Appendix E: Comments Submitted on Draft Revised Southern Sea Otter Recovery Plan Dated January 2000

In January 2000, we released the Draft Revised Recovery Plan for the Southern Sea Otter for public comment. During the comment period, we received 91 letters from Federal, State, and local agencies, nongovernmental organizations, business associations, and other members of the public. All letters of comment on the draft recovery plan are kept on file in the Ventura Fish and Wildlife Office, 2493 Portola Rd., Suite B, Ventura, California 93003. The following is a breakdown of the numbers of letters received from various affiliations:

Federal agencies—6 State agencies—3 local governments—1 nonprofit environmental/conservation organizations—9 commercial fishing and aquaculture associations—5 recreational groups—1 academia/professional—1 individual citizens—65

Many comments re-occurred in letters. The vast majority of responses came from individual citizens and expressed concern for the southern sea otter and support for research and recovery actions. Several comments either provided new or additional information for inclusion in the recovery plan or were editorial in nature. Those comments were incorporated into the final revised plan. Comments that were not incorporated into the recovery plan are summarized below along with our response.

Summary of Comments and our Responses

Comment 1. One commenter stated that the recovery plan should explain why the population should be viewed as endangered at a level where both the numbers and range would be greater than when the population was listed as threatened in 1977.

Response. This recovery plan incorporates current conservation biology principles. The initial listing and status classification did not have the benefit of such current thinking. Rather, the original classification of threatened was based on the presumed risk of extinction.

Comment 2. One commenter stated that it would be useful to note in the recovery plan revision why the type of population viability analysis described on page 25 of the draft revision was not or could not be done in the process of formulating the original recovery plan.

Response. Inclusion of such a discussion does not serve the purposes of the plan; *i.e.*, to identify the recovery criteria and tasks. Such an analysis was not completed in the 1982 recovery plan because that plan did not address the conditions under which the southern sea otter should be considered for reclassification as endangered.

Comment 3. One commenter stated that the table included as Appendix A does not, but should, provide estimates of the amount of range occupied by sea otters from 1982 to the present.

Response. The initial recovery plan provided estimates of the amount of range occupied by the sea otter as well as the population count. Later, as the sea otter population began to grow again subsequent to the restriction of gill and trammel nets, it became more difficult to identify the actual range occupied by the sea otters, and furthermore, it was difficult to find consensus amongst biologists as to what actually constituted the limits of the occupied range. Some suggested that range should be defined as all habitat in which sea otters occurred, including extra-limital sightings; others suggested it should be defined as the range in which females with pups were found. Pronounced seasonal movements of male otter groups further clouded this issue. Therefore, we decided that, to avoid confusion, it was best to present the table with only the population count data.

Comment 4. One commenter stated that pup counts are not important and recommended that recovery and delisting decisions use data for independent otters only. The commenter further stated that if pups are to be included, we need to provide a clearer rationale for using the spring counts.

Response. We and the Recovery Team believe that pup counts are important, and the recovery criteria will be based on spring counts. Pup counts provide an index of annual productivity, which is important when assessing the status of the population and evaluating other indicators of population health. The recovery plan does explain that spring counts have been established as the standard for assessing trend and population size because the conditions are more favorable for counting sea otters (*i.e.*, bull kelp is not present). During the fall counts, bull kelp is present and makes counting sea otters more difficult.

Comment 5. One commenter suggested including other human activities besides oil activities and commercial fishing, such as kelp harvest, use of personal water craft, other recreational uses (*e.g.*, kayaking, diving), impacts of contaminants, etc.

Response. Recovery plans identify those threats known to cause the species to be at risk of extinction including those identified at the time the species was listed and any additional threats subsequently identified. These other suggested activities were not included in the recovery tasks because they are not known to be threats contributing to the species' risk of extinction. If at any time in the future new threats are identified, the recovery plan can be updated to include these threats and management actions necessary to secure the protection and conservation of the sea otter.

Comment 6. One commenter recommended that we use a different factor for calculating the size at which the southern sea otter population should be considered endangered; *i.e.*, the threshold should be 1,550, not 1,850.

Response. The best available information regarding the threshold for endangered status for the southern sea otter was identified as that presented in the paper by Ralls *et al*.

