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Th 17b

Correspondence

CD-019-12, U.S. Fish and Wildlife Service

Termination of the Southern Sea Otter Translocation Program, Southern California

Attached are

Letters from:

**California Sea Urchin Commission
Steve Rebuck
Bobby McKinley
Environmental Defense Center
California Wetfish Producers Assn.
Jeffrey Crumley**

Also included are

Video (DVD) from Bobby McKinley

Sample of a large number (but substantially the same) series of 300+ emails received

White Paper



June 5, 2012

Mary Shallenberger
Chair
California Coastal Commission
P.O. Box 354
Clements, CA 95227-0354

Dear Chairwoman Shallenberger:

The California Sea Urchin Commission ("Commission") is pleased to submit information to the California Coastal Commission ("CCC") regarding item 17b on the Commission's schedule for consideration on June 14 noted as "CD-019-12 (U.S. Fish and Wildlife Service, So. California). Consistency determination by U.S. Fish and Wildlife Service ("Service") for termination of southern sea otter translocation program, southern California coastal waters (including Channel Islands)." This letter and all attachments are being provided to appropriate staff.

The Commission was created under the laws of California for the purpose of promoting a scientifically and economically sustainable shellfishery. The Commission is authorized to engage in scientific monitoring and data collection to support responsible fishery management. In addition, the Commission is authorized to advocate policy and legislative decisions that are compatible with the interests of the fishery.

The Commission has devoted considerable time and effort to reviewing and commenting on the Service's proposal to terminate the southern sea otter translocation program. Additionally, the Commission has reviewed the CCC's staff report on the issue. The Commission is deeply concerned about the accuracy and completeness of the data provided by the Service in the Revised Draft Supplemental Environmental Impact Statement regarding the Translocation of Southern Sea Otters ("DSEIS"), which forms the basis of the staff report.

The Commission believes there is significant additional information that the staff and members of the CCC should review, and thus, we request a continuance of this agenda item to a date in the future. The attached documents provide a more complete analysis of the data addressed in the DSEIS, but briefly, the Service's preferred alternative increases direct and indirect ecosystem conflicts with numerous species of shellfish, including species protected under the Endangered Species Act. The Service neglects the basic issue of biodiversity by failing to fully and properly analyze the impact of the proposal on the endangered black abalone and the endangered white abalone. These endangered species are subject to sea otter predation, threatening both the survival and recovery of the abalone as the sea otter range expands.

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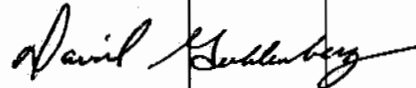
Mary Shallenberger, Chair
California Coastal Commission
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June 5, 2012

Additionally, the Commission is very concerned about the lack of consideration being given to the needs of the fishermen in the CCC staff report. When the CCC considered the translocation program in 1987, it carefully contemplated how the program would affect fisheries and supported the creation of the sea otter management zone to mitigate the economic impacts on fisheries. The current staff report has only a cursory examination of these impacts, which are significant and could result in the loss of viable shellfisheries off the coast of Southern California.

Again, the Commission requests a continuance to more fully educate the CCC on these issues. However, should this not be possible, we respectfully request twenty minutes of time to testify before the California Coastal Commission during consideration of this matter.

The Commission appreciates the opportunity to submit these comments.

Sincerely,



David Goldenberg
Executive Director

cc: California Coastal Commission Staff

Attachments

- (1) October 24, 2011 Comments of the California Sea Urchin Commission on the Revised Draft Supplemental Environmental Impact Statement Regarding Translocation of Southern Sea Otters and on the Proposed Rule to Implement the Preferred Alternative
- (2) November 21, 2011 Supplemental Comments of the California Sea Urchin Commission on the Revised Draft Supplemental Environmental Impact Statement Regarding Translocation of Southern Sea Otters and on the Proposed Rule to Implement the Preferred Alternative
- (3) April 19, 2012 Testimony of Bruce Steele on behalf of the California Sea Urchin Commission before the U.S. House of Representatives Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs



October 24, 2011

Ms. Lilian Carswell
U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726

Dear Ms. Carswell:

The California Sea Urchin Commission ("Commission") is pleased to submit the enclosed comments on the Revised Draft Supplemental Environmental Impact Statement regarding the Translocation of Southern Sea Otters ("DSEIS") and the proposed rule implementing the preferred alternative ("Proposed Rule"). 76 Fed. Reg. 53381 (August 26, 2011). The Commission was created under the laws of California for the purpose of promoting a scientifically and economically sustainable sea urchin fishery. The Commission is authorized to engage in scientific monitoring and data collection to support responsible fishery management. In addition, the Commission is authorized to advocate policy and legislative decisions that are compatible with the interests of the fishery.

The Commission has devoted substantial time and effort to reviewing the DSEIS. At the outset, the Commission is deeply concerned about the accuracy and completeness of the data contained in the DSEIS. Equally important, the conclusion that the translocation program has failed is not supported by the data that do exist. The translocation has not failed. Instead, the Fish and Wildlife Service had unrealistic expectations for when certain milestones would be reached. Indeed, the DSEIS admits the Service's expectations were unrealistic and further admits that the translocation population is a successfully reproducing population in terms of numbers and growth. Rather than recognize these data and reevaluate the Service's original expectations, the Service has chosen to declare translocation a failure. To reach that conclusion, the Service has ignored the best scientific data available and has used evaluation standards found nowhere in the existing regulations. The Service has simply minted new standards to evaluate the translocation without complying with the Administrative Procedure Act.

The Commission is also greatly disturbed by the Service's proposal to retain the sea otters at San Nicolas Island notwithstanding a declaration that the translocation has failed. The existing regulations, in furtherance of P.L. 99-625, provide that if the translocation is declared a failure, the otters at San Nicolas Island must be removed from that location. The DSEIS

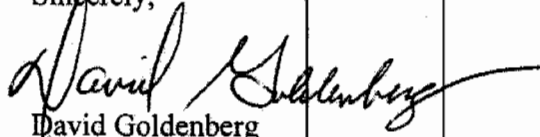
Ms. Lilian Carswell
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proposes to ignore the law and the regulations and to retain the otters at San Nicolas Island. The Service cannot disregard the law and the regulations.

Finally, the Service has failed to fully and properly analyze two critical issues: (1) the impact of the preferred alternative on the endangered black abalone and the endangered white abalone; and (2) the impact of degraded water quality on the sea otters.

The Commission appreciates the opportunity to submit these Comments which address all of the above issues in more detail.

Sincerely,


David Goldenberg
Executive Director

**COMMENTS OF THE CALIFORNIA SEA URCHIN COMMISSION ON THE
REVISED DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
REGARDING TRANSLOCATION OF SOUTHERN SEA OTTERS AND ON THE
PROPOSED RULE TO IMPLEMENT THE PREFERRED ALTERNATIVE**

I. INTRODUCTION

The Revised Draft Supplemental Environmental Impact Statement ("DSEIS") prepared by the Fish and Wildlife Service ("Service") fails to properly and completely analyze the available data. As currently drafted, the DSEIS mischaracterizes the science surrounding the southern sea otter (*Enhydra lutris nereis*). Equally important, the preferred alternative increases direct and indirect ecosystem conflicts with numerous species of shellfish, including species protected under the Endangered Species Act ("ESA").

II. A LEGAL AND FACTUAL ANALYSIS OF THE DECISION TO TERMINATE TRANSLOCATION

The DSEIS analysis of the translocation, as well as Appendix C which supports that analysis, are studies in contradictory statements, unsupported assumptions, selective use of facts, and newly minted standards. This section of the Comments examines the objectives of the translocation, the actual results of the translocation when compared to the objectives, and the proper application of the failure criteria in assessing the success or failure of translocation.

A. The Objective of the Translocation Program

The DSEIS concludes that the "primary purpose [of the translocation program] was to bring southern sea otters closer to recovery and to eventual delisting...." DSEIS at 5. The final rule establishing the translocation program confirms this purpose, stating that once the translocated colony was established, the southern sea otter could be considered for delisting. 52 Fed. Reg. 29754 (August 11, 1987) ("Final Rule") at 29775. Thus, the fundamental purpose of the translocation program was to increase the number of southern sea otters.

