APPENDIX O. Response to Public Comments on the Draft Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA)

The Trustees received over 45 comment letters on the Draft Refugio Beach Oil Spill DARP/EA that are summarized and responded to below. Original comment letters are available for download from the Administrative Record for the case at https://pub-data.diver.orr.noaa.gov/admin-record/6104/RBOS_DARP_Public%20Comments_NoPII.pdf.

Comments of Support:

S Comment 1: The Trustees received several comments that indicated full support of the draft plan. Comments of Support included:

- Support for the California brown pelican restoration and western snowy plover restoration proposed projects.
- Support for of restoration projects for marine mammals.
- Support for SHORE-1, SubT-4, SubT-2, BIRD-1, BIRD-3, and BIRD-7 Projects.
- Hopes that all projects will be implemented.

S Comment 2: One commenter expressed their opinion that the Trustees presented an excellent assessment and restoration plan.

S Comment 3: Multiple comments were received specifically supporting restoration projects for marine mammals.

S Comment 4: Several commenters expressed support for the shoreline restoration projects and were highly supportive of the Ellwood Seawall Removal Project.

S Comment 5: One commenter expressed strong support for the sand dwelling kelp forest restoration project.

S Comment 6: Two commenters were supportive of SHORE-3 project and would like to help with implementation in "Zone D".

S Comment 7: A comment expressed support of the Draft DARP/EA, indicated that they provided support during development of the DARP/EA, and plan to continue to provide support in the implementation phase.

S Comment 8: A comment indicated support for removal of pilings at COPR (2nd tier) PROJECT.

S Comment 9: One commenter requested maximum funding possible to Channel Islands Marine and Wildlife Institute (CIMWI).

Response: The Trustees are thankful for the letters of support on the DARP/EA.

General Comments:

G Comment 1: The commenter requested a public comment period extension of 45 days due to COVID-19.

Response: The Trustees appreciate that the COVID-19 pandemic has created any number of hardships. Nevertheless, we received only one request to extend the 45-day comment period, and the requester did not suggest that they were unable to comment sufficiently on behalf of her organization. The comment period will remain at 45-days to ensure that the plan is finalized in early 2021.

G Comment 2: The commenter is concerned that the amount of the NRDA damages was included in the Plains Consent Decree before the public comment process was completed.

Response: Settlements for natural resource damages are often based upon estimates of what appropriate restoration may cost, and it is common for natural resource settlements to occur prior to completion of the public process and the Trustees completing a Final DARP/EA. A noteworthy example of this is the M/V Cosco Busan oil spill in San Francisco Bay, where the DARP/EA was finalized after the consent decree was entered.

The OPA regulations allow the Trustees to settle claims for natural resource damages "... at any time, provided that the settlement is adequate in the judgment of the trustees to satisfy the goals of the OPA and is fair, reasonable, and in the public interest." (15 CFR § 990.25). In this case, the Trustees have concluded that the settlement achieves the goals of OPA to make the public and the environment whole, is a fair and reasonable result, and advances the public interest.

The Trustees have provided a sufficient basis to support this conclusion through development of their Draft DARP/EA, as required by OPA. 33 U.S.C. § 2706. In developing their Draft DARP/EA, the Trustees followed requirements set forth in OPA to assess the injured natural resources and conduct restoration planning. Following OPA regulations, the Trustees determined whether the Refugio Beach incident injured natural resources or impaired their services (15 CFR § 990.51) and quantified the degree and the spatial and temporal extent of those injuries and loss of services (15 CFR § 990.52). This process of injury determination and quantification is described in detail in Chapter 5. The Trustees used a variety of standard scientific approaches, appropriate to the nature of the resource and injury being studied.

Chapter 5 of the Draft DARP/EA also contains the Trustees' development and evaluation of alternatives for comprehensive restoration planning (15 CFR §§ 990.53-54). As a result of this process, the Trustees determined that the restoration projects identified in the Draft DARP/EA were appropriate to compensate the public for losses to the injured resources.

After nearly five years of intensive field work, study, data analysis, and planning, the Trustees published the Draft DARP/EA satisfied that the plan would achieve the Trustees' restoration goals and that the settlement amounts included in the consent decree were appropriate. Now, having carefully considered the public's comments on the Draft DARP/EA, the Trustees still believe that to be true.

G Comment 3: The commenter requests that the Trustees stop referring to these incidents and blowouts by the places they occur and start giving them back to the companies that have caused them. They state that this incident is the Plains All American Oil Spill at Refugio. **Response:** The Trustees appreciate this comment. **G Comment 4:** The commenter requests that the Trustees keep an open mind and work with the community to ensure a final plan that meets the needs of the community and restores the environment.

Response: The Trustees place a high priority on public participation in the restoration planning process, before, during, and after the public's review of the Draft DARP/EA. In the summer of 2015, shortly after the spill, the Trustees began a robust outreach process. The Trustees held a public meeting in June 2015 and began publishing periodic newsletters to keep the public informed, starting in July 2015. However, the public outreach went beyond providing informational materials. Throughout the process, the Trustees also sought restoration concepts from experts, academics, local governments, and the general public. This is evidenced by the extensive list of both Tier 1 and Tier 2 projects that the Trustees' considered. In fact, few of the restoration projects included in the Draft DARP/EA were purely Trustee-driven; most were proposed by interested members of local communities throughout the spill area.

The Trustees have also carefully considered the public comments submitted on the Draft DARP/EA. While the Trustees have not made any major changes to the preferred alternatives from the Draft DARP/EA, this is due, in part, to the fact that the preferred alternatives were already largely community-driven.

Communication and coordination with local communities will also continue even after the publication of this Final DARP/EA. Most notably, the selection of projects to compensate for lost human use will be an ongoing process – one that will be driven largely by the needs of local communities. State Parks will consider public comments on the DARP/EA as well as input from Santa Barbara County and other local governmental and non-government organizations prior to selecting projects on State Parks' properties to compensate for recreation losses occurring from Gaviota to El Capitan. With regard to projects downcoast of El Capitan State Beach, the State Trustees will solicit grant proposals from Santa Barbara County, Ventura County, Los Angeles County, County and City Park Districts, as well as other local public entities and non-profits. The Trustees will provide funding through the South Coast Shoreline Parks and Outdoor Recreation Grants Program, but the project proposals will originate from local agencies and park districts as well as non-profits within the most spill-affected communities.

G Comment 5: The commenter states that the volume of oil spilled was greater than the amount considered by the Trustees in the DARP/EA.

Response: The Trustees understand that Dr. Igor Mezic, co-founder of AIMdyn, Inc. and a Professor at the University of California, Santa Barbara, performed a study for private litigants that suggests the volume of oil spilled exceeds the 123,000 gallon estimate referenced in the Draft DARP/EA.

The Trustees relied upon the total spill volume (i.e., the amount that left the pipeline) referenced in the Pipeline and Hazardous Materials Safety Agency's Failure Investigation Report and various other response documents. We then estimated the amount of oil that in turn would have entered the ocean.

Spill volume estimates were primarily considered by the Trustees in the assessment process as a means to "cross check" whether the spill volume was consistent with the Trustees' determination of the geographic extent of oiling and degree of impacts. However, the Trustees ultimately based their injury assessment on observations and data collected in the field, as well as laboratory studies. For

example, the Trustees considered field observations of oil collected by oil spill responders conducting SCAT surveys. The Trustees also conducted a robust forensics study to determine the origin (or "fingerprint") of a large number of oil and tissue samples found in the environment in various locations.

The Trustees do not believe that either their estimate of the amount of oil entering the ocean, or the estimates of Dr. Mezic are necessarily inconsistent with the injuries that were quantified in the assessment process. The resulting natural resource damages are based upon the cost to restore the quantified injuries to resources and the value of lost human use, not spill volume.

G Comment 6: The commenter stated that information about oil at the Channel Islands and in the Sanctuary is unclear throughout the DARP/EA.

Response: The Trustees appreciate this comment. Oil at the Channel Islands is discussed in Section 1.1.2, Figure 4, and Section 2.2.5 in the Draft DARP/EA. The Trustees have made revisions to Sections 1.1.2 and 2.2.5 for clarification.

G Comment 7: The commenter believes that the sunken oil assessment may have been too late. **Response:** Bringing in equipment and divers certified to dive in oil-contaminated water for purposes of an assessment takes time. The Trustees initiated the sunken oil assessment as soon as it was feasible and safe to deploy. Submerged oil can move in and out of the area quickly, depending on tides and currents, making the certainty of "catching" the submerged oil a challenge. The two subtidal assessments were undertaken within 2 weeks of the spill—one conducted by the Response between 11 and 13 days after the spill, and one conducted by the Trustees 13 days after the spill (DARP/EA Section 5.2.1). However, the Trustees still found evidence of oil in sediments and tissue 13 days later. The quantification the Trustees used for the assessment (based on algal and surfgrass damage) was sufficient and we are confident that the injuries are adequately compensated.

G Comment 8: The commenter expressed concern over the lack of long-term analysis to assess the injury and damage of Refugio Beach Oil Spill. Several sections of the comment letter mention that no analyses were conducted beyond two years after the spill.

Response: The Trustees collected anniversary chemical and biological survey data for 1-2 years after the spill. The chemical data strongly suggested that exposure to Line 901 oil was greatly attenuated or no longer detectable within those media. The biological survey data suggested that recovery of beach hoppers was not complete; however the data showed recovery was occurring, and that recovery would likely be complete within 4-years, as estimated by Dr. Jenifer Dugan (UC Santa Barbara). Given this and other information, the Trustees felt there was enough justification to focus the assessment on restoration planning and achieving an out-of-court settlement with the responsible party, rather than pursuing additional biological injury and recovery data. As stated in Section 4 of the DARP/EA, while there is some uncertainty inherent in the assessment of impacts from oil spills, and while collecting more information may increase the precision of the estimate of the impacts, the Trustees believe that the type and scale of potential restoration actions would not substantially change as a result of more studies. Therefore, the Trustees sought to balance the desire for more information with the reality that further research would be costly and would delay the implementation of the restoration projects.

G Comment 9: The commenter states that the DARP/EA must be revised to include performance criteria in order to ensure adequate restoration as required by NRDA regulations.

Response: The Trustees agree that performance criteria and monitoring are critical to ensuring the selected restoration is adequate. Monitoring results also provide much-needed information to the Trustees in the unfortunate event of another oil spill. Accordingly, the Trustees included in the Draft DARP/EA a discussion of performance criteria for each preferred project. The Trustees also understand the desire for additional details on performance criteria. Accordingly, the Trustees have revised the performance criteria and monitoring discussions in the Final DARP/EA for each preferred project, adding as much detail as is practical at this point in the planning process.

However, many of the projects included in this plan are still relatively early in the planning process and are, therefore, not yet ready for the development of highly detailed monitoring plans or performance criteria. As the projects get more fully developed, the Trustees will work in coordination with project implementers to create more detailed monitoring plans and performance criteria.

G Comment 10: The commenter stated that active and ongoing Chumash partnership should be enlisted.

Response: The Trustees agree and will continue to reach out and invite Chumash collaboration throughout the restoration planning and implementation process.

G Comment 11: The commenter requests that Chumash continue to be involved throughout implementation of projects.

