U.S. Department
of Homeland Security

**United States
Coast Guard**

Director
United States Coast Guard
National Pollution Funds Center

Natural Resource Damage (NRD)
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01/24/2007

DHL
Claim Number: S99018-OI1

Department of the Interior – Bureau of Land Management
ATTN: Edward Shepard
State Director
Oregon/Washington BLM
Oregon State Office
P.O Box 2965
Portland, OR 97208

Re: Claim Number: S99018-OI1

Dear Mr. Shepard:

The National Pollution Funds Center (NPFC), in accordance with the Oil Pollution Act (OPA) (33 U.S.C. 2701 et seq.), has determined to pay specific portions of the claim from the U.S. Department of the Interior; U.S. Department of Agriculture; State of Oregon; Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians; and Confederated Tribes of Siletz Indians of Oregon for natural resource damages (NRD) arising from the *M/V New Carissa* Oil Spill incident (S99018-OL1). With amendments, the final claim presented to the Oil Spill Liability Trust Fund (OSLTF) is $39,725,357, which includes a requested contingency of $6,056,092. NPFC has determined that of that amount, $27,985,382 in NRD costs is compensable under OPA to fund the implementation of the restoration plan for the *M/V New Carissa* incident. This amount does not include a contingency payment, as discussed later in this document.(See Section 14)

Taking into consideration $2,387,319 remaining with the Trustees from the settlement of Responsible Parties' liability for NRD costs, the total sum that will be paid to the Trustees from the OSLTF is $25,598,063. In a December 22, 2006 letter addressed to the Director of the NPFC from Mr. Shepard, the Trustees requested that the settlement amount be amended downward to $2,136,619. Because the settlement amount is deducted from any total paid by NPFC, the Trustees' proposed amendment would result in an increase of the claim by $250,700. After carefully considering the matter, NPFC has determined that the documentation provided to justify this amendment was not sufficient to warrant payment. This is particularly true given that some of these costs are also requested in other parts of the claim..

The rationale for this determined payment of $25,598,063 is detailed in this letter.

NPFC's Authority to Adjudicate Natural Resource Damage Claims

When OPA was enacted, Congress authorized the use of the OSLTF to pay the cost of assessing natural resource damages and implementing plans to restore natural resources lost as a result of an oil spill. 33 USC Section 2712 (a)(2). Executive Order 12777 further delegated the functions vested in the President by Section 2712 (a)(2) to the Federal trustees designated by the NCP. OSLTF payments of costs under 33 USC Section 2712 (a)(2) are only available with an annual appropriation (33 USC Section 2752 (a)).

Congress also authorized the use of the OSLTF to pay claims for uncompensated damages (33 USC Section 2712 (a)(4)). Executive Order 12777 further delegated to the Coast Guard the functions vested in the President by 2712 (a)(4) (56 Fed. Reg. 54757, Oct. 22, 1991). Unlike costs under Section 2712 (a)(2), claims under Section 2712 (a)(4) may be paid from the OSLTF without an appropriation (33 USC Section 2752 (b)).

In the Matter of the U.S. Coast Guard--Oil Spill Liability Trust Fund, B-255979 (Oct. 30, 1995), the Comptroller General concluded that a trustee's claim for natural resource damages could not be paid under Section 2712 (a)(4). However, the Department of Justice ("DOJ") subsequently disagreed with the Comptroller General's opinion and held that the trustees could seek reimbursement of natural resource damages from the OSLTF through either an appropriation under Section 2712 (a)(2) or a claim under Section 2712 (a)(4). See, Funds Available For Payment Of Natural Resource Damages Under the Oil Pollution Act of 1990, 21 U.S. Op. OLC 188 (DOJ Office of Legal Counsel, September 25, 1997). Because NPFC has been delegated the authority to adjudicate claims against the OSLTF under section 2712 (a)(4) and DOJ has ruled that trustee natural resource damage claims may be paid by the OSLTF without an appropriation, NPFC has the authority to adjudicate this claim. As part of that authority, NPFC is the fact finder during the adjudication of this claim.

Jurisdictional Information

NPFC first considered whether the claimed damages arose from an incident as defined under the Oil Pollution Act (33 USC 2701 et seq.). To be covered, the incident must involve a discharge of oil or a substantial threat of discharge of oil from a vessel or facility into navigable waters of the United States after August 18, 1990. The *M/V New Carissa* Oil Spill incident resulted from the grounding of the bulk cargo ship *M/V New Carissa* near Coos Bay, Oregon, on February 4, 1999. In part due to storms and heavy surf conditions, the ship's hull developed a crack and began leaking oil on or about February 8, 1999. The vessel eventually broke apart, releasing substantial quantities of oil into the coastal waters and on to the beaches in the vicinity of Coos Bay. During a subsequent attempt to tow the bow section out to sea, the towline broke and the bow drifted back to shore, grounding again near Waldport, Oregon, in early March and continuing to release oil. Initial estimates placed the quantity of oil released at between 25,000 and 70,000 gallons; the Trustees subsequently estimated that as much as 140,000 gallons of oil may have been discharged as a result of these events. NPFC finds that the *M/V New Carissa* Oil Spill constitutes an incident as defined under OPA.

Claimant Eligibility

Pursuant to 33 CFR 136.207, appropriate natural resources trustees may present claims to the Oil Spill Liability Trust Fund (OLSTF) for natural resource damages. Natural resource trusteeship authority is designated according to Section 1006(b) of OPA (33 U.S.C. Sec. 2706 (b)); specifically, Federal trustees are designated by the President, State trustees by their respective State Governors, and Tribal trustees by their respective Tribal governing bodies. The Claimants for the *M/V New Carissa* Oil Spill incident are the U.S. Department of Interior (Bureau of Land Management (BLM) and U.S. Fish and Wildlife Service (USFWS)); the U.S. Department of Agriculture (U.S. Forest Service (USFS)); the State of Oregon (Oregon Department of Environmental Quality (ODEQ) and Oregon Department of Fish and Wildlife (ODFW)); the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians; and the Confederated Tribes of Siletz Indians of Oregon. These Claimants have jointly submitted this claim for natural resource damages resulting from the *M/V New Carissa* Oil Spill, and have designated the U.S. Department of Interior as the Lead Administrative Trustee (LAT), with the State Director of the Oregon/Washington Office of BLM as the Authorized Official.

NPFC finds that BLM and USFWS, under the authority of the Secretary of the Interior, and the Forest Service, under the authority of the Secretary of Agriculture, are appropriate Federal natural resources trustees pursuant to the President's designation of Federal trustees under OPA, Executive Order 12777 (56 Fed. Reg. 54757, Oct. 22, 1991), and Subpart G of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300.600). Similarly, under Oregon Revised Statutes Chapter 468B, the ODEQ is tasked, in part, with developing natural resource valuations in assessing damages from oil discharges in cooperation with other natural resource agencies, and is designated as the lead State agency for management of environmental cleanup following oil spills (ORS 468B.395). Moreover, both ODEQ and ODFW are authorized by statute to recover damages arising from pollution that results in injury to fish or other wildlife, or to fish or wildlife habitat (ORS 468B.060). And finally, the Tribal Chairman of the Confederated Tribes of the Siletz Indians and the Tribal Council Chairman of the Confederated

Tribes of the Coos, Lower Umpqua, and Siuslaw Indians are appropriate natural resource trustees for their respective Tribes. Accordingly, NPFC finds that all of the Claimants for the *M/V New Carissa* Oil Spill incident are eligible to present claims to the OSLTF.

The Responsible Parties (RP) for this incident include Green Atlas Shipping S.A., the owners of the *M/V New Carissa*; TMM Co., Ltd., the ship's managers/operators; and Britannia Steamship Insurance Association, Ltd., the insurers of the *M/V New Carissa*. Under a consent decree and judgment issued in June 2004, Green Atlas and TMM jointly paid a lump sum of $4,000,000 in settlement of their liability for natural resource damages from the *M/V New Carissa* Oil Spill; a portion of this settlement amount was applied to funding natural resource damage assessment costs incurred by the Trustees in developing the restoration plan for this incident. From that $4,000,000, Trustees reimbursed $867,900 to NPFC for pre-assessment activities under an agreement between the Trustees and NPFC and litigation services by the Department of Justice.

Under a separate Memorandum of Agreement (MOA) instituted in December 2003 between NPFC and the Federal Trustees for this incident, NPFC agreed that the consent decree and judgment would not prejudice the rights of the *M/V New Carissa* Trustees to present a claim to the OSLTF for natural resource damages in excess of the settlement amount, that the Trustees' claim to the OSLTF would be considered and adjudicated as one for which "full and adequate compensation is unavailable" within the meaning of Section 1013(d) of OPA, and that the Trustees thus would not need to first present their claim to the RP. Therefore, in accordance with the consent decree and the terms of the MOA, the Trustees are eligible to present this claim directly to NPFC.

Claimant's Burden of Proof

Just like other claimants, trustees bear the burden of proving their entitlement to the amount claimed for compensation of natural resource damages (33 CFR 136.105). Unlike other types of claimants, trustees may be assisted by the rebuttable presumption found at 33 USC 2706 (e)(2) and 15 CFR 990.13 when meeting their burden.

Under OPA's rebuttable presumption, trustee determinations made in accordance with 15 CFR 990 are initially presumed correct. However, where trustees use procedures that fail to comply with 15 CFR Part 990, the presumption of correctness will not apply to the non-compliant portions of the assessment. See Natural Resource Damage Assessments, 61 Fed. Reg. 440, 443 (January 5, 1996). Once the trustees establish that the presumption applies, responsible parties have the burdens of presenting alternative evidence and of persuading the fact finder that the determinations were incorrect. Although determinations made in compliance with 15 CFR 990 will initially be presumed correct, the presumption of correctness may be rebutted. If the rebuttal evidence is of sufficient weight, the NPFC may request that the trustees supplement their administrative record or claim with additional clarifying information and, ultimately, may deny the claim in whole or part.

Claim Presentation

This natural resource damage claim was submitted by the State Director of the Oregon/Washington Office of BLM, acting as Authorized Official for the LAT on behalf of all *M/V New Carissa* Oil Spill trustees, and was received by NPFC on February 28, 2006. It included a cover letter; the Final Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA) for the *M/V New Carissa* Oil Spill; a summary of the NRDA claim components and associated costs; the *M/V New Carissa* Natural Resource Trustee Council Resolution (2006-01) Adopting Final Damage Assessment and Restoration Plan; the Federal Register Notice of Intent to Conduct Restoration Planning: *M/V New Carissa* Natural Resource Damage Assessment (FR Vol. 66, No. 216, pp. 56339-56340, November 7, 2001); the Memorandum of Agreement Between the United States Coast Guard, National Pollution Funds Center and the Federal Natural Resource Trustees for the *M/V New Carissa* Oil Spill; and the Consent Decree and Judgment in Green Atlas Shipping, et al. v. United States, filed June 4, 2004. This claim package meets the general requirements for a claim as set out in the NPFC claims regulations (33 CFR 136.105), including the requirement that the claim be in writing for a sum certain. The initial review of the claim also established that the claim derived from an OPA-covered discharge into navigable waters of the United States.

The time limitation for NRD claims is established by OPA (33 U.S.C. Sec. 2713(h)(2) and Sec. 2717 (f)(1)) and set out in both the NPFC claims regulations (33 CFR 136.101) and the Natural Resource Damage Assessments (NRDA) regulations (15 CFR 990.64(b)). The trustees presented this claim to NPFC within the appropriate statute of limitation. The NPFC claims regulations require claims to be filed within three years from the date of reasonable

discovery of injury connected to the incident or within three years of the completion of the NRDA pursuant to the NRDA regulations, whichever is later. Under the NRDA regulations (15 CFR 990), the last step in a NRDA is development of the Final Restoration Plan, and any claims must be filed within three years after the Final Restoration Plan is made publicly available. The Final Damage Assessment and Restoration Plan (DARP) for the *M/V New Carissa* Oil Spill incident was approved by the Trustees and made publicly available on January 31, 2006, effectively completing the NRDA. Because Claimants have certified that the NRDA was conducted in accordance with applicable provisions of the NRDA regulations at 15 CFR 990, and the NPFC received this claim on February 28, 2006, less than three years from the date the DARP was made publicly available, NPFC finds that the claim was presented within the statute of limitations set out in both the NPFC claims regulations and the NRDA regulations as cited above.

Claim Review and Adjudication Timeline

Following submittal of the claim on February 28, 2006, NPFC conducted an initial review of all claim documentation, and subsequently submitted a request for further information. to the Claimants on April 10, 2006, seeking additional information to resolve technical questions arising from this initial review. In response to this request, Claimants met with NPFC on April 18-19, 2006, at NPFC headquarters in Arlington, Virginia, to provide and discuss Claimants' responses to the questions posed in the request.

On June 6, 2006, NPFC sent to the Claimants a copy of the meeting notes from the April 18-19 meetings, which included the questions posed on April 10 by NPFC and the corresponding responses received from Claimants during the April 18-19 meetings. Claimants responded on June 15, 2006, with comments and additions to the meeting notes, along with additional supporting documents.

On July 6, 2006, following additional review of all information presented pursuant to the claim, including Claimants' June 15 correspondence in response to the April meeting notes, NPFC submitted to Claimants a final list of Restoration Claim Questions and Issues Requiring Claimant Input. Claimants responded in writing to many of these questions and issues on August 6, 2006. To facilitate discussion and resolution of these responses and the remaining questions and issues, the NPFC NRD Claims Division Chief traveled to Portland, Oregon, along with Contractor representatives from the NPFC New Carissa NRDA Claim Review team, to meet with Claimants for the week of August 7-11, 2006. During these meetings, most of the questions and issues from the July 6 list were resolved. At the conclusion of the meetings, NPFC and Claimants agreed on a specified set of additional responses and/or information that Claimants would provide in order to address the remaining outstanding questions and issues. Claimants provided all of the agreed upon responses and information by August 22, 2006.