The Draft Evaluation of the Southern Sea Otter Translocation Program 1987-2010, Appendix C of the DSEIS ("Draft Evaluation"), echoes the position that the "primary purpose" of the translocation was to move the sea otter toward delisting. Draft Evaluation at 4. In that regard, the Draft Evaluation also states the Service hoped to establish a self contained population that "would provide a safeguard" if the parent population were "adversely affected by a catastrophic event, such as an oil spill." *Id.*

The second purpose of the translocation program was "to obtain data for assessing translocation and containment techniques, population dynamics, the ecological relationships of sea otters and the nearshore community, and the effects on the donor population of removal of individual sea otters for translocation." DSEIS at 5.

Based on its overall analysis of the needs of the southern sea otter, the Service concluded the translocation program was "essential" to the recovery and delisting of the southern sea otter. 52 Fed. Reg. at 29759, 29778. When Congress considered the legislation that became P.L. 99-625, it also concluded that the San Nicolas Island population is "critical to the species' continued existence." Congressional Record, Vol. 132, p. 33808, October 18, 1986.

So, what has changed to make a "critical" program a pariah? We still need to recover the sea otter population and we still have the problem of potential oil spills. While the DSEIS presents a startling array of different legal and factual bases for declaring translocation a failure, all of the Service's justifications for the preferred alternative rotate around, and depend on, two elements. First, the Service asserts that based on the enormity of the Exxon Valdez oil spill, the San Nicolas Island population is no longer outside the reach of a catastrophic oil spill. What is the Service's solution to this realization? Allow the sea otters to expand their range within the management zone.

But the Service admits an Exxon Valdez type spill would include the geographic area into which the sea otters might expand. If the translocation is a failure because it is within the range of a catastrophic oil spill, then so too is the DSEIS' preferred alternative of range expansion. The Service cannot use the catastrophic oil spill scenario to declare translocation a failure without simultaneously admitting the preferred alternative cannot meet its objective. The Service is using a fatally flawed double standard to declare translocation a failure.

The second underlying basis for the Service's decision to declare translocation a failure is the assertion that the San Nicolas Island population is small and its future uncertain. That is far different than saying the San Nicolas Island population is still not critical to the recovery of southern sea otters. Moreover, the fact that the Service's preferred alternative is to leave the sea otters at San Nicolas Island, even after declaring the translocated population a failure, proves that the translocation did not fail and that the San Nicolas Island population is important for sea otter recovery.

B. The Translocation Program Met Its Objectives

The analysis of whether the translocation program has met its objectives begins with the DSEIS' assertion that the translocation has failed because the San Nicolas Island population is "small, and its future uncertain." DSEIS at 5. The Draft Evaluation echoes this, stating the translocation failed because "[w]e anticipated that translocation would ultimately result in a larger population size and a more continuous distribution of animals...." Draft Evaluation at 2. These statements are contradicted by the facts.

The intent of the translocation program was to establish a breeding nucleus of 70 sea otters. That 70 would expand into an established population of 150. *Id.* at 4. To achieve the breeding nucleus, plan was to translocate 70 sea otters in the first year of the program. That

number would be supplemented with up to 70 sea otters annually to a total of 250 that could be moved. *Id.* However, the Service translocated only 140 sea otters between 1987 and 1990, 56% of the 250 originally planned to be part of the translocation. *Id.* at 1. Given that the Service stopped the actual translocation at just over 50% of the original objective, it is arbitrary and capricious to judge success of the current population level at San Nicolas Island based on the original assumptions about when and how population levels would be achieved if 250 sea otters were translocated.

The status and current trend of the San Nicolas Island population is illuminating. The 2010 population survey at San Nicolas Island counted 46 animals. *Id.* at 13. This is 66% of the initial goal for the breeding nucleus. If the full translocation program had been implemented, it is reasonable to assume we would now have a breeding nucleus of 70 animals and would be moving toward the population level of 150. Significantly, at the current reproduction rate, which is approximately 10% annually, the San Nicolas Island population should reach 70 within four years.¹ Even the Service admits the initial objective of 70 sea otters at San Nicolas Island will occur. DSEIS at 77, 89. The fact that this event may not have occurred as rapidly as the Service hoped does not mean the translocation program failed, particularly when the Service's implementation of the program is a principal cause of the delay.

¹ The 2005 Draft Supplemental Environmental Impact Statement stated at 77 that the San Nicolas Island sea otter population numbered 32 animals in 2005. Five years later, the number is 46. That is a growth rate of approximately 10%. The DSEIS statement that the growth rate is averaging only 7%, DSEIS at 76, is artificially low because it includes years in which the San Nicolas Island population was struggling. The 10% number reflects the current reality. Indeed, independent scientific analysis has concluded that since 1999 the population at San Nicolas Island has grown at a rate of approximately 10% per year. Estes et al. 2006 at 3-4. Even if the 7% growth rate is correct, the San Nicolas Island population reaches 70 one year later. DSEIS at 77.

In considering the ability of the San Nicolas Island population to continue its growth, it is noteworthy that the Draft Evaluation accompanying the 2005 Draft Supplemental Impact Statement ("2005 Draft Evaluation") concluded there is nothing that threatens the "health and well-being of the [San Nicolas Island] population.... to the point that the colony's continued survival is unlikely...." Draft Evaluation at 26. Thus, the Service admitted the San Nicolas Island population is moving toward the original objective, albeit more slowly than hoped – a slowness caused in large part by the Service's failure to fully implement the translocation program. The conclusion in 2005 that there is nothing currently threatening the health and well being of the San Nicolas Island population is restated in the Draft Evaluation. Draft Evaluation at 29. The Service goes on to admit the sea otter population at San Nicolas Island "are expected ... to increase in number...." DSEIS at 89. From this perspective, the translocation program is far from the failure declared by the Service.

Four other factors, completely ignored by the Service, confirm the success of the translocation. First, virtually all of the sea otters at San Nicolas Island are offspring of the originally translocated population. Draft Evaluation at 13.² That means there is a healthy and successfully reproducing population at San Nicolas Island.

Second, at least 150 pups have been born at San Nicolas Island, further confirming the presence of a healthy reproducing population. *Id.* The Service has admitted that given the restricted number of animals moved to San Nicolas Island, and after applying the accepted first year pup mortality to new births, the Service "would not expect to have many more sea otters at the island than we currently have." 2005 Draft Evaluation at 24. The population is where it

² This is because the founding animals were translocated between 20 and 23 years ago and the average life expectancy of southern sea otters is 10-15 years. Draft Evaluation at 13, citing Reidman and Estes 1990.

should be, contrary to claims in the DSEIS that expectations have not been met and that translocation has failed.

Third, the San Nicolas Island population is reproducing at a rate of 10% annually. Estes et al. at 3-4. This is precisely in the middle of the 5-15% reproduction rate the Service expected. Draft Evaluation at 4. This reproduction rate is better than the 5%-6% rate of the parent population and represents an "exponential population increase." Estes et al. 2006 at 3. This does not sound like failure. Indeed, the DSEIS points out that in "the past several years there has been growth of the population, which is almost certainly [due to] pups ... rather than to immigration of sea otters to the island." Draft Evaluation at 13.

Fourth, the San Nicolas Island population is healthier than the parent population. A comparison of the translocated population with the parent population found that the "length and mass at age and the age-specific mass to length ratios were significantly greater for sea otters at San Nicolas Island than in the central population." Estes et al. 2006 at 6. The DSEIS confirms this fact noting that the San Nicolas Island sea otters "were in a better body condition" than the sea otters along the central California coast. This does not sound like a failed population. It sounds like a population that is healthier than the parent population.

