard to document the limitations on access to the waterways caused by the closures and placement of oil booms. Various state agencies, including DEP, provide estimates of the number of berths available in Pinellas County public marinas. The Trustees found that significant additional data would be needed to reliably quantify recreational boating losses, including data on the total number of public and private berths; berth occupancy rates during the spill period; the daily percentage of boats usually leaving berths; the number of additional boats launching at public and private launch

ramps; and the average number of persons on a boating trip. The collection of such additional data would have required a substantial, spill-specific assessment study. The Trustees eventually concluded this additional work would not be justified given facts indicating boating losses would likely be limited and this further work would likely be costly.

Even though the Trustees did not proceed to specifically quantify recreational boating losses in the assessment, the Trustees found evidence sufficient to establish that recreational boating losses did occur. This factual determination is relevant to the development of this Draft RP/EA. In evaluating different approaches to restoring resource services which the public lost, it is appropriate to consider the nature of all documented service losses and the extent to which restoration alternatives will benefit more than one resource or resource service. This is consistent with guidance applicable to restoration planning under OPA found in 15 C.F.R. 990.54 as well as NEPA. Therefore, the Trustees have considered recreational boating losses in identifying the restoration plan proposed for use in Section 5.0 of this Draft RP/EA to address the recreational services of natural resources lost due to the Tampa Bay oil spill.

## 3.3 Recreational Shellfishing

## **3.3.1** Injury Determination

As a result of concern about public consumption of shellfish exposed to oil, DEP closed shellfish beds in Boca Ciega and lower Tampa Bay to recreational harvesting on August 11, 1993. The shellfish beds in Tampa Bay were reopened on September 23, 1993, and those in Boca Ciega Bay were reopened on November 30, 1993. The use of these resources for recreational shellfishing was lost for 109 days in Boca Ciega Bay and for 42 days in lower Tampa Bay.

#### 3.3.2 Summary of Assessment Activities

To quantify the loss recreational use of these shellfish beds requires information on the level of recreational harvesting which would normally occur at these locations. At the time of the spill, DEP's Division of Marine Resources periodically estimated the number of people shellfishing in these areas and the Trustees relied on these estimates to assess the recreational losses which occurred when these areas were closed. These estimates indicate that approximately 10 persons per day recreationally shellfish at beds in Boca Ciega Bay and that approximately five persons per day shellfish at beds in lower Tampa Bay. Based on this information, the Trustees calculated that the closure of these beds due to the spill resulted in a loss to the public of approximately 1300 recreational shellfish harvesting days.

## 4.0 OVERVIEW OF THE RESTORATION PLANNING PROCESS

State and Federal laws establishing liability for natural resource damages share a common objective -- to provide for expeditious restoration of natural resources and resource services following their injury or loss due to discharges of oil or other contaminants. Under these laws, the Trustees are responsible for determining what, if any, actions are needed to return injured natural resources to their pre-injury condition (termed 'primary restoration'), and to compensate for interim lost uses of such resources pending their restoration (termed 'compensatory restoration'). Compensable interim losses include the loss of uses or services of natural resources normally provided to humans as well as to other natural resources. The goal of restoration under these laws is to make the environment and public whole for natural resources injuries and service losses resulting from discharges. OPA requires that funds recovered as natural resource damages be used to plan and implement restoration actions appropriate to restore, replace, rehabilitate or acquire resources or services equivalent to those lost.

The Trustees initiated work to identify potential restoration opportunities to address the lost recreational use of natural resources during the assessment process. This early focus on restoration assisted the Trustees in determining an appropriate level of compensation for these recreational service losses, achieved through settlement, i.e, that funds recovered for these losses would provide an adequate opportunity to implement restoration to offset these losses post-settlement. This Draft RP/EA presents the restoration alternatives which the Trustees are proposing to address the lost access to and use of the shoreline beaches, waterways, and shellfishing areas for public recreation caused by the spill.

This Draft RP/EA focuses only on compensatory restoration alternatives, i.e., alternatives which would be appropriate to address the interim recreational service losses. Primary restoration planning seeks to determine the restoration actions appropriate to return natural resources, including their services, to pre-injury conditions. In this instance, the opportunity to use spill zone beaches, waterways, and shellfish beds for public recreation was restored within a fairly short period of time following the spill, largely due to effective response actions. Therefore, in developing this restoration plan, further consideration of primary restoration alternatives was unnecessary.

#### 4.1 Trustees' Strategy in Restoration Planning

In forming their restoration planning strategy, the Trustees considered the various sources of guidance currently available, including OPA, state law, and federal regulations guiding restoration planning under OPA at 15 C.F.R. Part 990. The strategy used to develop this restoration plan is consistent with all applicable statutes and guidelines.

The Trustees' goal in the restoration planning process, outlined in this Draft RP/EA, is as follows:

T o acco mplis h this goal,	GOAL: To identify restoration actions appropriate to address the lost access to and use of the shoreline beaches, waterways, and shellfishing areas for public recreation attributable to the Tampa Bay spill.
the	
Trustees	s developed the following restoration strategy:
Rest	
orati on	STRATEGY: Identify projects which would increase or enhance opportunities for recreational access or use of these same resources, in accordance with the public
actio	losses which were documented
ns	
can	
com	

pensate for lost recreational opportunities in various ways, such as by increasing access to existing resource recreation sites; increasing the capacity of existing resource recreation sites; increasing the quality of existing resource recreation sites; or creating new resource sites for recreation. Each of these approaches can result in two effects - increasing the quantity or improving the quality of the recreational use of the relevant natural resources.