Following the August meetings and receipt of the final responses and information, NPFC completed final review of all claim materials. The substance of the complete NPFC review, and its findings and conclusions regarding the restoration plan, form the basis for the claim determination as discussed in the pages that follow.

Adherence to NRDA Regulations

The trustees have certified that they conducted the *M/V New Carissa* Oil Spill NRDA and developed the DARP/EA in accordance with the applicable provisions of the NRDA regulations at 15 CFR 990. In addition to ensuring compliance with the Oil Pollution Act of 1990 (et seq.), a primary focus of the claim review and adjudication in this case has been to verify adherence of the NRDA process, procedures and methodologies detailed in the claim to the stipulations and requirements of the NRDA regulations, as discussed in Sections 1 through 12 below.

The claim was reviewed to ensure that the following activities listed in 15 CFR 990 were conducted:

1. Determination of jurisdiction (15 CFR 990.41)
2. Determination to conduct restoration planning (15 CFR 990.42)
3. Coordination with trustees, response agencies, Responsible Parties, and the public (15 CFR 990.14)
4. Emergency Restoration (15 CFR 990.26)
5. Publication of a Notice of Intent to Conduct Restoration Planning (15 CFR 990.44)
6. Opening of an Administrative Record (15 CFR 990.45)
7. Determination and quantification of injuries (15 CFR 990.51, 15 CFR 990.52)/Assessment procedures (15 CFR 990.27).

1. Exposure and pathway were established, and injuries identified
2. Appropriate injuries were selected for assessment
3. Injuries were quantified
4. Appropriate, reliable and valid assessment procedures were utilized

8. A reasonable range of feasible restoration alternatives was identified (15 CFR 990.53)
9. Restoration alternatives were evaluated and the preferred alternative was selected (15 CFR 990.54)
10. Draft Restoration Plan and Final Restoration Plan were developed (15 CFR 990.55)
11. Reasonableness of assessment costs (33 USC Sec. 2706 (d)(1), 15 CFR 990.30, 33 CFR 136.211)
12. Revolving Trust Fund established for sums recovered by the Trustees for the NRD (33 U.S.C. Sec. 2706 (f), 15 CFR 990.65).

1. Determination of Jurisdiction

Upon learning of an incident, trustees must determine, in accordance with the procedure established at 15 CFR 990.41, whether there is jurisdiction to pursue restoration under OPA. To make a determination of jurisdiction, the trustees must determine (1) whether an OPA incident has occurred, as defined at 15 CFR 990.30; (2) that the incident was not a permitted discharge, from a public vessel, or from an onshore facility subject to the Trans-Alaska Pipeline Authority Act (43 USC 1651, et seq.); and (3) that natural resources under the trusteeship of the trustees may have been, or may be, injured as a result of the incident. The *M/V New Carissa* Oil Spill Trustees' determination of jurisdiction to pursue restoration for this incident under OPA is contained in the Federal Register Notice of Intent to Conduct Restoration Planning: *M/V New Carissa* Natural Resource Damage Assessment (FR Vol. 66, No. 216, pp. 56339-56340, November 7, 2001), which is part of the Administrative Record (Record No. 36) for the NRDA.

2. Determination to Conduct Restoration Planning

If trustees determine that there is jurisdiction to pursue restoration, in order to proceed under the NRDA regulations they must make a determination to conduct restoration planning. This determination requires finding (1) that injuries have resulted, or are likely to result from the incident; (2) response actions have not adequately addressed, or are not expected to address, the injuries resulting from the incident; and (3) feasible primary and/or compensatory restoration actions exist to address the potential injuries (15 CFR 990.42). The Trustees' findings on these points are set forth in the Federal Register Notice of Intent to Conduct Restoration Planning: *M/V New Carissa* Natural Resource Damage Assessment (FR Vol. 66, No. 216, pp. 56339-56340, November 7, 2001). As indicated in the Notice of Intent, the findings of the determination to conduct restoration planning were based on preassessment studies and data collection regarding potential injuries to a variety of resources, including seabirds, shorebirds and recreational use; these studies are contained in the Administrative Record. NPFC finds that the Trustees' determination to conduct restoration planning was appropriate, and complies with the requirements of 15 CFR 990.42.

3. Coordination (Trustees, Response Agencies and the Public)

The *M/V New Carissa* incident affected resources under the trusteeship of multiple Federal, State and Tribal trustees. The NRDA regulations (15 CFR 990.14(a)(1)) recommend that, in such cases, trustees should conduct joint damage assessments to ensure full restoration of resources without double recovery of damages. In addition, the regulations require that, for such joint damage assessments, trustees must designate one or more Lead Administrative Trustee(s) to act as coordinators (15 CFR 990.14(a)(1)). The *M/V New Carissa* Trustee Council satisfied this requirement by designating the U.S. Department of Interior (DOI) as the Lead Administrative Trustee (LAT), with the State Director of the Oregon/Washington Office of BLM serving as the Authorized Official. The Administrative Record index reflects the designation of the Authorized Official for the *M/V New Carissa* NRDA by the DOI Office of Environmental Policy and Compliance (OEPC) (Record Nos. 8 and 14), as well as the adoption of a Trustee Memorandum of Agreement for *M/V New Carissa* Oil Spill (Record No. 20). Trustee agencies have certified, "that to the best of their knowledge no other trustees have authority to pursue a claim for natural resource damages under OPA for the same natural resources as those which are the subject of the joint natural resource damage assessment covered by this resolution" thus satisfying the NPFC claims regulations set out in 33 CFR 136.209(f).

Section 990.14(c) of the NRDA regulations specifies a requirement for trustees to invite Responsible Parties to participate in the NRDA. Coordination and cooperation between the Trustees and the RP for the *M/V New Carissa* incident has been documented in both the Final DARP/EA and the Administrative Record. As noted in Section 1.5 of the DARP/EA, during the preassessment phase the Trustees and RP jointly funded several studies of potential resource injuries resulting from the incident, as well as the planning effort for emergency restoration measures for the western snowy plover. This early coordination is reflected by several listings in the Administrative Record of agreements and formal communications with the RP (e.g., Record Nos. 1, 3, 13, 17 and 22), including an invitation from the Trustees to the RP to participate in the Emergency Restoration for the western snowy plover (Record 2), as required by 15 CFR 990.26(c). Additional regulatory requirements for emergency restoration are discussed in Section 4 below.

According to Section 1.5 of the DARP/EA, the Trustees subsequently issued a written invitation to the RP, on October 19, 2001, to participate in Restoration Planning, in compliance with 15 CFR 990.14(c)(1); the RP responded in writing on June 25, 2002, indicating their desire to participate. NPFC notes, however, that neither the Trustees' invitation to the RP, nor the RP response, appears to be listed in the Administrative Record index, contrary to regulatory provisions. Under the NRDA regulations, Trustees are required to document their invitation to the RP to participate in Restoration Planning in the Administrative Record (15 CFR 990.14(c)(7)), and should also include in the Administrative Record any agreements (e.g., an agreement to jointly participate in the NRDA), not otherwise privileged, with the RP (15 CFR 990.45(a)(3)).

Under 15 CFR 990.14(d), trustees must provide opportunities for public involvement after their decision to develop restoration plans. As provided in 15 CFR 990.55, this public involvement must, at a minimum, include an opportunity for public review of and comment on the Draft Restoration Plan. As discussed in Section 1.6 of the Final DARP/EA, prior to completion of the Draft DARP, the *M/V New Carissa* Trustees solicited public comment on and involvement in the restoration planning process through the publication of a Scoping Notice on June 28, 2004, and dissemination of a Scoping Information Packet to interested parties. Upon release of the Draft DARP, the Trustees advertised its availability for public review extensively; they held two public meetings to discuss and receive comments on the Plan, received numerous written comments and telephone calls, and ultimately extended the initial 30-day public comment period for an additional two weeks, as noted in Section 1.6 of the Final DARP/EA.

4. Emergency Restoration

The initial grounding of the *M/V New Carissa* occurred very near wintering and breeding areas of the western snowy plover, which is federally-listed as a threatened species. To offset some of the potential injuries to plovers, the Trustees implemented a number of emergency restoration measures, jointly funded with the RP, as discussed in Section 3.1.1 of the Final DARP/EA. The NRDA regulations set forth a number of conditions (15 CFR 990.26(a)) that must apply in order for trustees to undertake emergency restoration, all of which appear to have been met in this case. As noted in Section 3 above, 15 CFR 990.26(c) requires that trustees invite the RP to participate in the emergency restoration, as is documented in the Administrative Record for this incident (Record 2). Similarly, 15 CFR 990.26(d) requires that trustees provide notice to the public of planned emergency restoration actions; the *M/V New Carissa* Trustees published a Notice of Intent to Conduct Emergency Restoration for the Western Snowy Plover on May 11, 1999, as reflected in the Administrative Record (Record 9). However, 15 CFR 990.26(d) further requires that trustees provide public notice of the justification for, nature and extent of, and results of emergency restoration actions within a reasonable time frame after completion of such actions. NPFC notes that the justification for, and the nature and extent of, emergency restoration actions may have been addressed in the published Notice of Intent and on pages 26-27 and appendix 5 of the DARP, there is only a general mention of results from the emergency restoration activities; no quantitative or qualitative benefits are described.

5. Notice of Intent to Conduct Restoration Planning

As reflected in the Administrative Record (Record No. 36), the Trustees published a Notice of Intent to Conduct Restoration Planning for the *M/V New Carissa* incident in the Federal Register (Vol. 66, No. 216) on November 7, 2001. This Notice of Intent complied fully with the requirements specified at 15 CFR 990.44; it detailed the Trustees' Determination of Jurisdiction (pursuant to 15 CFR 990.41) and contained the findings of their Determination to Conduct Restoration Planning (pursuant to 15 CFR 990.42). The Notice further included discussion of the facts of the incident, the natural resources and/or services likely to have been injured as a result of

the incident, and the potential restoration actions relevant to the expected injuries, in accordance with the typical elements of a Notice of Intent as listed in 15 CFR 990.44.

6. Administrative Record

Section 990.45 of the NRDA regulations (15 CFR 990.45) sets forth the requirement that trustees, if they decide to proceed with restoration planning, must open a publicly available Administrative Record to document the basis for restoration decisions. As specified in 15 CFR 990.45, the Administrative Record should include documents relied upon during the NRDA, such as any relevant data, investigation reports, scientific studies and literature, the Draft and Final Restoration Plans, and public comments. The opening of the Administrative Record for this incident, and its public availability, were announced in the Federal Register Notice of Intent to Conduct Restoration Planning: *M/V New Carissa* Natural Resource Damage Assessment (FR Vol. 66, No. 216, pp. 56339-56340, November 7, 2001). Appendix 1 of the Final DARP/EA for the *M/V New Carissa* Oil Spill contains the index to the Administrative Record. The documents listed in the index are available for public review at the BLM Coos Bay District office in North Bend, Oregon, in fulfillment of the specific requirement for public availability. As noted earlier, certain certifications and documents appear to be absent from the Administrative Record index. NPFC further notes that a number of other documents that formed the basis for assessment and/or restoration decisions, and according to the NRDA regulations (15 CFR 990.45(a)) should be included in the Administrative Record, do not appear to be listed in the Administrative Record index, most notably the Resource Equivalency Analysis reports used as the basis for restoration scaling; the Draft and Final Restoration Plans; and various scientific studies, technical reports and addendums, and Trustee memorandums (e.g., the memorandum from USFWS to the BLM Case Manager, discussed on page 28 of the Final DARP/EA, indicating that further oil sampling could not be scientifically justified because the set of reference samples was incomplete).

7. Injury Assessment – Determination, Quantification and Procedures

Under the NRDA regulations governing injury assessment (15 CFR 990.51, 15 CFR 990.52), following the issuance of a Notice of Intent to Conduct Restoration Planning trustees must (1) determine whether injuries to natural resources and/or services have resulted from the incident, (2) identify the nature of the injury, (3) establish whether natural resources were exposed to the discharged oil from the incident and estimate the amount or extent of exposure, (4) determine whether there is a pathway linking the incident to the injuries, (5) select injuries to include in the assessment, (6) quantify the degree and the spatial and temporal extent of injuries, and (7) quantitatively or qualitatively estimate the time for natural recovery without restoration, but including any response actions. The regulations further specify the factors and approaches to be considered in carrying out these requirements. NPFC finds that the *M/V New Carissa* Oil Spill Trustees have generally complied with the requirements of 15 CFR 990.51 and 15 CFR 990.52 enumerated above. However, as discussed in the sections that follow for specific resource categories, NPFC does not agree with all of the Trustees' findings and results regarding injury quantification. For example, with regard to sanderling/shorebird injuries, NPFC has determined that there is evidence of sufficient weight to rebut the Trustees' inclusion of all oiled shorebirds, regardless of their degree of observed oiling, as mortalities in the injury quantification.

Moreover, while the Trustees considered a "no action/natural recovery" restoration alternative in Section 4.3.1 of the Final DARP/EA, there is no evidence or documentation provided in the claim to indicate that they fully analyzed this option to quantitatively or qualitatively estimate the time frame for natural recovery without restoration, as required in quantifying injury under 15 CFR 990.52(c) and listed in item 7 above. NPFC acknowledges that for some injury categories (e.g., lost recreational trips) natural recovery is not possible, and that for others (e.g., marbled murrelet mortalities) the baseline may be declining, so that natural recovery may not occur under current population trends or the recovery times may be extremely long and/or difficult to estimate. NPFC further acknowledges that, as noted in Section 4.3.1 of the Final DARP/EA, the "no action" restoration alternative would provide no compensation for interim losses of resources and/or services, as is provided under OPA. However, these considerations do not relieve Trustees of the regulatory requirement to estimate natural recovery times – which are an important factor in quantifying interim losses. In this case, the Trustees did not adequately demonstrate that estimation of natural recovery times, in consideration of the factors enumerated in 15 CFR 990.52(c), would not have been possible and therefore should not be required for any of the injury categories in this claim.