The problem is not that the San Nicolas Island population is unhealthy. The problem is that the Service had unrealistic expectations. The Service admits: "In retrospect, our expectations for success were overly optimistic." Draft Evaluation at 18. Because the San Nicolas Island population did not achieve the population numbers within the time frame originally expected by the Service, the Service says the program failed. Rather than change its unrealistic original assumptions, the Service pretends those assumptions are still valid and declares translocation a failure. In so doing, the Service ignores the current state of the

population, ignores the fact that its expectations were questionable, and conveniently forgets that its decision to translocate only 140 sea otters instead of 250 contributed to, if not caused, the slower time frame. The Service incorrectly concludes that “the creation of an established southern sea otter population at San Nicolas Island does not appear to be achievable.” *Id.* at 19. The facts outlined above regarding the status, trend, and health of the San Nicolas Island population belie that conclusion.

Indeed, the Service has determined (1) there is “a low cumulative probability” that the San Nicolas Island population will become extinct, *id.* at 27; (2) there is no current threat to the health and well being of the San Nicolas Island population, *id.* at 29; (3) the San Nicolas Island population is a self-sustaining and growing population, *id.* at 13, DSEIS at 77; (4) the San Nicolas Island population is healthier and reproducing at a higher rate than the central California population, Draft Evaluation at 4, 14; (5) the San Nicolas Island population is “expected ... to increase in number,” DEIS at 89; (6) the San Nicolas Island population will very soon have the breeding nucleus of 70 that the Service believes is critical, *id.* at 77, and (7) the Service has decided the sea otter colony at San Nicolas is sufficiently robust that it should be left there to grow and to fulfill the original expectations.

The history of other sea otter translocations proves the point. Slow starts to successful translocated sea otter populations due to dispersion are not unexpected. Many of the 89 sea otters translocated to the coast of British Columbia from 1969 to 1972 did not survive. But by 2004, the remnant population had grown to 3,185. Sea Otter Recovery Team, 2007. Similarly, between 1965 and 1969, 412 sea otters were translocated to six sites in southeast Alaska. Recent population estimates indicate this 412 has grown to as many as 12,632. *Id.* As a final example, as few as ten sea otters remained in the early 1970s after the translocation of 59 animals off the

coast of Washington. Jameson, R. J. 1993. The most current population counts in 2006 estimated 790 animals were present, which means the population displayed a mean population growth of 8% since 1989. Sea Otter Recovery Team, 2007

In light of all of these facts, the Service's conclusion that the San Nicolas Island translocation has failed is arbitrary and capricious under the Administrative Procedure Act ("APA"). The Supreme Court has held an agency action is arbitrary and capricious if the agency (1) has relied on factors Congress has not intended it to consider, (2) entirely failed to consider an important aspect of the problem, (3) offered an explanation for its decision that runs counter to the evidence before the agency, or (4) has offered an explanation for its action that is so implausible it could not be ascribed to a difference of view or the product of agency expertise. *Motor Vehicles Manufacturers Ass'n. v. State Farm Mutual Auto Ins.*, 463 U.S. 29, 43 (1983). Here, at a minimum, the Service has offered an explanation for its decision that runs counter to the evidence.

Let us now turn to the second reason underlying the Service's decision to declare translocation a failure – if there is a catastrophic event such as an oil spill, the San Nicolas Island population will be compromised. Draft Evaluation at 20. The solution, says the Service, is found in the DSEIS' preferred alternative to allow unrestricted expansion of sea otters from the parent range. The Service has noted the Exxon Valdez catastrophic spill was the singular force driving the Service to change its recovery strategy from translocation to range expansion. Consultation on the Containment Program for Southern Sea Otter, Biological Opinion, July 19, 2000 ("BiOp") at 29. However, the Service admits the Exxon Valdez spill covered 400 linear miles, "an area greatly exceeding the present range of the southern sea otter in central coastal California plus that of the translocated colony of San Nicolas Island." Draft Evaluation at 21. In

short, a spill like the Exxon Valdez could cover an area that includes the entire expansion area. The same catastrophic spill scenario the Service employs to declare the translocation a failure necessarily results in the conclusion that the preferred alternative of range expansion is, and will be, a failure. The Service cannot have it both ways. If translocation is a failure because of the expected impact of an Exxon Valdez type spill, then so too is the preferred alternative a failure.

Further compromising the validity of the oil spill scenario as a basis for declaring translocation a failure is the curious nature of the Service's logic. Recall two facts. First, when translocation was originally considered, the Service determined there was no chance the sea otter population on San Nicolas Island would be affected by a catastrophic oil spill. Second, the Service says the sheer enormity of the Exxon Valdez spill, approximately 10 million gallons, caused the Service to rethink that view. Now, consider a third fact. When the translocation was implemented, tankers the size of the Exxon Valdez were regularly plying the waters along the central California coast and putting into port in that region. This was common knowledge beginning in 1978 when tankers capable of spilling the same amount of oil spilled in the Exxon Valdez accident began transporting oil from the Prudhoe Bay oil fields to terminals in California. These tankers were traveling along the central California coast and docking at associated ports. Real and potential accidents were a matter of record. When the Senate considered the legislation that became P.L. 99-625, the floor debate documented several actual and potential spills. Congressional Record, Vol. 132, p. 33808, October 18, 1986. The potential for a catastrophic spill of the same magnitude of the Exxon Valdez was present when the translocation was planned and implemented. Then, it was not perceived as a problem. Then, the establishment of the San Nicolas Island population was "essential" for sea otter recovery. Today, with no change in the size of a potential spill, but with the addition of new and improved navigation and safety

programs, the Service claims a sudden and new awareness of the threat of an oil spill, and the San Nicolas Island translocation is somehow a failure. This is a conclusion in search of a justification, in violation of the standards set forth by the Supreme Court in *Motor Vehicles Manufacturers Ass'n*.

C. The Failure Criteria in the Regulations

The preceding section establishes that translocation has not failed based on the objectives of the translocation program. The primary purpose of the translocation program was to increase the population toward the delisting level. That objective is met. The Service's failure finding is without merit. This Comment will now examine various legal theories the DSEIS presents in an attempt to justify its failure determination.

At the outset, it is significant to recognize that the regulations implementing P.L. 99-625 set forth only five standards for evaluating the population levels and status of the San Nicolas Island population in order to determine whether the translocation was a success or a failure.

Those standards are:

1. no sea otters remain in the translocation zone after one year;
2. fewer than 25 others remain in the translocation zone after three years;
3. the translocated population is declining after two years;
4. sea otters are dispersing from the translocation zone and are becoming established in the management zone in such numbers to demonstrate that containment cannot be successfully accomplished; and
5. the health and well being of the translocated population is threatened such that its continued survival is unlikely.

50 C.F.R. §17.84(d)(8). According to the regulations, if any of these standards are met, translocation can be declared a failure. These standards relate exclusively to the status and

health of the translocated population. These standards do not focus on the parent population or on forces affecting the parent population.

The Draft Evaluation admits that criteria 1 and 5 listed in the preceding paragraph have not been met and, therefore, provide no basis for declaring the translocation a failure. Draft Evaluation at 25, 29. The Service asserts criterion 2 has been met because fewer than 25 sea otters remained at San Nicolas Island after three years. *Id.* at 25-26. Since the Service elected to implement only half of the translocation program, transferring to San Nicolas Island only about half of the number allowed to be placed there, the actual standard should not be 25. It is only half of that, in which case criterion 2 is not met because within three years of the initial transplant 17 sea otters were at the Island. *Id.* at 26. More importantly, as noted above, the Service admits its original numerical expectations were overly optimistic and that the San Nicolas Island population is within its normal range. Therefore, criterion 2 is not met in light of these facts and should be interpreted to reflect actual events.

As to criterion three, the Service concludes it is "unable to evaluate" whether the program failed under this standard. *Id.* at 27. Regardless of whether the Service can evaluate what had happened after two years, the facts are that there is no objective way to assert that this failure standard has been met based on the Service's own statement of facts about the growth and reproduction of the San Nicolas Island population.