In developing this plan, the Trustees have sought to identify a reasonable range of alternatives for consideration, including those with the potential to restore recreational services through actions to effectively restore, preserve or enhance the amount, quality or availability of the affected natural resources. Where available, these actions are believed by the Trustees to represent the best means of restoring natural resource services. Where options of this nature do not exist or are insufficient alone to address the public's losses, restoration options capable of providing services of the same type and quality as those lost are generally preferred. Where in-kind service replacement options are not available, restoration alternatives provide dissimilar services, the appropriate trade-off between the services lost and those provided by restoration must be considered to ensure the benefits of such restoration will be sufficient to offset public losses.

In developing this plan, the Trustees have also sought to rely on restoration options capable of providing or benefitting multiple resources or services, particularly those serving multiple recreational resource uses. This approach ensures restoration actions undertaken provide the greatest overall benefit to the public, consistent with the primary goal of this restoration plan. Actions with multiple benefits also have the potential to reduce administrative oversight, procedural requirements, permitting needs, and construction logistics, which makes accomplishing restoration more cost-efficient.

## 4.2 Framework for Identifying Preferred Restoration Alternatives

The restoration alternatives considered in this Draft RP/EA were identified and evaluated using a three step process. First, the Trustees sought to identify a reasonable range of project opportunities in the spill area with the potential to increase or enhance the relevant resources or access to or use of these resources for public recreation. This restoration scoping process was initiated during the assessment phase and has continued through the drafting of this document. The Trustees' earliest efforts in this regard included consultations and discussions with representatives of beach municipalities in the spill area, Pinellas County and the parties responsible for the spill. As recently as August 1999, each of these beach municipalities and Pinellas County were requested to provide a current list of potential restoration projects in their community which could be considered by the Trustees in the development of this restoration plan, consistent with the objectives of restoration for the recreational losses and the selection criteria. Table 4-2 lists the local governments contacted and Figure 2 their approximate locations.

City of Indian Rocks Beach	Pinellas County
City of Madeira Beach	Town of Indian Rocks Beach
City of St. Pete Beach	Town of Indian Shores
City of Treasure Island	Town of North Redington Beach
Egmont Key State Park	Town of Redington Beach
Fort DeSoto Park	Town of Redington Shores

Table 4-2 List of Local Governments Contacted During Restoration Planning

Figure 2: Local Goverments Contacted During Restortion Planining



The Trustees also invited the public to submit restoration options for Trustee consideration through a "Notice of Intent to Develop Restoration Plan for Lost Recreational Use of Natural Resources from the August 10, 1993 Tampa Bay Oil Spill" published in the *St. Petersburg Times* on July 12, 1999. That notice identified the spill event, the Trustees involved, the recreational service losses to be addressed in the development of this restoration plan and the criteria to be applied in evaluating and selecting preferred restoration options. Through these efforts, the Trustees identified a broad list of forty-six (46) possible restoration projects. The complete list of projects is summarized in Appendix A. These included proposals for acquisition of real property, development or expansion of various facilities or physical structures, vegetation planting and maintenance, vehicle acquisition and ecosystem development. The property acquisition proposals were primarily for creation of new parkland or shoreline access, but also included the development of a wildlife refuge. Proposals relating to facilities or structures encompassed boardwalks, piers, marinas, boat ramps, near shore and offshore reefs, beach groins, dune walkovers, and various other municipal structures.

Second, the Trustees screened this broad list of proposals based on the restoration selection criteria outlined below at 4.3. A threshold consideration in this initial screening process was the relationship of the action proposed to the resources or service losses which are to be addressed in this restoration plan, i.e., the lost access to or use of the shoreline beaches, waterways, and shellfishing areas for public recreation. This is a threshold criterion as it embodies the primary objective of this restoration plan. Only proposals capable of increasing or enhancing the relevant resources, or of increasing or enhancing use of these resources for public recreation in the areas where such public losses occurred were evaluated further in the screening process. This initial screening process resulted in the identification of five broadly defined restoration alternatives, encompassing 22 project proposals<sup>1</sup>, that in the judgment of the Trustees could reasonably be expected to achieve the objectives of this restoration plan in light of all the criteria to be applied. These restoration alternatives are categorized as: (1) Acquisition of Waterfront Property; (2) Construction of Fishing Piers; (3) Construction of Public Trails and Walkways; (4) Enhancement of Boating Opportunities; and 5) Enhancement of Natural Resource Amenities. Each of these alternatives include projects that would serve one or both of two general purposes - improving access to shoreline beaches for related recreational activities or the protection of shoreline habitats which support recreation.

These alternatives were then considered more carefully by the Trustees based on the criteria outlined below. Each of these alternatives and the result of that evaluation, with preferred restoration actions identified, are presented in Section 5.0 of this Draft RP/EA.

<sup>&</sup>lt;sup>1</sup> These alternatives consider similar project proposals as a single restoration alternative, with alternative sites or means for potential implementation. This grouping allowed similar projects to be evaluated as one general restoration alternative for purposes of evaluating and choosing among the alternative approaches to restoration. Specific project choices consistent with restoration alternatives selected in the final RP/EA will be the final step in the restoration planning process.

#### 4.3 Selection Criteria

The following criteria have been used by the Trustees to screen and further evaluate the listed restoration alternatives:

<u>Relationship of Restoration Alternative to Type and Quality of Resource Services Lost (Consistency</u> <u>with Restoration Goal)</u>- Considers the nature and extent to which a given restoration alternative would address the lost access to or use of the shoreline beaches, waterways, and shellfishing areas for public recreation attributable to the Tampa Bay spill. This includes the extent to which benefits of the alternative would effectively restore, preserve or enhance resource services in-kind or would otherwise be comparable in nature, scope, and location to the recreational service losses that occurred.

<u>Consistency with Restoration Strategy</u> - Considers the degree to which a restoration alternative relates to the restoration planning strategy outlined in Section 4.1, i.e., is capable of increasing the quantity or improving the quality of the recreational use of the affected beaches, waterways, and shellfish beds and, to the extent practicable, also provides or benefits multiple natural resources or services, particularly recreational resource uses.