(1983). In this paper, the authors considered the life history characteristics of the sea otter and determined that the correction factor of 27 percent is appropriate for the southern sea otters. Therefore, we did not change the threshold value.

Comment 7. One commenter asserted that the statement that sea otter populations in various geographic locations exhibit a wide range of growth rates and are thought to differ in life history parameters contradicts the Alaska sea otter stock assessments, which assumes a single high growth rate when assessing the stocks in Alaska.

Response. The statement within the draft revised recovery plan was a general statement comparing all sea otter populations and is supported by available literature. In Alaska, the sea otter population growth rate has ranged between 17 and 21 percent, while in California the southern sea otter population growth rate has ranged between 5 and 7 percent.

Comment 8. One commenter was concerned that the implication of recommending a 5-year study is that until the data from such a study are acquired, no management action will be taken. Given the continued decline of the population, the precautionary principle urges action that benefits the population in the absence of knowledge.

Response. We do not intend that no action will be taken until studies are completed and data analyzed. The responsible agency will take action using the best available information, subject to the availability of funds.

Comment 9. One commenter objected to what was believed to be the numerical objective for recovery as 8,400 sea otters along the California coast. It was further stated that there was no explanation for that number.

Response. This recovery plan, as well as the 1982 original plan and all subsequent drafts, recognizes our responsibility for managing sea otters not only under the Endangered Species Act, but also the Marine Mammal Protection Act. The recovery plan clearly recognizes that once the recovery objectives are achieved pursuant to the Endangered Species Act, we still have obligations under the Marine Mammal Protection Act. Those obligations are to restore the sea otter population to its optimum sustainable population level. Past efforts at determining marine mammal optimum sustainable population levels have identified the lower bound to be roughly 50-60 percent of the habitat's current carrying capacity. For the southern sea otter this lower bound is approximately 8,400 animals for the entire California coast, based on estimated historic population levels. A marine mammal population below its optimum sustainable population level is considered depleted. A conservation plan will need to be developed detailing methods for restoring the population to its optimum level.

Comment 10. One commenter believed that the recovery plan should reference the "seminal works" on sea otters.

Response. The original recovery plan recognizes much of the early literature on sea otters. The original plan is still available for anyone interested in obtaining these references. In developing this plan, we and the Recovery Team chose predominantly to

cite current peer-reviewed literature. This recovery plan does direct readers to contact us or other agencies for additional information, if desired.

Comment 11. One commenter recommended that the recovery plan should provide alternatives and an evaluation of the risks, and that there should be public hearings.

Response. Recovery plans are developed for species at risk of extinction; the plans should identify the threats to a species, recommend tasks by which the threats can be removed, and state the criteria by which the species is no longer considered to be at risk of extinction and in need of protective measures under the Endangered Species Act. The plan is a "road map" to recovery. There may be other means to get to recovery, other means by which the threats are eliminated. The recovery plan does not preclude other efforts to eliminate the risks; those could be pursued. Under most circumstances, only as specific tasks are implemented is the NEPA process invoked. During this process, alternatives are identified and evaluated, public meetings are held, and comments are evaluated before actions are implemented

Comment 12. One commenter recommended that we revise the five criteria that are evaluated in any proposed rule or final rule to add or remove a species from the Federal list of threatened or endangered species pursuant to the Endangered Species Act.

Response. Section 4(a)(1) of the Act and regulations (50 CFR part 424) issued to implement the listing provisions of the Act identify the factors that must be evaluated to determine the classification of a species. The five criteria that are analyzed in all Federal rulemakings are: 1) The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range; 2) Overutilization for Commercial, Recreational, Scientific, or Educational Purposes; 3) Disease or Predation; 4) The Inadequacy of Existing Regulatory mechanisms; and 5) Other Natural or Manmade Factors Affecting its Continued Existence. These factors cover all possible threats and we do not believe they should be changed.

Comment 13. One commenter recommended that we or the U.S. Geological Survey should write and publish a comprehensive summary of information obtained since 1990.

Response. Although a comprehensive summary of information is not available and resources are not available for such an effort at this time, new information is published. Information is continually being updated and reviewed through a variety of reference sources; however, there is inadequate funding to compile all information into a single document at this time.