Response: The Trustees have appreciated our communication with the Chumash to date and welcome continued collaboration into the future.

G Comment 12: The commenter expressed that not all tribes are represented in the Draft DARP/EA and encourages better communication.

Response: The Trustees appreciate the commenter providing a list of tribes beyond those listed by the Native American Heritage Commission. We have updated the Final DARP/EA to reflect this information. We anticipate continued coordination with tribes throughout the implementation of this plan to ensure that restoration is conducted in a way that is protective of sacred sites and is respectful of cultural keystone species that have significance beyond their role in the ecosystem.

G Comment 13: The commenter states that access paths were created during the oil spill response, and while many have grown over, some remain and are being used for beach access through culturally-sensitive sites. The vulnerability of these sensitive sites can be reduced by blocking off and revegetating the access trails.

Response: The Unified Command as well as Santa Barbara County's Emergency Coastal Development Permit required archaeological and Native American monitoring during cleanup, repair, and habitat restoration activities in order to minimize impacts to cultural resources. Native American monitoring was coordinated by Owl Clan Consultants and carried out by a consortium composed of Owl Clan staff, the federally recognized Santa Ynez Band of Chumash Indians, the Coastal Band of the Chumash Nation, the Barbareño/Ventureño Band of Mission Indians, and the Barbareño Chumash Band. The Trustees followed up with personnel involved in the response and were informed that the majority of the access path improvements made by response personnel were made to pre-existing volunteer trails used by the public prior to the spill. The access paths were restored to pre-spill conditions following the response. A number of the pre-existing volunteer trails remain open. The Trustees will follow up with the commenter to obtain further information regarding the location of the paths they are concerned about and to confirm whether the paths of concern were pre-existing volunteer trails. **G Comment 14:** Oil Spill Response capacity-building projects should have been included in the Draft DARP/EA but were absent. The commenter also expressed the need for cultural resource monitor HAZWOPER training.

Response: Funds secured through the Natural Resource Damage Assessment must be spent on restoration projects that have tangible benefits to the natural resources that were injured by the spill. While oil spill response capacity-building is a necessary component of spill preparedness, it falls outside the scope and purpose of Natural Resource Damage Assessment authorities.

The California Department of Fish and Wildlife, Office of Spill Prevention and Response, U.S. Coast Guard, and The Environmental Protection Agency lead spill preparedness through Area Committees that are open to all, and are an appropriate forum for spill response capacity-building. Butch Willoughby, with the U.S. Coast Guard, welcomes members of the local indigenous community to attend and take part in their Area Contingency Plan meetings. He can be reached by email at <u>Robert.M.Willoughby@uscg.mil</u>. OSPR typically holds open several seats at their internal HAZWOPER trainings that can be made available free of charge to members of the tribal community. Due to the ongoing Covid-19 pandemic, future training sessions have not been scheduled at this time. Members of the indigenous community who would like to find future dates of OSPR HAZWOPER trainings can contact Jeff Westervelt by email at jeff.westervelt@wildlife.ca.gov.

G Comment 15: The commenter expressed the opinion that Chumash people should not just be considered an interest group and that indigenous peoples have the right to free, prior, and informed consent. In addition, they have the right to conserve and protect their traditional resources. The commenter also stated that cultural resources are not synonymous with archeological resources. Cultural resources include land-based, water-based, and living natural resources, as well as cultural landscapes and sacred places.

Response: The Trustees appreciate this comment and reviewed the DARP/EA to ensure our wording aligns with these values.

G Comment 16: The commenter submitted references about Chumash culture for inclusion in the DARP/EA.

Response: The Trustees welcome and appreciate these additional resources. We have incorporated the following references into the Final DARP/EA and they will be added to our administrative record:

- Tribal Marine Protected Areas, Protecting Maritime Ways and Cultural Practices. 2004
- Chumash Ecosystem Services Assessment CINMS Condition Report
- Traditional and Local Knowledge, A vision for the Sea Grant Network, 2018.

G Comment 17: It was stated that wetland habitats were not assessed for damage after the spill. The commenter requested that the Trustees include justification in restoration plan if wetlands were not impacted by the spill.

Response: The Trustees did not assess wetlands for damages because the Trustees saw no evidence of wetlands oiling in the two weeks following the spill, and cleanup activities did not adversely affect wetlands. Section 2.3.6 of the DARP/EA addresses this point.

G Comment 18: The commenter requests enough funding to ensure projects are successful. The compensation should be 10x damage costs to address uncertainty.

Response: The Trustees agree that there is uncertainty in the costs associated with completing each of the restoration projects identified in the Draft Damage Assessment Restoration Plan. When necessary, cost contingencies were built into the cost estimate for each project. For example, the Trustees hired an engineering firm to develop construction cost escalation factors and a cost estimate for the removal of the Ellwood Seawall. The Trustees believe that contingency factors built into restoration project costs will provide an adequate level of certainty in being able to implement the projects in size and scope as identified in the plan.

G Comment 19: The commenter requests additional information on length of funding per project and if there is adequate funding to ensure long-term success.

Response: The length of funding per project is variable depending on the project and project scaling, i.e., the number of years needed for a project to compensate for the associated injuries. All projects have been budgeted to include a contingency that can be allocated to adjust for unanticipated issues that arise.

G Comment 20: The commenter has concerns with the consistency in monitoring post-spill and used Figure 14 (page 68) as an example; only one beach was monitored in August 2015. This was concerning to the commenter because this beach had the highest levels of Polycyclic Aromatic Hydrocarbons (PAHs). The commenter states that based on this figure, it appears that the majority of impacts may have been missed by the sampling regime.

Response: The NRDA team's sampling program was designed to assess broad-scale spatial and temporal patterns in macroinvertebrate fauna and contaminants over more than 50 km of shoreline. The team collected samples that were intended to yield time integrated measures of PAHs, including tissue from lower shore and upper shore elements of the food web and from intertidal pore water across the spill-affected area. These measures correlated well with SCAT estimates of oiling, which supported their use in further analyses. The example beach location that is the focus of this comment, shown in Figure 14, is Corral Canyon, a small beach located east of the site at Las Flores but west of the site at El Capitan. This location returned the highest pore water total PAH concentrations of any location sampled during this spill event. The responders and Trustees became aware of this location later than the commencement of the planned surveys of the other nearby sites following a surfer's complaint about its disproportionately significant and persistent oiling status. The oiling status of the originally sampled sites was more apparent to spill responders and NRDA teams shortly after the spill, and these sites were more frequently and easily accessed during and post-spill. As soon as the Trustees were alerted to the oiling status at Corral Canyon, we arranged a special sampling effort to collect data from it in August 2015. The Trustees then made the decision to continue to sample that site in the two following sampling events. While the pore water chemistry results reflect the later start of the sampling at this site, this was a function of becoming aware of the condition of this site later than other locations rather than any intentional omission. The post-spill sampling design decisions were made rapidly, based on the most current information available regarding fate and transport of oil and general oiling status of sites. While the peak concentrations of hydrocarbons may not have been captured in this dataset, the Trustees do not believe that this resulted in the majority of the impacts being missed and wish to point out that multiple datasets and lines of evidence were factored into the injury assessment.

G Comment 21: The commenter requests justification for how the percentage of injury was calculated for shoreline habitats and suggests there is a lack of consistency in the injury assessment data.

Response: SCAT derived data, which quantified oiling levels in shoreline Zones A, C, and D combined with acreage, were used to estimate injury based on the approximate proportionality of oiling compared to Zone B, given that less data and fewer types of data were collected in those zones. The concept was that lesser oiling led to lesser injury, both from exposure and from clean-up operations. The Trustees view this as the most consistent approach with the data and evidence available. Lower injury levels reduce the ability to detect injury using field data that have high inherent variability (*e.g.*, talitrid population measures). Reduced ability to detect injury in field data affects the utility and cost-effectiveness of collecting additional field data to conduct direct comparisons of Zones A, C, and D measurements to other sites, including control sites. The value 0.034 is the fraction of discounted service-acre years in Zone D compared to Zone B; (0.05 dSAY/Acre in Zone D) / (1.47 dSAY/Acre in Zone B) = 0.034. That calculated value follows from the 5% injury in one year assigned to Zone D.

G Comment 22: The commenter requests additional justification to link injuries assessed to the proposed restoration projects and for the Trustees to provide information on location of projects in terms of zones and injuries assessed for each zone

Response: The Trustees appreciate this comment. We have reviewed the DARP/EA and revised the bird and marine mammal appendices to include additional quantification information linking injuries to the preferred projects. In addition, the Final DARP/EA has been revised to include maps that identify the location of all preferred projects.

G Comment 23: The commenter stated that second-tier restoration projects described as "out of kind" or not appropriate for the impact should be removed from the document.

Response: The Trustees agree that there are plentiful opportunities for in-kind restoration and projects that provide out-of-kind benefits to the resources that were impacted by the spill are not preferred. We reviewed the three second-tier projects that were described as providing benefits that were "out of kind" with the injury caused by the oil spill. In each case, we identified so me nexus between the restoration project and the injury, and therefore retained each in the text, but with expanded descriptions to clarify the nexus of the restoration to the injury.

G Comment 24: The commenter states they are optimistic that the preferred restoration projects in the Draft DARP/EA will be beneficial to the resources injured by the Refugio Oil Spill, but are concerned that the assessment may underestimate the damages. They are therefore also concerned that the scale of the selected restoration projects may be inadequate.

Response: The Trustees followed requirements set forth in OPA to assess the injured natural resources and conduct restoration planning in developing the Draft DARP/EA. Following OPA regulations, the Trustees determined whether the Refugio Beach incident injured natural resources or impaired their services (15 CFR § 990.51) and quantified the degree and the spatial and temporal extent of those injuries and loss of services (15 CFR § 990.52) The Trustees used a variety of standard scientific approaches, appropriate to the nature of the resource and injury being studied. This process of injury determination and quantification is described in detail in Chapter 5. In the Final DARP/EA the Trustees have provided further detail regarding restoration scaling. The Trustees believe that the preferred projects described in the Draft and Final DARP/EA achieve the goals of OPA to make the public and the environment whole, is a fair and reasonable result, and advances the public interest.

Responsible Party Comments:

RP Comment 1: The commenter provided background info on spill, participation, and NRDA process. **Response:** The Trustees welcome and appreciate this comment.

RP Comment 2: The commenter stated that the Draft DARP/EA reflects only the Trustees' conclusions and determinations; Plains disagreed with several of the methods and findings of the Trustees. **Response:** The Trustees acknowledge the comment.

RP Comment 3: The commenter stated that Plains' experts believe the Trustees somewhat overstated the spill's impact but agrees with the restoration projects in the Draft DARP/EA. **Response:** The Trustees appreciate the support of the projects in the Draft DARP/EA.

Shoreline Habitats:

SH Comment 1: The commenter is concerned with the lack of impacts assessed for rocky intertidal habitats beyond Zone B.