<u>Consistency with Community Objectives</u> - Considers the degree to which a given restoration alternative is consistent with known or anticipated community objectives, particularly with respect to the use and enjoyment of natural resources. Community objectives are derived from relevant community goals or planning documents as well as from information provided by county and local governments and the public.

<u>Multiple Benefits</u> - Considers the extent to which a given restoration alternative will address more than one natural resource or service, particularly recreational resource use.

<u>Technical Feasibility</u> - Considers both the likelihood that the opportunity to implement a given restoration alternative exists and that it can be successfully implemented within a reasonable period of time. Consideration of this factor includes but is not limited to the availability of expertise, programs or contractors required to implement such an action and prior experience with methods or techniques proposed for use, availability of equipment and materials, site availability and logistical difficulty.

<u>Restoration Site Requirements</u> - Considers the extent to which the scientific, engineering or legal requirements of proposed restoration alternatives can be met by available implementation sites.

<u>Potential for Additional Natural Resource Injury</u> - Considers the extent to which implementation of a restoration alternative may adversely affect other natural resources.

<u>Restoration is Self-sustaining</u> - Considers the degree to which further human intervention or support is necessary to achieve success or to sustain the function of a restoration action over time.

<u>Consistency with Applicable Laws and Policies</u> - Considers the extent to which a restoration alternative is otherwise consistent with relevant State, Federal and County policies or could be implemented in accordance with State, Federal and County laws.

<u>Potential Effects on Human Health and Safety</u> - Considers the potential that a restoration alternative may adversely impact human health and safety in the community.

<u>Cost Effectiveness</u> - Considers the relationship of costs associated with a given restoration alternative to that alternative's ability to achieve the restoration objectives. Among those alternatives achieving the restoration objectives, a less costly restoration approach is preferred. Relevant costs considerations include but are not limited to costs associated with conceptual design, engineering specifications, site acquisition, permitting, and other applicable procedural requirements, project construction, necessary performance monitoring, future maintenance and restoration oversight.

While all factors have been considered by the Trustees, these criteria are not necessarily afforded equal weight in identifying preferred restoration alternatives. As previously noted, for instance, the first criterion listed is a primary consideration, since it is key to ensuring restoration objectives for the recreational service losses are met. Further, the application of these criteria often involve a balancing of interests in order to identify the best approach to meeting the restoration goal. Accordingly, the Trustees are afforded and exercise substantial discretion in evaluating restoration alternatives based on these criteria. The identified selection criteria and the discretion afforded the Trustees in developing this restoration plan based thereon are consistent with the restoration planning guidance outlined in the OPA regulations at 15 C.F.R. Part 990.

It is important to note that the Trustees recognized early in the restoration scoping process that the expected benefits of potential projects would be a key factor in planning for restoration actions appropriate to address the resource services lost. Therefore, during the scoping process, the Trustees actively sought data or other information which could be used in evaluating possible projects on that basis. This included specifically requesting county and city representatives to provide supporting data or information indicating, for example, the increases in swimming, fishing, boating, or shellfishing anticipated to occur as a result of the projects submitted for consideration. The Trustees' own search for usable data and the responses received, however, indicate that there is little quantitative data or information existing to support such estimates without initiating further studies at substantial additional cost to the public. Therefore, in evaluating restoration alternatives, the expected benefits of projects considered are described or characterized largely based on the general knowledge, experience, or expertise within the community with similar projects and other information or inferences drawn from the assessment and restoration scoping processes.

Finally, in evaluating costs, the Trustees have sought to take into account costs associated with similar projects in the Tampa Bay area, cost information accompanying proposals, government estimates and other sources of information to the extent available.

#### 5.0 PROPOSED RESTORATION PLAN

As noted in Section 4.2, the preferred means to restore natural resource services is through actions to restore, preserve, or enhance the amount, quality or availability of the affected natural resources themselves. During the restoration scoping process, however, the Trustees found that opportunities to restore surface waters, beaches or shellfish beds as a means of increasing the services of these resources for public recreation were very limited, in large part due to the highly developed nature of the area. As a result, the restoration plan proposed herein includes some actions which preserve or conserve natural resources, but also includes actions which will increase or enhance recreational access to or use of the affected resources.

The Trustees have identified the following five restoration alternatives as preferred for use to compensate the public for the recreational service losses caused by the Tampa Bay spill. These alternatives, in alphabetical order, are:

- Acquisition of Waterfront Property
- Construction of Fishing Piers
- · Construction of Public Trails and Walkways
- Enhancement of Boating Opportunities
- Enhancement of Natural Resource Amenities

The range of restoration alternatives evaluated by the Trustees and the rationale supporting the choice of the above alternatives as preferred is presented in subsections 5.1-5.7. In accordance with NEPA, the "no-action" alternative is also considered.

In making project selections consistent with the preferred alternatives, the Trustees are afforded discretion as they are required to balance many factors in determining the set of projects providing the greatest overall benefit to the public consistent with the primary objective of this restoration plan. The Trustees believe the settlement funds are sufficient to undertake projects under several of the preferred alternatives, but not necessarily all of them. Further, flexibility is necessary to adjust to practical considerations, such as expected versus actual future costs, timing and feasibility.

## 5.1 Preferred Alternative: Acquisition of Waterfront Property

This alternative encompasses the acquisition of one or more parcels or interests in land which include or border recreational shorelines affected by the spill. Ownership and/or future use of such lands is placed in the public domain, thereby expanding and preserving public access to or opportunities for use of shorelines, for such activities as beach recreation, fishing, and nature viewing, in the area where these resource services were lost due to the spill. Acquired lands would be managed by local, county or state authorities, as appropriate.