The fourth failure criterion set forth in the regulations is that sea otters are dispersing from the translocation zone into the management zone such that containment cannot work. After admitting that this standard "has not been met," the Service suggests the standard says something else so that the Service might argue the standard is now met. *Id.* at 28. Recall that the regulatory standard relates to whether sea otters are migrating into the management zone from the

translocation zone. The Service appears to suggest that under this standard it might be possible to consider the situation of sea otters migrating from the parent population into the management zone. *Id.* at 28-29. Not only is this not what criterion 4 states, but it has nothing to do with the health of the translocated population. The Service is correct that criterion 4 as contained in the regulations is not met.

Unable to sustain the position that the translocation has failed under the existing regulations, the Service invents new legal standards not found in the regulations. On the very first pages of the Draft Evaluation, the Service lays out the standards it actually used to find the translocation a failure. *Id.* at 1-2. However, none of these five new bases for evaluating the translocation are found in the existing regulations. The newly minted standards used in the Draft Evaluation for judging if the San Nicolas Island population is succeeding are:

1. the colony of southern sea otters at San Nicolas Island is small and its ability to become established and persist is uncertain;
2. the establishment and maintenance of an isolated southern sea otter colony at San Nicolas Island will not provide an adequate safeguard in the event that the parent southern sea otter population is adversely affected by a catastrophic event;
3. attempts to manage the natural range expansion of southern sea otters will disrupt seasonal patterns of movement in the parent population and hinder recovery of sea otters;
4. capturing and moving sea otters out of a "no-otter" management zone has proven to be ineffective as a long term management action "largely because" of the difficulties inherent in sea otter capture; and
5. the recovery strategy for the southern sea otter has changed since the original recovery plan for the species was released in 1982.

Discarding the standards for evaluating the translocation set forth in 50 C.F.R.

§17.84(d)(8) – standards which were adopted pursuant to a rulemaking conducted in accordance with the Administrative Procedure Act ("APA") – the Service has unilaterally and illegally

minted new standards. This unilateral creation of new regulatory standards violates the APA. At the outset, recall the Service felt that the creation of failure criteria had to be accomplished pursuant to the notice and comment requirements of the APA, requirements the Service has now chosen to ignore.

The APA requires that notice of a proposed rule be published in the Federal Register. 5 U.S.C. §553(b). After such notice, interested persons must be afforded an opportunity to comment on the proposal. These requirements are intended to provide the public with a meaningful way to comment on an agency's proposal. Accordingly, rules enacted by an agency but not published in the Federal Register, thus precluding notice and opportunity for public comment, are unlawful. *See U.S. v. Mowat*, 582 F.2d 1194, 1201 (9th Cir. 1978). *See also Paulsen v. Daniels*, 413 F.3d 999, 1006-08 (9th Cir. 2005) (holding that failure to provide the required notice-and-comment period, thereby precluding public participation in the rulemaking, rendered the regulation invalid). To rely on its newly created standards, as the Service has done, violates the APA. Such an action is particularly disturbing given that the Service determined that the five failure criteria had to be established in accordance with the APA's notice and comment procedures.

A careful review of these newly minted standards is even more distressing. Instead of focusing on the current status of the translocated population as required by the properly promulgated existing regulations, four of the five new standards used in the DSEIS to declare translocation a failure have nothing to do with the current status of the translocated population. Those four standards are: (1) there were difficulties associated with capturing and transporting sea otters, an activity that has not occurred for over 14 years and that has nothing to do with the current status of the translocated population; (2) the parent population outside the translocation

area should not be disturbed by capture and relocation; (3) the recovery strategy for the parent population outside the translocation area has changed; and (4) the effect of a catastrophic event on the parent population outside the translocation area would not be adequately compensated for by a translocated population. Not one of these factors relates to the health, population level, and trend of the translocated population itself. The fifth newly minted standard used by the Service to evaluate the translocation program might appear at first to be related to the applicable regulations, but careful analysis shows it is not. More importantly, it is factually incorrect.

One of the Service's newly minted standards is that the translocated population is small and its ability to become established is uncertain. But the applicable regulations set a minimum acceptable population for translocated sea otters at 25, a number well below the current population of 46. That the population is small is not the relevant standard. As to the ability of the translocated population to become established, the applicable regulations address this issue with two precise standards: (1) the translocated population is declining; or (2) the health of the translocated population is threatened such that its very survival is unlikely. The DSEIS does not assert that the translocated population is declining. In fact, the Service admits the population is increasing and will continue to do so. DSEIS at 77, 89. Further, as discussed above, the DSEIS points to no threat to the translocated population which threatens its very survival. Draft Evaluation at 29. Instead, the Service states there is a low probability of extinction.

The facts are that the existing regulatory standards for declaring translocation a failure are not satisfied. The standards created in the DSEIS to judge the success of the translocation were not adopted in accordance with law, are inconsistent with the lawfully adopted regulations, and generally have nothing to do with the actual status of the translocated population. Not only is the population well within the minimum threshold for success set forth in the regulations, but

it is reproducing and increasing naturally. In fact, at the present rate of growth, the DSEIS admits the translocated population will reach the first level of having a breeding nucleus population within a few years. The DSEIS points to no threat to the survival of the population which will prevent that from happening. The conclusion in the DSEIS that translocation has failed is neither legally nor factually correct.

Before leaving the issue of the newly minted standards set forth in the DSEIS to judge the translocation, one such standard merits additional comment. That new standard is that there were issues associated with the original capture program which ceased over 14 years ago. At the outset, it should be noted that the applicable regulations required that captured animals be transported to the relocation area no more than five days after capture. 50 C.F.R. §17.84(d)(3)(ii) and (iii). Often, however, those time requirements were not observed and the animals were kept in temporary holding areas for much longer periods. Further, many animals were subjected to questionable and dangerous surgical procedures to implant tracking devices. Several failed to survive the surgery. Problems associated with the prior capture and transport process resulted not from weaknesses in the transport program but from the Service's actions. Such problems could have been remedied. Thus, the Service's complaints about the capture and transfer program are suspect. This is particularly true given the fact that the Service has issued permits for the capture and release of southern sea otters, finding that the capture methodology was both safe and humane. More importantly, those issues have nothing to do with the current status of the San Nicolas Island population.

Finally, the Service has failed to consider that part of its regulations requiring the Service to determine the causes of any failure and, if those causes can be determined, to consider continuing the translocation program. 50 C.F.R. §17.84(d)(8)(vii). Here, the cause of any

“failure” of the translocation according to the established criteria is that the Service, having translocated only about half of the planned number of sea otters, failed to adjust its expectations and failed to allow sufficient time for the translocation to succeed. In that regard, three facts stand out. First, the Service admits its expectations, and the resulting failure standards, were unrealistic. Second, the Service admits the San Nicolas Island population is well on its way to meeting the original population level expectations. Third, the Service admits there is nothing that threatens the achievement of those objectives. In light of these facts, the Service should recognize under its existing regulatory authority that the translocation has not failed. The Service simply did not give the translocation sufficient time to achieve the population objectives given the reduction in the number of animals actually translocated.

D. Leaving Sea Otters at San Nicolas Island After a Failure Determination

The regulations implementing P.L. 99-625 clearly provide, consistent with the intent of the statute, that if the translocation is declared a failure, the sea otters at San Nicolas Island will be captured and returned to the parent zone. 50 C.F.R. §17.84(d)(8)(vi). The DSEIS preferred alternative pretends the regulations do not exist. The DSEIS declares the translocation a failure and then says, notwithstanding its own regulations, the Service will not move the sea otters from San Nicolas Island. Such a decision violates the language, spirit, and intent of P.L. 99-625 and its implementing regulations.

E. Conclusion

Contrary to the Service’s findings in the DSEIS and in the Draft Evaluation, there is no legal or factual basis for declaring the translocation population at San Nicolas Island a failure. The purpose of the translocation program is being fulfilled. The translocated population is healthy and growing. There are no major threats to the health and well being of the translocated

population. The only issue is that the Service expected the translocated population to grow at a faster rate. However, the Service admits those expectations were unrealistic, particularly since the Service translocated only half of the sea otters it originally planned to relocate. The translocation has succeeded.