The NRDA regulations governing use of assessment procedures (15 CFR 990.27) establish a set of required standards at 15 CFR 990.27(a) that all assessment procedures used in an NRDA pursuant to the regulations must

meet. Specifically, each assessment procedure must (1) be capable of providing information of use in determining the type and scale of restoration appropriate for a particular injury (2) be reliable and valid for the particular incident, and (3) if it is a more complex procedure requiring additional cost, have a cost differential that is reasonably related to the quantity and/or quality of relevant information provided by this more complex procedure. Under 15 CFR 990.27(c), when selecting the particular assessment procedures to use, trustees are required to consider a number of factors, including the range of procedures available, the time and cost necessary to implement those procedures, and the relevance and adequacy of information generated by the procedures in meeting the information requirements of restoration planning. In addition, if a range of available assessment procedures provides the same type and quality of information, the most cost-effective procedure must be used.

The range of assessment procedures available to trustees is discussed in 15 CFR 990.27, and includes field procedures, laboratory procedures, model-based procedures, and literature procedures. In conducting the *M/V New Carissa* Oil Spill NRDA, the Trustees employed the full range of specified procedures: field data collection procedures (e.g., plover nesting studies, ground and aerial bird population surveys, bird carcass collection, invertebrate sampling), laboratory procedures (e.g., oiled feather analysis, water sample analysis, invertebrate tissue analysis), modeling procedures (e.g., bird mortality modeling, oil fates modeling using SIMAP, resource equivalency analysis), and literature use (e.g., murrelet and plover recovery plans, scientific studies of murrelet nesting density, extensive use of scientific literature to support conclusions of the Interim Preassessment Report (Michel, 2000)). During the preassessment phase of the NRDA, Trustees relied on water column toxicity modeling conducted as part of the SIMAP model application to determine that fish injuries were likely not sufficient to warrant further assessment or quantification, and conducted invertebrate tissue sampling and analysis to similarly determine that invertebrate injuries were also likely not sufficient to warrant further assessment or quantification. NPFC finds these determinations reasonable.

Trustees used a Resource Equivalency Analysis (REA) approach to scale injuries on a species specific or guild basis, as appropriate. In general, except as noted above and/or discussed in more detail below in relation to specific resource categories, NPFC finds that the injury assessment procedures employed by the *M/V New Carissa* Trustees meet the standards established under 15 CFR 990.27(a), that they reflect reasonable and appropriate consideration of the factors required under 15 CFR 990.27(c), and that the resulting injury quantifications are valid and appropriate.

7.1. Lost Beach and Public Recreational Use – Restoration Costs

The Trustees observed and recorded impacts (lost and/or diminished use) as a result of the *M/V New Carissa* incident at public recreational areas and beaches, primarily in three locations – the North Spit area of Coos Bay, the Oregon Dunes Recreational Area, and the Governor Patterson Memorial State Park. Losses or diminishment of recreational shell fishing, crabbing, and fishing activities occurred in many areas along the southern Oregon Coast. Beaches and recreational areas were closed to public use around the North Spit area of Coos Bay between February 4, 1999, and March 25, 1999, and remained partially closed from March 26, 1999, to August 1, 1999. Recreational access to the North Spit area was limited from August 2, 1999, and September 15, 1999. Beaches, campsites, and recreational areas were closed to public use in various areas within the Oregon Dunes Recreational Area from February 4, 1999, to April 16, 1999. Beaches and recreational areas were closed to public use at the Governor Patterson Memorial State Park March 3-10, 1999. The lost and/or diminished resource uses resulting from these closures included off-highway vehicle use, wildlife viewing, horse riding, target shooting, day hiking, surfing, camping, beach combing, picnicking and general sight-seeing. Because many of the noted recreational area closures resulted from the observed presence of oil, and associated response activities, the claimed injuries are reasonably and directly linked to the incident. In addition to the closed recreational use sites, shell fishing was closed for the beaches of Coos and Douglas counties of Oregon and portions of Coos Bay from February 11 to March 4, 1999. Shellfishing advisories were in place for Winchester Bay and the Umpqua Estuary from February 12 to March 4, 1999. Fishing and crabbing advisories were in place for Coos Bay, Winchester Bay, and the Umpqua Estuary from February 12 to March 4, 1999.

Trustees quantified recreational resource injuries in the form of lost or diminished use through historical counts of individuals recreating in the areas affected by the incident in prior years, for the same time periods as the closings. Lost use was calculated by estimating the number of recreation trips affected, either as lost trips or trips of reduced quality, and by estimating the unit value per trip for each of these affected recreational activities from available sources. NPFC finds that this approach, which is a generally accepted methodology for quantifying lost recreational

use, is appropriate and reasonable. The Trustees calculated that between 27,974 and 29,204 lost public recreational trips, and 1,000 diminished public recreational trips, resulted from this incident.

Weather data comparisons presented with the injury quantification show slightly lower rainfall levels, slightly lower average weekend temperatures, and slightly higher weekday temperatures for 1999 compared to the same time period in 1998. However, NPFC finds that there is insufficient evidence to rebut the presumption of correctness with respect to the Trustees' conclusion that visitation rates in 1999 would likely not differ significantly from 1998 rates due to weather conditions. Overall, the data presented demonstrate reduced use of the affected beaches and public recreational areas following the incident, relative to expected baseline use for this time period. NPFC finds the assessment and quantification of lost and/or diminished beach and other public recreational resource use to be reliable and valid.

7.2. Western Snowy Plover Restoration Costs

As a managed species due to its threatened status, the western snowy plover population along the Oregon coast has been extensively studied since 1990. Consequently, by the time of the *M/V New Carissa* incident, approximately 80-90 percent of the breeding population of western snowy plovers had been marked with and could be individually identified by colored bands (Stern et al., 2000). This facilitated tracking of specific oiled birds, determination of the fate and breeding success of both oiled and non-oiled birds during the 1999 breeding season, and the consequent quantification of direct injury (4-8 birds killed) and likely degree and temporal extent of population impacts, as reported in the Final Impact Assessment of Oil Spilled from the New Carissa on the Western Snowy Plover along the Oregon Coast (Stern et al., 2000). The Trustees subsequently quantified indirect injury (i.e., the loss of subsequent generations of offspring of the birds killed by the spill) through calculations detailed in a Resource Equivalency Analysis (REA), which also served as the basis for scaling the preferred restoration alternative (restoration scaling is addressed separately in Section 10.2 below).

The western snowy plover REA (Skrabis, 2005a) uses the quantified direct injury as a starting point to calculate lost bird-years resulting from both direct and indirect injury, drawing on available data for life history parameters as inputs. NPFC has reviewed the procedures and methodology employed in the REA and finds that they meet the required standards of 15 CFR 990.27(a). However, NPFC has expressed concern during the course of claim adjudication that the 5-year average lifespan used in the REA was not supported by available information from the scientific literature, and in particular the 3-year average lifespan cited in the Western Snowy Plover Pacific Coast Population Draft Recovery Plan (USFWS, 2001). NPFC acknowledges receipt of an August 15, 2006, e-mail from Mark Stern, in which Mr. Stern, a member of the Pacific Coast Western Snowy Plover Recovery Team and thus one of the authors of the Draft Recovery Plan, addressed this issue. NPFC finds that the 2001 Western Snowy Plover Pacific Coast Population Draft Recovery Plan does not rebut the presumed correctness of the Trustees' use of the 5-year average lifespan in the REA on the basis of Mr. Stern's statements regarding his analysis of data specific to the Oregon coast western snowy plover population.

NPFC also expressed concern during claim adjudication regarding the use in the REA of a range of fledgling survival rates (51% + 40%) drawn from a study in the literature (Nur et al., 1999). This range of rates was used in the quantification of indirect injury and the scaling of the proposed HRA. Upon further review, NPFC finds that the evidence in the record rebuts the presumed correctness of this assertion and rejects the use of this literature-based range of fledgling survival rates as inappropriate because (1) it is not specific to the injured Oregon population, but is derived from data drawn solely from the Monterey Bay, California, subpopulation of western snowy plovers, as noted on page D-7 of Nur et al. (1999); and (2) Oregon-specific data on fledgling survival and subsequent nesting activity are available (e.g., see Lauten et al., 2005).

Accordingly, NPFC has determined that a more appropriate and precise measure of this local breeding activity and attendant local restoration potential can be achieved by replacing the range of fledgling survival rates from Nur et al. (1999) in the REA with a single combined Oregon-specific hatch-year return/nesting rate of 31%, derived from data in Lauten et al. (2005). This 31% rate is calculated by multiplying the 13-year average hatch-year return rate of 46.7% by the 13-year average hatch-year nesting rate of 65% for returning birds, as reported in Lauten et al. (2005), Table 12. This combined return/nesting rate provides a more robust measure of future local reproductive activity of fledglings, and is thus a more appropriate determinant of both indirect injury (lost future bird-years in the local population) and restoration productivity (future local nesting activity).

Substituting this Oregon-specific hatch-year combined return/nesting rate of 31% for the fledgling survival rate of 51% +/- 40% in the REA calculations yields a revised injury total of 18.04 lost bird-years (12.96 lost bird-years of direct injury and 5.08 lost bird-years of indirect injury), assuming 8 plovers killed directly by the spill, and revised HRA productivity of 1.08 bird-years per year of maintenance on the 30-acre HRA, assuming that the HRA produces 1 fledgling per year with maintenance (restoration Scenario 1 in the REA). These revised figures constitute anywhere from a 22.55% increase to a 34.26% reduction in total injury from the claimed figure of 21.08 +/- 6.36 lost bird-years, and anywhere from a 191.89% increase to a 64.82% reduction in HRA productivity from the claimed figure of 1.72 +/- 1.35 bird-years per year of HRA maintenance. These revised injury and HRA productivity figures form the basis for the NPFC determination regarding restoration scaling for the western snowy plover, as discussed in Section 10.2.

7.3. Sanderling and Other (Non-Plover) Shorebird Restoration Costs

During the preassessment phase of the NRDA, the Trustees conducted two separate surveys of shorebird populations, one in February 1999 and the other in March 1999, as reported in the Final DARP/EA and other supporting documents (Jaques, 1999; Ford et al., 2001). Sanderlings accounted for 99.3% of shorebirds counted in the February survey and 95.6% of those counted in the March survey (Ford et al., 2001). (These surveys also reported counts for gull populations; gulls are addressed within the seabird resource category for this claim adjudication, as they are throughout the Final DARP/EA and the associated Seabird Mortality report by Ford et al., 2001). To quantify shorebird injuries, shorebird population counts were combined with data on the peak rate of observed oiling, as determined from beach surveys, to derive an estimated range of 460-809 shorebirds oiled as a result of the incident; this methodology is detailed in Ford et al. (2001). The midpoint of this estimated range, 634 oiled shorebirds, served as a primary data input to the REA for sanderlings and other shorebirds (Skrabis 2005b).

For the purposes of the injury quantification and restoration scaling calculations reported in the REA, all of the estimated 634 oiled shorebirds included in the injured population estimate are treated as mortalities (in addition to 34 rehabilitated shorebirds and 4 confirmed dead shorebirds, for a total of 672 "dead" shorebirds), although no evidence of expected mortality from oiling, or other clear rationale, is provided to support this approach. NPFC has raised questions during the adjudication process regarding the validity and reasonableness of this treatment of oiled shorebirds as equivalent to mortalities. The BLM Case Manager has responded with a statement indicating that, on the basis of his personal experience observing shorebirds in the Coos Bay North Spit area during the incident, he believes that it would not have been possible for him to observe oil on shorebirds that were not at least moderately oiled. He further posits that because sanderlings must undertake a spring migration of more than 2,000 miles to their Arctic breeding grounds, it is reasonable to assume that, as a result of their presumed moderate to heavy level of oiling, all oiled shorebirds would perish. NPFC finds that, while this may have been the case directly after the spill (i.e., in February 1999), other Trustee studies and supporting documentation presented with the claim provide sufficient evidence to rebut the presumed correctness of the Case Manager's assertions for impacts occurring during March 1999.

The Shorebird Survey Results Final Report (Jaques, 1999), for example, which was conducted during the preassessment phase of the NRDA and is part of the supporting documentation for the claim, provides data from surveys conducted by Crescent Coastal Research (CCR) in the first and second week of March, 1999, showing that 54.76% of oiled sanderlings observed in the Waldport region of the spill zone and 66.67% of oiled sanderlings observed in the Coos Bay region of the spill zone showed only spotty oiling, defined as less than 1% coverage (see Jaques, 1999, pg.4 and Figure 4). While these observations made in March do not directly contradict the Case Manager's observations made in February at Coos Bay North Spit, they do show that the Trustees' assertion that all sanderlings observed with oil on them must have been moderately to heavily oiled can not be substantiated for the entire spill area, nor for the duration of the incident. The CCR report further states that none of the sanderlings observed with only spots of oil on their vents displayed any abnormal behavior, calling into question the assertion that all oiled birds would perish. The CCR surveys were conducted during week 5 of the spill (March 4-11); the highest reported percentage of sanderlings observed oiled in any individual flock was 23.98% (Jaques, 1999), consistent with the peak shorebird oiling rate of 23.5% reported for week 5 in the Waldport area by Ford et al. (2001; see Table 14 on pg.40).