#### 5.1.1 Evaluation of Alternative

During the restoration scoping process, a number of property sites of this nature were identified for which public acquisition would be consistent with the objectives of this restoration plan and had evident public support. All parcels identified are currently privately owned, with little to no public

access or use. While parcels are available for purchase now, they may not be available in the near future due to existing zoning, which would allow development of these parcels for private residential or commercial purposes, and development pressures and patterns in the expanding Tampa Bay/St. Petersburg region. Indeed, current marketing or plans for some of these properties are directed to these uses. Private development of these parcels could also result in construction or other property alterations which detract from public use of adjacent shorelines, including environmental quality, viewing enjoyment and access. Some parcels identified are adjacent to existing public lands, with natural shoreline recreation areas.

Waterfront property acquisition serves both resource conservation and access enhancement objectives. New opportunities for the public to access and use natural shorelines for recreation are provided where property is acquired in areas with limited or no current public access. Acquiring parcels adjacent to existing public shorelines expands public access while also allowing public recreation to be spread over a greater area. Spreading recreational use over a greater area decreases the environmental burden of recreational activities in any one place.

Not all properties identified for potential acquisition would provide opportunities for or support multiple recreational uses. Further, some sites are more suitable than others for post-acquisition enhancements which would increase either their utility for public recreation or their benefits to natural resources in these areas (e.g., such as by creation of dunes or planting of native vegetation). Properties with the potential to serve multiple restoration objectives and with low potential to negatively affect the quality of natural resources will be given a higher preference in the selection process. Property acquisition and planned uses will be coordinated with appropriate local, county, state or federal agencies to ensure consistency with any regional resource management plans or other community planning documents.

## 5.1.2 Estimate of Project Cost

Information available to the Trustees during the restoration scoping process indicates the cost to acquire a waterfront property could range from \$250,000 to several million dollars. Expected acquisition costs would vary based on such factors as the location of the parcel, the potential uses of the property under existing zoning, the demand for retaining open space in highly developed areas, and the availability of land for sale at the particular location. The Trustees would only favor acquisition of a property at a reasonable cost, given market conditions. The Trustees would also favor acquisitions which are eligible for matching funds from state, county or local entities.

## 5.1.3 Environmental and Socio-Economic Impact

Acquiring properties is likely to preempt the development of environmentally unsound projects or remove existing infrastructure to create access, so that the environmental impact of this alternative would be positive. Any development activities to enhance public access at the sites will fall under one of the remaining preferred alternatives, and the associated environmental impacts will be considered under the appropriate heading. This alternative will not have any significant socio-economic impacts.

## 5.2 Preferred Alternative: Construction of Fishing Piers

This alternative encompasses the construction of one or more new pier structures for use for public fishing. The lost access to area shorelines and surface waters during the spill included lost access for recreational fishing by both residents and tourists. The construction of one or more new fishing piers will address this lost public use by expanding the public areas available for use by fishermen and enhancing fishing access.

## 5.2.1 Evaluation of Alternative

During the restoration scoping process, suggestions from the affected community included requests or recommendations for new fishing piers at several locations. New piers would create new opportunities for the public to fish and attract anglers from other sites, some with no dedicated infrastructure. Fishing at other sites, such as vertical seawalls or riprap shorelines, is typically less safe than pier fishing, especially for children, the elderly, and the physically handicapped. New fishing piers may also attract fishermen from other sites not appropriate for heavy use, such as vegetated shorelines, and thus have the potential to reduce the impact of angler activities on natural environments.

Projects under this alternative would require state or local authorities to assume responsibility for any long term maintenance and upkeep.

## 5.2.2 Estimate of Project Cost

Information available to the Trustees indicates the estimated cost to create a fishing pier will vary greatly depending on such factors as the location, size and design features. Typical cost estimates ranged between \$55,000 and \$95,000, but the highest estimate for a new pier was approximately \$350,000. While the construction of fishing piers is relatively inexpensive, they are not self-sustaining and require maintenance over the long term. For projects under consideration by Trustees, state or local authorities will assume responsibility for pier maintenance and upkeep.

## 5.2.3 Environmental and Socio-Economic Impact

The construction of a fishing pier is expected to have minimal environmental impact. Some disturbance to the sea floor will occur during construction. Further, a pier will shade areas under or adjacent to the structure, which could potentially affect any marine vegetation present in the immediate area, such as sea grasses. These impacts are typically addressed during the project permitting process and are minimized through design features or during construction.

Fishing piers assist in focusing angling activities in areas equipped to accommodate recreational traffic, which alleviates the environmental harm at other sites. However, this same concentration of angling activity could increase pressure on fish species that are already overfished. The addition of fishing piers in selected areas will not have significant socio-economic impacts.

## 5.3 Preferred Alternative: Construction of Public Trails and Walkways

This alternative encompasses such projects as the construction of boardwalks, sidewalks, dune walkovers and biking or hiking trails. The boardwalk, sidewalk or public trail projects under consideration would generally run parallel to and behind public beaches, facilitating public use and access to the full length of these adjacent recreational public shorelines. Dune walkovers are elevated pedestrian walkways traversing dune habitats, including stabilizing vegetation. The creation of such public trails or walkways addresses the lost access to recreation shorelines during the spill event by providing increased or improved opportunities to access recreational shorelines and beaches in the future. These projects also contribute to the preservation of the natural habitats associated with these shorelines.

## 5.3.1 Evaluation of Alternative

During the restoration scoping process, sidewalk or elevated beach boardwalk projects were proposed by communities with beaches with moderate to heavy public recreational use. Boardwalk or sidewalk projects in these areas would enhance public access to these areas and provide a degree of protection to shoreline resources. Where beach use is high, such projects would constitute an additional amenity which would encourage additional recreational use and distribute recreational use across the full expanse of available beach. This has the potential to attract visitors or centralize pedestrian traffic away from other more sensitive or vulnerable shoreline environments. It also can increase the quality or value of these beaches as recreation sites.

