

Final

Supplement to the Damage Assessment and
Restoration Plan/Environmental Assessment
for the
August 10, 1993 Tampa Bay Oil Spill,

Volume I – Ecological Injuries

PREPARED BY

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
AND
U.S. DEPARTMENT OF INTERIOR, FISH AND WILDLIFE SERVICE

April 23, 2003

Supplement to the Final DARP/EA Vol. I

	Page
1.0 INTRODUCTION	4
1.1 Authority	4
1.2 Need and Purpose	4
1.3 Public Participation	5
1.4 Administrative Record	6
2.0 RESTORATION PLANNING PROCESS	7
2.1 Restoration Selection Criteria	7
3.0 PHYSICAL LOSS OF BEACH SAND - REVISED RESTORATION PLAN	9
3.1 Selected Alternative: Beach Sand Replacement Using Offshore Dredged Sand (Previously Selected Action)	9
3.1.1 Evaluation of Alternative	9
3.1.2 Ecological and Socio-Economic Impacts	10
3.2 Selected Alternative: Restoration of Dune Vegetation	10
3.2.1 Evaluation of Alternative	11
3.2.2 Ecological and Socio-Economic Impacts	11
3.3 Selected Alternative: Dune Management Activities	12
3.3.1 Evaluation of Alternative	12
3.3.2 Ecological and Socio-Economic Impacts	13
3.4 Non-Selected Alternatives	13
4.0 RESTORATION PROJECTS IDENTIFIED FOR FUNDING	15
4.1 Beach Sand Replacement Using Offshore Dredged Sand	15
4.2 Restoration of Dune Vegetation	15
4.2.1 Anticipated Level of Funding	16
4.3 Dune Management Activities	17
4.3.1 Anticipated Level of Funding	18
4.4 Summary of Selected Projects/Anticipated Funding	18
4.5 Non-Selected Restoration Projects	19
5.0 COMPLIANCE WITH OTHER KEY STATUTES, REGULATIONS, AND POLICIES	20
6.0 FINDING OF NO SIGNIFICANT IMPACT	24
7.0 LIST OF PREPARERS	25
8.0 TRUSTEE COUNCIL SIGNATURES	26

APPENDICES

A	SELECTED RESTORATION ALTERNATIVES & PROJECTS CONSIDERED/IDENTIFIED FOR FUNDING UNDER RP/EA	27
B	SUMMARY OF PUBLIC COMMENTS ON THE DRAFT RESTORATION PLAN AND TRUSTEES' RESPONSE	28
C	FINDING OF NO SIGNIFICANT IMPACT LETTER	30

1.0 INTRODUCTION

This document is a Supplement to part one (Volume I) of the Final Damage Assessment and Restoration Plan and Environmental Assessment, June 1997, (DARP/EA Vol. I), developed by the State and Federal natural resource Trustee Council to address the injury, loss or destruction of natural resources resulting from the August 10, 1993, oil spill in Tampa Bay, Florida (hereafter, “the Spill”). The supplement is needed to provide for additional action alternatives which may be used to restore beach sand to address the beach sand injury identified in Section 4.9 of the Final DARP/EA, pp. 77-81, using natural resource damages which the Trustee Council recovered for that loss.

1.1 Authority

This Supplement to the DARP/EA Vol. I (hereafter, “the Supplement”) has been prepared jointly by the Florida Department of Environmental Protection (DEP), the National Oceanic and Atmospheric Administration (NOAA) of the United States Department of Commerce, and the United States Department of the Interior, acting through the U. S. Fish and Wildlife Service (DOI/USFWS) (hereafter, “the Trustees”) pursuant to their respective authorities as Trustees for natural resources injured as a result of the Spill, including under the Oil Pollution Act (OPA), 33 U.S.C. § 2701 *et seq.*, the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq.*, and other applicable laws. In addition, DEP is acting pursuant to authority provided by Chapter 376, Florida Statutes, and other applicable provisions of State law.

1.2 Need and Purpose

On August 10, 1993, approximately 32,000 gallons of mixed light fuels and 330,000 gallons of #6 fuel oil were discharged into the Tampa Bay environment following collisions involving three vessels - the tank barge "OCEAN 255", the tank barge "B-155" and the freighter "BALSA 37" - just south of Mullet Key near the entrance to Tampa Bay, Florida. The spill and/or associated response actions resulted in injury to a variety of natural resources, including birds, sea turtles, mangroves, seagrasses, salt marshes, oyster beds, surface waters, sediments and beaches, and significantly disrupted the use of area waterways, beaches and shellfish beds for public recreation. The physical loss of beach sand is one of nine types of natural resource injuries identified and assessed by the Trustees in the DARP/EA Vol. I¹.

The physical loss of beach sand occurred as a result of necessary response actions. Much of the oil involved in the Spill eventually stranded on about 13 linear miles of the beaches on the Pinellas County barrier islands. Cleanup of the oil on these beaches resulted in the removal of an estimated 39,827 cubic yards of oiled sand. As specified in Section 4.9 of the DARP/EA Vol. I, damages for the

¹ Lost human uses of natural resources were also addressed in the damage assessment process for the spill. These losses are addressed in the Final Restoration Plan and Environmental Assessment, Volume 2 – Human Use and Recreational Injuries, dated November 2000.

physical loss of beach sand were assessed based on the cost of replacing the same volume of beach sand as was removed. DEP estimated this cost to be \$10 per cubic yard from available information regarding the incremental cost to replace additional sand (equivalent to the volume lost) as part of a routine public sand nourishment project in the affected area. Damages for the physical sand loss were thus assessed at \$398,000.00. The Trustees recovered these damages in May 1999 as part of a comprehensive settlement of State and Federal claims arising from the Spill.

A restoration plan addressing the physical sand loss and governing use of the recovered damages is included in the DARP/EA Vol. I at Section 4.9.6. In that section, only one restoration alternative was selected for use to achieve sand replacement², the direct replacement of beach sand with offshore dredged sand, through augmentation of a current or future local, permitted beach nourishment project. The Trustees previously approved augmentation of one beach nourishment project at Blind Pass consistent with this restoration plan, and \$200,000.00 of the damages recovered were paid to DEP at settlement as reimbursement of the costs of that action. With respect to the remaining \$198,000.00, the Trustees have diligently searched but have not found another restoration project opportunity consistent with Section 4.9.6. All identified nourishment plans for area beaches have sources of necessary funds identified and/or are already planned at capacity. Consultations with Pinellas County have identified no unfunded projects for the next 10 years. Further, the amount of the remaining funds is insufficient to support a full project, as nourishment projects which use offshore dredged sand typically cost several million dollars. Therefore, to provide for use of the remaining beach sand restoration funds consistent with OPA, the Trustees find it necessary to identify other restoration actions appropriate to beach sand restoration.