NPFC finds, furthermore, that another study presented by Trustees in support of the claim shows that observed deviations from normal feeding behavior between oiled and non-oiled sanderlings decrease with the degree of oiling. In a published paper (Burger, 1997) provided by the Trustees, Burger reported on studies of the effects of

oiling on the feeding behavior of sanderlings and plovers following an oil spill in New Jersey, and concluded that the effect of oiling on foraging was strongly dependent on the degree of oiling, measured as the percentage of a bird's body that was oiled (Burger, 1997). Burger's oiling categories include birds with no oil (i.e., 0%) and birds with 1-10% oil coverage, making it possible to interpolate from her graphed results (see Figure 2 on pg. 295) and determine that sanderlings with less than 1% oil coverage – such as those observed during the CCR shorebird survey – exhibited little or no decrease in time devoted to feeding and little or no increase in time devoted to preening when compared to non-oiled birds. This is consistent with the observation in the CCR report (Jaques, 1999), as noted above, that none of the spottily (<1%) oiled sanderlings observed during the March 1999 survey displayed any abnormal behavior. These results indicate that the injury to a sanderling as a result of light oiling, any associated reduction of its capacity to feed in preparation for the rigors of migration, and hence the probability of its dying during migration or suffering severely diminished reproductive capacity, would be minimal. Consequently, from available information submitted by the Trustees, NPFC finds that there is sufficient evidence to rebut the presumed correctness of the Trustees' conclusion that all shorebirds observed with oil on them could reasonably be expected to die, or to fail to reach their breeding grounds, as a result of oiling from the *M/V New Carissa* incident.

Therefore, NPFC finds that it is not justified by the available evidence, nor is it reasonable in this case, to count all of the 634 oiled shorebirds drawn from the Ford et al. (2001) oiled population estimate as mortalities in the REA. As a result, revising the shorebird mortality input to the REA to exclude the proportion of birds observed with less than 1% oiling during the CCR survey is warranted. NPFC considered the following approaches to revising the shorebird mortalities included in the REA:

- Reduce the number of oiled shorebirds included in the REA by 54.76%, to reflect the percentage of birds observed with less than 1% oiling in the Waldport area during the CCR survey. This reduces the number of oiled shorebirds counted as mortalities in the REA from 668 to 302, with a corresponding reduction of lost shorebird-years from 7,044.63 to 3,207.83, or 54.46%. This approach is rejected because (1) it applies degree of oiling percentages from the Waldport area to the entire spill zone, (2) it applies the correction based on degree of oiling observed only for sanderlings to all species of shorebirds, and (3) it assumes that rehabilitated and released birds, which accounted for 34 of the 668 oiled sanderlings included in the REA mortality estimate, could be expected to function similarly to non-rehabilitated oiled birds. This last assumption in particular would not be supported by any studies reviewed during this claim adjudication, since none of those studies pertain to rehabilitated sanderlings, and since no data were provided regarding the degree of oiling of the sanderlings rehabilitated in this case. (NPFC does note, nonetheless, that of seventeen western snowy plovers with up to 50% body coverage of oil that were rehabilitated and released during this incident, seven went on to breed on the Oregon coast in the 1999 breeding season, while five others apparently dispersed to other breeding areas and then returned to the Oregon coast in late summer and early fall 1999 (Stern et al., 2000); like those western snowy plovers, oiled sanderlings were rehabilitated by the International Bird Rescue and Research Center (IBRRC) at dedicated facilities set up within the *M/V New Carissa* spill area.)
- Alternatively, NPFC calculated the specific number of sanderlings to be removed from the REA mortality input for each region (Waldport and Coos Bay), using the data contained in the CCR report. Specifically, for each region, NPFC multiplied the recorded population of sanderlings by the percentage of sanderlings observed oiled and the percentage of oiled sanderlings observed with less than 1% oil coverage, and subtract the results from the REA mortality input. NPFC chooses this approach to make the revision to the REA mortality input because it (1) appropriately applies separate degree of oiling percentages from the Coos Bay area and the Waldport area to bird populations within those respective areas, (2) applies the correction based on degree of oiling observed for sanderlings only to sanderling populations and not to other species, and (3) it ensures that corrections are not applied to rehabilitated and released birds, which, as noted above, is a conservative approach consistent with the lack of specific data or information on the rehabilitated sanderlings. Applying this method to make the correction reduces the number of oiled shorebirds counted as mortalities in the REA from 668 to 413, with a corresponding reduction of lost shorebird-years from 7,044.63 to 4,371.45, or 37.95%.

This revised injury total of 4,371.45 lost shorebird-years forms the basis for the NPFC determination regarding restoration scaling for sanderlings and other non-plover shorebirds, as discussed in Section 10.3.

7.4. Marbled Murrelet Restoration Costs

Unlike other seabirds along the Oregon coast, marbled murrelets nest in old growth forest rather than along rocky coastlines or offshore islands, and were thus considered separately from other seabirds in the Final DARP/EA. During the response efforts following the incident, beach survey teams collected 26 dead marbled murrelets which are federally-listed as a threatened species. Using this figure of 26 confirmed dead birds as an input to their seabird mortality model, Ford et al. (2001) modeled the total direct injury to marbled murrelets as 262 mortalities directly attributed to the *M/V New Carissa* incident (see Section 7.5 for further discussion of the seabird mortality model). These 262 mortalities in turn served as a primary input to the REA for marbled murrelets (Skrabis, 2005c). The REA calculations yielded a total injury figure of 3,271.22 lost bird-years for marbled murrelets. Based on a review of the development and methodology of the seabird mortality model, as well as the REA calculations, the NPFC finds that these assessment procedures are reliable and valid, and capable of providing information of use in determining the appropriate type and scale of restoration in accordance with 15 CFR 990.27. Accordingly, the NPFC accepts the total injury figure of 3,271.22 lost bird-years for marbled murrelets.

7.5. Other (Non-Murrelet) Seabird and Waterfowl Restoration Costs

As discussed in Chapter 3 of the Final DARP/EA and detailed by Ford et al. (2001), the Trustees conducted modeling to estimate the number of seabird mortalities attributable to the *M/V New Carissa* incident, based on the number of bird carcasses actually recovered. The seabird mortality model took into account such factors as carcass search efficiency, probability of carcass scavenging, and estimated background (natural) carcass deposition rates. NPFC finds the overall methodology employed in the seabird mortality model to be reliable and valid for use in assessing injuries from this incident, and capable of providing information of use in determining the type and scale of restoration appropriate for a particular injury, in accordance with the requirements of 15 CFR 990.27(a).

The seabird mortality numbers derived from the Ford et al. model served as inputs to a series of Resource Equivalency Analyses (REA) for particular species and/or species groups. In each REA, Trustees used available information on relevant life history parameters (e.g., average life expectancy, adult survival rates) to calculate total direct and indirect seabird injuries from the estimated mortalities, expressing the result as lost seabird-years; they then calculated the seabird-years restored by various restoration alternatives to determine the scale of restoration needed to compensate for those injuries (Skrabis, 2005d, 2005e, 2005f, 2005g, 2005h, 2005i, 2005j, 2005k, 2005l). NPFC reviewed the REA methodology and algorithms employed for seabird injury calculations and find them valid, reliable and appropriate for use in this incident.

Several revisions to the seabird and waterfowl injuries contained in the REA reports have been made during the adjudication process:

- NPFC acknowledges and accepts the revisions to lost bird-years claimed for scoters and ducks, and for grebes, as delineated in claimants' August 6, 2006 responses to the NPFC. Specifically, NPFC accepts the reduction of 1,180.58 lost bird-years in scoter and duck injuries, for a new total of 11,321.85, and the increase of 739.97 lost bird-years in grebe injuries, for a new total of 3,255.85.
- A correction made by NPFC to computational errors (mid-point averaging applied to each year of the analysis, rather than to just the first year as in all other cases) in the REA for gulls and kittiwakes reduces gull and kittiwake injuries by 1,408.29 bird-years, or roughly 17.4% of the original total of 8,097.04 lost gull and kittiwake bird-years, to a new total of 6,688.75.

Combined, these changes to lost seabird-years yield a new total of 42,214.27 lost bird-years for all seabird species, a 4.2% reduction from the total of 44,063.17 lost seabird-years originally cited in the claim.

During the initial claim review and subsequent information requests and meetings, NPFC was unable to verify or validate the derivation of the 56.7% New Carissa seabird mortality correction factor calculated by Ford et al. (2001). Based on further clarification received by NPFC from R. Glenn Ford on August 21, 2006, pursuant to the August meetings with Claimants, NPFC accepts the validity of the model-based methodology used to derive this 56.7% seabird mortality correction factor.

NPFC raised questions during the claim review regarding the implications of possible additional oil sources detected during analysis of oiled feathers from bird carcasses recovered during the incident. As determined by Payne and Driskell (2003), a significant percentage of petroleum samples taken from oiled bird feathers collected at the time of

the spill could not be conclusively linked to *M/V New Carissa* source oils and may indicate the presence of as many as 7 other distinct oil sources.

In an effort to resolve this issue, James R. Payne, in a communication on August 22, 2006, pursuant to the adjudication process, provided additional information indicating that all oils sampled from bird feathers collected at the time of the spill were known or likely anthropogenic petroleum materials (i.e., derived from a discharge, or discharges, as defined by OPA, and not originating from natural seeps). As such, because these oils would necessarily be attributable to a discharge under OPA, and because no other known source(s) for these oils could be identified, NPFC accepts the bird carcass numbers used as inputs to the Ford et al. (2001) seabird mortality model, possibly including birds oiled only by these unidentified sources, and accordingly accepts the resulting modeled seabird mortality figures and injury totals from the resource equivalency analyses. Although this approach could conceivably result in the attribution of injuries from unidentified oils to the *M/V New Carissa*, NPFC believes it is nonetheless consistent with the intent and goal of OPA to achieve the greatest possible extent of restoration of known injured resources, and that in the face of uncertainty, such a result would be preferable to failing to address and restore documented resource injuries.

For several species of seabirds (gulls and kittiwakes, scoters, common murres and puffins, and others), NPFC raised questions during the adjudication process regarding the validity of treating all rehabilitated and released oiled seabirds as mortalities for the purposes of indirect injury quantification and restoration scaling in their respective REA. Such rehabilitated birds accounted for 25% (85 of 340) of all gulls and kittiwakes in that REA (Skrabis, 2005h), 10.9% (45 of 413) of scoters and ducks in that REA (Skrabis, 2005k), 11.5% (26 of 226) of common murres and puffins in that REA (Skrabis, 2005e), and less than 5% of several other species. Overall, birds that were rehabilitated and released, or observed oiled but not captured, accounted for 7.63% (168 of 2,201) of all seabirds counted as mortalities in the various seabird REAs.

Claimants submitted four studies from the scientific literature (Anderson et al., 1996; Khan and Ryan, 1991; Mead, 1997; and Sharp, 1996) to support their assertion that rehabilitated and released seabirds do not survive, or at least can be assumed to no longer reproduce, and hence should be considered lost from the breeding population and functionally, if not literally, dead. The Mead report (1997), however, makes note of a separate study (Harris and Wanless, 1997) that documents rehabilitated birds rejoining the breeding population.

A number of more recent studies from the scientific literature have documented longer post-release survival duration for rehabilitated birds, extending to several years and approaching that of non-oiled birds in some cases; increased post-release survival rates for rehabilitated birds; lack of post-release behavioral differences between rehabilitated and non-oiled birds in one instance; and in at least one other instance, a significant percentage of rehabilitated birds rejoining the breeding population (SDST, 2003; Giese et al., 2000; Goldsworthy et al., 2000; Golightly et al., 2002; Newman et al., 2004; Newman et al., 2003; Wolfaardt and Nel, 2003; Underhill et al., 1999; Underhill et al., 2001; Whittington, 1999). Taken as a whole, these studies would not seem to support counting all oiled, rehabilitated birds as mortalities for inclusion in the REA calculations. However, many of these same studies do continue to conclude that oiled, rehabilitated birds frequently suffer from decreased survival duration and lower survival rates than non-oiled birds (although the gap is narrowing), and that those rehabilitated birds that do breed may produce less robust offspring with reduced survival probabilities. The weight of evidence on these topics is not yet sufficiently conclusive or definitive to allow estimation of expected survival or reproductive rates of rehabilitated birds with the degree of precision necessary for them to serve as useful inputs to injury assessments. Some research, for example, appears to suggest that survival rates, reproductive success, and observed behavioral impacts following rehabilitation may vary by species; this proves problematic in cases such as the *M/V New Carissa* incident, in which several different species have been rehabilitated and released. Few species have yet been studied for significant lengths of time following oil spills, and this continues to be an area of ongoing research. Consequently, despite reservations, NPFC concluded that there was not sufficient evidence in the record to rebut the presumed correctness of the Trustees' determination that the inclusion of all rehabilitated birds as mortalities was appropriate.

8. Restoration Alternatives

Under 15 CFR 990.53, trustees must consider a reasonable range of restoration alternatives before selecting the preferred alternative(s). For each alternative, trustees must consider primary restoration actions, including a natural recovery alternative, and compensatory restoration actions. The specific alternatives considered for this incident are listed in Table 9 in Section 4.3 of the Final DARP/EA. For lost recreational resource use, the restoration alternatives

considered were (1) implementation of a top priority project list for the three most heavily affected recreational areas, (2) implementation of lower priority projects for two of the three areas, and (3) no action. For western snowy plover injuries, the restoration alternatives considered were (1) maintenance of the North Spit 1998 HRA for 30 years and implementation of a western snowy plover public education project, (2) no action. For sanderling and other (non-plover) shorebird injuries, the restoration alternatives considered were (1) acquire and restore key shorebird parcels on the Oregon coast and implement a shorebird public education project, (2) acquire and manage alternate properties for shorebirds on the Oregon coast; and (3) no action. For marbled murrelet injuries, the restoration alternatives considered were (1) acquire 1,269 acres of mature marbled murrelet nesting habitat, (2) acquire conservation easements on 2,642-38,478 acres of younger potential murrelet habitat, and (3) no action. Finally, for other (non-murrelet) seabird and waterfowl injuries, the restoration alternatives considered were (1) acquire and manage a key parcel to protect adjacent seabird nesting colony, manage predators on selected seabird colonies and through refuse management at selected State Parks, and implement a seabird public education project; (2) acquire an alternate property to protect nesting seabirds, and implement one of several alternative public education projects; and (3) no action.