Dune walkovers provide access to public beaches in a manner that protects dune habitats. Dunes themselves provide important ecological services within the beach environment, including protection from storms, protection from erosion, and habitat for birds and sea turtles. Dunes and shoreline vegetation also contribute aesthetically to the use of recreational shorelines. While ecologically desirable, dune habitats require protection from recreational traffic in order to prevent losses of vegetation or losses of other resources. The presence of dunes along a stretch of beach can also restrict beach access, especially for the elderly and physically disabled. Signs designed to protect dune vegetation may discourage public use of adjacent beaches. Therefore, the addition of dune walkovers can increase the public's opportunity to use beaches in these areas and protect this component of the beach environment. In addition to protecting resources at these access points, the location of these specified access points can also be selected to move pedestrians away from more pristine or vulnerable landscapes and to alert passersby to the presence of a public shoreline.

A viable system of public recreational trails is an integral and evolving part of the Pinellas County area, where outdoor recreation helps define many of the local communities. In extending existing public trails, the Trustees intend to strike a balance between resource conservation and additional development as a means of enhancing access to recreational shorelines. Therefore, project location and selection will seek to emphasize the value of leaving relatively pristine stretches of beach undisturbed while fulfilling restoration objectives of increasing access. Such public trails will exclude motorized vehicles. Walking trails encourage low-impact use of beach resources. Bike trails have the added benefit of improved public safety where cyclists are drawn away from roads and automobile traffic. For projects under this alternative, choice of material will be considered in determining the degree to which the project is considered self-sustaining. Wooden structures will generally require more maintenance in the long term than cement structures.

## 5.3.2 Estimate of Project Cost

A number of potential projects involving the construction of boardwalks, sidewalks, dune walkovers, biking or hiking trails were identified during the restoration scoping process. Costs vary substantially depending on the project, particularly the materials involved, and the project size. Estimated project costs range from \$50,000 to \$500,000.

## 5.3.3 Environmental and Socio-Economic Impact

The Trustees have determined that the construction of public trails and walkways will have minimal environmental impact. Some disturbance to the beach landscape will occur due to the presence of equipment and crews during construction. Trails and walkways may serve to concentrate recreational activities in areas equipped to accommodate heavy recreational traffic, thereby alleviating environmental harm at other sites. Walking trails may encourage low-impact use of beach resources. Dune walkovers protect shoreline environments from erosion. In the event of medical emergencies, dune walkovers, sidewalks and elevated walkways provide quick and easy access to emergency personnel. Similarly, bike trails may improve safety if they draw cyclists away from roads and automobile traffic. The addition of trails and walkways in selected areas will not have significant socio-economic impacts.

## 5.4 Preferred Alternative: Enhancement of Boating Opportunities

This alternative encompasses the placement, construction or enhancement of one or more structures providing access to or supporting use of area waters by the recreational boating public. At least two projects capable of increasing or improving recreational boating access were identified during the restoration scoping process: construction or enhancement of boat ramps and installation of mooring buoys at recreational boating destinations.

## 5.4.1 Evaluation of Alternative

The lost access to area waters during the spill resulted in their lost use for recreational boating by both residents and tourists. Projects which increase or improve boater access to public waterways, whether for fishing or other recreational purposes, will serve to address this component of the public loss.

New or improved boat ramps have the potential to increase access to and use of area waters for water-based recreation such as boating, fishing, diving, water skiing, and recreational harvesting of shellfish. Additionally, both new and improved ramp facilities facilitate safety by improving access or use by emergency response or rescue personnel.

Mooring buoys would enhance recreation but also serve to protect natural resources from boating disturbances or long term damage. They permit boaters to stop and tie up in desired recreational

locations without anchoring. Anchoring release and retrieval can impact seagrass beds or other sensitive habitats. Popular boating destinations can suffer chronic impacts from anchoring. These effects can be prevented through the use of mooring buoys. Mooring buoys also have the potential to entice boaters from areas where the risk of other boating impacts is greater, such as from shallower waters where prop scarring is a known problem. During holidays and other periods of heavy boat use, mooring buoys are often shared by multiple boats, allowing more boaters to access popular recreational areas while minimizing impacts. Mooring buoys, however, are viewed as having high maintenance requirements, as they must be frequently cleaned and repaired.

## 5.4.2 Estimate of Project Cost

Cost estimates to completely rehabilitate or construct a new boat ramp are between \$95,000 to \$150,000. The purchase and installation of mooring buoys, including low impact anchoring devices, would cost approximately \$1,000 to \$1,200 each. Both projects would be expected to require future maintenance. For both projects, costs associated with long term maintenance would be the responsibility of the state, county or local government with or assuming ownership or management of the project.

## 5.4.3 Environmental and Socio-Economic Impact

Boating in Tampa Bay has resulted in propeller scaring in seagrasses and propeller injuries to the West Indian Manatee (*Trichechus manatus*). Increasing or expanding boat launching opportunities may contribute to these problems. On the other hand, such actions facilitate and support recreational uses which are important to the area economy. The addition of boat ramps could also have beneficial effects to human safety through improvement of ocean access by marine rescue and assistance crews, oil spill response personnel, and environmental organizations.

Mooring buoys have the potential to reduce damage to sensitive habitats, such as seagrasses. No other socio-economic impacts are expected.

## 5.5 Preferred Alternative: Enhancement of Natural Resource Amenities

This alternative encompasses two projects: creation of near-shore reef structure and planting of sea oats at sites along recreational beaches. Both these projects have the potential to improve the quality of recreational use of affected natural resources. Implementation would be limited to areas where public access to shorelines for recreation is assured.