1.3 Public Participation

This Supplement amends Section 4.9.6 of the DARP/EA Vol. I. A draft of this document was made available for public review and comment for 30 days, beginning July 1, 2002. A notice announcing the availability of the Draft Supplement and the period for public review was published in the St. Petersburg Times on July 1, 2002. That notice invited members of the public to propose other restoration alternatives or specific restoration projects, consistent with the restoration objectives. The notice also solicited comments on the alternatives proposed by the Trustees. Three comments on the Draft Supplement were received during the public comment period. One comment proposed three additional projects for consideration. All comments were considered by the Trustees before finalizing this Supplement and the expanded list of projects was considered by the Trustees as identified in

² Sand replacement was considered as primary restoration in the DARP/EA Vol. I. The restoration plan for the beach sand loss in DARP/EA Vol. I also considered the need for compensatory restoration action, i.e, restoration which would compensate for interim loss of physical services (e.g. erosion control) pending sand replacement. However, in this instance the Trustees found the beach sand loss was unlikely to diminish the storm protection provided by the beaches or to contribute to beach erosion and, on that basis, selected the No Action Alternative. The decision not to undertake restoration to compensate for interim service losses is not revisited in this Supplement and remains final.

Section 4.0. A summary of the specific comments received and the Trustees' responses thereto are included in Appendix B of this Supplement.

1.4 Administrative Record

Records documenting information considered, and actions taken by the Trustees in planning for and implementing restoration, including development of this Supplement, are included in an Administrative Record (AR) being maintained by the Trustees. Information and documents, including the public comments submitted on the Draft Supplement and the Final Supplement, are included in this AR as received or completed. These records facilitate public participation in the restoration planning process. Interested persons can access or view these records at the offices of:

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

Arrangements must be made in advance to review the record, or to obtain copies of documents in the record, by contacting the person listed above. Access to and copying of documents in the record are subject to all applicable laws and policies, including, but not limited to, laws and policies relating to copying fees and the reproduction or use of any material which is copyrighted.

2.0 RESTORATION PLANNING PROCESS

The DARP/EA Vol. I identifies the Trustees' strategy and framework for identifying preferred restoration actions to address resource injuries (Section 3.0), and defines the scope of the beach resource injury for assessment and restoration planning purposes (Section 4.9). Under the DARP/EA Vol. I, the injury to the beach resource is limited to the physical loss of beach sand due to the cleanup of oil from the beaches. Consistent with this narrowly defined injury, the restoration plan at Section 4.9.6 considers actions necessary to replace the lost sand. These elements continue to apply and are the foundation for the revised restoration plan described herein.

The DARP/EA Vol. I also provides information on the relevant environmental setting which is applicable to consideration of the restoration alternatives identified herein. That information provides the foundation for the Trustees' evaluation of the potential environmental consequences of these restoration alternatives.

2.1 Restoration Selection Criteria

In revising the restoration plan for this injury, the Trustees applied the following general criteria from the DARP/EA Vol. I in order to evaluate additional restoration alternatives and identify the actions selected for use to address the physical injury to the beach resource:

Relationship to assessed injury - Considers the nature and extent to which a restoration action would address the natural resource injuries that occurred as the result of the spill, including those resulting from response actions. This includes the extent to which benefits of the action would be on-site, in-kind, or would be otherwise comparable in nature, scope, degree and location to injuries that occurred.

Relationship to natural recovery - Considers the extent to which implementation of a given restoration alternative would reduce the time it takes an injured resource to recover to baseline and the ability of the resource to recover with or without alternative actions.

Consistency with restoration objectives - Considers the extent to which a given approach to restoration achieves restoration objectives identified for the injured resource.

Consistency with community objectives - Considers the degree to which a given restoration alternative is consistent with objectives for protection or enhancement of natural resources in the impacted watershed which are the subject of community-wide consensus. Such objectives may be found in the National Estuary Program's Comprehensive Conservation and Management Plans or other community-based planning documents for the impacted watershed.

Technical feasibility - Considers both the likelihood that a given restoration action will succeed in a reasonable period of time, and the availability of technical expertise, programs and contractors to implement the considered action. This factor includes, but is not limited to, consideration of prior

experience with methods or techniques proposed for use, availability of equipment and materials, site availability and logistical difficulty.

Site requirements - Considers and compares the extent to which physical, biological or other scientific requirements of proposed restoration actions can be met by available sites.

Potential for additional natural resource injury - Considers the risk that a proposed action may aggravate or cause additional natural resource injuries.

Multiple benefits - Considers the extent to which a given restoration action will address more than one natural resource injury or loss.

Sustainability of a given restoration action - Considers the vulnerability of a given restoration action to natural or human-induced stresses following implementation, and the need for future maintenance actions to achieve restoration objectives.

Consistency with policies and compliance with law - Considers the extent to which the action is consistent with relevant Federal and State policies and complies with Federal and State laws.

Cost of restoration - Considers the relationship of costs associated with a given restoration alternative to the benefits of that alternative and the ability to achieve restoration objectives. Other factors being substantially equal, the Trustees give preference to the less costly restoration approach.

3.0 PHYSICAL LOSS OF BEACH SAND - REVISED RESTORATION PLAN

As noted in Section 1.2, the Trustees have been unable to find beach nourishment project opportunities consistent with the original restoration plan, in large part due to the adequacy of funding for known projects. As a result, the Trustees identified and evaluated a range of restoration alternatives which would either actively replace beach sand or avoid or prevent future sand losses.

This section describes the range of restoration alternatives identified and evaluated by the Trustees in developing the revised plan to provide for beach sand restoration. The alternatives considered include some alternatives considered in developing the DARP/EA Vol I. Based on their evaluation of these alternatives, the Trustees selected the following restoration alternatives for possible use in this revised restoration plan:

- Beach Sand Replacement Using Offshore Dredged Sand (Previously Selected Action)
- Restoration of Dune Vegetation
- Dune Management Activities

The range of restoration alternatives evaluated by the Trustees and the rationale supporting the selection of the above alternatives is summarized in subsections 3.1-3.4. In accordance with NEPA, the “no-action” alternative is also considered but is rejected for reasons stated.

3.1 Selected Alternative: Beach Sand Replacement Using Offshore Dredged Sand (Previously Selected Action)

This is the restoration alternative selected in the DARP/EA Vol. I. The alternative involves direct placement of sand on injured beaches with sand obtained by augmenting current or future, local and permitted beach nourishment projects.