III. ECOSYSTEM MANAGEMENT AND THE ENDANGERED SPECIES ACT

The southern sea otter has been listed as a threatened species pursuant to the Endangered Species Act (“ESA”). White abalone was listed as an endangered species in 2001 and black abalone was designated endangered in 2009. DSEIS at 84, 87. The Preferred Alternative advanced by the Service creates a classic conflict between the needs of several ESA-protected species – a conflict the Service has chosen to ignore – a conflict that threatens the survival and recovery of the two listed abalone species as well as posing a serious threat to the recovery of pink and green abalone which are currently depleted species throughout their range.

A. Sea Otter Predation Threatens White Abalone

The Service concludes that allowing unlimited range expansion for sea otters, the preferred alternative, presents no threat to the endangered white abalone. *Id.* at 86. The Service begins its analysis by admitting that “sea otter range expansion along the central California coast is known to have reduced abalone population levels and size distributions....” *Id.* at 84, citing Wendell 1994. Notwithstanding this finding, the Service concludes there is no conflict between the preferred alternative and abalone survival and recovery.

The inconsistency of admitting that sea otter predation constitutes a threat to abalone and then stating there is no problem seems lost on the Service. This inconsistency is particularly curious given that the Service also admits white abalone “have nearly been extirpated in southern

California waters.” DSEIS at 37. Introducing an apex predator into abalone habitat will have significant, if not fatal, consequences for the future of this endangered species.

1. Habitat Overlap – Depth

The Service attempts to rescue its argument that no problem exists by asserting “[t]he depths at which white abalone occur and the typical foraging depths of sea otters overlap only partially.” DSEIS at 85. The Service states that the majority of the current remnant population of adult white abalone occurs at depths of 30-60 meters. *Id.*

The Service then states that a study of sea otter dive depths showed that 95% of the critical foraging habitat for female sea otters was 2-20 meters and for males 2-40 meters. *Id.* at 44, 85. The first problem with the Service’s argument is quickly revealed by the Service’s next admission that “historically, white abalone may have been restricted to waters deeper than 25 m (82 ft) as a result of sea otter predation....” *Id.*³ The significance of the Service’s admission is revealed by the fact that the extremely depleted remnant white abalone population is projected to become extinct without human intervention and the current accepted plan is to reestablish white abalone by introducing laboratory raised animals to the wild at depths of 18-26 meters. This depth is considered the white abalone’s historic optimal habitat and is well within sea otter foraging range. Indeed, in its 2011 section 7 ESA consultation regarding the captive propagation of white abalone, the National Marine Fisheries Service (“NMFS”) found that sea otters could pose a significant source of white abalone mortality. More importantly, NMFS determined that “sea otter predation may limit white abalone populations to small individuals that are restricted to cryptic habitats and, thus, are expected to represent a natural threat to the recovery of the

³ The Service goes on to note that a factor restricting white abalone to waters deeper than 25 meters is competition from pink abalone. However, pink abalone is depleted throughout its range and current densities pose little competition for white abalone.

species in the wild.” NOAA 2011. In its January 3, 2006 letter to the Service, the Marine Mammal Commission confirmed this view stating that the Service’s “assumption that white abalone’s primary habitat is in water too deep for the sea otters to forage is ... questionable” and that the Service’s Preferred Alternative “would further exacerbate the decline of white abalone....” Letter to Diane K. Noda, Field Supervisor, USFWS, Ventura, CA, from Marine Mammal Commission, David Cottingham, Executive Director, January 3, 2006. In other words, given the depth overlap between sea otters and white abalone and the feeding preference of sea otters, if sea otters are present in areas containing white abalone it is likely to cause a population collapse of white abalone.

The reply from the Service is that sea otter predation will not be a problem because white abalone will have recovered to sufficient numbers by the time sea otters fully occupy white abalone habitat. Not only does this admit there is a problem with sea otter predation, but the Service offers no proof for its assertion that the white abalone population will reach numbers sufficient to withstand the ravages of sea otter predation before the sea otters arrive in abalone habitat. The Marine Mammal Commission’s January 3, 2006 letter to the Service calls the Service’s position an “assumption” that is both “questionable” and “unlikely.” Furthermore, in making its “questionable” and “unlikely” assumption, the Service arbitrarily limited its almost non-existent analysis of sea otter predation impacts to a ten-year time frame. This ignores the fact that the recovery of white abalone will take decades. Sea otter predation over those decades is likely to prevent the recovery of the endangered white abalone, if not jeopardize its very survival.

The second problem with the Service’s attempt to argue that sea otter predation is not a serious problem for white abalone is that white abalone habitat is found at 5-60 meters. Even if

the Service is correct that the majority of sea otter predation occurs at depths up to 40 meters, then two thirds of white abalone habitat is likely to cease to exist if the Preferred Alternative is adopted.

The third problem with the Service's effort to dismiss the significant effects of the Preferred Alternative on the survival and recovery of white abalone is that optimal white abalone habitat occurs at depths less than 30 meters. NOAA 2011. The Marine Mammal Commission's January 3, 2006 letter to the Service notes that abalone were first found in their optimal habitat which is "shallow, protected areas." The Commission calls the deeper waters to which the Preferred Alternative would confine white abalone "suboptimal habitat." These conclusions about what constitutes optimal white abalone habitat are supported by California Department of Fish and Game Cruise Reports from 1973 and 1974. In the 1973 survey, 80% of white abalone was located in waters shallower than 22 meters. In 1974, two surveys showed 68% and 57% of white abalone was found at depths of less than 22 meters. Thus, the net effect of the Preferred Alternative is to confine white abalone to sub-optimal habitat.

In considering the significance of these data about optimal abalone habitat, recall, as noted above, the Service has already admitted that critical foraging habitat for sea otters is up to 20 meters for females and 40 meters for males. In other words, up to 80% of optimal white abalone habitat will, according to the Service, be unavailable to the abalone if the Preferred Alternative is approved.

The fourth problem with the Service's conclusion that the Preferred Alternative presents no problem for white abalone because sea otters do not forage at depths below 40 meters is that the Service is wrong. Available data contradict the Service's view that sea otter foraging stops at 40 meters. California adopted regulations to limit the accidental drowning of foraging sea otters

by prohibiting the setting of gill and trammel nets on the ocean bottom in waters less than 109 meters throughout the sea otter's current range. The State took this action because of clear and convincing evidence that sea otters are foraging at those depths. The evidence included systematic aerial surveys documenting large numbers of sea otters observed beyond the 90 meter depth contour. Sea otters have also been caught in king crab trap sets in Alaska at depths of 80 meters. Time depth recorders implanted in sea otters document sea otter foraging in California and Alaska waters at depths greater than 88 meters. Multiple observations by NMFS officials of sea otters caught in Pacific cod traps set at depths ranging from 44-73 meters in Alaska further demonstrate that sea otters forage within abalone range depths.

Furthermore, individual sea otter foraging preferences are often species specific and not influenced exclusively by prey depth distribution. The Service admits the "habitat used by white abalone (rock-sand interfaces of boulders and low-relief rocky reefs) provides no crevice refuge from predation...." DSEIS at 85. Indeed, the facts are that adult white abalone are found on exposed rocks, not in tiny crevices. NOAA 2011. As a consequence, foraging at any depth for white abalone could be a very effective foraging strategy for those southern sea otters which have a preference for abalone. It is unreasonable to assume low level impacts from sea otter predation when abalone are recognized as a preferred food item of sea otters and, in the case of the white abalone, are very vulnerable to predation.

Contrary to the Service's view, there is a significant overlap between white abalone habitat and sea otter foraging that threatens the survival and recovery of the endangered white abalone, a species that is estimated to be at one percent of its historic level. Rogers-Bennett et al. 2002.