Response: As part of our overall Injury assessment to rocky intertidal communities, the Trustees engaged researchers involved with the Multi-Agency Rocky Intertidal Network (MARINe), a consortium of research groups working together to collect compatible data that are entered into a centralized database. Their studies included sites well downcoast of Zone B, allowing the Trustees to leverage monitoring of already established, long-term community and population grids along much of the California coast to provide information as a control. Additional sampling sites were established very soon after the spill, within the primary known spill footprint, and were photographed following MARINEE RAPID assessment protocols developed specifically for oil spills. The summary of findings may be found here in the Raimondi et al. 2019 report:

(https://pub-data.diver.orr.noaa.gov/admin-

record/6104/Refugio%20Rocky%20intertidal%20report%20Final%209-5-2019.pdf).

The photographs taken at sites directly in the heaviest oiling zone were examined for species composition, percent cover within a quadrat, and overall diversity of the community of organisms, in an attempt to detect community and population level impacts that could be attributable to oiling.

When assessing impacts from an acute event such as an oil spill, particularly one that impacts a broad area, the Trustees are faced with situating these study sites across a variety of, potentially extremely diverse locations. However, we attempted to select sampling locations within areas we understood to be most likely to exhibit impacts from the oiling, with the ability to then extrapolate against locations with similar oiling throughout the spill zone(s). Thus, the quadrats were placed across a variety of locations with the most likelihood of exhibiting oil induced effects. Based on the findings from the Raimondi et al. 2019 report, we found that there were impacts to intertidal species resulting from the Refugio Beach Oil Spill at sites proximate to the spill location. Most common and long-lived sessile and mobile indicator species showed reduced cover in oiled sites, verses non-oiled sites. However, there were few quantifiable changes to rocky intertidal communities in the quadrat grids further from the spill location. The Trustees cannot assert that absolutely no injury occurred to some rocky intertidal flora and fauna outside of the Zone B. However, given the results of the studies that we conducted, and the burden of proof of injury we bear in NRDA, we determined that the most significant proportion of the injury to these habitats occurred within Zone B.

SH Comment 2: The commenter is concerned with project location choices for Rocky Intertidal and Shoreline Projects.

Response: The Trustees screened projects against criteria to designate them as preferred or nonpreferred, as well as prioritizing projects that would be implemented within the spill affected area. It is our intention to select the best in-kind projects proximate to the injured habitats to compensate for the natural resources that were injured. Habitat restoration is generally best accomplished closer to, rather than farther from, the site of impact. We must, however, also consider the other qualities of the projects when making funding choices. So exact matching to the number of habitat equivalency units (i.e., dSAYs) within any given municipality or a given geopolitical boundary is often not possible and involves trade-offs to other aspects and qualities of the projects. These qualities include how inkind the projects are, how likely to succeed they are, how durable the benefits are, or other important characteristics. **SH Comment 3:** The commenter expressed concern with the data presented in the beach hopper analysis. Their specific comments are as follows:

"Figure 15 (page 69) presents 2017 TPAH levels in beach hoppers that are not negative. A known negative reference or control value is needed here for direct comparison. Additionally, we are concerned that too low of a value was chosen for the value of enhancement for ultraviolet (UV) toxicity. The toxicity enhancement due to UV is stated as a range from 2-1000 (page 69), however 10 was chosen as the value of enhancement. There is no justification for this decision and we are concerned that it is not adequately protective. We recommend using the highest number (1000) to be most protective and precautionary. Finally, regarding Figure 16 (page 70), we request that additional reference sites outside of the spill zone are needed for direct comparison. We appreciate that there are data pre-spill and that there is a clear impact of the spill on talitrid amphipod abundance. However, the Zone D site is still in the spill zone and its very high abundance post-spill indicates that the post-spill data for all sites should have potentially been much higher than the pre-spill data. A host of other environmental conditions could be at play here and the addition of sites that were not impacted by oil could help tease apart true impacts."

Response: The Trustees sought out uncontaminated reference sites for these surveys, but the size of the spill and the timing of the spread made the selection of reference sites more complex. Goleta beach was originally selected, but the site became oiled within the week. The team then selected Carpinteria as the reference site, but the spilled oil reached that location and, eventually reached locations beyond it to the east. The team also considered that there are many known oil seeps in the spill-affected area. Upon further deliberation by the Trustee team, all of the areas shown on the referenced graph, and for which we had tissue samples, were also thought to experience some level of PAH-influence from seep sources. The team concluded that making comparisons in concentrations over time was appropriate, since completely PAH-free area(s) would have been challenging to locate in this region. The Trustees-did not expect negative concentrations to be present at reference sites in this region. The change in chemical results over time at each location became increasingly informative and the results demonstrated what appeared to be a meaningful decrease in PAH concentrations in years 2016 and 2017.

The ultraviolet light (UV) factors used in the analysis supported conclusions of injury, demonstrated by other lines of evidence. First, the UV factor was only applied to the megalopae stage sand crabs, as they are relatively translucent, which is necessary for phototoxicity to occur. Second, the Trustees did not need to use a factor greater than 10 since at this level the results demonstrated toxicity thresholds were exceeded, when compared to measured water values. That result, combined with the apparent reality that we did not capture the maximum water concentrations in all locations with our data set, was enough to conclude that the water values were toxic to life forms that were exposed to the contaminated water. A decision was made to utilize a factor of 10 following the scientific literature review on phototoxicity of PAHs.

The cooperatively designed sampling program aimed to characterize large scale patterns of exposure and injury while the spill was hitting the shoreline, encompassing a variety of shore types. Additional sampling followed to provide information on the early stages of recovery. After PAH concentration results were available (tissue and pore water), it was clear that there were generally good correlations between SCAT assessments and NRDA sampling results. This finding provided higher confidence in using early systematic oiling data for exposure estimates and in underscoring the importance of elucidating the potential clean-up associated injuries. The Trustees recognize that the Carpinteria site shown in Figure 16 of the Draft DARP/EA, did receive some oiling, but realize that oiling occurred as far away as Los Angeles County beaches. Beaches in those densely urbanized and populated areas are mechanically groomed for human recreational uses and have highly altered wrack-associated biological resources that are notably lacking in beach hoppers (talitrids). This is largely because the wrack is removed in the beach grooming process. So, selecting distant sites that are so biologically different from the Gaviota Coast beaches, would not have provided useful reference sites. The injury was clear to the Trustees, upon examination of these data, especially at the three sites where we had pre-spill data on beach hopper abundance. We decided that there was limited technical benefit to pursuing reference data at much more distant beaches from the primary impacts that occurred on the Gaviota Coast. It is not clear to the Trustees that comparing to the beach hoppers at that site would have increased the injury, and there were notable non-oil related impacts that needed to be factored in as well.

SH Comment 4: The commenter states that shoreline restoration projects are appropriate and they particularly support Ellwood seawall removal and dune projects. They recommend cessation of beach grooming near dune restoration sites as a no cost project component.

Response: The Trustees appreciate the support of the shoreline projects. Cessation of beach grooming has been added as a second-tier project. However, cessation of beach grooming is not a zero cost alternative. Implementing the project would take time and effort to plan, changing management practices, and addressing public comments and input. In addition, few managed beach areas are likely to stop mechanical grooming without addressing issues associated with changes in those practices (analysis of the impacts from changes, public process, management plans, permitting, trash mitigation, liability issues, etc.).

SH Comment 5: The commenter is supportive of Black Abalone Restoration and Relocation Project, but does not think it's a priority without additional justification since the project is too experimental. **Response:** The Trustees appreciate the support for the black abalone restoration project. This project is specifically designed to compensate for impacts to rocky intertidal habitat within the spill zone. Black abalone restoration has been identified by experts in the field of intertidal ecology to be a feasible mechanism for enhancing ecosystem function of rocky intertidal habitats. While Black abalone translocation is not commonplace, it has been largely successful in small trials near the spill zone. In addition, the implementers bring a wealth of knowledge and experience gained from these trials and over 20 years of assessing black abalone populations in California and Mexico. Because this project has shown success in trials undertaken by the project implementers, provides direct benefits to rocky intertidal habitats, and is important to the recovery of an endangered species, the project remains the Trustees' preferred alternative. Subtidal and Fish Habitats:

SF Comment 1: Fish and invertebrate mortality observations lacked survey design and consistency. **Response**: The Trustees appreciate this comment and agree. This is why we did not rely on mortality observations for quantification of injury.

SF Comment 2: The commenter agrees with the use of Grunion as an indicator species, but the assessment lacks an analysis of loss of recruitment beyond hatching.

Response: The Trustees agree that we did not analyze the loss of recruitment as a follow-on to hatching success. The scope and breadth of NRDA studies vary depending on the type of oil spilled, the duration of the spill and the ecosystems and species affected. The Trustees do not attempt to assess and quantify injuries for every resource group for every spill to make separate claims. Instead, restoration projects are selected that can have multiple benefits. In the case of grunion, the improvements to sand beach habitat, particularly with the removal of the Ellwood seawall is expected to open up spawning habitat for grunion.

SF Comment 3: The commenter is concerned that surfgrass and algae surveys were only conducted in Zone B.

Response: Large areas of surfgrass and algae are only present where rocky bottoms are present, and most of this coast is sandy bottom, so there are limited areas available for selection. Surfgrass and algae sample surveys were performed where oil was observed and in selected reference areas. Exposure zones were drawn after sampling was completed and were selected on the basis of relative oiling levels on the shoreline.

SF Comment 4: The Southern California Distinct Population Segment (DPS) of steelhead (Gaviota to Los Angeles County) were probably affected by the spill (both directly and indirectly). Their inclusion in the DARP/EA should be reconsidered.

Response: The Trustees examined the coastal lagoons of the Gaviota Coast (the most impacted area) in the week or two following the spill. None of the lagoons were oiled, and either the Unified Command had placed protective booms to protect those areas or they or were closed off to ocean access at the time. Therefore, the Trustees did not further assess the coastal lagoons or uplands.

We agree that there may have been a potential route of exposure to steelhead, but quantification of offshore injuries within the broad area used by steelhead in the timeframe that Refugio oil was present in the environment was not possible. It is possible that steelhead could have encountered oil from the spill, but there was no evidence of mortality.

SF Comment 5: The commenter requests assistance with the series of barriers to steelhead migration in Gaviota Creek.

Response: The Trustees agree that watershed-wide restoration of Gaviota Creek, including the removal of steelhead migration barriers is an important project that would benefit multiple resources. The removal of steelhead barriers is focused on one species that was not documented to be injured by the spill, therefore it did not rise to the level of a "preferred" project. Furthermore, the commencement of watershed-wide restoration is contingent on the relocation of the access road to Gaviota State Beach and Hollister Ranch, and removal of the current road that comprises a substantial impediment in the watershed. The scale of this project exceeds the resources that could be provided through NRDA settlement funds; however, the Trustees have included this as a second-tier project.

SF Comment 6: The commenter is concerned about impacts on donor sites for the Red Abalone Restoration Project.

Response: The Trustees will work closely with the CDFW Marine Region, along with other experts in the field of abalone biology, to assess potential donor sites. If reasonable donor sites do not meet criteria established by CDFW, the project will be limited to outplanting cultured juvenile abalone. This will result in fewer immediate benefits of establishing adult abalone on the restoration site, but the long-term success of the project will be similar with or without the translocation.

SF Comment 7: The commenter requested that the Trustees explore other opportunities for kelp restoration in the location that kelp was injured.

Response: The Trustees will consult with a variety of kelp forest scientists and restoration professionals to determine if there are additional options for kelp forest restoration in the region affected by the spill.