3.1.1 Evaluation of Alternative

Augmenting current or future beach nourishment projects would directly replace the volume of sand that was lost during the oil spill cleanup and achieves the restoration objective. Because beach nourishment projects are routinely implemented in Pinellas County, the alternative is technically feasible. Because the cost of implementing a complete beach nourishment project greatly exceeds the limited beach sand restoration funds remaining, augmentation of a current or future beach nourishment project presents the only cost-feasible means of using offshore dredged sand for sand replacement. The alternative poses some resource impacts, as described in Section 3.1.2, but these impacts are short-lived and are typically avoided or minimized through permit conditions. Project sustainability is a significant concern under this alternative as, depending on location and other site conditions, sand placed on a nourished beach can remain for anywhere from a just a few months to several years. Where project benefits would be short-term, use of this alternative would not be cost-effective. Nonetheless, this alternative remains a potentially viable and cost-effective means of restoring lost beach sand where restoration benefits are likely to be longer term.

3.1.2 Ecological and Socio-Economic Impacts

Replacement of beach sand with dredged sand would have impacts on the physical and biological environment, at both the offshore dredging site and at the recipient beach. The beach profile would be elevated, which increases storm and erosion protection to structures or habitats landward of the beach face. Beach fauna, such as coquina bivalves (*Donax variabilis*) and Ghost crabs (*Ocypode quadrata*), and other burrowing organisms found in the sand, such as the small shrimp-like amphipod (*Ampelisca abdita*) would be subject to burial. Burrowing organisms likely will survive and adapt to burial to some degree; moreover, any adverse impacts to these biological communities are typically short-lived, because nearby populations of these organisms migrate into the nourished beach or quickly repopulate the affected areas due to their high fecundity. Construction activities will also temporarily displace foraging of shore birds in the immediate area, but the effect is temporary and is not likely to adversely affect any birds due to the abundance of alternative beach foraging areas.

Sea turtle nesting can be affected by coastal construction activities. Heavy machinery can destroy nests or can compact beach sand, making it unsuitable for nesting. Emerging nestlings can become disoriented by lighting impacts. In the context of beach nourishment projects, these types of impacts are normally addressed through State and Federal permitting processes, which seek to eliminate or minimize these risks through conditions applied to construction methods or timing (e.g., construction permitted only in non-nesting periods).

Impacts to historical or cultural resources of the State are not anticipated, as the beaches targeted for nourishment in Pinellas County have generally been the subject of, and disturbed by, previous construction or nourishment projects, and there are no known historical or archaeological resources present on these sites. Public use of a beach site is excluded during nourishment activities. Noise and some air pollution are expected when heavy machinery is used to grade the sand pumped onto the beach from offshore. These disturbances are temporary and generally minimal.

3.2 Selected Alternative: Restoration of Dune Vegetation

This alternative involves planting of native dune vegetation, such as sea oats, as a means of promoting natural dune development and replacing lost beach sand over time. Sea oats are long-stemmed grasses that grow on sand dunes. These and other native dune plants with above- and below-ground plant structure help to capture windblown sand and deposit it back onto the dunes and beach, and to anchor and stabilize dunes. This alternative represents a mechanism (i.e., vegetation) for accelerating what is otherwise a long-term natural process for returning sand to beaches through accretion. Potential planting sites would include areas where new vegetation is required to replace that lost due to pedestrian traffic or other recreational uses or where additional erosion protection is desired.

3.2.1 Evaluation of Alternative

Dune vegetation planting can occur at the beaches where the sand loss occurred, so that the benefits of this passive means of sand replacement occur at the site of the original losses. It is a restoration alternative with few potential adverse consequences. The alternative would achieve the restoration objective of beach sand replacement, although it will occur incrementally, and over a long period of time. Several beach municipalities support or encourage the planting of native dune vegetation and report that volunteer groups in the community are actively engaged in sea oat plantings. The City of Treasure Island has proposed a planting project immediately south of the Sunset Vista Trailhead Park (currently under development) involving dune shaping and planting. There may be other areas with the capacity to sustain dune vegetation projects within the affected beach communities. Dune vegetation projects are technically feasible; indeed, they are relatively simple projects, with few design or site preparation requirements. The projects are self-sustaining, as dune vegetation generally needs little care after initial planting.

Dune vegetation provides numerous immediate benefits and services to other resources such as nesting habitat for shore birds and recreational services and aesthetic enjoyment for humans. A developing dune community will reduce ongoing sand erosion and provide increased storm protection to structures behind them. Planting dune vegetation is a cost-effective alternative for replacing beach sand as the projects have few and relatively simple plan requirements, the materials needed are inexpensive and readily available, volunteer labor can be effectively used to install plants, and there are few permitting requirements. Sea oat planting project estimates available to the Trustees during development of a separate restoration plan for this Spill³ generally ranged from \$30,000 to \$50,000. The Treasure Island project proposal noted above has a cost estimate of approximately \$65,150, with about \$54,350 of that total potentially related to restoration of dune vegetation.

3.2.2 Ecological and Socio-Economic Impacts

Planting native dune vegetation will have no negative or minimal negative environmental consequences. Planting is usually done by hand. If heavy machinery is used to shape planting areas, it will be done during the day and in a manner that avoids disturbing turtles and birds – specifically heavy machinery will not be used during turtle nesting season. Current planting guidelines and accepted project practices require that planting material be purchased from a nursery which can document that the planting stock is genetically similar to, or originates from, seed stock which is from the dune vegetation community where planting is to occur. Following these guidelines and practices should ensure the genetic integrity of the beach dune community is maintained. Increasing dune vegetation through planting should have positive benefits to the bird populations that rely on dune communities for habitat. Species such as the piping plover are likely to benefit from these actions.

The planting of dune vegetation may displace or eliminate recreational use of some small areas

³ The Final Restoration Plan and Environmental Assessment, Volume 2 – Human Use and Recreational Injuries, dated November 2000.

of beach surface, but any surface areas lost to dune vegetation will be extremely small in relation to the total beach area available for recreational use in the affected communities. Further, the planting of native dune vegetation contributes to the natural landscape, which is a more aesthetically pleasing and popular landscape to many recreational beach goers. The benefits to recreational beach goers will offset any potential impact, due to the small reduction in available beach area. This alternative will not have any other socio-economic impacts.