2. Habitat Overlap – Geographic

The Service next tries to stifle any discussion about the adverse impact of its preferred alternative on white abalone by asserting that the area sea otters are expected to occupy over the next ten years “is at the northernmost end of the white abalone’s historic range...” DSEIS at 85. This ignores the fact that the historic range of the white abalone extends from Point Conception in California, the northern boundary of the sea otter management zone, into the Baja Peninsula in Mexico. The facts are that over time, sea otters will expand throughout the abalone range. One cannot manage ecosystems by only looking ten years ahead as the Service has done, particularly when the actions unleashed today are not reversible.

The facts are that large numbers of sea otters already occupy the coastal area east of Point Conception that was historic white abalone habitat. This area cannot be used for re-colonization because of sea otter predation. Similarly, the area around San Nicolas Island will remain occupied by sea otters under the Preferred Alternative. This prevents more potential white abalone habitat from being re-established. As to other areas, there is absolutely no evidence in the DSEIS or elsewhere to support the Service’s claim that white abalone can become established in other areas before the sea otters arrive in the area, or that an established but endangered population can survive in the face of sea otter predation.

3. Habitat Overlap – Type of Habitat

As a last resort, the Service asserts certain offshore banks “may provide refuge for white abalone from sea otter predation.” *Id.* Apparently admitting refuge is necessary because of the effects of sea otter predation, the Service notes that Cortes Bank and Tanner Bank are likely to be available habitat for white abalone. But these banks are not optimal white abalone habitat.

Relying on these banks to save the white abalone is akin to saying that all is well with sea otters if the parent population is wiped out and the sea otters are confined to San Nicolas Island only.

4. The Effects of Sea Otter Predation on Abalone

Within established sea otter ranges, nearly all abalone populations are confined to crevices that are inaccessible to sea otters and the average abalone size is half that of the population outside the sea otter range. Tegner, Mia J., J. D. DeMartini, K. A. Karpov, 1992 at 370-383. As noted above, the Service admits this fact. DSEIS at 85.

The reason sea otters and abalone are incompatible in the circumstances that exist today is seen by examining sea otter consumption rates of abalone. If a group of only 50 male sea otters moved into an abalone area, and each sea otter weighed an average of 60 pounds, typical for male sea otters, and each ate 25%-30% of its body weight daily, again typical for sea otters, and if 60% of the diet was abalone, then these sea otters could easily consume approximately 500 pounds of abalone each day. In only one year, it would be possible for the sea otters to consume 90 tons of abalone. For comparison purposes, in 1996, the last year the commercial abalone fishery was open, commercial abalone landings were 114.75 tons.

Further illustrating the conflict between sea otters and abalone are the events at San Nicolas Island after sea otters were translocated. Although relatively few sea otters that were translocated beginning in 1987 actually remained at the Island, red abalone landings in this once vital commercial fishery declined as a percentage of State landings from 41% in 1987 to 30% in 1988, 12% in 1989, and 3% in 1990. CDF&G 1991. Indeed, studies have shown that in as short as six years sea otter predation reduced red abalone populations by 90% within the established portion of the parent range.

5. The Abalone Recovery Plan

It is also important to consider the relationship between the Preferred Alternative and the White Abalone Recovery Plan. That plan assumes the reintroduction of laboratory raised white abalone into the abalone's habitat. White abalone reproduce better and grow faster at the shallower end of their optimal habitat where there is more drift algae and warmer water. Thus, this will be the preferred area for reintroduction. However, it is undisputed that these shallow waters are well within the sea otter's foraging range. In other words, the Preferred Alternative presents the very real problem of thwarting the Recovery Plan by allowing sea otters into areas where abalone re-colonization might otherwise occur.

To achieve delisting, white abalone must show increases in species density as well as geographic abundance, a healthy size frequency and reoccupation of at least 75% of its historic range. NMFS 2008. This will be a daunting task even without sea otter predation given that the current white abalone population does not appear to be self-sustaining. Hobday et al. 2001. As the Abalone Recovery Plan acknowledges, sea otters are known to quickly reduce emergent abalone abundance to about 0.007 per square meter (Wendell 1994), which is about an order of magnitude less than the required delisting number.

Further, foraging sea otters tend to eat the largest, most exposed animals first. Only the smaller animals remain in protected crevices. This predation pattern lowers reproductive success because smaller animals tend to be younger with lower egg production. The larger the abalone, the less cryptic the individual becomes and the more likely it will be predated upon by sea otters. Hobday et al. 2001.

Where sea otters overlap with white abalone, the abalone population will not exhibit growth but, in the best case, can only stabilize and be relegated to cracks and crevices. Cooper et

al. 1977. Without some type of spatial planning, it is only a matter of time before sea otters fully occupy white abalone habitat. Once that happens, white abalone will be consigned to endangered status if not extinction.

Given all of these facts, it is not surprising that the Abalone Recovery and Management Plan states at §2.1.9.3: “The survival of several depleted abalone populations in southern California could be jeopardized by expansion of the sea otter’s range and the accompanying increase in sea otter predation on abalone....” The Service’s attempt to argue there are not sufficient conflicts between the preferred alternative and white abalone conservation and recovery is belied by the facts.

B. Sea Otter Predation Threatens Black Abalone

Black abalone was listed as endangered under the ESA in 2009. As is the case with white abalone, the Service’s preferred alternative threatens both the survival and the recovery of black abalone. The effects of sea otter predation discussed above regarding white abalone apply with equal force here and need not be repeated.

1. Habitat Overlap

The existence of habitat overlap between sea otters and black abalone cannot be questioned. Even the Service admits “[b]lack abalone inhabit water depths well within the range of sea otter predation....” DSEIS at 88. The Service also admits that a “considerable portion of the black abalone’s range overlaps the current range of the southern sea otter.” *Id.* Nevertheless, the Service claims black abalone can inhabit deep fissures beneath rocks and such cryptic black abalone can “persist” at low densities. *Id.*

The fundamental problem with the Service’s position is that it confines the endangered black abalone to persisting, to mere survival, at best. Although the Service admits black abalone

“have nearly been extirpated in southern California waters,” DSEIS at 37, the Service apparently sees no problem with introducing a voracious apex predator into an already precarious circumstance for black abalone. In response to the Service’s assertion that black abalone will be able to recover to sufficient numbers before sea otter predation is a problem, not only does the Service offer no proof for its claim but the Marine Mammal Commission’s January 3, 2006 letter to the Service calls the Service’s assumption “questionable” and “unlikely.”

As is the case with white abalone, the Preferred Alternative will have a significant and adverse impact on the survival and recovery of the endangered black abalone, a species that is estimated to be at only one percent of its historic population level. Rogers-Bennett et al. 2002. Indeed, what the Service ignores is that in the mid-1980s, a pathogen began infecting black abalone populations along the southern California and Mexican coasts, causing a 95%-98% mortality. The evidence indicates that the mass mortality associated with this disease is continuing northward. Van Blaricom et al. 2009. Adding sea otter predation on top of this devastating disease could cause a total population collapse of black abalone in southern California.

C. Other Abalone Species

The Service’s proposed action is a serious threat not only to endangered abalone but also to every other depleted species of abalone in southern California, including the pink and green abalone. The DSEIS notes green abalone have been nearly extirpated in southern California waters while red and pink abalone have been reduced to remnant populations. DSEIS at 37. The additional pressure of sea otter predation may have the effect of moving these populations into the endangered category. Currently, pink and green abalone are estimated to be at only one percent of their historic level. Rogers-Bennett et al. 2002. Adding sea otters as a top predator to

already depleted resources will jeopardize their existence. As noted in one scientific report: "Persistent occupation and continued immigration into southern California could have serious ramifications for the recovery of the abalone resource and for other invertebrates as well." California Cooperative Fisheries Investigators 1999.

D. The Legal Framework

Section 7(a)(2) of the ESA requires that every federal agency "shall... insure that any action authorized, funded, or carried out by such agency... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined... to be critical." 16 U.S.C. §1536(a)(2). The Service simply cannot ensure that the preferred alternative will not jeopardize the continued existence of endangered abalone.