NPFC observes that no restoration alternatives outside of the state of Oregon were considered, despite the fact that several of the most heavily injured bird species or species categories (e.g., scoters and ducks, fulmars, and sanderlings) do not nest along the Oregon coast. While NPFC appreciates and understands the Trustees' desire to restore locally injured resources through local restoration projects to the extent practicable, such local restoration projects are not necessarily always the best options for the injured resources. The failure to look beyond Oregon's borders for potential restoration alternatives may have constrained the range of alternatives considered, the potential restoration value of the "available" alternatives to the resources of concern, and hence the overall cost effectiveness of the restoration plan. As a result, NPFC believes that the limited restoration alternatives evaluated may have reduced the opportunity to fulfill the spirit and intent of OPA to ensure evaluation and selection of those alternatives that provide the best, and most cost-effective, restoration of the injured resources. Furthermore, as noted in Section 7, although the Trustees considered a "no action" alternative for each resource category, there is no evidence or documentation provided in the claim to indicate that they quantitatively or qualitatively estimated natural recovery times without restoration. Such estimation of natural recovery times is not only required in quantifying injury under 15 CFR 990.52(c), but is important both to properly evaluating the no action alternative in comparison to other restoration alternatives (for resources other than recreational use), and to quantifying interim losses. Trustees' assertion in the Final DARP/EA (pp. 49-50) that natural recovery is unlikely for species in decline ignores the reality of dynamic baseline conditions for biological resources over time. While a declining baseline may imply that the resource, if it recovers naturally, would recover to a level lower than existed immediately prior to the incident, and while this may not be an acceptable result or management objective, particularly for threatened or endangered species, a natural recovery estimate is nonetheless useful in quantifying injury and corresponding restoration requirements.

9. Selection of the Preferred Alternative

The NRDA regulations at 15 CFR 990.54(a) establish minimum evaluation standards that trustees must use, once they have developed a reasonable range of restoration alternatives, as the basis for evaluating those alternatives. These minimum standards for evaluation are:

1. The cost to carry out the alternative;
2. The extent to which each alternative is expected to meet the trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses;
3. The likelihood of success of each alternative;
4. The extent to which each alternative will prevent future injury as a result of the incident, and avoid collateral injury as a result of implementing the alternative;
5. The extent to which each alternative benefits more than one natural resource and/or service; and
6. The effect of each alternative on public health and safety.

The Trustees added other criteria to be considered when evaluating the restoration alternatives, as appropriate to the resource category proposed for restoration and the nature of the specific restoration alternative under evaluation.

9.1. Lost Beach and Public Recreational Use – Restoration Costs

To restore lost beach and public recreational use, the Trustees considered several alternatives. They developed a list of proposed and alternative projects, ensuring that all projects met the overall objective of restoring lost beach and public recreational use within the area affected by the incident. They developed a list of nine specific selection criteria, incorporating and/or overlapping with the standards enumerated above, for use in selecting appropriate restoration projects. The final list of 11 projects that best restores lost beach and public recreational use resulting from the incident is: 1) Gov. Patterson Memorial State Recreation Site beach trail and parking lot; 2) North Spit and Horsfall area directional sign and 2 entry kiosks; 3) North Spit and Horsfall area State/Federal beach sign program; 4) Horsfall day use area expansion; 5) North Spit (interior) trail rehabilitation; 6) Horsfall campground accessible sites; 7) North Spit fence removal; 8) signs and placement of signs on sand roads; 9) Bluebill Campground toilet replacement; 10) Horsfall road OHV fencing; and 11) BLM sand road upgrade. The Trustees also considered a "no-action" alternative, but concluded that no-action would not address losses. NPFC finds that there is insufficient evidence in the record to rebut the presumed correctness of this conclusion.

The Trustees considered a reasonable range of restoration alternatives to compensate for lost beach and public recreational resource use. They evaluated each restoration project using the criteria in 15 CFR 990.54, and all were appropriate and found to be acceptable. These projects all met the objective of restoring lost beach and public recreational use from the incident. NPFC concludes that the selection of the preferred alternative was reasonable.

9.2. Western Snowy Plover Restoration Costs

As noted above in Section 8, the range of alternatives considered for western snowy plover restoration included only the proposed combination of HRA maintenance and public education, and a "no action" alternative. Trustees did not consider or evaluate other feasible alternatives that might well have proven both cost-effective and likely to succeed, such as expansion of the existing nest exclosure program for predator management, which at the time of publication of the Scoping Notice for restoration planning had a documented record of 13 years of success (Lauten et al., 2005; Stern et al., 2000). Moreover, although the Trustees conducted an evaluation of the identified range of alternatives according to the criteria specified in 15 CFR 990.54(a), as discussed in 4.3.2.2.1 of the Final DARP/EA, this evaluation was limited in scope and therefore may have reduced the Trustees' ability to fully meet the intent, expressed in 15 CFR 990.54(b), of informing the selection of a preferred restoration alternative. Not only was the range of alternatives under consideration limited, the evaluation was also limited to the HRA maintenance component of the proposed alternative. No documented evaluation of the public education component, or of the "no action" alternative, was undertaken with respect to the criteria specified in 15 CFR 990.54(a). NPFC has determined that in this instance the Trustees did not consider a reasonable range of alternatives as required by the regulation and their conclusions are not presumed correct. Despite this, NPFC accepts the selection of the preferred HRA project only because there is evidence in the record that habitat maintenance and restoration has been shown in other areas to be an effective means to expand and enhance the productivity of western snowy plover nesting sites. The proposed education project is denied for reasons stated in Section 10.2 below.

9.3. Sanderling and Other (Non-Plover) Shorebird Restoration Costs

The range of alternatives considered for restoration of sanderlings and other shorebirds included (1) the proposed combination of parcel acquisition for marsh restoration and shorebird curriculum development, (2) a set of several alternative parcels potentially available for acquisition and marsh restoration and two alternative education projects, and (3) a "no action" alternative. As with the western snowy plover restoration alternatives, although the Trustees conducted an evaluation, the limited information presented in the Final DARP/EA is not sufficient to judge the efficacy of the evaluation in serving the regulatory intent of informing the selection of a preferred restoration alternative. None of the education projects appears to have been specifically evaluated according to the criteria specified in 15 CFR 990.54(a), and documentation of the evaluation of four alternative marsh restoration parcels appears to be limited to the observation that although they would meet the objective of restoring lost bird-years, none would produce habitat of a quality comparable to that of the proposed (preferred) marsh restoration (see Section 4.3.4.3.1, pg. 71 of the Final DARP/EA). No discussion or documentation is provided in the Final DARP/EA to indicate how the Trustees reached this conclusion, or how they judged and compared the relative quality of habitat to be restored across the sites. However, because Trustees, in their responses to the July 6 Restoration Claim Questions and Issues Requiring Claimant Input, have provided supplemental information indicating that the preferred marsh restoration project will restore more bird-years for sanderlings, the most abundant and heavily affected shorebird, than all but one of the alternative projects (as discussed further in Section

10.3), NPFC accepts the selection of the preferred alternative. NPFC denies the shorebird education portion of the preferred alternative for reasons stated in Section 10.3 below.

9.4. Marbled Murrelet Restoration Costs

To restore marbled murrelet losses, the Trustees considered three alternatives: acquiring 1,269 acres of mature marbled murrelet nesting habitat, acquiring conservation easements on 2,642-38,478 acres of younger potential murrelet habitat, and no action. In response to questions raised during claim review and adjudication regarding this seemingly limited range of alternatives, the Trustees provided additional information on April 27, 2006, indicating that, during the scoping phase of restoration planning they also considered identifying and protecting additional occupied habitat on Federal lands; protecting intermediate (immature) habitat on Federal lands; managing recreation use to reduce disturbances to nesting populations; predator management, especially for corvids (ravens and crows) in the form of aggressive waste management, corvid contraception or lethal control; and additional research and/or surveys to provide better information to manage the species. All of these alternatives were rejected during the scoping process. NPFC notes that, to the extent that Trustees' consideration and rejection of these options during the scoping process served as a basis for their subsequent decisions pertaining to restoration, some documentation and/or notation of that consideration and rejection of options is required in the Administrative Record under 15 CFR 990.45(a); such documentation appears to be lacking.

The Recovery Plan for the Threatened Marbled Murrelet (Brachyramphus marmoratus) in Washington, Oregon, and California (USFWS, 1997), and the Evaluation Report for the 5-Year Status Review of the Marbled Murrelet in Washington, Oregon, and California (McShane et al., 2004), identify habitat loss and degradation as serious threats to marbled murrelet populations, and correspondingly identify habitat acquisition and/or protection as an effective component of species recovery and management plans. The Trustees defined three categories of criteria to consider in selecting and evaluating marbled murrelet habitat for acquisition: 1) geographical location, with preference given to sites in proximity to Oregon's north coast; 2) habitat quality factors known or believed to be important to marbled murrelet nesting and/or nesting success; and 3) ease of manageability. These criteria generally incorporate the minimum evaluation standards established at 15 CFR 990.54(a).

Based on consideration of their evaluation criteria, the Trustees identified three forested parcels, which together include 1,269 acres of mature occupied or high/medium quality marbled murrelet habitat, for acquisition. The trustees also considered as an alternative acquiring conservation easements on 2,642-38,478 acres of less mature potential marbled murrelet habitat; however the cost of securing easements on this larger acreage would exceed that of purchasing the smaller proposed acreage of mature habitat, the amount of time needed for the tracts to mature and become suitable or functioning habitat would be prohibitive, and interim losses would continue. The Trustees also considered a "no-action" alternative, but determined that it would not address the marbled murrelet losses. NPFC finds that there is insufficient evidence in the record to rebut the presumed correctness of these determinations and concludes that the selection of the preferred restoration alternative was reasonable.

9.5. Other (Non-Murrelet) Seabird and Waterfowl Restoration Costs

The range of restoration alternatives considered for non-murrelet seabird and waterfowl injuries was (1) acquire and manage a key parcel to protect an adjacent seabird nesting colony, manage predators on selected seabird colonies and through refuse management at selected State Parks, and implement a seabird public education project consisting of signage at coastal public access points; (2) acquire an alternate property to protect nesting seabirds; and (3) no action. NPFC notes that, although many heavily affected seabird species (e.g., scoters, northern fulmar, black-legged kittiwake) do not nest on the Oregon coast, no restoration alternatives outside Oregon were considered for seabirds; this geographic constraint may have unnecessarily limited the potential effectiveness of available restoration alternatives.

Trustees' evaluation of the alternatives considered does not appear to have taken into account the duplicative nature of the parcel acquisition and predator management projects, both of which, as shown in Table 1 (at the end of this determination) provide compensation primarily for lost cormorant bird-years. As indicated, predator management alone would restore 23,768 cormorant bird-years (according to the most recent information provided by Claimants in response to the July 6 NPFC request for information), clearly sufficient compensation for the approximately 1,120 cormorant bird-years lost as a result of the incident. Acquisition of either the preferred parcel (Otter Crest) or the alternative parcel (Cox Rock) would restore approximately an additional 16,000 cormorant bird-years, but no more

than approximately 2,100 bird-years for all other species combined, despite the fact that seabird species other than cormorants accounted for nearly 41,100 lost bird-years, or more than 97% of total seabird injuries.

Moreover, in the case of the Otter Crest parcel, the only other species restored besides cormorants would be pigeon guillemots, for which the Final DARP/EA includes no mention of injury as a result of the *M/V New Carissa* incident. This parcel thus provides no incremental restoration benefit, beyond that already achievable through predator management, to species actually injured by the incident. The Trustees' statement in the Final DARP/EA that "all three projects [parcel acquisition, predator management, and signage at coastal public access points] will protect multiple seabird species" (Section 4.3.3.4.1, pg. 63) would thus appear to over-value the benefit of acquiring this parcel for New Carissa seabird injury restoration. In light of the duplication of restoration provided by predator management, the Trustees' finding that the proposed/preferred alternative (combining acquisition of Otter Crest parcel, implementation of predator management, and placement of educational signage at coastal public access points) would meet their objective of restoring lost bird-years in a cost-effective manner seems unresponsive to the evaluation standards established at 15 CFR 990.54(a).

Additionally, as discussed in Section 10.5 below, the evaluation and selection of the preferred restoration alternative did not account for the significant benefit to gulls from predator management. Although gulls were identified in the Final DARP/EA (pg. 62) as a species expected to benefit from predator management, and gull-years restored by predator management were quantified (see Section 10.5), these restored gull-years were inexplicably excluded from the Seabird and Shorebird Restoration Credits REA (Skrabis, 2005m). In addition, as discussed in Section 10.3 below, the evaluation of alternatives for seabirds failed to account for the likely restoration benefits to various seabird species from the proposed Bandon Marsh shorebird restoration project. The Trustees note in the Final DARP/EA that the Bandon Marsh restoration project will benefit "a very substantial number of waterfowl" (pg. 68); various species of sea ducks, gulls and other waterfowl are known to frequent tidal salt marshes in other areas along the Pacific coast. Although not specifically quantified by the Trustees, the restored seabird-years provided by Bandon Marsh could contribute significantly to overall seabird restoration, and should have been considered in the evaluation of seabird restoration alternatives. Based on this evidence, NPFC finds that notwithstanding the rebuttable presumption the record indicates that the predator management project fully compensates for the injuries, provides a greater range of benefits and is more cost effective.