3.3 Selected Alternative: Dune Management Activities

This alternative involves actions which mitigate human use and/or ecological impacts to dune communities, promote natural dune recovery and formation, and facilitate replacement of beach sand through natural accretion. Such actions could include, but are not limited to construction of dune walkovers, educational signage, designation of restricted areas, and removing invasive exotic species (vegetation) found locally along some recreational beaches⁴. These activities are often paired or done in concert with seeding or replanting barren areas with native vegetation as described in Section 3.2. Such actions are generally implemented to curb impacts caused to dune habitats by humans (i.e., foot traffic) in high use areas, or by other conditions which contribute to the destruction of dune habitats and sand loss. Preventing such access or carefully channeling pedestrian traffic via walkovers, allows dune habitats to recover from pedestrian impacts and accrete sand.

3.3.1 Evaluation of Alternative

Dune management activities can be implemented in areas of documented dune habitat impact and sand loss. Dune management activities would avoid further sand losses due to human-related losses of dune habitat as well as accelerate the replacement of sand through natural processes over time, which is consistent with the restoration objective. Dune management activities are also consistent with community objectives as evidenced by the protection afforded to dune habitats by Federal, State, and local laws and ordinances and the significant public investment in dune walkovers already apparent in the affected community.

Dune management activities are technically feasible and cost-effective. Although dune walkovers can be more expensive than some of the activities under this alternative, walkovers can provide protection to dune communities for up to 20 years if constructed using durable, ultraviolet radiation (UV) resistant recycled materials. Removing exotic species from dune habitat can be a more expensive activity than constructing dune walkovers, particularly if heavy machinery is needed to eliminate mature stands of invasive trees. Project costs under this alternative could vary substantially depending on the particular action proposed. Project costs will reflect such factors as the scope of the

⁴ Exotic vegetation, Australian pine (*Casuarina equisetifolia*) in particular, often displaces the native dune vegetation which naturally accumulates sand and builds dunes. As they grow, Australian pines shade out native dune vegetation and over time develop a root system that degrades the nesting habitat service that sand dunes provide to sea turtles by creating a physical obstruction during excavation of a nest cavity. Importantly, the Australian pine root systems de-stabilize the existing dunes and promote sand erosion. Eradicating Australian pine from an infested dune area is often the first step in dune restoration.

activity or the extent to which it would involve design, permitting, material and/or construction costs.

The potential for additional resource injury is low. Construction impacts are likely to occur, but only within the degraded area targeted for restoration and not within healthy areas. Dune management activities tend to be sustainable activities, requiring only modest maintenance over time. Numerous opportunities to implement dune management activities exist within the affected communities.

3.3.2 Ecological and Socio-Economic Impacts

Management activities such as educational signage or establishment of restricted areas are likely to have only beneficial consequences. Other activities such as construction of dune walkovers, and removal of exotic plants may involve some temporary disturbance to the beach landscape, including noise and exhaust from machinery which may disturb birds and/or wildlife in the immediate vicinity. Walkovers serve to concentrate recreational activities in areas better suited or equipped to accommodate recreational traffic, thereby alleviating environmental impacts across broader areas. Construction of dune walkovers in historic areas, such as Ft. De Soto Park would be coordinated with a State Historic Preservation Officer to avoid impacts to any known, but unobservable historic artifacts

In the event of medical emergencies, dune walkovers also facilitate access to recreational shorelines by emergency personnel and may also improve safety if they draw pedestrians away from roads and automobile traffic. The addition of dune walkovers in selected areas would not have significant socio-economic impacts.

3.4 Non-Selected Alternatives

This section describes other restoration alternatives considered by the Trustees in developing this Supplement, but found following evaluation, to be inappropriate or less suited for use as a beach sand restoration action.

Overland Trucking of Sand: This alternative involves trucking in a volume of beach sand from a land-based sand quarry or other source with equivalent quality sand and placing it directly on one or more affected beach areas. This alternative was considered, but rejected in the DARP/EA Vol. I largely due to undesirable impacts associated with having large trucks moving into and out of beach communities and the potential costs of implementing this alternative. These impacts include increases in noise and traffic and the exhaust from large diesel trucks, which are not consistent with the objectives of beach communities whose economic base derives from being a resort and vacation destination. The potential impacts to the transportation infrastructure within the beach communities, and the lack of benefits to other natural resources, were also significant concerns. The Trustees reconsidered this alternative in developing this Supplement, but found its selection was not warranted for the same reasons the alternative was rejected in the DARP/EA Vol. I.

Construct groins or jetties: This alternative involves installing man-made structures which function to trap sand as it naturally passes by shorelines, transported by wave energy and currents.

Jetties are structures constructed with large boulders perpendicular to the shoreline and are intended to protect a harbor entrance. They usually extend hundreds of feet offshore. Groins are similar to jetties in that they are built perpendicular to the shoreline, but they are located along a shoreline with the sole purpose of stopping erosion and trapping sand. Both types of structures interfere with sand transport by waves and currents and build adjacent beaches. Although these structures can increase beach areas where they have been placed, they can also have the undesired effect of depriving sand to other beaches that would benefit from the undisturbed natural sand transport process, which is contrary to the interest and objectives of some beach communities. Moreover, the cost of construction of these types of structures is substantially higher than the cost of any other restoration alternative considered, due to the degree of engineering, design and other planning required, and would likely exceed the funds available to provide for beach sand restoration.

Creation of Near-shore Oyster Habitat: This alternative involves creation of a near-shore oyster reef as a means of creating shoreline conditions suitable for sand accretion, accelerating what is otherwise a natural process for returning sand to beaches. An oyster reef can also protect a shoreline from erosion by reducing wave energy, which can help avoid or reduce future losses of sand due to wave action. The alternative involves the placement of fossilized shell or other appropriate material on the sea floor close enough to the shore to promote sand accretion and to reduce wave energy from wind and boat traffic. Siting would be limited to areas of sandy bottom in order to minimize or eliminate the potential for additional natural resource injury.

Using an oyster reef to accrete sand is consistent with the restoration objective of replacing lost sand, but not consistent with the Trustees intent to replace the lost sand on-site. High wave energy conditions immediately offshore of the Gulf beaches affected by the spill make it difficult to establish an oyster reef there. A more likely and feasible location for an oyster reef project is within Boca Ciega Bay. While an oyster reef in Boca Ciega Bay might prevent further erosion of sand along adjacent shorelines, sand accretion in Boca Ciega Bay does not benefit any beaches suffering sand loss and is, therefore, not appropriate for selection as a primary restoration action.

No Action Alternative: This alternative would involve no further direct intervention to restore lost beach sand. Under this alternative, ongoing management programs and natural recovery processes would be the only processes available to restore lost sand to affected beaches. However, most of the affected beach areas require periodic beach renourishment to maintain them for recreation and as coastal erosion barriers or buffers, due to ongoing erosion. Under these circumstances, the lost sand is unlikely to be restored except by supplemental action. Further, this alternative does not provide for the use of the damages recovered for restoration of the lost beach sand, which the Trustees are lawfully required to apply, if possible, to that purpose.