Section 7(a)(1) of the ESA requires that the Secretary of the Interior review programs administered by the Interior Department and utilize such programs in furtherance of the purposes of the ESA. 16 U.S.C. §1536(a)(1). The failure to take action to protect the endangered white abalone and the endangered black abalone violates this mandatory duty.

Further, allowing unlimited sea otter range expansion is an action that will result in a taking of endangered white and black abalone in violation of the prohibition set forth in §9(a)(1)(B) of the ESA, 16 U.S.C. §1538(a)(1)(B).

In sum, the Service is proposing a preferred alternative that likely violates the ESA at several levels. First, the agency action will allow unlimited sea otter range expansion which will result in a prohibited taking of endangered abalones. Second, the Service has failed to implement its §7(a)(1) responsibilities because it has failed to fully and adequately consider the impact of its actions on the survival and recovery of endangered abalone and to affirmatively

take action to protect these abalone. Finally, the Service is proposing an action that will jeopardize the continued existence of endangered abalone in violation of §7(a)(2).

IV. IMPACT OF THE PREFERRED ALTERNATIVE ON SHELLFISH

Endangered abalone are not the only species in the ecosystem that will be threatened by the preferred alternative. Several other species of shellfish will also see their populations plummet, perhaps to endangered status, if the preferred alternative is adopted. The Service states that sea otters "consume an amount of food equivalent to 23 to 33 percent of their body weight per day...." DEIS at 44. Having admitted this fact, the Service never considers its implications for the future of California's shellfish. Those implications are made clear by examining what will happen to commercial fishermen if the preferred alternative is adopted.

As scientists have noted, "Unless the sea otter is eventually contained, the State's Pismo clam, sea urchin, abalone, certain crab, and possibly lobster fisheries will be precluded. Sea otters do not extirpate these shellfish stocks, they merely reduce the exposed biomass to densities well below those necessary for profitable commercial exploitation or satisfactory recreational use. In all the cases, where sea otters have moved into either pristine areas ... there has been a reduction of over 90% in numbers of shellfish...." Burge 1973, Miller et al. 1975, California Department of Fish and Game 1976. When sea otters enter an area, over time the only remaining macro-invertebrates of edible size are observed deep in crevices where sea otters cannot reach them. Ebert 1968; Lowry and Pearse 1973, Cooper et al. 1978. "Whenever one of these large forage items leaves its protective habitat where sea otters are established, it apparently quickly becomes otter food." Miller 1980 at 11.

Other scientists also recognize that when sea otters reoccupy an area the result of sea otter predation on shellfish is the end of commercially viable fisheries. "The documented loss of

shellfish fisheries associated with sea otter reoccupation strongly suggests the pattern can be used to predict future losses whenever sea otter range expansion occurs." Wendell 1994 at 45-64. Yet, another scientist concluded: "within their established range, otter foraging clearly precludes commercial fisheries for abalone and sea urchins." Tegner et al. 1992 at 370-383. Still other scientist stated: "There is little doubt that the movement of sea otters into [abalone fishery] areas was the cause of the decline and eventual elimination of the commercial abalone fishery. Gotshall et al. 1984. Yet another scientific study concluded: "Our observations of the decline of the Pismo Beach Pismo clam fishery ... provide further evidence that sea otters are directly responsible for the loss of these sport fisheries." Wendell et al. 1986 at 210.

A. P.L. 99-625

Congress, in enacting P.L. 99-625, and the Service, in establishing the sea otter management zone, recognized the need to protect California's shellfish fisheries from the destructive effects of sea otter predation. The importance of protecting sea urchin fisheries is clearly acknowledged in P.L. 99-625 which states:

The purpose of the management zone is to ... prevent, to the maximum extent feasible, conflict with other fishery resources within the management zone by the experimental population.

Section 1(b)(4). Likewise, the Notice of Record of Decision implementing P.L. 99-625 states:

Because the reintroduction of sea otters to waters surrounding San Nicolas [I]sland would have adverse impacts on fisheries in particular, the translocation plan ... would establish a management, or otter-free, zone from which any sea otter would be captured and removed using non-lethal means.... *Maintenance of this management zone free of otters is the principal mitigation feature of the proposal for fisheries and other environmental and socioeconomic impacts.* Implementation of this management zone would confine the impact of translocated sea otters on fisheries to the immediate vicinity around San Nicolas Island. In addition, it would prevent the existing population from expanding its range into major shellfish and gillnet fisheries of southern California south of Point Conception ... it would preclude significant conflicts between sea otters and fisheries and other marine resource uses throughout southern California coastal waters south of Point

Conception.... The management zone is economically important to the fishery interests in the region.

52 Fed. Reg. 29784, 29787 (Aug. 11, 1987)(emphasis added).

B. The Impact of the Preferred Alternative on California's Shellfish Resources and Shellfish Fisheries

The Service has apparently decided to ignore the intent of P.L. 99-625 and the Service's own findings quoted immediately above. The reality is that the impact of the preferred alternative on California's shellfish fisheries will be devastating. As the Marine Mammal Commission ("MMC") stated: "It is likely that the southward movement of sea otters will seriously affect all shellfish fisheries in California. Currently the sea urchin, sea cucumber, and lobster fisheries are sustainable and represent important economic assets." The MMC continued, stating: "the abandonment of the sea otter range management could, over the long term, lead to the elimination of virtually all of the shellfish fisheries along the West Coast; these fisheries have long been major economic and cultural assets over the entire region." Letter to Ms Diana K. Noda, Field Supervisor, USFWS, Ventura, from Marine Mammal Commission, David Cottingham, Executive Director, January 3, 2006.

The view expressed by the MMC is rooted in scientific fact. Sea otters tend to first target the most abundant and easily retrievable prey. For that reason, the sea urchin is normally the first invertebrate prey species to be depleted once sea otters enter an area where they exist in high densities, followed by abalone and large crabs, if available. Ostfeld 1982.

A twenty-year study of sea otter diets in a ten mile section of California coast near Point Buchon, just south of Morro Bay, demonstrates the significant effect sea otters have on sea urchin. The study was initiated in 1973, shortly after sea otters initially migrated into the area. During the next five years, 1973-1977, sea urchin averaged 20% of sea otters diets, with a high

of 36% in 1975. For the remainder of the study period to 1993, sea urchin represented just 1.4% because sea otter predation had exhausted the sea urchin population. Benech 1994. This same study examined the density of sea urchin populations finding that red sea urchin densities approximated 3 per square meter before sea otters began foraging. After only four years of sea otter foraging, the sea urchin densities had dropped below detection levels (less than one per 300 square meters).

Other studies show a much higher predation rate of sea urchins by sea otters. Published observations of sea otter consumption in areas of high sea urchin density show that sea urchins are more than 60% of the sea otter diet. Bodkin, Esslinger, and Monson 2004; Breen, Carson, Foster, and Stewart 1982; Laidre and Jameson 2006; and Miller 1974.

To put these consumption preferences into a very clear perspective, an average size sea otter weighing 50 pounds will consume 12.5 pounds of food daily (25% of its weight using the very low end of consumption set forth in the DSEIS). When sea urchins are available, the favored sea otter prey is the sea urchin roe. Roe often makes up 7% of the sea urchins weight. Thus, it would take 178 pounds of whole sea urchin each day to provide 12.5 pounds of food for a single sea otter. Annualized, that equals 65,000 pounds of sea urchin in just one year. At this rate, only 169 sea otters, feeding exclusively on sea urchin, would consume the entire annual sea urchin harvest by sea urchin divers. ($169 \times 65,000 = 11$ million lbs).

While sea urchin divers are limited by regulations to not taking sea urchin of a limited size, sea otters are not and they typically eliminate any meaningful sea urchin resource within their feeding area. Once an area becomes part of the sea otter's established range, the shellfish population is decimated and the commercial fishery in that area collapses. Benech 1977.

There is ample empirical data documenting the collapse of shellfisheries when sea otters enter an area. These include the collapse of the abalone fishery around Morro Bay, the collapse of the sea urchin fishery around Port San Luis, and the reduction in harvest of red sea urchins by 90% in the area from Point Conception to Santa Barbara within two years of their migration when sea otters migrated into the management zone in 1998. Long term surveys near Port San Luis revealed that sea urchin densities dropped to 1% of pre-otter densities after only 27 months of sea otter occupation. Benech 1978.