SF Comment 8: The commenter is concerned with funding for the Sand-Dwelling Kelp Restoration Project and requests information on why additional funding is needed. The commenter also recommends investigating rocky reef kelp restoration projects in Zones A, C, and D.

Response: The sand dwelling kelp project is a pilot project that has shown promise, but requires additional monitoring and permitting to evaluate the viability of the project. Funding for this project is currently limited to a feasibility assessment via monitoring and permit acquisition. We will consider other locations as we develop the project for kelp restoration if determined to be feasible and warranted. We are not considering adding restoration projects that involve the construction of reef habitat.

SF Comment 9: The commenter is supportive of the Goleta Bay sand-dwelling kelp restoration project and would like to be funded to implement the project.

Response: The Trustees thank you for your comment. We will be evaluating potential project implementers through a competitive process.

SF Comment 10: The commenter is supportive of developing a Marine Protected Area (MPA) Management and Stewardship Program as a possible alternate restoration project. They propose that this project could include cleanup of marine debris within MPAs, removal of invasive kelps, and education and outreach to promote awareness, compliance, and stewardship of MPAs.

Response: The MPAs in the spill region are already managed as a statewide network through an established MPA Management Program. Therefore, the Trustees do not see a need to develop a separate MPA Management and Stewardship program. The MPA Management Program is a collaboration between the California Department of Fish and Wildlife, the Ocean Protection Council, the Fish and Game Commission, and the MPA Statewide Leadership Team. This partnership-based approach ensures MPAs are adaptively managed and informed by engaged partnerships. CDFW is the lead managing agency and enforces regulations set by the Fish and Game Commission. The Ocean Protection Council is the policy lead for the MPAs and implementation of MPA activities. The MPA Statewide Leadership Team ensures communication and collaboration among entities having significant authority, mandates, or interests that relate to California's MPA network. The Leadership Team includes numerous state and federal agencies with jurisdiction or management interests. It also includes four Tribal Representative seats as well as key partners outside of government, including nonprofits, members of the fishing community, tribal representatives, local governments, scientists and others. The MPA Leadership Team has developed "The California Collaborative Approach: Marine

Protected Area Partnership Plan" and a Work Plan to guide the partnership-based MPA Management Program. Several project proponents hope to target MPAs for restoration that will significantly enhance ecosystem function in the reserves and provide for significant monitoring inside and outside the reserves.

Birds:

B Comment 1: The commenter questioned if oil spill effects on fish prey species of the federally endangered nesting California least tern were assessed.

Response: The assessment of subtidal and fish habitat presented in Section 5.2 analyzed effects on fish from the oil spill. The data collected through this assessment suggest that the area of greatest injury was closest to the release location, in Zone B. Although specific studies weren't conducted that focused on California least tern prey species, it is likely that fish such as northern anchovy and young rockfishes were impacted by the spill, particularly in Zone B. California least terns forage for prey close to their nesting colonies and fly further from nesting grounds when prey is scarce. No nesting colonies occur within Zone B. Nesting colonies do occur within Zone D; however, this area was primarily affected by sporadic tarballs that do not pose a substantial risk to California least tern prey species.

B Comment 2: The commenter expressed concerns with the timing of data collection on bird impacts. The draft restoration plan provides the dates of May 20 – June 24 for collection of dead birds. Other sections of the draft plan state that impacts were seen for many months post-spill. The commenter is also concerned that impacts were missed for brown pelicans because breeding sites were not assessed until September. The commenter states that these potential missed impacts need to be added to the injury analysis.

Response: Surveillance and reporting of injured and dead birds along the coastline were conducted throughout the spill response between May 20, 2015 and June 24, 2015, and transitioned to surveillance through existing stranding networks from June 25, 2015, and beyond. The Trustees continued to monitor reports of dead birds beyond June 25, 2015, to determine if there were indications of additional animals affected by the oil spill. Ultimately, we determined that the period of May 20, 2015, to June 24, 2015, was the appropriate time period to determine the number of spill-affected birds that should be considered for the beached bird model. This model extrapolates the number of birds missed from parameters relevant to the number of birds found during the response period.

Regarding our assessment of brown pelican breeding sites. Initial surveys were conducted at Anacapa Island breeding colonies starting on June 4. Surveys were conducted by boat, per standard protocols, and no oiled pelicans were observed. On-island surveys were conducted in September 2015 to search for dead oiled pelicans that may have been missed by earlier visual inspections. These surveys did not yield evidence that breeding activities at the Channel Islands were impacted by the oil spill.

B Comment 3: The commenter does not support the rehabilitation credit given to birds that were collected alive and rehabilitated and released. The birds should be included in the injury analysis as they experienced injury, and resources were used to rehabilitate them.

Response: All birds that were captured live or collected dead during the response period were considered in the analysis of injury. Birds that were rehabilitated and released were not removed from the analysis; rather, we ran the Beached Bird Model with all birds collected to understand the total number of birds affected by the spill. Based on the results of post-rehabilitation survival studies, we then provided "rehabilitation credit" that considered a likely survival rate of the birds that were rehabilitated (i.e., birds that were rehabilitated and released are not likely to have the same life expectancy as unaffected birds, and this is accounted for through a proportional rehabilitation credit). As noted in the comment, resources were used to rehabilitate birds that were injured by the spill. In the Natural Resource Damage Assessment framework, bird rehabilitation efforts are considered to be

"primary restoration" or efforts that directly reduce the impacts of the oil spill. The restoration outlined in the DARP/EA is compensatory restoration that makes the public whole for injury that occurred from the spill that could not be avoided or reduced through primary restoration. It would not be appropriate to completely discount the efforts of bird rehabilitation by providing no credit for birds that were rehabilitated.

B Comment 4: The commenter expressed concerns with the western snowy plover impact analysis. They do not support capturing impacts to western snowy plover populations in Ventura County as part of the shoreline habitat injury assessment (Draft DARP/EA page 118). The shoreline assessment only examined acres and time to recovery, a different metric than is used for birds in terms of impacts from death and breeding. The commenter requests more information about how this was conducted if the impacts will be included in the shoreline assessment.

Response: As part of the bird injury assessment, monitoring data from all western snowy plover breeding areas were analyzed for evidence of injury due to oil exposure or cleanup activities. There was no observed mortality of western snowy plovers due to the spill. No evidence of injury was found at any western snowy plover breeding sites, except for the breeding area at Coal Oil Point Reserve, where oiled plovers were observed in 2015 and an increase in egg infertility was identified in 2016. The Trustees conducted a screening level risk assessment and determined that it was plausible for the level of oil exposure to western snowy plovers at Coal Oil Point Reserve to have caused reproductive harm to birds attempting to breed the following year. Due to its close proximity to the spill origin, Coal Oil Point received far greater levels of oiling than any other beach that supports western snowy plover breeding, which are at least 36 miles straight-line distance downcoast. While many plovers at Coal Oil Point were documented to have oil on their bodies or beaks in 2015, only one plover at a Ventura County beach was observed to be lightly oiled. The low level of oiling at breeding sites and the extremely limited observations of oil exposure to western snowy plovers at these sites supports the conclusion that direct injury to western snowy plovers through mortality or reproductive injury other than at Coal Oil Point is unlikely.

The Trustees acknowledge that cleanup activities on beaches that support western snowy plover breeding likely caused a decrease in wrack that supports prey species for western snowy plovers. This impact of cleanup activities, including wrack removal on the sandy beach environment, is quantified through the shoreline habitat assessment. Quantifying the impacts to plover prey species at Ventura County beaches separately from the shoreline injury quantification would represent double-counting of the injury since many of the restoration projects proposed to restore the sandy beach environment also provide benefits to western snowy plovers.

B Comment 5: The commenters are concerned with the lack of long-term analysis. Coal Oil Point Reserve was the only location examined a year after the spill for impacts on Western Snowy Plover breeding. The commenter states that other breeding sites should have been examined as well and that all 10 infertile eggs at Coal Oil Point Reserve in 2016 should count as injuries, not just four.

Response: Each western snowy plover breeding location within the spill area is monitored annually. Monitoring data in the years after the spill provided no indication of lasting plover injury due to the spill, other than the reproductive injury to birds at Coal Oil Point in 2016. We acknowledge the commenters preference for a precautionary approach to quantifying injury, but it is inappropriate to ignore the biological baseline data of fledgling rates at Coal Oil Point when calculating injury. **B Comment 6:** The commenter has concerns with the justification for the Brown Pelican Colony Protection at Anacapa Island. The commenter wants to know how close the Cape ivy is now to pelican breeding sites and what the impacts are on pelicans. The commenter says that it needs to be shown that this project will have a positive impact and doing nothing will have negative impacts on pelicans. They are concerned with the use of herbicide being applied by helicopter and recommend only hand application to ensure that impacts are limited to non-target species. They also want to know what happens if the Cape ivy is not gone or controlled after six years.

Response: Cape ivy is an invasive plant that originated from South Africa and was introduced to the United States in the late 1800s. The plant grows tenaciously in wetlands and streams, smothering native plants and often dominating the understory. The current infestation that is proposed for treatment is relatively small and is located in Summit Canyon, along the canyon's bluffs and near the canyon mouth. If left untreated, Cape ivy will expand and dominate the canyon that currently supports a high density of brown pelican breeding activity. This project will protect the integrity of the breeding habitat by preventing the spread of Cape ivy by eradicating the source population, thereby removing this threat to brown pelican breeding habitat.

Treatment will occur outside of the breeding window for pelicans. No aerial application is proposed for treatment of the Cape ivy. The herbicide application will be done by hand. Due to rugged access up west Anacapa, helicopter operations were included in order to move materials (water, supplies etc.) and facilitate support for ground crews to spray by hand with backpack sprayers. The infestation should be eradicated within the proposed project timeframe of approximately 6 years. The scope includes follow-up treatment which is advisable given the nature and biology of the plant and literature regarding eradication timelines. The project will eradicate Cape ivy from the canyon. Monitoring and re-treatment will be conducted until this goal is met.

B Comment 7: The commenter is concerned with the lack of detailed information for specific techniques and quantitative goals in the western snowy plover management at Coal Oil Point Reserve. They state that this project does not take into account possible impacts at other locations. **Response:** As discussed in previous comments, the Trustees did not find evidence of injuries at other snowy plover breeding areas. Management actions will be adapted to the needs of the population at the time the project is implemented and may include predator control, upgraded signage and fences, outreach to reduce disturbances, leashes to lend for pets, and eradication of iceplant in areas of nesting habitat on Ellwood Beach. The effectiveness of the management will be determined through monitoring of the plover population, nesting rate, fledgling success, and threats from humans and predators.

B Comment 8: The commenter raised questions of how the beach bird model was applied to determine injury in this case. The commenter stated that the Bird Beach Model should have examined all five criteria of why birds might not be collected for all species of birds. They suggested that the Bird Beach Model should be applied to all impacted birds, even non-native and domestic birds as well as rehabilitated birds, so that impacts are not being underestimated for the bird injury and damage assessment.