10. Restoration Plan and Restoration Scaling

Under 15 CFR 990.55, trustees are required to develop both a Draft and a Final Restoration Plan, and provide an opportunity for public review of, and comment on, the Draft plan. As noted in Section 3 of this determination letter, and discussed in Section 1.6 of the Final DARP/EA, prior to completion of the Draft DARP the *M/V New Carissa* Trustees solicited public comment on and involvement in the restoration planning process through the publication of a Scoping Notice on June 28, 2004, and dissemination of a Scoping Information Packet to interested parties. Upon release of the Draft DARP, the Trustees advertised its availability for public review extensively; they held two public meetings to discuss and receive comments on the Plan, received numerous written comments and telephone calls, and ultimately extended the initial 30-day public comment period for an additional two weeks, as noted in Section 1.6 of the Final DARP/EA.

The provisions of 15 CFR 990.55(d) require that the Final DARP contain certain specific information, including (1) a summary of injury assessment procedures used; (2) a description of the nature, degree, and spatial and temporal extent of injuries resulting from the incident; (3) the goals and objectives of restoration; (4) the range of restoration alternatives considered, and a discussion of how such alternatives were developed and evaluated; (5) identification of the trustees' preferred alternative(s); (6) a description of past and proposed involvement of the responsible parties in the assessment; (7) a description of monitoring for documenting restoration effectiveness, including performance criteria that will be used to determine the success of restoration or need for interim corrective action; (8) responses to public comments; and (9) an indication of any changes made to the Draft Restoration Plan. NPFC finds that the Final DARP/EA for the *M/V New Carissa* Oil Spill includes all of these components.

Sections 10.1 through 10.5 below summarize NPFC considerations and findings regarding scaling of the Trustees preferred restoration alternatives, and provide determinations regarding NPFC approval or denial of specific claim components.

10.1. Lost Beach and Public Recreational Use – Restoration Costs

NPFC finds that the projects included in the preferred restoration alternative proposed in the Final DARP/EA to compensate for lost public recreational resource use are reasonable, and will provide appropriate enhancements to recreational use visit experiences at those beaches and public recreational areas impacted by the spill. Because lost or diminished beach and public recreational use visits cannot be "restored," the proposed enhancements provide compensatory services of comparable type and quality. The equivalency of restoration is achieved by scaling the total value of proposed recreational facility restoration projects to match the value of lost or diminished beach and/or recreational facility or resource use.

Of the valuation approaches used in oil spill NRDA to scale recreational resource restorations, benefits transfer is the most commonly used (and economical), assuming that a study (or set of studies) of the value of activities comparable to those lost or diminished is available from which to transfer appropriate monetary recreational use valuations. To value the lost beach and recreational facilities use resulting from this incident, the Trustees used a benefits transfer approach to estimate the per-visit (consumer surplus) value of a lost beach visit. The trustees used the general U.S. Department of Interior beach value of $14.39 (December, 1999 dollars) as the average lost consumer surplus for each beach and public recreational use lost trip for this incident. In addition, the trustees used half that value, $7.20, for the diminished trips. With 26,974-28,204 lost trips at $14.39 per trip, and 1,000 diminished trips at $7.20 per trip, the value of the lost beach and public recreational use for this incident is $395,356-$413,056 (Carlson and Fujimoto, 2001). NPFC finds the Trustees' use of the general 1999 beach value reasonable as it falls toward the lower end of the range of values from the literature for all types of recreational activities affected by this incident; the use of half that value for diminished trips is also reasonable.

The following enhancements are proposed for the affected beach and public recreation facilities/areas:

- Gov. Patterson Memorial State Recreation Site beach trail and parking lot – repairing and improving the beach trails and the parking lot.
- North Spit and Horsfall area directional sign and 2 entry kiosks – a directional road sign and 2 entry kiosks with information about the areas including information on signs or panels.
- North Spit and Horsfall area State/Federal beach sign program – beach signs to indicate plover nesting area boundaries and the USFS/Oregon State Parks boundary.
- Horsfall day use area expansion – this project will relocate the staging area with parking.
- North Spit (interior) trail rehabilitation – rehabilitate existing trails making them easier to use.
- Horsfall campground accessible sites – upgrade 7 sites (10% of campground capacity) to fully accessible status.
- North Spit fence removal – remove unsafe, deteriorating fence structure to improve public safety.
- Signs and placement of signs on sand roads – implement the BLM "Leave No Trace" sign strategy.
- Bluebill Campground toilet replacement – replace current toilet and septic system with a sealed vault toilet system to protect ground water and provide accessible toilets.
- Horsfall road OHV fencing – alleviate OHV operations to prevent unacceptable resource impacts.
- BLM sand road upgrade – upgrade the sand road created to bypass snowy plover nesting habitat to improve public safety.

As a whole, the proposed projects would restore approximately the same mix of beach and public recreation uses as lost due to the incident. These projects improve visitor access, convenience, health and safety, and help protect natural resources through visitor education. These restoration projects are reasonable, appropriately scaled, and linked to the lost beach and public recreational use injury. Accordingly, NPFC approves all recreational resource restoration projects.

10.2. Western Snowy Plover Restoration Costs

As noted in Section 7.2 above, quantified direct injuries to western snowy plovers (i.e., numbers of birds killed by the incident), as reported in the Final Impact Assessment of Oil Spilled from the New Carissa on the Western Snowy Plover along the Oregon Coast (Stern et al., 2000), served as a primary input to the REA for the purpose of restoration scaling. The REA incorporated the reported range of 4-8 plovers killed. Based on the extensive study documented in the Final Impact Assessment, NPFC accepts the upper-bound estimate of 8 plovers killed as a reasonable and appropriate input to the restoration scaling. Similarly, based on the observed record of fledgling

production on the HRA, as documented in the REA and the Final DARP/EA, NPFC accepts the estimate of 1 fledgling produced per year on the HRA as a reasonable lower-bound input to the restoration scaling.

Maintaining these figures of 8 plovers killed and 1 fledgling produced per year from the HRA as inputs to the REA calculations, while substituting the hatch-year combined return nesting rate for the fledgling survival rate, as detailed in Section 7.2 above, yields revised total injury and HRA productivity figures of 18.04 lost bird-years and 1.08 bird-years per maintenance year, respectively. These figures in turn yield a required HRA maintenance period of 16.7 years (18.04/1.08) to provide adequate restoration to compensate for spill-related injury, rebutting the 30 years proposed in the claim.

On the basis of these calculations, NPFC finds there is sufficient evidence to support HRA maintenance on 30 acres for 20 years, rather than the 30 years proposed by the Trustees. This 20-year maintenance period represents an extension of nearly 20 percent beyond the maintenance period of 16.7 years calculated to be sufficient for equivalent restoration of injured western snowy plovers. NPFC finds that this extension makes adequate allowance for possible natural variability that might occur in the average 31% combined hatch-year return/nesting rate over the course of the restoration period as a result of either below-average return rates or below-average nesting rates, or both, in any given year.

Trustees have asserted that unquantified injuries to plovers may have occurred that were not addressed, or could not be quantified, in the Final Impact Assessment of Oil Spilled from the New Carissa on the Western Snowy Plover along the Oregon Coast (Stern et al., 2000). But given the extensive and thorough monitoring effort documented in the Final Impact Assessment, and understanding that 80-90% of the breeding population was banded at the time of the spill, NPFC concludes that plover injuries were accurately and reliably documented; Trustees have presented no new data or documentation to call that conclusion into question. In addition, it is likely, and Trustees have acknowledged, that the emergency restoration measures implemented for the western snowy plover at the time of the spill provided some restoration benefit to the local population. That benefit, although unquantified (as noted in Section 4 above, Trustees have not provided public notice of the results of western snowy plover emergency restoration actions as required under 15 CFR 990.26(d)), would likely offset any injury that was not quantified by the thorough study detailed in the Final Impact Assessment. Consequently, the NPFC finds that there is evidence of sufficient weight in the record to rebut the presumed correctness of the Trustees' conclusions that additional restoration is warranted outside of the proposed maintenance on the 1998 HRA, thus, the western snowy plover docent program is denied.

10.3. Sanderling and Other (Non-Plover) Shorebird Restoration Costs

The Bandon Marsh restoration project would restore 11,446 shorebird-years, or 2.62 times the revised total of 4,371.45 lost shorebird-years (see Section 7.3 for the derivation of this revised injury figure). NPFC notes that the scale of marsh restoration projects is not feasibly reducible.. According to the Trustees, no feasible direct restoration alternatives were identified for sanderlings. Moreover, sanderlings were the most heavily injured shorebird, and of the six marsh restoration alternatives the Trustees initially considered, five of which were included in the Final DARP/EA, Bandon Marsh would restore more sanderling bird-years (approximately 940) than all but one of the others. The one alternative that would restore more sanderling bird-years – the New River Bottoms alternative – would result in total restoration of nearly 74,000 bird-years. Of the four remaining alternatives identified, one would restore no sanderling bird-years (Leeds Island); one would restore approximately 45% more total bird-years than Bandon Marsh, again representing a significant, likely non-compensable overcompensation, but 20% fewer sanderling bird-years (New River/Floras Creek); one would under compensate for the revised total injuries by approximately 22% (Kangas); and the last would restore only 23% as many sanderling bird-years as Bandon Marsh (Lower Drift Creek). NPFC further notes that the other component of the Trustees' preferred alternative, the Sister Shorebird project, provides no quantifiable restoration of lost bird-years, but if implemented alone would likely under compensate significantly for total shorebird injuries. And finally, NPFC observes that Bandon Marsh, like other tidal salt marshes on the Pacific Coast, will likely provide wintering habitat, resting areas, or other resource services to a variety of seabirds and waterfowl, including some species of scoters and other sea ducks, and gulls, which comprise the second and third most heavily injured categories of seabirds from this incident, respectively. Indeed, the Trustees note in the Final DARP/EA that the Bandon Marsh restoration project will benefit "a very substantial number of waterfowl" (pg. 68) In light of these considerations, NPFC finds that there is no evidence in the record to rebut the Trustees' presumption of correctness in their selection of Bandon Marsh.

In light of the finding that the Bandon Marsh restoration project will clearly provide adequate compensation for lost shorebird-years (262%), NPFC finds that the proposed Sister Shorebird education program is not compensable under OPA as part of this claim. The Trustees contend that this project is needed to provide additional restoration beyond that achieved by Bandon Marsh, to compensate for sanderling injuries. However, as noted above, the Trustees have provided no evidence of direct restoration benefits to sanderlings expected from the Sister Shorebird program as required by 15 CFR 990.54(a), or of the likelihood of direct benefits in the form of reduced disturbance to sanderlings and other shorebirds. NPFC recognizes that educational programs often can be valuable components of restoration plans, but finds that, in the absence of a clearly articulated rationale for such a project, the level of compensation provided for shorebird injuries by Bandon Marsh obviates the need for it in this case. Consequently, the NPFC finds that in respect to the proposed Sister Shorebird project the evidence in the record overcomes the presumption in favor of the trustee conclusion that the project is needed to achieve full compensation. Therefore, the Sister Shorebird Project is denied.

10.4. Marbled Murrelet Restoration Costs

Drawing on studies from the scientific literature, the Trustees estimated a nesting density of 25/acres per nest for marbled murrelets. Using the life history parameters and algorithms developed for the marbled murrelet REA (Skrabis, 2005c), the Trustees calculated that each marbled murrelet nest on existing nesting habitat would restore 64.4 bird-years. The trustees then identified the scale of the project that would equate the total discounted quantity of replacement services to the total discounted quantity of lost services (3,271.22 lost bird-years), resulting in a credit just equal to the debit to compensate for the marbled murrelet injury. Acquisition of 666.41 acres for direct injury, and 602.83 acres for indirect injury, for a total of 1,269.24 acres of occupied or high/medium quality habitat was found necessary to compensate for marbled murrelet injuries.

NPFC accepts the results of the marbled murrelet injury quantification and restoration scaling calculations, including the finding that 1,269 acres of occupied and/or high/medium quality habitat are needed to achieve required restoration, based on the assumed nesting density of 25 acres/nest. The nesting density of 25 acres/nest used for the purposes of restoration scaling may be a conservative estimate for the parcels proposed for acquisition: survey data for Parcel A, the largest of the three, indicates an actual nesting density of approximately 44 acres/nest, according to supplemental information provided by the Trustees pursuant to claim adjudication. The Trustees have also taken a conservative approach in estimating the acreage required for restoration by allowing restoration credit for high/medium quality habitat that is not known or documented to be occupied, rather than just for known occupied habitat. NPFC recognizes that taking the more strictly protective approach of allowing restoration credit only for known occupied habitat would have resulted in the need to acquire significantly more acreage of such habitat. In consideration of the validity of the injury calculation and restoration scaling, the tendency of marbled murrelet sub-populations to stay within a limited geographic range rather than migrating to other areas of potentially suitable habitat, the unique and increasingly scarce and/or fragmented habitat required for marbled murrelet nesting, the often "patchy" nature of high/medium quality marbled murrelet nesting habitat, and the vulnerability of marbled murrelet nests to disturbance and predation and the attendant need for suitable acreages of buffer zones, NPFC approves acquisition of the three proposed habitat parcels. As there is insufficient evidence in the record to rebut the presumed correctness of the Trustees' determination for this project, NPFC finds that the preferred restoration alternative adequately and appropriately restores the losses to marbled murrelets that resulted from this incident.