Comment 14. One commenter believed that the recovery plan greatly overstates the threat and effects of oil spills and stated that there is no discussion of oil spills that have affected California sea otters.

Response. There have been several events along the California coast that could easily have resulted in a large oil spill within the range of the southern sea otter. For example, in 1982, the Sealift Pacific lost steerage and nearly grounded along the Big Sur Coast. The

vessel was able to stop its movement toward the shore by dragging its anchor. In 1992, an onshore pipeline broke and oil spilled into Avila Bay. Four oiled sea otters were removed from that area. We acknowledge that to date there has been no large oil spill in the range of the southern sea otter that has caused a high level of mortality. However, the *Exxon Valdez* oil spill event clearly demonstrates that a large-scale oil spill can occur, and that if one occurs within the range of sea otters, it will be capable of causing substantial mortality of sea otters and habitat degradation. We and many other agencies and organizations are concerned about the threat of oil spills and their effects on the California coastal environment. Because of the threat of oil spills, the U.S. Coast Guard and the Monterey Bay National Marine Sanctuary established an interagency team to develop a proposal to reduce oil spill risk from vessel traffic. A plan was developed and subsequently approved by the International Maritime Organization that manages international vessel routing.

Comment 15. One commenter recommended that we develop a sea otter containment program in collaboration with fishermen, who would provide matching funds to ensure ongoing capture capability.

Response. This comment is best addressed relative to our current effort toward developing a supplemental environmental impact statement on the translocation program. Because of the current status of the southern sea otter population and the changed circumstances surrounding the original translocation program, we are currently developing a supplemental environmental impact statement on the translocation program. As part of this effort, we have solicited public input through the scoping process and will be evaluating public comments and program alternatives. This recommendation, if it was submitted during the scoping process, can be evaluated for consideration.

Comment 16. One commenter recommended that habitat protection should have a high priority (regardless of listing status), and that an assessment of negative impacts (loss of kelp beds and shellfish larvae) on the coastal habitat from projects such as municipal sewer outfalls, silt, and pesticides in runoff and water intake and discharge from power plants be done. Areas or projects where negative impacts are occurring should be corrected or mitigated.

Response. The recovery plan does identify habitat issues known, or suspected, to threaten the southern sea otter (*e.g.*, contamination and disease). The recovery plan identifies the need to determine the causes of the problems and identify management actions that eliminate or reduce the threat. As new information becomes available identifying causes of habitat degradation, research and management efforts can be recommended to restore the coastal ecosystem.

Comment 17. A few commenters questioned how cessation of the "otter-free-management zone" would promote recovery of the southern sea otter.

Response. The translocation of southern sea otters to San Nicolas Island has been less successful than originally hoped for as a means of establishing a second, self-sustaining population of southern sea otters. Furthermore, the value of the colony, as originally

envisioned, was to repopulate the mainland population if decimated by an oil spill, or some other event, by translocating small numbers of animals from San Nicolas Island. Experience has demonstrated that this goal may not be achievable given the tendency of translocated sea otters to disperse. The mainland population is still threatened because of its small population size and limited distribution. Recovery can best be achieved by having a larger number of southern sea otters distributed over a larger area. Since 1998, southern sea otters from the central coast seasonally have moved south of Point Conception into the management (otter-free) zone. Containment of these animals (*i.e.*, their capture and relocation back into the mainland population), in perpetuity, does not enhance recovery and, if moving large numbers of animals, is likely to adversely affect the mainland population, by disrupting social dynamics, increasing competition, etc. The natural movement of sea otters into a larger area would be better for the sea otter.

Comment 18. One commenter asked how, if the minimal viable population for sea otter is approximately 1,850 animals, we could have published a nonessential designation for moving 150 sea otters to San Nicolas Island when the fall survey for 1987 was 1,367 animals (that is, 483 animals fewer than 1,850 animals).