Response: The DARP/EA lists five reasons why birds might not be collected by response teams and states that for non-pelican species reasons one and two, travel outside of response area and death at sea/sinking respectively, were difficult to assess. The Beach Bird Model incorporates the remaining three reasons and applies correction factors. For non-pelican species, it was difficult to determine an appropriate correction factor for birds traveling outside of the response area following oiling. The

Trustees believe that loons and other non-pelican species migrating north were more likely to have been acutely debilitated following oiling, limiting their ability to disburse, therefore a correction factor was not applied. Similarly, because the spill occurred near shore, the Trustees do not believe that a substantial number of oiled birds were lost at sea. Therefore the Trustees did not feel that it was necessary to apply a correction factor for birds lost at sea. The Beached Bird Model did not include two domestic ducks and one rock pigeon that were recovered because domesticated species are not protected by natural resource authorities of any of the Trustee Agencies. The beached bird model did include all impacted wild birds, including rehabilitated birds. The Footnote in Table 11 of the Draft DARP/EA was revised to clarify that the Beached Bird Model did consider birds collected live in order to extrapolate the total number of birds that were injured by the spill based on the total number that were collected. Rehabilitation credit was provided for birds that were later released, but only after those affected birds were considered in the model. This means that a multiplier developed through the beached bird model was applied to all impacted wild birds, including rehabilitated birds, to extrapolate the total number of birds injured by the spill. After the beached bird model analysis was complete, rehabilitation credit was applied for the birds that were successfully rehabilitated and released.

B Comment 9: The commenter requests that the Trustees reconsider their assessment of potential impacts to Scripps's murrelet and provide documentation if a detailed assessment occurred. **Response:** The Trustees agree that there may have been a potential route of exposure to alcids, but quantification of offshore injuries within the broad area used by alcids in the timeframe that Refugio oil was present in the environment was not possible. We therefore analyzed the species that were oiled and captured live, or collected dead during thorough beach searches. A Beached Bird Model was used to extrapolate how many birds were missed, based on the birds that were found. We have updated the text of Section 2.3 of the Final DARP/EA to remove Scripps's murrelets from the list of species that were not impacted. It is possible that Scripps's murrelets could have encountered oil from the spill, but there was no evidence of mortality.

B Comment 10: The commenter states that the Trustees should consider that the three preferred bird restoration projects will not likely result in restoration of murrelets or other alcid species. The commenter also states that Trustees should consider that many of the Trustee agencies on the Refugio Beach Oil Spill Trustee Council have supported restoration projects at Anacapa and Santa Barbara islands to restore Scripps's murrelet populations, and there are several restoration projects for alcids that are ready to be implemented.

Proposed projects that would benefit Scripps's murrelets and/or Cassin's auklet:

- Artificial nest habitat creation at Anacapa, Santa Barbara, or San Clemente Island
- Restore and increase artificial nest habitat at San Miguel Island
- Restore native habitat at Anacapa Island.

Response: The Trustees thank you for identifying these potential projects. While it is possible that Scripp's murrelets and other alcids were injured by the spill, there was no evidence of mortality and the damages were not quantified. Because the projects have an unknown nexus to injury, we will add them to our list of second-tier projects.

B Comment 11: The commenter recommended consulting with the Fish Contamination Education Collaborative for effective ways to target the angling community as part of the project to prevent injury to seabirds from recreational fishing.

Response: The Trustees thank you for this comment. We will keep this comment in mind during the implementation of the DARP/EA.

Marine Mammals:

MM Comment 1: The commenter was concerned that stranding data was only collected for Ventura and Santa Barbara Counties, but not Los Angeles County.

Response: Stranding data are collected for all counties by the Marine Mammal Stranding network member agencies and organizations on an ongoing basis. The Trustees only used stranding data for the mainland Ventura and Santa Barbara Counties for our injury quantification for marine mammals. While this may have left out some animals that ranged further afield, we also included animals that may have entered the area and stranded for reasons unrelated to oiling. Further, the surrounding counties did not have elevated strandings following the spill, so we would not have been able to detect a change above baseline.

Regarding the selection of end dates, the wildlife response ended in late June after no animals were found oiled with oil matching Line 901. The Trustees extended our consideration for two weeks after the end of the wildlife response. There were no elevated strandings above baseline after the first week of July.

MM Comment 2: The commenter stated that the marine mammal injury and damage assessment does not contain analysis on toxicity or nonlethal impacts.

Response: Although large oil spills such as Exxon Valdez and the Deepwater Horizon pursued longer term studies and found sublethal and longer-term effects to marine mammals, the Trustees did not think that level of effort was warranted for this spill, nor is it required under the Oil Pollution Act. The Trustees generally want to get to restoration expeditiously. Focusing on acute injury allows us to do that. Pursuing toxicity studies on mammals require multiple years of data collection to detect any potential change. In addition, identifying spill-related injuries would be complicated by the ongoing low-level exposure to natural oil seeps, and other environmental factors such as reduced prey availability or algal blooms.

The restoration projects selected as part of this more acute mortality assessment will improve marine mammal health and survivorship beginning in the first year of funding.

MM Comment 3: The commenter believes that the assessment was too conservative. As an example, whales were not assessed.

Response: The Trustees agree that gray whales may have been exposed to Line 901 oil. However, the Trustees are obligated to base our claims on injuries, not just exposure. The Trustees did not collect any data indicating that whales were injured by the spill. For example, there were no records indicating that whales stranded following the spill. Regardless, the Cetacean Entanglement Response project will benefit all cetaceans including large whales, such as gray whales.

MM Comment 4: The commenter believes that the marine mammal lost at sea factor was inappropriately used. The commenter wants the Trustees to apply the same factor for pinnipeds that was used for dolphins.

Response: The "lost at sea" factor is discussed in Appendix J of the Draft DARP/EA. It is based on a bottlenose dolphin study which included a significant amount of data from the southern California Bight. There are no equivalent studies for long-beaked common dolphin or for pinnipeds in the area, which is why the Trustees primarily relied on the Caretta study. The Trustees applied a lower "lost at sea" factor to pinnipeds in the area (half the cetacean "lost at sea" factor) based on the opinion of marine mammal experts that dying pinnipeds would be more likely to come to shore. The Trustees

believe it was appropriate to rely on marine mammal experts to determine which "lost at sea" factor to apply.

Human Uses:

HU Comment 1: Commenter would like natural steps created down to the beach after the existing steps end, at Camino Majorca/Del Playa in Isla Vista in order to reduce erosion. The commenter also would like bike racks at Coal Oil Point.

Response: The Trustees plan to solicit recreational-use project proposals via the South Coast Shoreline Parks and Outdoor Recreation Grants Program as detailed in the DARP/EA. Under this program, the Refugio Beach Oil Spill Trustees, through the National Fish and Wildlife Foundation, would solicit human recreational project grant proposals. At this time, the Final DARP/EA only identifies wildlife and habitat-related projects being considered by the Trustees.

HU Comment 2: A commenter expressed concerns that post-spill data from one year after the spill was used to serve as baseline data for Human Uses. They are concerned because spill impacts could have still been occurring and stated that appropriate reference sites outside of the spill area need to be used if appropriate and adequate pre-spill data are not available.

Response: "Baseline data" for human uses were primarily applied in two manners. The first was as an input to quantify percentage reductions in use due to the spill. This involved comparing indicators of human use collected during the spill (e.g., car counts, user counts) to predictions of those indicators had the spill not occurred (i.e., baseline). The second was to build estimates of total use for sections of shoreline. This involved deriving an absolute estimate of the potentially affected use in an area (e.g., in "user days"). In most cases, total lost use was calculated by combining these two elements: percentage reduction in use multiplied by total baseline use.

For most of the assessment area, the site-specific baseline data used to quantify the percentage reduction in use due to the spill were collected prior to the spill (see Sections 3.1 and 3.3 of Appendix M; Section 3.1 of Appendix L). For Goleta Beach and Arroyo Burro Beach County Parks, as well as a few sites around Coal Oil Point, pre-spill data were not available, so 2016 "baseline" data were used to estimate spill impacts in 2015. The resulting estimates (i.e., percentage decline in use) are consistent with adjacent sites where pre-spill data were used. Further, the site-specific models used to estimate percentage reductions in use indicated that spill impacts had likely subsided by the late summer/early fall of 2015, though it is possible that low level impacts continued to persist at the limited sites where post-spill data were used to estimate spill impacts.

For most of the assessment area, estimates of the absolute levels of baseline use were derived from pre-spill site-specific data or from the South Coast Marine Protected Area (MPA) Baseline Program, which conducted its surveys in 2012-2013. Data collected in 2016 at Refugio and El Capitan State Beaches and the adjacent pocket beaches provided "relative use" information that was used to supplement the model predictions of baseline use that relied on pre-spill data (see Sections 3.1 and 3.4 of Appendix L). For example, baseline use at the pocket beaches (i.e., Tajiguas, Venadito, and Las Flores Beaches) was calculated by estimating the ratio of pocket beach visitation to day use at Refugio and El Capitan State Beaches in 2016 and applying the ratio to predicted baseline use in 2015 using the pre-spill data.

For Goleta Beach and Arroyo Burro Beach County Parks, baseline use was estimated using 2016 data. Had baseline use been estimated using the MPA Baseline Program information, which was collected prior to the spill, the estimates would have been similar. When annual trip estimates derived from the MPA Baseline survey were compared to annual onsite trip estimates derived using information collected in the 2016 surveys at Goleta Beach and Arroyo Burro Beach County Parks, the aggregate difference in estimated trips was approximately 10 percent (with estimates derived using the 2016 data being slightly higher).

HU Comment 3: The commenter questions why \$3.9 million was collected for compensation when there was \$4.5 million in estimated lost value?

Response: The Trustees will recover about 87% of the lost use damages they estimated through the settlement process. However, the Trustees believe the amount recovered through the settlement is adequate based on the following considerations: the amount is within the range of values the Trustees deem plausible given the uncertainties in some of the data and the Trustees' burden of proof; the Trustees' desire to reach a settlement and commence restoration more quickly; and the inherent risks involved in litigation if a settlement was not reached.

HU Comment 4: The commenter wants to know how the \$3.9 million allocation for Recreational Restoration Projects can be increased to provide more robust compensation of the loss of recreational uses directly on the Gaviota Coast. They state that the funds are misdirected. **Response:** The Settlement amount is fixed.

Most of the \$3.9 million recovered for lost use will be spent on human-use related projects along the Gaviota Coast, based on the distribution of assessed impacts and corresponding estimates of lost value. Approximately 61.32% of the human use settlement amount is targeted for restoration along the Gaviota Coast. The remaining 38.68% of the human use settlement amount is targeted for recreation projects down coast from Coal Oil Point, across a much longer stretch of affected coastline. If more restoration funds are directed to the Gaviota Coast, less will be available for use elsewhere.

State Parks will administer 53.4% of the funds allocated for human-use related projects to compensate for recreational losses up coast from and including El Capitan State Beach, where the bulk of the loss was attributable to human use impacts at Gaviota State Park, Refugio State Beach and El Capitan State Beach (State Parks properties). The University of California Natural Reserve will administer 0.67% of the human use funds, to benefit the research, education, and outreach missions of the University of California at Coal Oil Point Reserve.