10.5. Other (Non-Murrelet) Seabird and Waterfowl Restoration Costs

As noted in Section 7.5 above, modifications to the seabird injury calculations during the course of claim review have resulted in a 4.2% reduction in total lost seabird-years, from the initial claimed total of 44,063.17 to 42,214.27. NPFC also acknowledges receipt of the revised restoration credit of 29,292 bird-years for predator management, as discussed in Claimants' August 6, 2006 responses to the July 6, 2006 Restoration Claim Questions and Issues Requiring Claimant Input, and detailed in the accompanying document, Seabird Restoration Projects 7-27-06. This is a reduction of 7,627 bird-years, or 20.66%, from the originally estimated total of 36,919 restored bird-years in the claim. However, neither the original projection, nor this revised total, includes the 74,716 gull bird-years that will be restored by predator management, as indicated in the restoration spreadsheets created by K. Skrabis and provided to NPFC in support of the claim, although section 4.3.3.4 of the Final DARP/EA lists western gulls as a species expected to benefit from the proposed predator management projects (pg. 62 of the Final DARP/EA). Adding these gull bird-years to the revised total of 29,292 restored bird-years provided by Claimants yields a new revised total seabird restoration credit of 104,008 bird-years for predator management alone, substantially (almost 2.5-fold) in

excess of the revised total injury of 42,214 lost seabird-years. Further, as noted in Sections 7.5 and 10.3, services to gulls, sea ducks and other seabirds will very likely be provided by the Bandon Marsh restoration project. Hence, the combination of the proposed predator management program and the services to seabirds from Bandon Marsh, albeit heretofore not quantified, result in clearly adequate restoration for seabird-years lost as a result of the *M/V New Carissa* Oil Spill.

Consequently, these projects would appear to provide a more efficacious and cost-effective means of restoring lost seabird-years than would acquisition of the preferred nesting habitat at Otter Crest. As shown in Table 1 (appended at the end of this determination), there are five possible combinations, or scenarios, of seabird restoration options based on the seabird projects proposed in the Trustees' preferred alternative (not including the final scenario of implementing none of the proposed projects), and the benefits likely accruing to seabirds and waterfowl from the Bandon Marsh project, as noted above. NPFC observes that the seabird-years restored by Otter Crest acquisition compensate for injuries to particular species already wholly, and more cost-effectively, compensated by the predator management and/or educational signage projects. As a result, acquisition of Otter Crest would provide no additional restoration value for seabird losses resulting from the New Carissa oil spill. The record indicates that the predator management project fully compensates for the injuries, provides a greater range of benefits and is more cost effective. NPFC denies the proposed acquisition of the Otter Crest parcel. The evidence in the record overcomes the presumption in favor of the trustee conclusion that the project is needed to achieve full compensation

Although, as noted in Table 1 and above, the proposed predator management project alone compensates numerically for the seabird-years lost as a result of the incident, it fails to address the less tangible issue of restoring the lost species diversity value associated with the (at least) 30 species of seabirds injured by the incident but not benefited by predator management. Among the restoration projects proposed in the preferred alternative, only the educational signage project has the potential to benefit all injured seabird species. Accordingly, NPFC approves implementation of the proposed/preferred predator management and educational signage projects as compensable under OPA.

11. Costs

The claimed costs for restoration implementation are summarized by resource category below.

11.1. Lost Beach and Public Recreational Use – Restoration Costs

The total lost beach and public recreational use restoration cost is $404,000, plus a 15 percent contingency cost of $60,600, for a total of $464,600. The restoration costs by project are:

- Gov. Patterson Memorial State Recreation Site beach trail and parking lot – repairing and improving the beach trails and the parking lot: $44,000.
- North Spit and Horsfall area directional sign and 2 entry kiosks – a directional road sign and 2 entry kiosks with information about the areas including information on signs or panels: $42,500.
- North Spit and Horsfall area State/Federal beach sign program – beach signs to indicate plover nesting area boundaries and the USFS/Oregon State Parks boundary: $13,000.
- Horsfall day use area expansion – this project will relocate the stating area with parking: $155,500.
- North Spit (interior) trail rehabilitation – rehabilitate existing trails: $10,000.
- Horsfall campground accessible sites – upgrade 7 sites (10% of campground capacity) to fully accessible status: $30,000.
- North Spit fence removal – remove unsafe, deteriorating fence structures: $10,000.
- Signs and placement of signs on sand roads – implement the BLM "Leave No Trace" sign strategy: $10,000.
- Bluebill Campground toilet replacement – replace current toilet and septic system with a sealed vault toilet system: $60,000.
- Horsfall road OHV fencing – alleviate OHV operations using fencing: $20,000
- BLM sand road upgrade – upgrade the sand road created to bypass snowy plover nesting habitat to improve public safety: $9,000.
- Fifteen percent contingency cost: $60,600.

NPFC finds the claimed costs of $404,000, excluding contingency, for the lost public recreational use restoration projects to be compensable under OPA.

11.2. Western Snowy Plover Restoration Costs

The claimed restoration costs for western snowy plovers are:	Claimed
• Western Snowy Plover (WSP) Restoration	$90,000
• Monitoring of 1998 HRA for WSP Use and Production	$15,000
• WSP Docent Program	$90,000
• Subtotal	$195,000
• DOI Indirect Costs	
16.84% on Salaries	$13,472
• 25% Contingency	$52,118
Total Western Snowy Plover Restoration	$239,743

NPFC approved costs are shown in Section 15.

11.3. Sanderling and Other (Non-Plover) Shorebird Restoration Costs

The claimed restoration costs for sanderlings and other (non-plover) shorebirds are:

• Shorebird Habitat Acquisition	
Shorebird Parcel	$35,000
Surveys	$9,000
Appraisals	$6,000
FWS Realty Planning & Acquisition	$1,000
Title/Closing Costs/Taxes	$3,000
Level 1 Contract Survey	$1,500
FWS Indirect Costs	
29.5% on Salaries & Other Costs	$2,950
6% on Contracts & Real Estate	$2,730
DOI Indirect Costs 16.84% on Salaries	$1,179
Total Acquisition Costs	$62,359
• Shorebird Habitat Restoration	
Restoration work on Ni-les 'tun Unit	$1,000,100
Restoration work on Boatman Unit	$200,420
Refuge Oversight, Monitoring and Reporting 6 years @ $33,054/yr	$198,324
FWS Indirect Costs	
29.5% on Salaries	$58,506
6% on Contracts	$72,031
DOI Indirect Costs	
16.84% on Salaries	$33,398
Total Habitat Restoration Costs	$1,562,779
• Shorebird Education Project	
Refuge Oversight, Monitoring and Reporting 6 years @ $11,018/yr	$66,108
Curriculum development	$6,000
AmeriCorps Instructors	$28,224
Teacher Workshops	$12,000
Transportation for students/instructors	$74,700
Supplies	$14,000

Website Support Years 1-2 @ $8,000/yr	$16,000
Office Supplies	$6,000
FWS Indirect Costs	
29.5% on Salaries	$55,698
6% on Contracts	$2,053
DOI Indirect Costs	
16.84% on Salaries	$13,827
Total Shorebird Education Project	$294,611
25% Contingency Cost	$479,937
Total Shorebird Restoration Costs	$2,399,685

NPFC approved costs are shown in Section 15.

11.4. Marbled Murrelet Restoration Costs

The total marbled murrelet restoration cost is $23,208,245, plus a 15 percent contingency cost of $3,481,237, for a total of $26,689,482. The restoration costs are:

- Acquiring 3 parcels totaling 4,296 acres to protect 1,269 acres of occupied marbled murrelet habitat at $5,000 per acre: $21,480,000.
- Land Surveys: $23,000.
- Title reports, title insurance, escrow, closing costs (.5% of total land cost): $85,920.
- Timber cruise for appraisal: $40,000.
- Appraisal costs: $25,000.
- Acquisition costs for Conservation Fund (3%): $644,400.
- BLM Acquisition realty costs (6 work months @ $8,200/wm): $49,200.
- Environmental Site Assessment: $5,000.
- Department of Interior 16.84% on Salaries: $8,285.
- Road surveys, road repair and maintenance, road decommissioning, road closure, culvert survey, stand exams, stream surveys, noxious weed surveys, NEPA compliance, pre-commercial thinning contracts, aerial photo flights at $150 per acre: $644,400.
- Marbled murrelet monitoring program on the 1,269 acres of high quality murrelet nesting habitat at $40 per acre per year for 4 years: $203,040.
- Fifteen (15) percent contingency: $3,481,237.

NPFC approves the total project cost of $23,208,245 and has found it compensable under OPA, but excludes the 15 percent contingency cost of $3,481,237 (See Section 15)

11.5. Other (Non-Murrelet) Seabird and Waterfowl Restoration Costs

The claimed restoration costs for other (non-murrelet) seabird and waterfowl are:

• Seabird Parcel $4,500,000	
Surveys	$17,000
Appraisals	$15,000
FWS Realty Planning & Acquisition	$9,000
Title/Closing Costs/Taxes	$16,000
Level 1 Contract Survey	$1,500
FWS Refuge Planning (IAR and Cat-X)	$1,892
Refuge Oversight, Monitoring and Reporting 6 years @ $11,018/yr[11]	$66,108
Operational Support 6 years @ $13,221/yr	$79,329
FWS Indirect Costs	

29.5% on Salaries & Other Costs	$55,262
6% on Contracts & Real Estate	$271,110
DOI Indirect Costs	
16.84% on Salaries	$15,493
Total Acquisition Costs	$5,047,694
• Predator Removal	
Years 1-5 @ $48,000/year	$240,000
Years 6-30 @ $19,000/year"	$475,000
Years 1-5 @ $2,000/year"	$10,000
Years 6-30 @ $1,000/year"	$25,000
Refuge Oversight, Monitoring and Reporting 6 years @ $22,036/yr	$132,216
Total Cost for Predator Management	$882,216
• Predator Proof Garbage Cans	
Coastal Oregon State Parks 146 garbage cans @ $300/can	$43,800
Gregory Point 4 garbage cans @ $300/can	$1,200
Total Cost for Predator Proof Garbage Cans	$45,000
FWS Indirect Costs	
29.5% on Salaries & Other Costs	$39,004
6% on Contracts	$45,000
DOI Indirect Costs	
16.84% on Salaries	$22,265
Total Predator Management Costs	$1,033,485
• Site location of educational panels, project oversight	
and maintenance 6 years @ $11,018/yr	$66,108
Panel design, fabrication and installation	$752,000
Website Support Years 1-2 @ $8,000/yr	$16,000
Office Supplies	$834,108
FWS Indirect Costs	
29.5% on Salaries & Other Costs	$25,992
6% on Contracts	$45,120
DOI Indirect Costs	
16.84% on Salaries	$13,827
Total Seabird Education Project	$925,047
25% Contingency	$1,751,556
Total Seabird Restoration Costs	$8,757,782

NPFC approved costs are shown in Section 15.

11.6. Future Case Management and Trustee Oversight Costs

The restoration plan includes future oversight and administration costs of $922,574. These costs include case management and trustee oversight for 10 years as follows.

Cost Category	Claimed Costs	Approved Costs
Case Management		

Case Manager Salary and Benefits		
• Year 1-5 $60,000/year	$300,000	$300,000
• Year 6-10 $25,000/year	$125,000	$60,000
Travel		
• Year 1-5 $5,000/year	$25,000	$25,000
• Year 6-10 $2,500/year	$12,500	$5000
Printing Costs for Annual Reports		
• Year 1-5 $2,000/year	$10,000	$0
• Final Report $3,000	$3,000	$3000
Office Supplies/Support		
• Year 1-5 $8,000/year	$40,000	$40,000
• Year 6-10 $3,000/year	$15,000	$8,000
Independent Audits		
• Years 1, 5 and 10 @ $10,000/audit	$30,000	$0
DOI Indirect Costs		
• 16.84% on Salaries	$71,570	$60,624
Total Case Management Cost	***$632,070***	***$501,624***
Trustee Council		
USFWS Trustee Representative		
• Years 1-5 $16,000/year	$80,000	$80,000
• Years 6-10 $8,000/year	$40,000	$16,000
USFWS Indirect Costs		
• 29.5% on Salaries & Other Costs 6% on Contracts	$35,400	$28,320
DOI Indirect Costs		
• 16.84% on Salaries	$10,104	$10,104
• Trustee Representative Salaries (including counsel, as necessary) to attend Trustee Meetings: $8,000/year for 10 years	$80,000	$48,000
• Trustee Representatives travel to attend Trustee Meetings: $2,000/year for 10 years	$20,000	$12,000
• Overhead Costs (calculated a general 25%)	$25,000	$15,000
Total Trustee Council Cost	***$290,504***	***$209,424***

Based on the Trustees' Claim and estimated timeframes for project completion NPFC determined to fund a Case Manager and Trustee Council activities at the full level of effort for 6 years. The majority of the proposed restoration projects will be completed within the 6 year timeframe with the exception of portions of the Predator Management (30 yrs) and Snowy Plover Maintenance (20 yrs) projects. However, after 6 years the planned costs on an annual basis for these two projects will be less than $5000 a year. Despite the presumption in favor of the determination, NPFC has determined that the record does not justify the same level of continued oversight of a case manager or management by the Trustee Council after year 6.

NPFC denies the printing costs associated with annual reports as NPFC will provide trustees with Progress Reporting Forms at no cost. Further, Independent Audits will be unnecessary as NPFC Progress Reporting Forms will suffice to meet the accounting requirements of funds expended from the OSLTF (See Section 13).
In total NPFC has determined to pay $711,048 resulting in a denial of $211,526.

11.7. Natural Resource Assessment Costs

The net claim of $37,338,038, and the net approved compensable amount of $25,598,063 documented in this determination, does not include the additional $2,387,319 remaining from Trustees' settlement of RP liability for natural resource damages from this incident. NPFC understands and acknowledges that this $2,387,319 will be

applied to the costs of restoration. As discussed earlier in this document the Trustees have requested that NPFC compensate them for $250,700 in restoration planning costs that have been incurred over the last year. NPFC has denied this request due to a lack of documentation substantiating these costs. In particular, when reviewing Trustee documentation submitted in support of this request, it appeared that the Trustees were requesting reimbursement for costs that are already delineated in the claim in terms of the Marbled Murrelet acquisition process.