4.0 RESTORATION PROJECTS IDENTIFIED FOR FUNDING

In making project selections under the selected alternatives the Trustee Council exercised discretion, balancing many factors in determining the project or set of projects providing the greatest overall benefit to the public consistent with the primary objective of this restoration plan. The Trustees have also taken into account practical considerations, such as anticipated costs, the limited funds available to implement restoration under this plan, timing and feasibility.

This section of the Supplement summarizes the Trustees' project selection decisions, based on the restoration proposals available for current consideration under the selected restoration alternatives. A total of five projects were available for consideration. Two of these projects were identified and described previously in the Draft Supplement. Three additional projects were identified as a result of the public comment period.

The first project proposal involves restoration of dune vegetation on city-owned property in Treasure Island. This project also incorporates a dune walkover as a companion feature to protect the restoration site. The second project proposal involves the construction of up to five dune walkovers at Fort De Soto Park. Of the five proposed locations, however, the sites at either end of the Gulf Fishing Pier parking lot were identified by Park managers as the areas with the highest need for these structures. The final three projects involve the construction of dune walkovers at three existing public access points on Madeira Beach - South Beach, 137th Avenue, and 132nd & 133rd Avenue. The South Beach project entails the removal and replacement of two walkovers that are currently overgrown by the dunes. The 137th Avenue project contemplates construction of a walkover at a pedestrian access site. The 132nd and 133rd Avenue project would lengthen two existing walkovers beyond the dune line.

The Trustees have selected two (2) of these projects for implementation and partial funding under this plan – the restoration of dune vegetation on Treasure Island and the dune walkover project at Fort De Soto Park. The rationale for the selection of these projects and information considered in evaluating all projects is presented in the remainder of this section. The anticipated cost to implement each project is identified, based on the proposals submitted. For the selected projects, the final funding amount allocated to each will be determined by the Trustees, but is not expected to be higher than the anticipated costs identified herein.

4.1 Beach Sand Replacement Using Offshore Dredged Sand

Although a selected restoration alternative, there were no known projects of this type without funding at the present time. No projects of this nature were available for consideration.

4.2 Restoration of Dune Vegetation

The Trustees have selected the project in Treasure Island to provide for the restoration of native dune vegetation. This project will be implemented on city-owned property approximately 150 yards south of the Sunset Vista Trailhead Park which was also partially implemented using Tampa Bay Oil

Spill settlement funds. Dunes will be shaped with heavy machinery, planted with native dune vegetation (sea oats) and watered for a brief period of time to establish the dune vegetation. A small amount of beach sand will be purchased and added to the site for initial dune shaping. Once the sea oats become established they will promote natural dune development and function to restore more sand over time. The dunes will also provide erosion protection. This dune vegetation project will restore sand, in a relatively low cost manner, to an area of beach in Treasure Island where the physical sand loss due to the spill was notable. This project is also desirable because it will be located in an area that is currently experiencing heavy pedestrian traffic and recreational use (Figure 1) with no present chance of experiencing natural sand accretion. Also, as noted above, the project submission from the City of Treasure Island includes a 4' wide dune walkover as a companion feature as a means of protecting and maintaining the restored vegetation and dunes, including the associated natural sand accretion process into the future.

Figure 1.



4.2.1 Anticipated Level of Funding

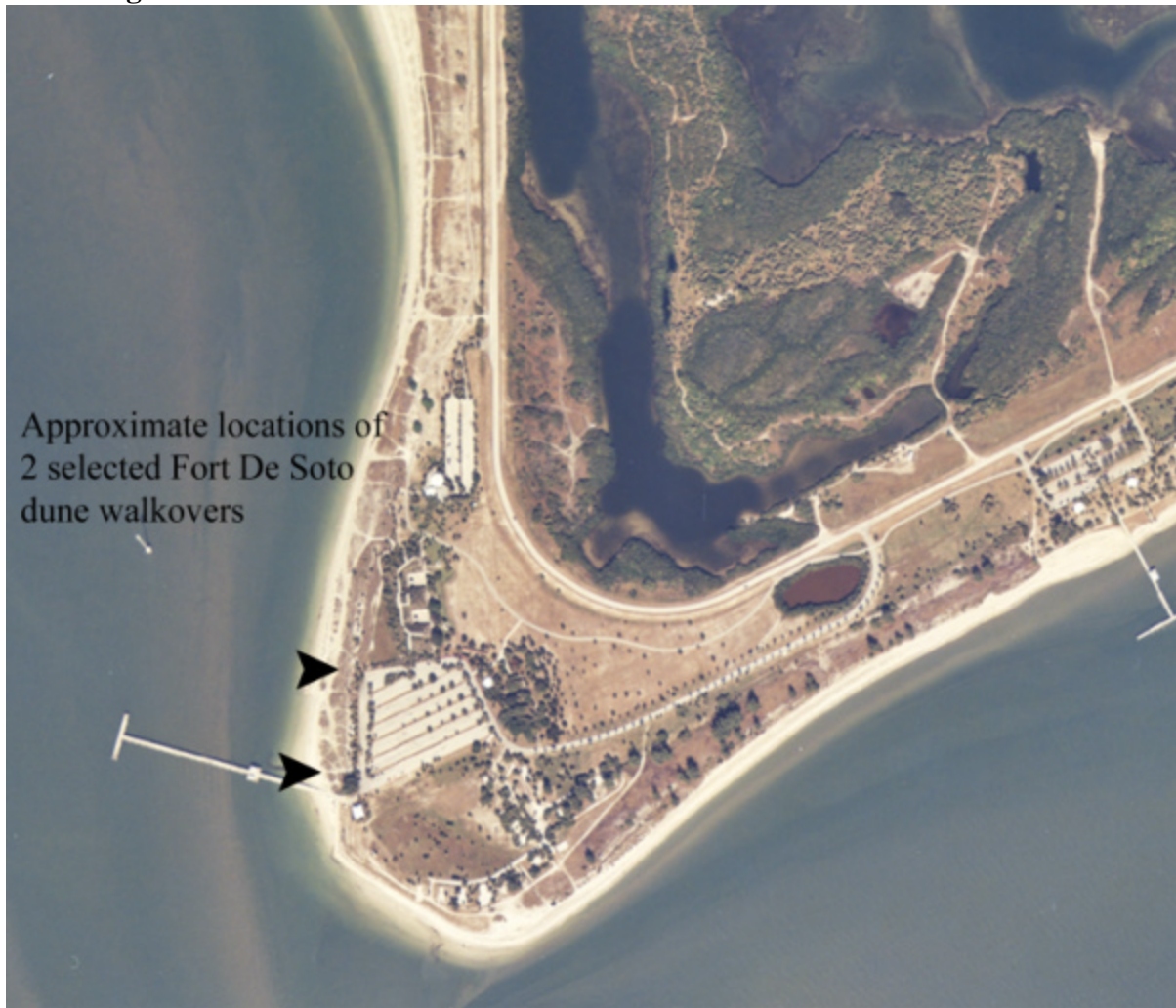
Based on the proposal submitted by the City of Treasure Island, the total cost of the dune vegetation and walkover project is estimated at \$65,150. This estimate covers the costs of project design, acquisition of sand and plant material, dune shaping, and walkover construction. The Trustees anticipate funding this project at approximately \$53,550. This sum represents the estimated costs of activities directly associated with the restoration of dune vegetation, including the initial dune shaping. Given that the funds available to implement sand restoration consistent with this plan are limited, this amount also reflects balancing of the funding needs of both of the selected projects. The City of