The State Trustees will oversee the remaining 46% of the human use funds to be allocated through a competitive grants program administered by the National Fish and Wildlife Foundation (NFWF). The grant program will fund projects to compensate for recreational losses suffered down coast of El Capitan. Approximately 16% of these funds will be targeted to fund projects between El Capitan and Coal Oil Point. After the Final DARP/EA is released, NFWF will solicit project ideas through a "Request for Proposals" (RFP) process. Grants will be awarded for projects that enhance the recreational use and enjoyment of fishing, boating, other water-based, and other shoreline recreation from southern Santa Barbara County (Goleta) to Los Angeles County (Long Beach). Local and regional park districts, and non-governmental organizations will be invited to apply. The Trustees encourage nonprofits, local agencies and park districts to submit grant proposals.

HU Comment 5: Several commenters stated that the funds for the recreation restoration projects are inadequate.

Response: The Trustees believe the amount recovered through the settlement is equitable and will compensate the public for the loss of use resulting from the spill. This belief is based on the following considerations:

- The amount is within a range of values the Trustees deem possible given the uncertainties in some of the data we collected;
- It can be difficult to assess human use baseline on affected shorelines for specific ranges of dates, i.e., what the human use would have been had the spill not occurred; and
- It is difficult to assess small declines in use following a spill, and many of the beaches that remained open had relatively small percentage reductions in beach use.

Additionally, the Trustees' were willing to accept a modest reduction (less than 13%) to reach a settlement and commence restoration more quickly. There are inherent risks involved in litigation if a settlement was not reached. Basically, there is no guarantee that we would get the full \$4.47 million if we litigated and there would be a significant delay and cost involved.

HU Comment 6: The commenter is concerned that human-use damages are weighed more heavily than other damages in the DARP/EA.

Response: Under the Oil Pollution Act and State Law, the Trustees are authorized to pursue damages to pay for restoration to compensate for natural resource injuries and to compensate the public for the loss of use of natural resources resulting from an oil spill. The Trustees follow Oil Pollution Act (OPA) guidance when pursuing oil spill natural resource damages. The magnitude of human use losses were determined independently from restoration costs, and the appropriate compensation estimated for each. In this case, human use loss damages were estimated to be \$4.47 million and the Trustees settled the lost human use portion of their claim for \$3.9 million.

HU Comment 7: The commenter is concerned that the limited recreation funds are being spent away from Gaviota Coast and is concerned about exclusion of informal public use from the damage assessment.

Response: Most of the \$3.9 million will be spent for projects that will benefit human uses along the Gaviota Coast, based on the distribution of assessed impacts and corresponding estimates of lost value. Approximately 61.32% of the human use settlement amount is targeted for restoration along the Gaviota Coast. The 38.68% of the settlement that is targeted for restoration outside the Gaviota Coast covers a much larger area, including shoreline in Ventura County, Los Angeles County, and other sections of Santa Barbara County. If more restoration funds are directed to the Gaviota Coast, less will be available for these other areas.

While the Gaviota Coast was the most heavily impacted region with respect to human uses (both in terms of intensity of impacts and total lost value), the Gaviota Coast is also being allocated the majority of the restoration funds. In general, the Trustees believe that it is important to distribute compensation, to the extent practical, to all the areas that were affected and to the extent those areas were affected. The less affected regions are being allocated less restoration funds. Moving funds away from impacted areas that have been allocated less restoration funds, simply because those areas were "less affected," would be undercompensating those areas. This would not be equitable. In addition, the Trustees did not exclude informal use. Please see the Trustees' response to comment HU Comment 9.

HU Comment 8: The commenter stated that additional funding should be directed to the Gaviota Coast because funding spent on State Parks units along the Gaviota Coast will not benefit local users and/or disadvantaged communities who often avoid accessing through State Parks units because of the access fees.

Response: State Parks will administer 53.4% of the funds allocated for human-use related projects to compensate for recreational losses up coast from, and including, El Capitan State Beach where the vast bulk of the loss was attributable to human use impacts at Gaviota State Park, Refugio State Beach and El Capitan State Beach (State Parks properties).

State Parks do serve disadvantaged communities along the Gaviota Coast and elsewhere. Some specific examples include, but are not limited to, informal recreational access where walk-in and bikein visitors can access developed day use facilities at Gaviota State Park, Refugio State Beach, and El Capitan State Beach free of any admission charge. In addition, free parking is available in Gaviota State Park at the Beach to Backcountry trailhead and the Las Cruces trailhead. Two dollar (\$2.00) parking is also available at the Hot Springs parking lot. When open, Gaviota Pier provides visitors with a place to fish that does not require a sport fishing license. Free parking is available at Bill Wallace trailhead in El Capitan SB. Finally, there are several informal parking areas along Hwy 101 where visitors can park and access Gaviota State Park, Refugio State Beach, and El Capitan State Beach without paying any day use fee.

As a Trustee and protector and preserver of coastal lands and access, State Parks is very interested in maximizing the ability of all communities to access and enjoy the Gaviota Coast. State Parks is open to hearing project ideas but will not conduct a competitive project selection process for implementation on State Park property. Project ideas can be submitted in writing to Refugio Restoration, 2493 Portola Road Suite B, Ventura, CA 93003, or <u>RefugioRestoration@fws.gov</u>.

HU Comment 9: The commenter stated that informal public use of the Gaviota Coast is considerable and are concerned that informal use may have been overlooked if only formal use was counted. They also stated that the majority of informal recreational users are low income and disadvantaged communities, so this exclusion has a disproportional impact on disadvantaged communities. **Response:** The commenter is correct that the 76-mile Gaviota Coast from Coal Oil Point in Isla Vista to Point Sal at the northern boundary of Vandenberg Air Force Base provides recreational use opportunities at formal access points (e.g., Gaviota State Park, Refugio State Beach, and El Capitan State Beach) as well as informal access points. The human use assessment addressed informal use along the Gaviota Coast in two ways. First, recreation use data were collected in 2016 at Tajiguas, Venadito, and Las Flores Beaches, which are small, informal pocket beaches adjacent to Refugio and El Capitan State Beaches. These data were used to estimate baseline use at these locations (see Section 3.4 of Appendix L). Second, informal use along other sections of the Gaviota Coast—including between El Capitan State Beach and Haskell's Beach—was covered by the South Coast MPA Baseline Program data (see Section 3.1 of Appendix L), which relied on trip destinations reported by a sample of Southern California residents. Relying on data from sampled residents meant that that the Trustee analysis used a sample of trips to systematically cover informal access points. Since none of the spill areas were excluded from the survey conducted by the MPA Baseline Program, the entire coast can be examined using this dataset. However, as the geographic resolution gets finer and the number of baseline trips gets smaller, fewer trips by the sample of residents are expected within a given section of coast and the proportional variability of the resulting estimate can get large. As a result, the estimates of baseline use across the spill are only reliable over larger areas where sampling errors average out. This is one reason why lost value estimates are provided regionally in the Draft DARP/EA. The Trustees have updated row headers for Tables 23 and 24 in the Final DARP/EA to ensure that it is clear that the loss estimates and restoration targets cover the entire coast. For additional information, please see the Trustees' response to HU Comment 10.

HU Comment 10: The commenter stated that the Shoreline Use Impact Analysis failed to recognize or properly account for impacts to human uses along sections of the Gaviota Coast where informal use occurs, most notably a five mile long stretch between El Capitan State Park and Haskell's Beach. They pointed to Exhibit 2.1 in Appendix L as a demonstration of the omission of this area, which includes areas known by locals as Las Varas Ranch, Dos Pueblos Ranch, Naples (aka Santa Barbara Ranch), Paradiso (aka Seals, Deadman's), and Eagle Canyon (aka Driftwoods).

Response: The Gaviota Coast includes a mixture of formal and informal access points. Site-specific data were compiled for eight sites along the Gaviota Coast between Gaviota State Park and Coal Oil Point for the human use assessment, which are shown in Exhibit 2.1 of Appendix L: Gaviota State Park, Tajiguas Beach, Refugio State Beach, Venadito Beach, Las Flores Beach, El Capitan State Beach, Haskell's Beach, and Sands Beach (including Coal Oil point). Data for the state parks and beaches (Gaviota State Park, Refugio State Beach, and El Capitan State Beach) were available from the California Department of Parks and Recreation. Data at the three pocket beaches (Tajiguas Beach, Venadito Beach, Las Flores Beach) were collected through a targeted data collection effort in 2016. Data at Haskell's Beach and Sands Beach were collected through targeted data collection efforts in late May and early June 2015 and 2016. Further, data for Sands Beach (including Coal Oil Point) were available for years prior to the spill from the University of California–Santa Barbara.

Exhibit 2.1 in Appendix L is titled "Selected Shoreline Use Locations..." because it does not include all access points in Santa Barbara County, including along the Gaviota Coast. However, all access points were included in the assessment and no part of the Gaviota Coast was ignored in the assessment. Informal use along the Gaviota Coast—including between El Capitan State Beach and Haskell's Beach—was covered by the South Coast MPA Baseline Program data (see Section 3.1 of Appendix L) which relied on trip destinations reported by a sample of Southern California residents. More broadly, the MPA Baseline data systematically covered use at informal access points throughout the assessment area where comprehensive site-specific data were not available and targeted onsite data collection efforts were impractical. Given that the MPA Baseline data relied on a sample of users, recreation use estimates for small areas of coast have larger errors than for broader areas of coast. The results of the assessment are aggregated across larger sections of coast to reduce this uncertainty (Table 24 of the DARP/EA).

HU Comment 11: The commenter states that settlement funds should be directed to secure the preservation of coastal lands, construct and improve the Coastal Trail, develop culturally-appropriate interpretive programs to honor the Chumash peoples, and memorialize and dedicate the informal pathways that the community uses to access and enjoy the Gaviota Coast.

Response: The Trustees appreciate the suggested projects. Preservation of coastal lands has been added as a second-tier project. Specific human use projects have not been selected for funding yet. The DARP/EA outlines how much and where specific monies should be spent on enhancing human uses along the Santa Barbara, Ventura, and Los Angeles County coastlines. Nevertheless, we welcome public input on potential human use projects to be implemented by State Parks and through the South Coast Shoreline Recreational Use Grants Program as described in the DARP/EA.

The South Coast Recreational Use Grants Program, administered by the National Fish and Wildlife Foundation (NFWF), will solicit project ideas through a "Request for Proposals" (RFP) process. Grants will be awarded to projects that enhance the recreational use and enjoyment of fishing, boating, other water-based, and other shoreline recreation from southern Santa Barbara County (Goleta) to Los Angeles County (Long Beach). Local, state, and federal agencies, local and regional park districts, and non-governmental organizations will be invited to apply. The Trustees will also solicit public input on project concepts considered for funding. Human use projects funded through State Parks will be coordinated with Santa Barbara County Building and Planning officials and other governmental and non-governmental organizations, as appropriate. State Parks will take into consideration the recreational projects identified in Appendix N, and public comments. The public will be provided an additional opportunity to provide input through the environmental planning and permitting process.

It should be noted that many of the informal pathways along the Gaviota Coast within State Parks ownership cannot be formalized because they cross Union Pacific Rail Road tracks at grade where there is no access easement in place. However, consistent with the suggestion by the commenter, State Parks is primarily considering repairs to the coastal trail segment between Refugio State Beach and El Capitan State Beach to compensate for lost human use along the designated portion of the Gaviota Coast. The development and approval of this project will be done through the CEQA public process, in which the commenter as well as other members of the public are welcome to participate.