Response. It is important to note that the original target of 150 animals was the total number of animals that could be moved to San Nicolas Island over the term of the permit. This total number of animals was not permitted to be moved in a single year. However, the number of animals in the population at the time of the translocation was below the minimal viable population figure. This figure (1,850 or fewer) has been provided as an index as to when the southern sea otter population status should be considered endangered pursuant to the Act. The determination of the listing status of a species pursuant to the Act is different than the determination whether an experimental population under section 4(d) of the Act is essential or nonessential. The essential/nonessential determination has relevance only with respect to section 7 of the Act. If we had believed at the time of initiating the translocation that all 150 sea otters would be lost shortly after the translocation, the translocation would not likely have proceeded at that time or as designed.

Comment 19. One commenter recommended that we should study risks to sea otters south of Point Conception, impacts to other resources such as abalone, impacts to sea otters from offshore oil, sewage, nuclear power plant operations, etc., and economic impacts and potential impacts on other life-forms by foraging sea otters.

Response. We are currently undertaking a supplemental environmental impact statement on the translocation program. This effort will re-evaluate the threats and impacts addressed in the original environmental impact statement for the translocation of sea otters. This document should satisfy the recommendations stated above. There is no environmental impact process for evaluating the threats to southern sea otters in their current range. However, the recovery plan does identify a need for the further evaluation of threats, the determination of their sources, and the development of reasonable and prudent measures to minimize them.

Comment 20. Several commenters recommended the improvement of survey methods.

Response. We recognize that the current survey methodology does not count every sea otter. The survey is designed and intended to provide a standardized method for counting southern sea otters, and thus to provide an index for assessing population trends. We do believe that it is important to evaluate periodically whether the best methodology is being used. However, we believe that changing survey protocol at this time would confound efforts to assess and to understand the status of the southern sea otter population because data collected under a different protocol would not be comparable with the data already collected for previous years.

Comment 21. One commenter stated that the recovery objective of 8,400 sea otters for the entire California coast is excessive and requested that the number be changed to the lower number of 5,400 as in the 1991 draft plan.

Response. The figure 8,400 is the estimated recovery goal for achieving the optimum sustainable population level under the Marine Mammal Protection Act. The Marine Mammal Protection Act states that the goal for managing marine mammals should be to obtain an optimum sustainable population keeping in mind the carrying capacity of the habitat. An optimum sustainable population for the southern sea otter is likely a level equal to 50 to 80 percent of its current carrying capacity. The lower bound of the optimum sustainable population is approximately 8,400 animals for the entire California coast, based on estimated historic population levels.

Comment 22. One commenter suggested that the recovery plan should include language to allow the concept of zonal management in order to protect "the balance of our marine resources."

Response. It is important to note that recovery plans do not allow or authorize any activity. A recovery plan is a guidance document that identifies recovery criteria and our recommended actions for restoring the species to a status that it no longer needs the protective provisions of the Endangered Species Act. Regarding zonal management, the Southern Sea Otter Recovery Team believes that the primary action for promoting the recovery of the southern sea otter at this time should be the cessation of the management zone, and that without such a change in management, the likelihood of recovery is significantly lessened. We are taking this recommendation and other information under consideration and evaluating several alternative courses of action, including the continuation of zonal management, through the National Environmental Policy Act process.

Comment 23. Several commenters recommended that an "implementation team" be created, so that after the recovery plan is approved, recovery tasks can be set in motion.

Response. Although the formulation of an implementation team is not necessary to activate recovery actions, such a team can be useful as an advisory body regarding recovery efforts and can effectively serve to facilitate collaborative efforts. We will consider this recommendation and how it can best be implemented.

Comment 24. Numerous commenters stated the importance of declaring the San Nicolas

Island translocation a failure and ending zonal management. Reasons noted were: 1) risk to sea otters associated with capture and relocation; 2) undue stress placed on sea otters living in the area to which sea otters would be translocated; 3) exacerbating food limitations and habitat degradation; and 4) disrupting existing social structure.

Response. We are currently developing a supplemental environmental impact statement to reevaluate the southern sea otter translocation plan as described in the final Environmental Impact Statement for Translocation of Southern Sea Otters, Appendix B, May 1987. Through this process, we will consider the current program, modifications to the program, and termination of the program. The supplemental environmental impact statement will update information, assess the impacts of proposed alternatives, provide for public participation, and ultimately identify an alternative that will reduce the southern sea otter's vulnerability to extinction.