12. Revolving Trust Fund and the Return of Unused Funding to the OSLTF

As established by OPA (33 U.S.C. Sec. 2706(f)) and set out in both the NPFC claims regulations (33 CFR 136.211) and the NRDA regulations (15 CFR 990.65), sums recovered by Trustees for NRD must be retained by the Trustees in a revolving trust account. Sums recovered for past assessment costs may be used to reimburse the trustees. All other sums must be used to implement the final restoration plan. For the purposes of this claim, NPFC will deposit funds in the Natural Resource Damage Assessment and Restoration Fund managed by the Department of the Interior.

All unused funds shall be returned to the OSLTF in a timely basis and no later than 6 months from the completion of each individual project as described in this determination in accordance with 15 CFR 990.65.

13. Cost Documentation, Progress Reporting, and Final Report.

Trustees shall provide quarterly progress reports and cost documentation to the NPFC every 3 months starting from the date that funding is received from the OSLTF. These reports shall be submitted to the NPFC no later than 30 days after end of each quarter. In addition, the Trustees shall provide in writing a Final Report on Restoration Implementation within 120 days after the completion of all projects except for the continued maintenance on the Predator Management (30 yrs) and Snowy Plover (20 yrs).

Progress Reports, submitted on a quarterly basis shall provide :

- An Executive Summary discussing the general progress in terms of implementing the Restoration Plan, this includes total funds spent to date.
- An individual summary for each project describing progress to date,and funds expended.
- Cost documentation for funds expended during the quarter that is being reported. This will include:
  - Labor Cost incurred by project.(Hourly rate, project worked on, indirect costs)
  - Travel Costs incurred (Vouchers)
  - Contracts (Statements of Work, Reports, Payment Information)
  - Equipment and Other Costs (Receipts)
- Certification by Lead Administrative Trustee that funds were expended according to the funded plan under this claim.
- Amount of Funds (if any) to be returned to the OSLTF.
- Written requests for Contingency Funds as necessary.

For convenience NPFC has developed quarterly progress reporting forms and cost documentation spreadsheets that are designed to assist the claimant in the tracking of these activities. NPFC highly recommends that Trustees utilize these forms for quarterly reporting. NPFC has developed these standardized forms to facilitate ease of reporting by Trustees and more efficient oversight and reconciliation by NPFC. Trustees may tailor these forms as necessary over the life of the claim or use another format for quarterly reporting; however, all of the information in the standardized NPFC forms must be included in the quarterly submissions.

14. NPFC Treatment of Contingency

Due to the uncertain nature of the requested contingencies at the time of this determination, contingent amounts will be paid only if and when those contingencies arise. NPFC recognizes that the costs in this plan are estimated and that these costs may unexpectedly increase, and/or new and unforeseeable costs may surface in the future.

To address this concern, NPFC has determined that the OSLTF will remain available for potential contingencies that arise during the implementation of this plan. Future contingency payments will be available on a project specific basis under the following criteria:

1. The potential in complex project plans to overlook certain activities/costs which nevertheless are later found to be necessary to complete the project, and

2. The potential that certain specific significant costs of a plan are subject to later developments or events that result in an increase in costs, and that can be described in reasonable detail and within reasonable costs parameters (e.g. a plan to purchase property may be subject to the future availability of property for purchase and/or the outcome of purchase negotiations).

In the future, if the need for additional funding arises under either of the two criteria above, the Trustees may request it from the NPFC. This request will be evaluated by NPFC and if approved will be expeditiously paid to the Trustees' revolving trust account. Any request for additional funding must document that this funding is needed for the completion of the activities outlined in the plan, that the requests complies with the above two criteria, and that the increased costs are reasonable.

It is the Trustees' responsibility to accurately track the costs being incurred under the plan and to document that additional funding is needed. NPFC will require the Trustees to submit Progress Reports as outlined in Section 13 prior to approving a request for additional funding.

The amount of contingency funding available to the Trustees on a project by project basis for this determination is detailed below. In a rare case, an increase to the determined amounts may be granted if adequate documentation and rationale are provided. Further, contingency payments are only available for a limited period of time after NPFC payment of the original plan. For the New Carissa and this determination, contingency payments are only available from the OSLTF for 6 years, as after that time the majority of the projects will be completed.

The contingencies percentage assigned by project are based on NPFC's determination of the degree of each project's complexity or potential for unknown events. For the funded projects in this determination the following contingencies have been assigned:

Project	Contingency
Lost Recreation	15%
Habitat Maintenance for Western Snowy Plover	25%
Bandon Marsh Restoration	25%
Habitat Acquisition for Marbled Murrelet	15%
Predator Management (Seabirds)	25%
Educational Signage (Seabirds)	25%
Case Management / Trustee Council	15%

For more detail on what contingencies are available for and their application please see NPFC-Cn Policy Document entitled "NRD Contingency Payments".

15. Summary

The findings of this determination are summarized in Table 2 below according to resource category. The specified claimed amounts exclude the 15%-25% contingency requested by the trustees for each project.

Table 2. NPFC Summary Determination Findings

Projects	*Claimed Amount*	**NPFC Determination**	**Compensable Amount**
Lost Recreation			
Various – see Sec. 10.1	$404,000	Approve All	$404,000
Western Snowy Plover			
HRA Maintenance (30 yrs)	$117,630	Approve Maintenance for 20 years	$78,420
Docent Program	$90,842	Denied (HRA provides sufficient restoration)	--

Non-Plover Shorebirds			
Bandon Marsh Restoration	$1,625,137	Approved	$1,625,137
Sister Shorebird (Education)	$294,610	Denied (Bandon Marsh provides sufficient restoration)	--
Marbled Murrelet			
Habitat Acquisition and Management	$23,208,245	Approved	$23,208,245
Non-Murrelet Seabirds and Waterfowl			
Predator Management	$1,033,485	Approved	$1,033,485
Educational Signage	$925,047	Approved	$925,047
Habitat Acquisition and Management (Otter Crest)	$5,047,694	Denied (Predator mgmt, signage, and ancillary benefits of Bandon Marsh provide sufficient restoration)	--
Case Management and Trustee Oversight			
Case Management (10 yrs)	$632,070	Approve 6 years, at full effort. Deny subsequent years.	$501,624
Trustee Oversight (10 yrs)	$290,504	Approve 6 years, at full effort. Deny subsequent years.	$209,424
Request for Contingency Funding			
Lost Recreation	$60,600 (15%)	See Section 14	--
Western Snowy Plover	$52,118 (25%)	See Section 14	--
Non-Plover Shorebirds	$479,937 (25%)	See Section 14	--
Marbled Murrelet	$3,481,237 (15%)	See Section 14	--
Non-Murrelet Seabirds and Waterfowl	$1,751,556 (25%)	See Section 14	--
Case Management	$230,644 (25%)	See Section 14	--
Subtotals	$39,725,356		$27,985,382
Less RP Settlement Funds	($2,136,619)	Reduction in Settlement amount unsubstantiated.	($2,387,319)
TOTALS	**$37,588,736**		**$25,598,063**

All natural resource damage costs that are not being offered for reimbursement are considered denied. You may make a written request for reconsideration of these claims. The reconsideration must be received by the NPFC within 60 days of the date of this letter and must include the factual or legal basis of the requests for reconsideration, providing any additional support for the claim. Reconsideration will be based upon the information provided and a claim may be reconsidered only once. Disposition of the reconsideration will constitute final agency action. Failure of the NPFC to issue a written decision within 90 days after receipt of a timely request for reconsideration shall, at the option of the claimant, be deemed final agency action. All correspondence should include corresponding claim number.

Mail reconsideration requests to:

Director (cn)
U.S. Coast Guard
National Pollution Funds Center
4200 Wilson Boulevard, Suite 1000
Arlington, VA 22203-1804

If you accept these offers, please sign the enclosed Acceptance/Release Forms where indicated and return to:

Director (cn)
U.S. Coast Guard
National Pollution Funds Center
4200 Wilson Boulevard, Suite 1000
Arlington, VA 22203-1804

If we do not receive the signed original Acceptance/Release Form within 60 days of the date of this letter, the offers are void. If the settlements are accepted, your payment will be mailed within 30 days of receipt of the Release Form. Please provide account information and instruction for the transfer of funds to your trustee account when you submit the Release Form.

If you have any questions or would like to discuss the matter, you may write me at the above address or contact me by phone at 202-493-6723.

Sincerely,

Scott Knoche
Claims Manager
Natural Resource Damage Claims Division
National Pollution Funds Center
U.S. Coast Guard

ENCL: Acceptance/Release Form

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Table 1 – *New Carissa* NRDA Claim Evaluation
Seabird Injuries Summary and Seabird Restoration Scenarios

SEABIRD INJURIES (EXCLUDING MARBLED MURRELETS)

Species Group	Group Bird-Years Lost
Loons (common loon, Pacific loon, red-throated loon)	1,296.79
Grebes (western grebe, horned grebe, red-necked grebe, eared grebe)	3,255.85
Cormorants (Brandt's cormorant, double-crested cormorant, pelagic cormorant)	1,119.81
Murres and Puffins (common murre, tufted puffin, horned puffin)	7,838.36
Auklets and Ancient Murrelets (Cassin's auklet, parakeet auklet, rhinoceros auklet, ancient murrelet)	2,646.79
Scoters and Ducks (surf, white-winged, and black scoters; bufflehead; wood duck; mallard; greater scaup; American coot)	11,321.85
Storm-petrels and Shearwaters (Leach's, and fork-tailed storm-petrels; short-tailed, wedge-tailed, and sooty shearwaters)	578.11
Fulmars (northern fulmar)	7,468.56
Gulls and Kittiwakes (western (W), glaucous-winged (GW), GW-W hybrid, Bonaparte's, herring, and mew gulls; black-legged, and red-legged kittiwakes)	6,688.75
TOTAL	**42,214.87**

SEABIRD RESTORATION SCENARIOS

Scenario	Restoration Credit: Bird-years Restored	Number of Species Protected or Restored	Cost	Comments
I. Predator Management Educational Signage Otter Crest Acquisition	• 23,768 cormorant-years 74,716 gull-years 4,872 auk-years 652 storm-petrel-years • Unknown; not quantifiable • 16,072 cormorant-years 2,107 pigeon guillemot-yr	• 7-9 (Brandt's, pelagic and double-crested cormorants; western gull; common murre; pigeon guillemot; tufted puffin; Leach's storm-petrel; black oystercatcher (a shorebird)) • 18-39 (18 species, including 5 shorebirds, listed in responses to July 6 Restoration Claim Questions and Issues) • 2 (pelagic cormorant, pigeon guillemot)	• $1.03M • $925K • $5.05M	• Compensates for quantified injury • Predator management alone compensates for lost bird-years. • Educational signage and predator management address lost diversity • Otter Crest restores species already restored by predator management; therefore it provides no restoration value
II. Predator Management Otter Crest Acquisition	• 23,768 cormorant-years 74,716 gull-years 4,872 auk-years 652 storm-petrel-years • 16,072 cormorant-years 2,107 pigeon guillemot-yr	• 7-9 (Brandt's, pelagic and double-crested cormorants; western gull; common murre; pigeon guillemot; tufted puffin; Leach's storm-petrel; black oystercatcher (a shorebird)) • 2 (pelagic cormorant, pigeon guillemot)	• $1.03M • $5.05M	• Compensates for quantified injury • Predator management alone compensates for lost bird-years. • Predator management only partially restores diversity • Otter Crest restores species already restored by predator management; therefore it provides no restoration value
III. Predator Management	• 23,768 cormorant-years 74,716 gull-years 4,872 auk-years 652 storm-	• 7-9 (Brandt's, pelagic and double-crested cormorants; western gull; common murre; pigeon guillemot; tufted puffin;	• $1.03M	• Compensates for quantified injury • Predator management alone compensates for lost bird-years.

Table 1 – *New Carissa* NRDA Claim Evaluation
Seabird Injuries Summary and Seabird Restoration Scenarios

Educational Signage	petrel-years • Unknown; not quantifiable	Leach's storm-petrel; black oystercatcher (a shorebird)) • 18-39 (18 species, including 5 shorebirds, listed in responses to July 6 Restoration Claim Questions and Issues)	• $925K	• Predator management only partially restores diversity. • Educational signage addresses lost diversity.
IV. Educational Signage Otter Crest Acquisition	• Unknown; not quantifiable • 16,072 cormorant-years 2,107 pigeon guillemot-yr	• 18-39 (18 species, including 5 shorebirds, listed in responses to July 6 Restoration Claim Questions and Issues) • 2 (pelagic cormorant, pigeon guillemot)	• $925K • $5.05M	• Educational signage addresses lost diversity. • Otter Crest only partially (43%) compensates for lost seabird-years, leaving uncompensated injuries of 24,035 bird-years, or 57% of total. • In order to fully compensate for quantified injuries, each of the proposed 80 signs must be assumed to restore 300.4 bird-years over its functional life.
V. Predator Management Educational Signage Bandon Marsh	• 23,768 cormorant-years 74,716 gull-years 4,872 auk-years 652 storm-petrel-years • Unknown; not quantifiable • Not quantified; unknown	• 7-9 (Brandt's, pelagic and double-crested cormorants; western gull; common murre; pigeon guillemot; tufted puffin; Leach's storm-petrel; black oystercatcher (a shorebird)) • 18-39 (18 species, including 5 shorebirds, listed in responses to July 6 Restoration Claim Questions and Issues) • Undetermined number of waterfowl and seabird species	• $1.03M • $925K • Covered for shorebirds	• Compensates for quantified injury • Predator management alone compensates for lost bird-years. • Predator management only partially restores diversity. • Educational signage addresses lost diversity. • Bandon Marsh shorebird restoration project provides ancillary restoration benefit to seabirds and waterfowl
VI. Deny All Projects	• None	• None	• None	Not viable under OPA since other alternatives do exist to provide restored seabird-years and (some) restoration of species diversity.

Notes: 1 – Trustees/Claimants have provided varying assessments of the numbers of species restored by predator management and educational signage.