HU Comment 12: The commenter states that compensation for local non-camping coastal uses on the Gaviota Coast are not addressed in current Tier 1 projects.

Response: The commenter is correct that specific projects to compensate for lost human use are not included in current TIER 1 projects. Instead, the DARP/EA outlines how much and where specific monies should be spent on enhancing human uses along the Santa Barbara, Ventura, and Los Angeles County coastlines and describes how appropriate projects will be identified and selected. State Parks will administer approximately \$2.08 Million for projects on State Parks' properties to compensate for recreation losses from Gaviota to El Capitan. State Parks will consider public comments on the DARP/EA as well as input from Santa Barbara County, other local governmental, and non-government organizations prior to selecting projects. The public will have additional opportunities to provide input during the California Environmental Quality Act (CEQA) process following project selection. The State Trustees will administer approximately \$1.79 Million through the South Coast Shoreline Parks and Outdoor Recreation Grants Program for projects to compensate for recreation losses that occurred downcoast of El Capitan State Beach. The Trustees plan to solicit grant proposals as detailed in the Restoration Plan. At this time, the Final DARP/EA only identifies wildlife and habitat-related projects being considered by the Trustees.

HU Comment 13: The commenter states that Human Use Projects Gaviota Pier Repair (EX-HU-2) and Refugio and Gaviota Human Impact Mitigation and Protection Program (EX-HU-23) should be Tier 1 projects.

Response: The Trustees appreciate your support for EX-HU-2 and EX-HU-23. Specific human use projects have not been selected for funding yet. Instead, the DARP/EA outlines how much and where specific monies should be spent on enhancing human uses along the Santa Barbara, Ventura, and Los Angeles County coastlines and describes how appropriate projects will be identified and selected. Please see HU Comment 12 for information on how human use projects will be administered. At this time, the Final DARP/EA only identifies wildlife and habitat-related projects being considered by the Trustees.

HU Comment 14: The commenter provided list of projects to be considered under the South Coast Shoreline Parks and Outdoor Recreation Grants Program and requests increased funding allocated to the Grants Program.

Response: The Trustees plan to solicit grant proposals for recreational-use projects via the South Coast Shoreline Parks and Outdoor Recreation Grants Program after the Final DARP/EA is completed.

Santa Barbara County, Ventura County, Los Angeles County, County and City Park Districts, as well as other local public entities and non-profits will be invited to submit grant proposals for shoreline recreational projects downcoast of El Capitan State Beach. Unless there is a conflict-of-interest, the Counties will be provided an opportunity to comment on projects the Trustees consider, following a Request-for-Proposal process to be initiated by the State Trustees. The Trustees are constrained in the amount of funding available to the Grants Program as detailed in the plan.

HU Comment 15: The commenter suggests the Trustees need to compensate local users that are geographically close to the spill location and were the most impacted.

Response: The Trustees agree. It is a goal of the Trustees to select projects spanning the geographic extent of the spill and to allocate funds according to the relative magnitude of the spill impacts. The distribution of damages is based upon the estimated distribution of lost value resulting from the spill. Accordingly, 61.32% of the estimated lost value covered in the human use assessment was concentrated on the Gaviota Coast. Accordingly, the human use restoration process targets 61.32% of the restoration funding to the Gaviota Coast. The remaining 38.68% of the damages for lost human use will go for projects along the Ventura and Los Angeles County coasts, and other areas in Santa Barbara County.

HU Comment 16: The commenter requests that the Trustees consider the project "Goleta Beach Park Restoration" (EX-HU-13).

Response: The Trustees have included the project in Appendix N, Table 3 "Human Use Projects – No human use projects considered at this time," along with the Trustees' evaluation.

This project was submitted as a human use project. The Trustees plan to solicit grant proposals for recreational-use projects covering the Goleta Beach area via the South Coast Shoreline Parks and Outdoor Recreation Grants Program after the Final DARP/EA is completed. Santa Barbara County, Ventura County, Los Angeles County, County and City Park Districts, as well as other local public entities and non-profits will be invited to submit grant proposals for shoreline recreational projects downcoast of El Capitan State Beach. The Trustees will provide the funding for projects through the South Coast Shoreline Parks and Outdoor Recreation Grants Program as described in the DARP/EA.

Since this project would increase coastal resilience and ecosystem services, the Trustees considered this project for sandy beach restoration. Because the project costs are relatively high compared to other preferred projects for sandy beach restoration, this project has been designated as a second-tier project.

HU Comment 17: The commenter notes that beach advisories south of Coal Oil Point and along Ventura County's coastline impacted beach use. The commenter indicates this should be clearly stated in the DARP/EA.

Response: The commenter is correct that beach advisories south of Coal Oil Point Reserve in Santa Barbara and Ventura Counties impacted beach use. This information is in the DARP/EA: "Spill impacts on recreation were less severe south of Coal Oil Point Reserve. Although spill-related oiling, advisories, and significant media coverage of the incident occurred, no closures were identified along the remaining sections of the Santa Barbara and Ventura County coastlines." (p. 143 of the Draft DARP/EA). The locations of the advisories, including those south of Coal Oil Point Reserve, are shown in Figure 37 of the Draft DARP/EA on page 144. Advisories and closures were documented to provide context for the human use assessment, but advisories were not used to directly estimate spill impacts. Trustees estimated changes in recreation use attributable to the spill, a behavioral response informed by individual perceptions of the spill, advisories and closures, the presence of cleanup crews, media coverage, and other factors. The assessment identified areas of human use impacts using site-specific models of recreation visitation data and the results of these models correlated to areas covered by closures and advisories. However, changes in use specifically due to closures and advisories were not estimated separately because that was not necessary for the assessment.

HU Comment 18: The commenter stated that Point Mugu State Park and Gaviota State Park were not considered for human use projects.

Response: While Point Mugu experienced decreased camping visitation in June and July of 2015 (Appendix K, Exhibit 3-2, pg. 3-3), this was not attributed to the spill. Additionally, while Gaviota State Park experienced decreased camping visitation in July, August, and September of 2015 (Appendix K, Exhibit 3-2, pg. 3-3), this was not attributed to the spill. The reason for this determination is documented in Section 3.2 of Appendix K: "Spill impacts occur when the initial deviation at a site is negative and continues until the first period with a non-negative deviation or until the first full period after Labor Day." Since the initial deviations for Point Mugu in Exhibit 3.2 were not negative, subsequent negative deviations in June and July were not attributed to the spill. Since the initial deviations in June 2015 were not, subsequent negative deviations in July, August, and September were not attributed to the spill.

The human use assessment used statistical models to predict average visitation in 2015 but for the spill. Since actual visitation could be above or below the predicted mean even without the spill, it was important to have a systematic and consistent decision rule for identifying losses throughout the spill area. This ensured that the analysis was data-driven, and it produced results that were consistent with oiling, closures, advisories, and cleanup activities. This approach resulted in determining that camping spill impacts were limited to Gaviota State Park, Refugio State Beach, and El Capitan State Beach. The determination at Point Mugu was consistent with parks closer to the spill, including Hobson Beach County Park, Rincon Parkway, Faria Beach County Park, and Point Mugu Beach RV Park, where site managers reported that the spill did not have an impact on camping at their sites (Section 3.3 of Appendix K). The same data-driven approach was applied in assessing impacts to shoreline use (Section 3.2 of Appendix L) and identified impacts that were generally greater in magnitude and longer lasting in areas closer to the spill.

HU Comment 19: The commenter stated that there was no attempt to integrate the recreational resource elements from the National Park Service Feasibility Study into the DARP/EA.

Response: The human use assessment considered the NPS Feasibility Study and cited it in Appendices K, L, and M to document that the Gaviota Coast is widely recognized for its scenic beauty and outdoor recreation opportunities by providing extraordinary biological diversity, natural and cultural resources. The Recreational Resources section of the NPS Feasibility Study highlights the publicly-accessible areas included in the human use assessment: "Public access from Gaviota State Park east to Coal Oil Point consists of Gaviota State Park, Refugio State Beach, El Capitan State Beach, Haskell's Beach/Bacara Resort, beach access at Sandpiper Golf Course, and the Coal Oil Point Reserve. Generally, the beaches in this area enjoy greater usage with the milder ocean temperatures and

meteorological conditions than the beaches north of Point Conception. On U.S. Highway 101, between Gaviota State Park and Refugio State Beach, there are vehicle pull-off areas from which State beaches may be accessed" (p. 39). The following page of the NPS Feasibility Study (p. 40) states that privately managed recreational areas also provide opportunities for public enjoyment.

All of the access points identified in the NPS Feasibility Study were covered by the human use assessment either by site-specific data (e.g., State Parks day use and camping data) or the South Coast MPA Baseline Program data (see Appendix L Section 3.1 of the DARP/EA), which relied on trip destinations reported by a sample of Southern California residents. The MPA Baseline data systematically covered use at informal access points throughout the assessment area, including along the Gaviota Coast, where comprehensive site-specific data were not available and targeted onsite data collection efforts were impractical due to the number of access points. While the NPS Feasibility Study offers some aggregate estimates of recreation use across state and county parks along the Gaviota Coast (p. 40, 145), the human use assessment instead used more recent disaggregated data for these individual parks, which were more relevant to determine impacts from the spill.

HU Comment 20: The commenter stated that the DARP/EA lacks any reference to the Santa Barbara County Gaviota Coast Plan even though it contains an extensive recreational analysis, including identification of existing and proposed recreational facilities, which would be applicable for documenting baseline conditions and considering restoration projects.

Response: With respect to documenting baseline conditions, Page 4-3 of the Gaviota Coast Plan states: "Dedicated public beach access locations along the entire 39-miles of coastline within the Plan Area are limited to four locations: El Capitan State Beach, Refugio State Beach, Gaviota State Park, and Jalama Beach County Park. The remainder of the coastline from Jalama to Gaviota State Park, and east of El Capitan State Beach is composed of large private land holdings and public access to the beach is currently not allowed except under privately managed access programs."

The human use assessment covered all of the listed dedicated public beach access locations and other informal access points using site-specific data (e.g., State Parks day use and camping data) or the South Coast MPA Baseline Program data (see Appendix L Section 3.1 of the DARP/EA), which relied on trip destinations reported by a sample of Southern California residents. The MPA Baseline data systematically covered use at informal access points throughout the assessment area, including along the Gaviota Coast, where comprehensive site-specific data were not available and targeted onsite data collection efforts were impractical.

With respect to restoration project selection, the Gaviota Coast Plan does have information relevant to the consideration of restoration projects. However, the DARP/EA does not select specific recreation projects related to human use restoration. The DARP/EA outlines how much and where specific monies should be spent on enhancing human uses along the Santa Barbara, Ventura, and Los Angeles County coastlines.

HU Comment 21: The commenter questioned why subsistence fishing was not included in the assessment of injuries to human uses.

Response: Subsistence fishing is an important part of fishing use, particularly on piers. Under the Oil Pollution Act as well as state law, damages for loss of subsistence fishing may be pursued separately as a third party claim by affected claimants. However, those involved in subsistence fishing may also have experienced consumer surplus losses due to the spill, which are recoverable by the Trustees.