## 5.5.1 Evaluation of Alternative

The creation of a nearshore reef involves the placement of materials on the sea floor which offer shelter for fish and other marine life and the opportunity for the growth of marine vegetation. Manmade reefs can create a viable habitat for underwater life. The creation or extension of nearshore reefs canprovide additional fishery habitat and, to the extent that they concentrate fish benefit recreational fishermen, by increasing the opportunity to catch fish at these sites. A flourishing reef can also be popular with swimmers and boaters for snorkeling, diving and the general viewing of marine life. Several nearshore locations have been identified as appropriate sites for viable reef creation.

Sea oats are the long stemmed grasses that grow on sand dunes. These plants help to capture sand, stabilize dunes and prevent their erosion. The reeds capture windblown sand and deposit it back onto the dunes and beach. They also contribute to the natural landscape which is aesthetically pleasing to recreational beach goers. Planting sites would be selected to include areas where new vegetation is required to replace that lost due to pedestrian traffic or other recreational uses. Planting sites could also be selected to be undertaken in conjunction with dune walkover projects.

Both projects would be considered self-sustaining after implementation. County authorities would have responsibility for any necessary maintenance or further action at reef sites following implementation.

## 5.5.2 Estimate of Project Cost

A cost estimate for the creation of a near-shore reef is about \$350,000. Sea oat planting estimates range from \$30,000 to \$50,000.

## 5.5.3 Environmental and Socio-Economic Impact

As noted above, positive environmental impacts for this preferred alternative include the creation of beneficial fish habitat through reef construction and preservation of shoreline habitat. There is the potential for some adverse impacts from reef creation due to the conversion of one habitat type to another and the effects of or adding to concentrating fishing pressure on any species that may be overfished. Some impacts, however, if they occur are likely to be minimal due to the anticipated project scale or may be minimized in design and implementation. Some on-site environmental disturbance could occur during construction, such as short-term local increases in turbidity. No significant socio-economic impacts are expected to occur as the result of either constructing nearshore reefs or planting sea oats.

## 5.6 No Action Alternative

In developing restoration plans pursuant to the Oil Pollution Act of 1990 and other federal laws, the National Environmental Policy Act requires the "no action" alternative be considered as a means of minimizing potential consequences to the human environment. Under the "no action" alternative, no action would be taken to provide for resources or services which would compensate for the lost access to or use of resources for recreation caused by the spill. Only natural recovery of resources or services occurs under this option. Interim losses are not addressed.

Under laws applicable to this incident, it is the Trustees' responsibility to seek compensation for the lost use of or access to natural resources for public recreation and, further, to use funds recovered for these losses to restore, replace or acquire services equivalent to those lost. Where such losses are significant and feasible, cost-effective restoration alternatives are available, the "no action" alternative cannot satisfy these responsibilities and must be rejected on that basis. Further, while the

preferred alternatives outlined above include some development activities, they are part of an overall plan that will enhance environmental quality.

## 5.7 Non-Preferred Alternatives

A number of alternatives proposed during the public comment process have been determined by the Trustees to be less appropriate in fulfilling restoration objectives. In particular, the benefits of most of these projects are only indirectly related to the human-use losses associated with the spill.

The creation or expansion of artificial offshore reefs as identified during the scoping process would only indirectly benefit the shoreline resources or recreational sites where the most significant harm or loss occurred. Near-shore reefs are included as a preferred restoration activity because they would occur within the spill affected environment. The enhancement of offshore resources or uses would not address the Trustees' primary objectives in this restoration plan.

Improvements to existing access sites which do not preserve resources or create new opportunities for access, are also not favored as a restoration alternatives. Some of the projects considered by the Trustees involved plans to redesign or rehabilitate existing recreational sites. Such activities include enhanced lighting, changes to outdoor furniture, increased parking, better shade facilities and other improvements. While such amenities might be beneficial to the public and potentially improve the recreational experience, the Trustees found sufficient opportunities available to increase access directly.

The creation of additional parking facilities at existing access points was also deemed a nonpreferred alternative. Driving to the beach is certainly a popular choice for many people, but it is not the objective of the Trustees to relieve traffic congestion or to favor driving over other modes of transportation. While walking or cycling along the beach can be considered part of a shoreline recreational experience, planning decisions about automobile access to a beach site properly lie with regional authorities using locally controlled funding.

## 5.8 Allocation of Restoration Funds

The Trustees believe it will be possible to fund at least one of each of the preferred restoration alternatives identified above. Projects that will be considered for funding under each of the preferred alternatives are presented in Appendix A. It is possible, however, that additional projects, not listed in Appendix A, will be identified during the public comment period on this draft RP/EA.

# 6.0 COMPLIANCE WITH OTHER KEY STATUTES, REGULATIONS, AND POLICIES

#### Oil Pollution Act of 1990 (OPA), 33 U.S.C. § 2701 et seq.; 15 C.F.R. Part 990.

OPA consolidated provisions from several previous statutes dealing with prevention, response and compensation for oil spills. OPA provides authority for Trustee agencies to seek restoration to compensate for interim losses of natural resources or services, including the lost human uses of resources that occur pending the recovery of affected resources or services.

Under OPA and its implementing regulations, the natural resource damage assessment process consists of three phases: preassessment, restoration planning, and restoration implementation. In the preassessment phase, Trustees make a preliminary determination whether losses have occurred involving natural resources or the services they provide, and whether feasible restoration options exist to address the losses. During the restoration planning process, the losses are evaluated, the type and scale of necessary restoration actions is determined, and the proposed restoration actions are presented for public review in a Draft Restoration Plan. In the implementation phase, selected restoration actions are carried out by the parties responsible of the spill or by the Trustees using recovered funds.