Treasure Island has acknowledged it could complete this project with partial funding.

4.3 Dune Management Activities

The Trustees selected the walkover project at Fort De Soto Park for partial funding under this alternative. The project selection decision and funding to be provided, however, extends only to the construction of dune walkovers at the two priority sites identified on either end of the Gulf Fishing Pier parking lot. These are areas where the public has walked through established dunes, and continues to do so (Figure 2). Pedestrian traffic through these sites has eroded deep footpaths through the dunes and eliminated wide swaths of vegetation, to a degree which inhibits or prevents natural sand accretion and other important ecological functions of the dune habitat. These locations are considered priority sites as they will relieve pedestrian traffic on eleven currently used sand paths through the dunes. Of the five sites proposed, the degradation of the dune structure due to pedestrian traffic appears to be highest at these two locations. The Park has also shown interest in funneling traffic to the constructed walkovers by blocking sand paths and allowing for the vegetation to naturally spread. Considering the limited funds available to implement restoration under this plan, the confinement of the project selection to two of the five proposed walkover sites balances the funding needs of the actions which the Trustees believe are best suited to achieve sand restoration. In addition, the selection of the Fort De Soto project benefits an area that was heavily impacted by the response activities associated with the Spill yet has, to date, not benefited from either recreational or ecological restoration. The project at Fort De Soto was selected by the Trustees over the walkover projects proposed in Madeira Beach for reasons which are detailed in Section 4.5.

Figure 2.



4.3.1 Anticipated Level of Funding

The Trustees received further information on the cost to design and construct the dune walkover project at Fort De Soto Park following release of the Draft Supplement. That information indicates construction of walkovers at the two priority sites will cost approximately \$144,450. Funding at that level is anticipated.

4.4 Summary of Selected Projects/Anticipated Funding

The Trustee Council has selected two projects for funding under this plan to achieve the restoration of sand lost due to the spill. The anticipated funding for these two projects totals \$198,000.

Table 4.4 Restoration Funding Summary

Beach Sand Replacement Using Offshore Dredged Sand	\$0
Restoration of Dune Vegetation (and Walkover)	\$53,550
Dune Management Activities	\$144,450
Total	\$198,000

As noted above, final funding for the selected projects will be determined by the Trustees, but is not expected to be higher than the anticipated cost. If the actual level of funding for selected projects proves to be substantially lower than anticipated herein, the Trustees may reconsider funding for non-selected projects or may seek additional project proposals which are consistent with this restoration plan.

4.5 Non-Selected Restoration Projects

Following site inspection and project review, the three dune walkover projects submitted for funding consideration by the City of Madeira Beach were not selected. The dune walkovers at South Beach were not selected because it did not appear that removal of the existing walkovers and construction of higher walkovers would lead to the accretion of additional sand; rather, it seemed removal of the existing walkover would harm the existing dune and construction of a higher walkover would only relieve the City of maintenance issues associated with the existing walkovers. The dune walkover project at the public access site located near 137th Avenue was not selected because the primary benefit of the project appeared to be the enhancement of public access at the location rather than the physical restoration of sand, the restoration objective of this Supplement. Finally, the walkovers proposed for 132nd and 133rd Avenues were not selected, as these sites do not currently appear to experience pedestrian traffic at a level sufficient to be a significant detriment to dune formation. At present, one path extends from each walkway down to the beach with no evidence of side footpaths through the dunes.

5.0 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.

The DARP/EA Vol. I was developed pursuant to OPA to assess natural injuries and losses caused by the Spill and to define restoration actions appropriate to address those injuries, as compensation for those losses. The restoration plan in that document was developed with substantial opportunity for public input, in part through release of a Draft DARP/EA Vol. I for public review and comment, in accordance with the requirements of OPA relating to public participation in the restoration planning process. Public participation is also required to revise that plan. Similarly, this Supplement was developed with the opportunity for public input, review and comment, in compliance with OPA provisions relating to the use of recovered damages, and in accordance with the restoration planning guidance found in 15 C.F.R. Part 990.

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 (EA) in planning for any action with potential environmental consequences. In considering the restoration actions proposed herein, the elements of an Environmental Assessment (EA) were integrated into this RP/EA, in accordance with NEPA. Thus, the effects of the restoration actions identified herein were evaluated prior to selection. This evaluation was found to support a Finding of No Significant Impact (FONSI), which is incorporated into this document in Section 6.0.

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 planning appropriate restoration actions using recovered damages, 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 requires a 404 permit. A CWA Section 404 permit will be obtained, if required, in implementing any restoration actions selected in the Final Supplement to the DARP/EA Vol. I.

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 reviewed the restoration actions identified herein for consistency with the Florida Coastal Management Program and found them to be consistent with that plan. As required by the CZMA, NOAA submitted its determination to the Florida Department of Community Affairs, the agency then responsible for coordinating Florida's review of this determination, by letter dated August 23, 2002. The State's review concluded with a letter dated September 11, 2002 that concurred with NOAA's finding that the restoration actions identified in this Supplement are consistent with the Florida's Coastal Management Program.

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 identified in this Supplement to the DARP/EA Vol. I are not expected to adversely impact any species listed under the ESA. Prior to implementation of any project under this final revised restoration plan, the Trustee Council will initiate consultation with the appropriate agencies pursuant to the ESA and ensure that such restoration actions will be in accordance with all applicable provisions of the Act.

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

The selected 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. The Trustee Council has initiated consultation with the appropriate agencies pursuant to this statute. This consultation process will continue as necessary to provide for appropriate implementation of restoration actions under this plan, including the necessary permits that must be obtained.