In response to comments received on the January 2000 draft revised plan, we asked the Recovery Team to complete a trend analysis to determine the population size that would be robust enough for us to detect trends in abundance reliably prior to the population declining to endangered status. In April 2002, we submitted this analysis for peer review by Alan Hastings (UC Davis), Marcel Holyoak (UC Davis), John R. Sauer (USGS-Patuxent Wildlife Research Center), and Dan Goodman (Montana State University). Their comments are summarized below:

Comment 1. Several reviewers questioned whether the use of a 5 percent rate of decline was appropriate considering that the rate of decline observed in the Alaska population was 16 percent or more.

Response. If one assumed a 16 percent rate of decline, with the same trial scenario as used originally (e.g., CV = 0.1, alpha = 0.1, etc.), it would take 5 years to get a high likelihood of detecting a decline, during which time the population would drop by 58 percent. Therefore, the buffer above 1,850 would be 2,590 animals for a threshold of 4,440 animals (1,850 + 2,590). The Recovery Team finds using the higher rate of decline unreasonable for the California population because it has never been observed in California, and prefers to use the maximum rate of decline observed in the population since monitoring was initiated.

Comment 2. Several reviewers recommended conducting simulation trials to look at the robustness of the listing criteria (including trend analysis) and the 3-year running average index.

Response. Although this exercise would be valuable, it would take a programmer/analyst several months at a minimum to complete the work, at a cost of about \$15,000. The Recovery Team recommended, and we agreed, that we should not delay completing the final revised recovery plan in order to complete this analysis. Rather, we should make final the current version of the recovery plan and then undertake the analysis and incorporate the results as part of the next status review in 5 years.

Comment 3. Several reviewers noted that using the 3-year running average is conservative when considering delisting, but it is not conservative when considering uplisting (*i.e.*, going from threatened to endangered).

Response. Most of the Recovery Team preferred to trigger uplisting to endangered if the population falls below 1,850 in a single year. However, the Fish and Wildlife Service has determined that it is appropriate to use the 3-year running average when considering uplisting. Because population counts have fluctuated from one year to the next, we believe it is prudent to use the 3-year running average to characterize population size during a given year. For example, if we used a single year count as the criterion to initiate reclassification to endangered when the population count is at or below 1,850, then during the course of developing and proposing a reclassification, if a subsequent count were above 1,850, we would have to terminate that proposal effort (thus making inefficient use of limited staff time). Using the 3-year running average is both consistent with how we assess population size and should provide assurance that the population is adequately characterized if we propose uplisting or delisting. (See also the response to Comment 2 above.)

Comment 4. Two reviewers commented that changes between years could be extreme and that linear trends may be less of a worry than nonlinear trends.

Response. The Recovery Team did not support this consideration, as increases and decreases in abundance of the California sea otter population since the 1970s have been approximately linear, with decreases in the late 1970s and early 1980s (likely due to density-independent mortality related to fishery interactions), increases from the mid-1980s to the mid-1990s, and then decreases from the mid-1990s to 2000.

Comment 5. One reviewer recommended that we verify that the coefficient of variation (cv) of the index counts are relatively constant and approximately 0.1.

Response. The cv (of 0.1) was estimated by deviations from the best fit to trends in the population count data. This method of estimating the cv is a very reasonable one; the only other way would be to replicate counts in a given year, which would be extremely expensive in terms of time and money.

Comment 6. One reviewer questioned why we did not use Lande's 5,000 figure when determining the criteria for when the southern sea otter should be considered endangered.

Response. Basically, Lande's calculation was for a time scale on the order of thousands of years. The Recovery Team thought that a time scale of decades to a century was more appropriate for management purposes; hence the 500 number was used

Comment 7. One reviewer raised a point that the 10 years required to detect a trend of

less than 5 percent per year does not allow time for us to react and attempt mitigation.

Response. This point is valid. A simulation analysis would allow an evaluation of the probability of detecting a given decline in a given number of years. (See the response to Comment 2, above.) Furthermore, the simulation analysis needs to take into account the time it takes to propose and make final a reclassification ruling. The results of the analysis should be incorporated as part of the next status review in 5 years.