#### National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq.; 40 C.F.R. Parts 1500-1508

NEPA requires the federal government to perform an Environmental Assessment in any planning process with potential environmental consequences. In considering the restoration actions proposed herein, this Draft RP/EA incorporates all elements of an Environmental Assessment (EA) in accordance with NEPA. Additional information on potential environmental impacts will be added as necessary when the restoration plan is finalized. Comments and input from the public is an important component of the NEPA process, and this draft is intended to assist in the public review process.

# Federal Water Pollution Control Act, commonly called the Clean Water Act (CWA), 33 U.S.C. § 1251 *et seq*.

The Clean Water Act, Section 311, is also a source of authority for seeking natural resource damages. Like OPA, this statute provides for damage claims based on appropriate restoration actions as delineated in regulations promulgated by the Department of the Interior.

Section 404 of the law requires a permit for the disposal of material into navigable waters. The Army Corps of Engineers administers the program. A restoration project that moves significant amounts of material into or out of waters or wetlands – restoration of marshlands, for example – requires a 404 permit. A CWA Section 404 permit will be obtained, if required, in implementing any restoration actions selected in the Final RP/EA.

#### Coastal Zone Management Act (CZMA), 16 U.S.C. § 1451 et seq.; 15 C.F.R. 923

The goal of the CZMA is to encourage appropriate management of coastal resources by requiring states to develop Coastal Management Plans (CMPs). The planning process is meant to include preservation, protection and development of resources, with provisions governing the restoration and enhancement of coastal environments. Under Section 1456 of CZMA, federal actions are required to comply with approved state CMPs. NOAA has reviewed this Draft RP/EA for consistency with the Florida Coastal Management Program and believes the restoration actions proposed herein are consistent with that plan. NOAA is submitting this determination of consistency to the Florida Department of Community Affairs for review coincident with the release of this document.

## Endangered Species Act (ESA), 16 U.S.C. § 1531 et seq.; 50 C.F.R. Parts 17, 222, 224.

The ESA directs all federal agencies to assist in the conservation of threatened and endangered species to the extent their authority allows. Protection of wildlife and preservation of habitat are the central objectives in this effort. The Department of Commerce (through NOAA) and the Department of the Interior (through USFWS) publish lists of endangered and threatened species. Section 7 of the Act requires that federal agencies consult with these departments to minimize the effects of federal actions on these listed species.

The restoration actions described in this Draft RP/EA are not expected to adversely impact any species listed under the ESA. Prior to implementation of the final restoration plan, the Trustees will initiate consultation with the appropriate agencies pursuant to the ESA and ensure that the restoration actions contemplated are in accordance with all applicable provisions.

## Fish and Wildlife Conservation Act, 16 U.S.C. § 2901 et seq.

The proposed restoration projects will not encourage or discourage the conservation of non-game fish and wildlife.

## Fish and Wildlife Coordination Act (FWCA), 16 U.S.C. § 661 et seq.

The FWCA requires that federal agencies consult with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and state wildlife agencies regarding activities that affect any aquatic environments. This consultation is generally incorporated into the compliance process associated with other relevant statutes, such as CWA and NEPA. As part of the final restoration planning process, the Trustees will initiate consultation with the appropriate agencies pursuant to this statute.

## Magnuson Fishery Conservation and Management Act, 16 U.S.C. § 1801 et seq.

The Magnuson Fishery Conservation and Management Act provides for stewardship of the Nation's fishery resources within the Exclusive Economic Zone, covering all U.S. coastal waters out to a boundary at 200 miles. The resource management goal is to achieve and maintain the optimum yield from U.S. marine fisheries. The Act also establishes a program to promote the protection of Essential Fish Habitat (EFH) in the planning of federal actions. After EFH has been described and identified in fishery management plans by the regional fishery management councils, federal agencies are obligated to consult with the Secretary of Commerce with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH.

The Trustees do not believe that the preferred restoration alternatives will adversely impact any Essential Fish Habitat as designated in the Act. Although final projects and locations have not yet been identified, it does not appear that any particular project under consideration is likely to adversely affect any EFH. To ensure compliance, however, the Trustees will finalize EFH evaluation and initiate appropriate consultation with the National Marine Fisheries Service, Southeast Habitat Protection Division after specific restoration project details have been developed.

#### Marine Mammal Protection Act, 16 U.S.C. § 1361 et seq.

The Marine Mammal Protection Act calls for long-term management and research programs regarding marine mammals. It places a moratorium on the taking and importation of marine mammals and marine mammal products, with limited exceptions. The Department of Commerce is responsible for whales, porpoises, seals, and sea lions. The Department of the Interior is responsible for all other marine mammals. The proposed restoration actions will not have an adverse effect on marine mammals.

#### Migratory Bird Conservation Act, 126 U.S.C. § 715 et seq.

The proposed restoration actions will have no adverse effect on migratory birds.

## Archeological Resources Protection Act, 16 U.S.C. § 470 et seq.

The Florida State Historical Preservation Officer will be consulted pursuant to this Act after restoration projects are finalized and before they are implemented. The consultation will ensure that there are no known cultural resources in the project area and no sites listed or eligible for listing on the National Register of Historic Places.

#### Anadromous Fish Conservation Act, 16 U.S.C. § 757

The proposed restoration actions will have no adverse effect on anadromous fish species.

## Rivers and Harbors Act of 1899, 33 U.S.C. § 403 et seq., Section 10

The Rivers and Harbors Act regulates development and use of the nation's navigable waterways. Section 10 of the Act prohibits unauthorized obstruction or alteration of navigable waters and vests the Army Corps of Engineers with the authority to regulate discharges of fill and other alterations. Restoration actions that require Section 404 Clean Water Act permits are likely also to require permits under Section 10 of the Rivers and Harbors Act. A single permit usually serves for both. Any permits under the Act, if required, will be obtained prior to implementing any restoration actions selected in the Final RP/EA.