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 restoration alternatives selected in this plan nor any of the restoration projects identified for implementation hereunder, will adversely impact any EFH designated pursuant to the Act. However, the Trustees will initiate appropriate consultation with the National Marine Fisheries Service, Southeast Habitat Protection Division and finalize the EFH determination after specific restoration project sites are identified and further project details are 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 selected restoration actions will not have an adverse effect on marine mammals.

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

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

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

The Florida State Historic Preservation Officer will be consulted pursuant to this Act before selected restoration projects are implemented to ensure that there are no known cultural resources in any project area and no sites listed or eligible for listing on the National Register of Historic Places. The Division of Historical Resources of the State of Florida, in letter dated October 8, 2002 noted that Egmont Key and Fort De Soto Batteries are listed in the National Register of Historic Places and must be avoided by project activities. Prior to implementation of the selected project at Fort De Soto Park, the Florida State Historic Preservation Officer will be contacted to determine and minimize or avoid any of effect on the historical site.

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

The selected 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 also likely 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 action selected in the Final Supplement to the DARP/EA Vol. I.

Information Quality Guidelines Issued Pursuant to Public Law 106-554

Information disseminated by federal agencies to the public after October 1, 2002, is subject to information quality guidelines developed by each agency pursuant to Section 515 of Public Law 106-554 that are intended to ensure and maximize the quality of such information (i.e., the objectivity, utility and integrity of such information). The final supplement was identified as an information product covered by information quality guidelines established by NOAA and DOI for this purpose. The information contained herein complies with applicable guidelines.

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

An Environmental Assessment is integrated within this Supplement to the DARP/EA Vol. I and environmental coordination is taking place as required by NEPA.

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

The selected restoration actions will not adversely affect 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 Trustee Council has concluded that there would be no adverse impacts on low-income or minority communities due to the selected restoration actions.

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

The selected restoration actions will not adversely affect recreational fisheries and the services they provide.

6.0 FINDING OF NO SIGNIFICANT IMPACT

The federal Trustees elected to issue the final determination of no significant impact via a separate letter. This letter has been incorporated into the Supplement at Appendix C.

7.0 LIST OF PREPARERS

National Oceanic and Atmospheric Administration, U. S. Department of Commerce

Stephanie Fluke

John Iliff

Leslie Craig

Dolores Toscano

Florida Dept. of Environmental Protection

Maureen Malvern

Jane Urquhart-Donnelly

Philip Wieczynski

Domenic LetoBarone

U. S. Fish and Wildlife Service U. S. Department of the Interior

Diane Beeman

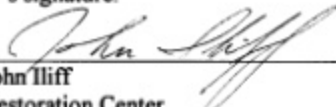
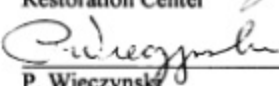
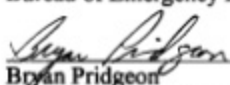
Holly Deal

Bryan Pridgeon

8.0 TRUSTEE COUNCIL SIGNATURES

In accordance with the Memorandum of Agreement between NOAA, the DEP and USFWS dated May 24, 1999 the following designated members of the Trustee Council for the Tampa Bay Oil Spill Restoration Phase indicate by signature below their approval of this Final Supplement to the Damage Assessment and Restoration Plan/Environmental Assessment for the August 10, 1993 Tampa Bay Oil Spill, Volume I – Ecological Injuries.

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

For NOAA	 John Iliff Restoration Center	Date <u>4/22/2003</u>
For FDEP	 P. Wiczynski Bureau of Emergency Response	Date <u>4/18/2003</u>
For USFWS	 Bryan Pridgeon U.S. Fish and Wildlife Service	Date <u>4/23/2003</u>

APPENDIX A

SELECTED RESTORATION ALTERNATIVES & PROJECTS CONSIDERED/IDENTIFIED FOR FUNDING UNDER RP/EA

Projects Available/Considered	Selected
-------------------------------	----------

RESTORATION OF DUNE VEGETATION

Dune Shaping and Sea Oat Planting in Treasure Island	YES
--	-----

DUNE MANAGEMENT ACTIVITIES

Dune walkovers in Ft. De Soto Park	YES
Dune walkover(s) at South Beach in Madeira Beach	NO
Dune walkover at 137 th Ave. in Madeira Beach	NO
Dune walkover(s) at 132 nd and 133 rd Ave. in Madeira Beach	NO

NON-SELECTED ALTERNATIVES

Overland Trucking of Sand	
Construct groins or jetties	
Creation of near-shore oyster habitat:	
No action alternative:	

APPENDIX B: SUMMARY OF PUBLIC COMMENTS ON THE DRAFT RESTORATION PLAN AND TRUSTEES' RESPONSE

A Draft of this document was made available for public review and comment for 30 days, beginning July 1, 2002. The notice announcing the availability of the Draft Supplement for public review also invited members of the public to propose other restoration alternatives or specific restoration projects for consideration, consistent with the restoration objective. The following is a summary of comments that the Trustees received during the public comment period and the Trustee Council's response (in italics) to each. All comments submitted by the public during this period were considered in finalizing this restoration plan.

Comment: The City of Treasure Island restated its interest in implementing the Dune Restoration Project as identified in the draft Supplement to the DARP/EA. The City submitted a budget for this project located near the Sunset Vista Trailhead Park totaling \$65,150.

Response: *As part of its review of all project proposals, Trustee Council representatives visited the proposed site for this dune vegetation restoration project. The Trustee Council considered both the updated cost estimate and observations from the site visit to evaluate the proposed restoration project and finalize project selections under this restoration plan. The Trustee Council selected the restoration of dune vegetation (w/ walkover) project near Sunset Vista Trailhead Park for funding under this restoration plan.*

Comment: The Senior Park Supervisor restated a desire to be considered for funding for dune walkover structures at Fort De Soto Park. A revised cost estimate was also submitted and outlined the cost/linear foot for five potential walkovers. Two of these sites were identified as priority projects with an estimated cost of \$144,450.

Response: *As part of its review of all project proposals, the Trustee Council representatives visited each of these proposed sites. The cost information, project priorities identified by the County, and observations from the site visits were used to evaluate these proposed structures and finalize project selections under this plan. The Trustee Council chose the two priority walkovers proposed at Fort De Soto Park for funding under this restoration plan as these two sites have and will continue to experience high volume pedestrian traffic which is clearly degrading the existing dunes.*

Comment: The City of Madeira Beach had no changes or concerns with the Draft Supplement but submitted a prioritized list of three additional projects for funding consideration. This list (in priority order) included (1) replacing two dune walkovers at South Beach (estimated cost - \$50,000), (2) installing a dune walkover at 137th Avenue (estimated cost - \$25,000), and (3) extending the 132nd and 133rd Ave. dune walkovers (estimated cost - \$50,000).