These losses were captured by the Trustees' human use assessment. The data that were relied on in the Trustees' human use assessment did not distinguish between subsistence fishing and recreational fishing, and therefore, would have included subsistence fishing and applied an estimated value for consumer surplus loss to those uses.

Site-specific data were used to quantify the percentage reduction in use due to the spill (see Section 3.1 of Appendix L), including data covering piers proximate to the spill (e.g., Goleta County Park and the Santa Barbara Waterfront), as well as others further down the coast. Estimates of baseline use were derived from these site-specific data or the South Coast MPA Baseline Program (see Section 3.1 of Appendix L) to comprehensively cover the affected coastlines of Santa Barbara, Ventura, and Los Angeles Counties. These data sources include a range of users, including subsistence anglers.

HU Comment 22: The commenter offered support in helping Trustees reach out to the community during the Human Use grants program to identify human use restoration projects. They also encouraged multi-lingual outreach materials related to restoration and outreach to reach underrepresented communities. They suggested Trustees could add a requirement for grant proposals to describe how environmental justice and inclusion is taken into consideration in their approach to restoration.

Response: The Trustees appreciate commenter's offer of assistance and the important need to serve underrepresented communities. State Parks will administer approximately \$2.08 Million for projects on State Parks' properties to compensate for recreation losses occurring from Gaviota to El Capitan. State Parks' properties currently serve disadvantaged communities along the Gaviota Coast and elsewhere. Some specific examples include but are not limited to informal recreational access where walk-in and bike-in visitors can access developed day use facilities at Gaviota State Park, Refugio State Beach, and El Capitan State Beach free of any admission charge. In addition, free parking is available in Gaviota State Park at the Beach to Backcountry trailhead and the Las Cruces trailhead. Two dollar (\$2.00) parking is also available at the Hots Spring parking lot. Gaviota Pier (when open) provides visitors with a place to fish that does not require a sport fishing license. Free parking is available at Bill Wallace trailhead in El Capitan State Beach. Finally, there are several informal parking areas along Hwy 101 where visitors can park and access Gaviota State Park, Refugio State Beach, and El Capitan State Beach without paying any day use fee. State Parks is open to hearing project ideas but will not conduct a competitive project selection process for projects on State Parks' properties. State Parks will consider public comments on the DARP/EA as well as input from Santa Barbara County and other local governmental and non-government organizations prior to selecting projects.

With regard to projects downcoast of El Capitan State Beach, the State Trustees will solicit grant proposals from Counties (Santa Barbara, Ventura, and Los Angeles), County and local Park Districts, as well as other local public entities and non-profits. Grant proposals will not be solicited from individuals or for-profit companies. It is the goal of the Trustees to select a suite of projects spanning the geographic area of the spill that address the types of activities impacted by the spill. In addition to other requirements, the Trustees will request grant proposals to describe whether and to what extent the proposed project will provide recreational benefit to underserved communities affected by the spill.

Multi-resource Topics:

MR Comment 1: The commenter requested additional funding for programs at places like the Santa Barbara Wildlife Care Network that rescue and rehabilitate injured animals, including birds.

Response: The Trustees agree that support for rescue and rehabilitation of injured animals is an important and appropriate restoration measure to compensate for the effects of the oil spill. The projects BIRD-2 and MAMM-1 include funding for these activities.

MR Comment 2: The commenter is supportive of compensation to increase stranded animal rehabilitation but would like to see the establishment of a mammal and/or bird rescue/rehab facility in Ventura County.

Response: The Trustees appreciate the suggestion to focus bird restoration efforts on enhancing rescue and rehabilitation efforts in Ventura County. Rescue and rehabilitation facilities and personnel play an important role in preventing the death of birds that have been affected by fishing injuries and therefore is a valid component of project BIRD-2, Prevention of Injury to Seabirds Related to Recreational Fishing. The DARP/EA has been revised to specifically identify that enhancing the capacity for rescue and rehabilitation of seabirds is considered in the project BIRD-2. Establishing a new Ventura County mammal and/or bird rescue and rehabilitation facility exceeds the resources that could be provided through NRDA settlement funds; however, the Trustees have included this as a second-tier project

MR Comment 3: The commenter expressed concern about elevated erosion along bluffs with removal of the Ellwood Seawall and recommends using artificial reef balls slightly offshore to reduce wave energy.

Response: The Trustees share the concern that erosion and degradation of the seawall leads to unsafe conditions along the beach. However, the Ellwood Seawall was never a bluff seawall. The wall was the landward side of a raised road for historic oil works. The wall is disintegrating, falling apart, and collapsing from waves and the resulting scour. This creates unsafe conditions to beach users and snowy plovers downcoast, and exacerbates natural erosional processes. Even if the Trustees do not fund the project, the ocean will eventually degrade the seawall, plank by plank, until it is gone.

At this time the Marine Region of the California Department of Fish and Wildlife does not support projects than introduce "fill" into the marine environment until a state-wide policy for such projects is completed and adopted.

MR Comment 4: The commenter stated that restoration plan needs to provide justification for why the Ellwood Seawall Project is being funded by this and not the entity who installed it.

Response: The entity(s) or companies that installed the road in the early 1900s are longer in existence. Our best information sources indicate that defunct oil production entities constructed the Ellwood Seawall (https://www.cityofgoleta.org/home/showdocument?id=15655). There is no party the Trustees, the city, county, or state can purse for cost recovery related to removing the seawall.

MR Comment 5: The commenter is supportive of the removal of the Matilija Dam as a possible alternate restoration project. They also request the removal of the Rindge Dam in Malibu Creek and other dams upstream to be considered as possible restoration projects.

Response: The Trustees thank you for this comment and will consider support for the Matilija Dam removal project. Based on the criteria for project selection, the Matilija Dam Removal Project is listed as a second-tier shoreline habitat project in the DARP/EA. The removal of Rindge Dam in Malibu Creek

and other dams upstream have also been added as second-tier shoreline habitat projects that may also have benefits to other resource categories.

Summary Revisions included in the Final DARP/EA:

Comment: Request additional justification to provide a link between injuries assessed and proposed restoration projects; provide information on location of projects in terms of zones and injuries assessed for each zone.

Revision: The bird and marine mammal appendices were revised to provide information to demonstrate the link between injuries and projects. Restoration summary maps were added to the Executive Summary.

Comment: DARP/EA must be revised to include performance criteria in order to ensure adequate restoration as required by NRDA regulations.

Revision: Trustees have reviewed the DARP/EA and updated performance criteria as needed in the DARP/EA. However, as specific projects are planned, more specific criteria will be developed.

Comment: The Trustees received multiple references about Chumash culture for inclusion in the DARP/EA.

Revision: The Trustees will incorporate and reference the following materials in the DARP/EA:

- Tribal Marine Protected Areas, Protecting Maritime Ways and Cultural Practices. 2004
- Chumash Ecosystem Services Assessment CINMS Condition Report
- Traditional and Local Knowledge, A vision for the Sea Grant Network, 2018.

Comment: The commenter stated that information about oil at the Channel Islands and in the Sanctuary is unclear throughout the DARP/EA.

Revision: The Trustees appreciate this comment. Oil at the Channel Islands is discussed in Section 1.1.2, Figure 4, and Section 2.2.5 in the Draft DARP/EA. The Trustees have made revisions to Sections 1.1.2 and 2.2.5 for clarification.

Comment: The commenter stated that the DARP/EA lacks any reference to the Santa Barbara County Gaviota Coast Plan even though it contains an extensive recreational analysis, including identification of existing and proposed recreational facilities, which would be applicable for documenting baseline conditions and considering restoration projects.

Revision: DARP/EA Section 2.1.2 has been amended to reference the "Gaviota Coast Plan".

Comment: The commenter stated that second-tier restoration projects described as "out of kind" or not appropriate for impact should be removed from the document

Revision: The Trustees reviewed the three second-tier projects that were described as providing benefits that were "out of kind" with the injury caused by the oil spill. In each case, we identified some nexus of the restoration project to the injury, and therefore retained each in the text, but with expanded descriptions to clarify the nexus of the restoration to the injury.

Comment: The commenter states that shoreline restoration projects are appropriate and they particularly support Ellwood seawall removal and dune projects. They recommend cessation of beach grooming near dune restoration sites as a no cost project component.

Revision: Cessation of beach grooming has been added as a second-tier project. There is a need for a project proponent and partnerships that do not currently exist, and the project goal may come into conflict with some management goals of owner/manager entities.

Comment: The commenter requests assistance with the series of barriers to steelhead migration in Gaviota Creek.

Revision: The project has been included in the DARP/EA as a second-tier subtidal project.

Comment: The commenter states that the Trustees should consider that the three preferred bird restoration projects will not likely result in restoration to murrelets or other alcid species. The commenter also states that Trustees should consider that many of the Trustee agencies on the TC have supported restoration projects at Anacapa and Santa Barbara islands to restore Scripps's murrelet populations, and there are several restoration projects for alcids that are ready to be implemented

Proposed projects that would benefit Scripps's murrelets and/or Cassin's auklet:

- Artificial nest habitat creation at Anacapa, Santa Barbara, or San Clemente Island
- Restore and increase artificial nest habitat at San Miguel Island
- Restore native habitat at Anacapa Island.

Revision: The Trustees have included these projects in the DARP/EA as second-tier projects

Comment: The commenter requests that the Trustees reconsider their assessment of potential impacts to Scripps's murrelet and to provide documentation if a detailed assessment occurred. **Revision:** The Trustees removed statements that Scripps's murrelets were not in the area from Section 2.3.

Comment: The commenter is supportive of compensation to increase stranded animal rehabilitation but would like to see the establishment of a mammal and/or bird rescue/rehab facility in Ventura County.

Revision: The Trustees have amended Section 5.3.6, project BIRD-2, to include expanding bird recovery, transport, and rehabilitation. The Trustees have added establishing a new Ventura County mammal and/or bird rescue and rehabilitation facility as a second-tier project.

Comment: The commenter stated that informal public use of the Gaviota Coast is considerable and are concerned that informal use may have been overlooked if only formal use was counted. They also stated that the majority of informal recreational users are low income and disadvantaged communities, so this exclusion has a disproportional impact on disadvantaged communities.

Revision: The row headings in Tables 23 and 24 were revised to reflect that there were no gaps in coastline coverage. Specifically, where Table 23 stated "Haskells to Ellwood", it was changed to "El Capitan to Ellwood". Where Table 24 stated "Haskells to Coal Oil Point", it was changed to "El Capitan to Coal Oil Point".

Comment: The commenter states that settlement funds should be directed to secure the preservation of coastal lands, construct and improve the Coastal Trail, develop culturally-appropriate interpretive programs to honor the Chumash peoples, and memorialize and dedicate the informal pathways that the community uses to access and enjoy the Gaviota Coast.

Revision: The Trustees have included these additional human-use projects in Table 3 in Appendix N.

Comment: The commenter is supportive of the removal of the Matilija Dam as a possible alternate restoration project. They also request the removal of the Rindge Dam in Malibu Creek and other dams upstream to be considered as possible restoration projects.

Revision: The Matilija Dam Removal Project will remain a second-tier project. Removal of Rindge Dam and other dams further upstream have been included in the DARP/EA as second-tier projects.