# Executive Order Number 11514 (34 FR 8693) – Protection and Enhancement of Environmental Quality

A Draft Environmental Assessment is integrated within this Draft RP/EA and environmental coordination is taking place as required by NEPA.

## Executive Order Number 11990 (42 FR 26961) – Protection of Wetlands

The proposed restoration activities will not adversely effect wetlands or the services they provide.

## **Executive Order Number 12898 – Environmental Justice**

This Executive Order requires each federal agency to identify and address any policy or planning impacts that disproportionately affect the health and environment in low-income or minority populations. EPA and the Council on Environmental Quality have emphasized the importance of incorporating environmental justice review into the analyses conducted by federal agencies under NEPA and of developing appropriate mitigation measures. The Trustees have concluded that there would be no adverse impacts on low-income or minority communities due to the preferred restoration alternatives.

## Executive Order Number 12962 (60 FR 30769) - Recreational Fisheries

The proposed restoration projects will not adversely effect recreational fisheries and the services they provide.

## 7.0 FINDING OF NO SIGNIFICANT IMPACT

Having reviewed the attached environmental assessment and the available information relative to the Restoration Plan, I have determined that there will be no significant environmental impacts from the proposed actions. Accordingly, preparation of an environmental impact statement on these issues is not required by Section 102 (2) of the National Environmental Policy Act or its implementing regulations.

\_\_\_\_\_ Date \_\_\_\_\_

Penelope D. Dalton Assistant Administrator for Fisheries National Marine Fisheries Service National Oceanic and Atmospheric Administration U. S. Department of Commerce

#### 8.0 TRUSTEE COUNCIL SIGNATURES

In accordance with the Memorandum of Agreement between the National Oceanic and Atmospheric Administration of the U. S. Department of Commerce and the Florida Department of Environmental Protection, executed January 14, 1997, the following designated members of the 'Tampa Bay Natural Resources Trustee Council' indicate by signature below their agreement to adopt, in its entirety, this Tampa Bay Restoration Plan / Environmental Assessment.

The date of final approval for this document shall be the date of the final Trustee Representative's signature.

For NOAA

Date

John Iliff Restoration Center National Oceanic and Atmospheric Administration 9721 Executive Center Drive N., Koger Bldg., Suite 114 St. Petersburg, FL 33702

For FDEP

Date \_\_\_\_\_

P. Wieczynski
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## 9.0 LIST OF PREPARERS

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## APPENDIX A

Preferred Restoration Alternatives			
Ace	quisition of Waterfront Property		
1	Waterfront property in Pinellas County; eligible for Penny for Pinellas matching		
	funds; to create or expand beach access		
2	Waterfront/beach property in Indian Shores to expand nature preserve/park		
3	Bayfront property in Madeira Beach for park area		
4	Beach front property in N. Redington Beach to create beach access		
5	Bayfront property in Treasure Island to create bay access		
6	Beach front property in Treasure Island for creation of beach access		
7	Property in Pinellas County; to create public access to open water; to provide		
	space for environmental educational facility		
Co	nstruction of Fishing Piers		
8	Upgrade existing pier in St. Pete Beach to enhance fishing access		
9	Create fishing pier in St. Pete Beach to increase fishing access		
10	Enlarge and enhance existing fishing pier in St. Pete Beach		
11	Create fishing pier in St. Pete Beach to increase fishing access		
Co	Construction of Public Trails and Walkways		
12	Walkway creation along Gulf beaches in St. Pete Beach		
13	Walkway creation along Gulf beaches in St. Pete Beach		
14	Dune walkovers in Ft. DeSoto Park		
15	Dune walkovers in N. Redington Beach		
16	Dune walkovers in Redington Beach		
17	Create public trail on Pinellas Bay Way to Ft. DeSoto Park		
18	Walkway along Gulf beaches in Treasure Island		
Enhancement of Boating Opportunities			
19	Mooring buoys at Egmont Keys to enhance boating access		
20	Rehabilitate and enlarge bay side boat ramp in St. Pete Beach		
Enl	hancement of Natural Resource Amenities		
21	Nearshore artificial reefs in the Gulf of Mexico or Boca Ciega Bay		
22	Plant Sea Oats on Gulf side beach dunes		
	Non-Preferred Alternatives		
23	Replacement of boat ramp in Ft. DeSoto Park		
24	Create parking area for boat trailers in Pinellas County		
25	Implement Good Mate program (boater and marina education) throughout Pinellas		
	County		
26	Create artificial reefs 12 miles offshore of Tarpon Springs		
27	Funding for infrastructure at nature preserve in Indian Rocks Beach		

- **28** Development of park in Indian Shores
- **29** Facilities improvement in Madeira Beach
- **30** Development of pavilion in N. Redington Beach
- **31** Other property acquisition (non-beach or waterfront).
- **32** Resurfacing of existing bike trail in Ft. DeSoto Park
- **33** Updating beach facilities at Ft. DeSoto Park
- **34** Purchase sand colored towels for beach hotels to reduce chlorine bleach use
- **35** Fund a feasibility study for a Sky Train along Gulf beaches
- **36** Non-waterfront property acquisition in Redington Beach
- **37** Develop a pavilion in Redington Beach
- **38** Landscape common areas in Redington Beach
- **39** Purchase of a tractor for Redington Beach
- **40** Develop a wildlife preserve in Redington Shores
- **41** Develop a marina in St. Pete Beach
- 42 Install showers at St. Pete Beach
- **43** Install street lighting along the beach at St. Pete Beach
- **44** Purchase park and recreation equipment for St. Pete Beach
- **45** Create a breakwater at St. Pete Beach
- **46** Landscape the "Honor Walk" in St. Pete Beach