Response: *Because these projects were consistent with the restoration alternatives proposed for use in this restoration plan, the Trustee Council included these projects for evaluation for*

potential funding under this plan. As part of its review of all project proposals, Trustee Council representatives visited each of these proposed sites. The Trustee Council considered the City's project descriptions, the cost estimates, and observations from the site visits to evaluate the proposed restoration projects and finalize project selections under this plan. None of these projects were selected for funding, however, as the Trustee Council found the sand restoration objective was better met through other available projects, as outlined in Section 4.5 of this document.

APPENDIX C

FINDING OF NO SIGNIFICANT IMPACT LETTER

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Final Supplement to the Damage Assessment and Restoration Plan/Environmental Assessment for the Tampa Bay Oil Spill Tampa Bay, Tampa, Florida

The National Oceanic and Atmospheric Administration (NOAA) is the lead Federal agency for the National Environmental Policy Act (NEPA) compliance for the Final Supplement to the Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA) to restore natural resources injured by the August 10, 1993 vessel collision and oil spill in Tampa Bay, Florida. This plan was developed in cooperation with the with the Florida Department of Environmental Protection and the U.S. Department of the Interior (U.S. Fish and Wildlife Service) as cooperating trustees.

This supplement amends Section 4.9.6 of the DARP/EA Vol. 1. A draft of this document was available for public review and comment for 30 days starting July 1, 2002. A notice announcing the availability of the Draft Supplement and the period for public review was published in the St. Petersburg Times. This notice also invited the public to propose other restoration alternatives and to comment on the alternatives proposed by the Trustees. All three comments received were considered by the Trustees before finalizing this Supplement and the expanded list of projects.

This supplement presents two project proposals as alternatives to the original restoration: restoration of dune vegetation on Treasure Island (\$53K), and construction of two dune walkovers at Fort De Soto Park (\$144K).

To comply with the requirements of NEPA, the Trustees analyzed the effects of the alternatives proposed by the Trustees on the quality of the human environment. NEPA's implementing regulations direct federal agencies to evaluate the potential significance of proposed actions by considering both context and intensity. For the actions proposed in this Final Supplement to the Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA), the appropriate context for considering potential significance of the action is local, as opposed to national or worldwide. With respect to evaluating the intensity of the impacts fo the proposed action, the NEPA regulations (40 C.F.R. § 1508.27) suggest consideration of ten factors. These are addressed in the Supplement and summarized below.

1. *Likely impacts of the proposed projects:*

Both projects address the injury of physical loss of beach sand. The Treasure Island project will enhance and stabilize existing dunes by adding sand and planting vegetation, which is expected to spread and promote natural dune development. The Fort De Soto Park project will build dune walkovers to redirect pedestrians and relieve or eliminate foot traffic across the dunes. Concentrated foot traffic over the dunes destroys dune-stabilizing vegetation as well as inhibiting or preventing natural sand accretion. Once dunes are lost, so are the important ecological functions they perform, such as reducing wind and storm erosion, and providing dune habitat, especially for bird populations that

nest there. The direct, long-term ecological impacts of both projects are beneficial in that each promotes formation of natural dunes.

Shaping of dunes, planting sea oats, and constructing dune walkovers may displace or eliminate small areas of beach surface used for recreation. These areas will be very small in comparison to the total beach area available for recreation at both Treasure Island and Fort De Soto Park. In addition, planting native dune vegetation will contribute to the natural landscape, providing a different benefit that will serve to offset the loss of a small recreational area.

Neither of these projects is expected to require substantial long-term maintenance.

Short-term impacts include noise and exhaust from use of heavy equipment used for hauling in sand and shaping the dunes at Treasure Island. Construction work at Fort De Soto Park may have also involve use of machinery with similar results. Work at both sites will be done during the day only, and will be scheduled to avoid turtle nesting season. Also, at both locations construction may temporarily redirect pedestrian traffic to the beach, but will not restrict it. Work on these projects may result in minimal and short duration disturbance, if any, to both humans and wildlife in the project area.

2. *Likely effects of the project on public health and safety:*

One foreseeable effect on human health and safety is that dune walkovers make it easier for emergency personnel to get to the beaches. Dune walkovers also direct pedestrians away from roads and traffic, which would improve safety for both pedestrians and drivers. Dune shaping and planting at Treasure Island would have no foreseeable effect on public health and safety.

3. *Unique characteristics of the geographic area in which the projects are to be implemented:*

The areas in which these projects will take place present no unique characteristics that make them distinct from the many other local beaches.

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial:*

Both projects have been available for public review and generated only minor response. Neither is likely to be highly controversial.

5. *Degree to which possible effects of implementing the project are highly uncertain or involve unknown risks:*

Both types of projects have been done elsewhere so no great uncertainties or risks are expected.

6. *Precedential effect of the project on future actions that may significantly affect the human environment:*

Since both types of projects have already been done elsewhere, there is no precedential effect.

7. *Possible significance of cumulative impacts from implementing this and other similar projects:*

Both projects are quite small in scale and effects are very localized, so cumulative impacts are not significant.

8. *Effects of the project on National Historic Places, or likely impacts to significant cultural, scientific, or historic resources:*

Both projects are being coordinated with the State Historic Preservation Officer and with federal and state agencies responsible for natural resources to ensure that there are no likely impacts to significant cultural, scientific, or historic resources.

9. *Degree to which the project may adversely affect endangered or threatened species or their critical habitat:*

Both projects are being coordinated with federal and state agencies responsible for natural resources to ensure that there are no likely impacts to endangered or threatened species or their critical habitat.

10. *Likely violations of environmental protection laws:*

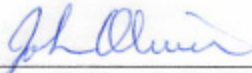
Both projects have been planned to be in compliance with all applicable environmental protection laws, and no violations are likely or expected. In addition, both projects will be implemented in compliance with all permits required by the state and federal regulatory agencies.

In each project, the effects were judged to be beneficial though not significant as defined by NEPA.

Both projects will be implemented in compliance with all permits required by the state and federal regulatory agencies.

DETERMINATION:

Based upon an environmental review and evaluation of the Final Supplement to the Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA) to restore natural resources injured by the August 10, 1993 vessel collision and oil spill in Tampa Bay, Florida, I have determined that the proposed action does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969, as amended. Accordingly, an environmental impact statement is not required for these projects.

for 

William T. Hogarth, Ph.D.
Assistant Administrator for Fisheries
National Marine Fisheries Service
National Oceanic and Atmospheric Administration

4-14-03
Date