During the winter of 1997/98, approximately 100 sea otters migrated southeast of Point Conception, the southern border of the management zone and just north of Santa Barbara. Within one year, predation on sea urchins was so severe that sea urchin harvesting was no longer viable, at which time the sea otters returned to the northern, familiar portion of their range. The following winter, 1998/99, another raft (or group) of sea otters returned to an area south-east of Point Conception, slightly farther than the previous winter. Again, predation was so severe that sea urchin harvesting in this area is no longer possible. According to records of the California Department of Fish and Game, this area just southeast of Point Conception produced nearly one million pounds of sea urchin annually prior to 1997, representing a loss of nearly \$700,000 in at-the-dock value to sea urchin divers in the area.

Without question, the impact of the preferred alternative on California's shellfish resources and the fishermen and processor workers who depend on those resources will be devastating. In a vain attempt to claim the opposite, the Service appears to suggest that sea otter range expansion will be sufficiently slow and away from important fishery areas that fishermen will have time to adapt. Not only does this ignore the destructive impact of sea otter predation on the resource but it ignores the fishermen and processor workers as well as coastal

nutrient value relative to the energy cost to capture and relative to alternatives. Ostfeld 1982; Breen, Carson, Foster, and Stewart 1982; Laidre, Kristin, and Jameson 2006; Miller (1974).

Sea otters will then target the same age and size class of other sea urchin living at the same depths (Bodkin et al 2004) as the commercial sea urchin fishery targets. This will result in the collapse or loss of a viable fishery. Benech 1977, Johnson 1982.

What the Service ignores is that an average of 68% of all southern California sea urchin landings is from the Channel Islands. The distance from the mainland just southeast of Point Conception to San Miguel Island, the northerly-most of the Channel Islands, is just 28 miles, well within a one-day swim for sea otters.

None of this analysis is found in the DSEIS. Instead, the DSEIS simply dismisses as unimportant the clearly foreseeable impacts of the preferred alternative on California's shellfish resource and its dependent shellfish fisheries. Significantly, the Service admits that "when sea otters permanently reside in a given area, the commercial fisheries for sea urchin, lobster, crab, and sea cucumber will no longer be viable in that area." DSEIS at 93. The Service also admits there is a "direct relationship between percent occupation of habitat and percent loss of shellfish fisheries...." *Id.* at 76. In other words, "when 50 percent of the available habitat [is] occupied by sea otters, shellfish harvests would be reduced by 50 percent." *Id.* at 75. The facts are that fisheries cease to exist when sea otters are present. As the Service stated in its summation: "once an area is permanently occupied by sea otters, the commercial sea urchin fishery would no longer be viable in that area." *Id.* at 97-98. Rather than address the true ecosystem impacts of the preferred alternative on the shellfish resources off California, the Service simply decides that these parts of the ecosystem, and the fishermen who depend on them, are unimportant and are to be sacrificed.

C. The Economic Impact of the Preferred Alternative

Leaving aside the fact that the Preferred Alternative completely abandons all concepts of ecosystem management, it will also have serious economic consequences. The sea urchin industry is California's fifth largest fishery with over \$13 million in domestic sales, \$8.7 million in exports, and employing hundreds of people. The Service identifies the sea urchin fishery, along with the lobster, crab, sea cucumber, halibut and white sea bass fisheries, as the fisheries impacted by the preferred alternative. The economic value of these fisheries approximates \$40 million using standard multipliers of ex-vessel value. Wendell 1994.

Today, California has 300 permitted sea urchin divers and an equivalent number of licensed deckhands. Thirty percent of all divers make 100% of their household income from the sea urchin fishery and the average diver derives 63% of all household income from the fishery. Hansen and Dewees 2006. These fishermen will suffer irretrievable harm from the preferred alternative.

The Preferred Alternative will also have irreversible impacts on the fish processing industry. If the sea urchin fishery collapsed in southern California, the two sea urchin processors in northern California might survive, but it is likely that only two of the nine southern California processors would survive, and they would survive only because they deal in other seafood products. Even so, these two processors would experience a significant reduction in business.

Each sea urchin processor employs 30-60 workers, depending on the season. This employment represents approximately 495 workers statewide year around. Overwhelmingly, processor employees earn the legal minimum wage and would face difficulties if they needed to find alternative employment. The National Ocean Economics Program, tracking wages paid in ocean related industries, reports that in 2004 the average seafood processing employee in

California was paid \$33,853. National Ocean Economics Program, www.oceaneconomics.org. A sample survey of sea urchin processors by the California Sea Urchin Commission suggests a lower average wage is more appropriate, something in the range of \$22,000 annually. This would result in an estimated payroll for all California sea urchin processors of approximately \$10,890,000 annually – a sizable contribution to the State's coastal communities. If the southern portion of the sea urchin fishery collapsed due to the adoption of the preferred alternative, the seven processors who deal in sea urchin exclusively could be forced to terminate nearly 315 employees. This could mean a loss of \$6,930,000 to local economies from lost wages alone. Again, the Service improperly dismisses these impacts as inconsequential.

It is important at this point to recall that the California Coastal Commission has stated unequivocally that any decision by the Service to declare the translocation a failure, to terminate the management zone and to allow sea otters to remain at San Nicolas Island will require a determination by the Coastal Commission regarding the consistency of any such action with California's coastal zone management plan as to the impact on commercial fisheries. Letter to Steve Alcorn, U.S. Department of the Interior, from Susan Hansch, California Coastal Commission, dated April 30, 1999. The Service has ignored this requirement.

V. ALTERNATIVES

The Service has unreasonably limited the alternatives to be analyzed. Equally important, the Service has failed to properly and completely analyze the effects of the Preferred Alternative. Other alternatives merit examination.

A. Alternative 1 – Resume Implementation of 1987 Translocation Plan

If the Service acknowledges the modifications made to the original plan (translocation of fewer sea otters than planned) and adapts its continued implementation of this alternative relative

to an adjusted temporal scale and current resource conditions, then this alternative will not only protect the sea otter, but will also sustain valuable marine fisheries and enhance the restoration of depleted and endangered species in southern California. This alternative can work well if the Service takes an ecological landscape view and adapts its management efforts based on experiences learned in the field, continued resource data acquisition, and collaboration with both the state and the private sector.

B. Alternative 2A – Implement a Modified Translocation Program with a Smaller Management Zone

This alternative as it stands (we call this 2A) is not acceptable. It includes offshore Island locations that will jeopardize existing fisheries and the Abalone Recovery Management Plan while simultaneously limiting coastal expansion of sea otter to their current range. This is a lose/lose situation.

It is possible however, to take the concept of a modified translocation program and smaller Management Zone and make it more realistic and effective by taking into account what has been learned from the current translocation. The alternative can be modified to be less damaging to the existing fisheries and endangered and depleted abalone in Southern California by taking a broader view than mere range expansion of sea otter as the sole strategy for sea otter population recovery and protection. Therefore, as a second choice, the Commission recommends its own Alternative 2B.

C. Alternative 2B – Implement a Modified Translocation Program with a Smaller Coastal Management Zone which Focuses on Ecosystem Function and Adaptive Management

This Alternative 2B would modify the current Management Zone by excluding from that Zone the area from Point Conception to Oxnard along the coast to a distance of three miles offshore. This excludes the parent population that has already expanded south of Point

Conception from the Management Zone and allows the parent population to further expand its range. This modified Management Zone also reflects the dispersal patterns predicted in Tinker et al. 2008. Tinker's model indicates a predictive range expansion wave speed of 5.2 km/year southward along the coast such that within 25 years the parent population south of Point Conception will grow to approximately 395 individuals and will expand in range as far south as Oxnard. This range expansion model does not anticipate large numbers of parent population animals expanding into the modified Management Zone. If the model is correct, as assumed by the Service, then only occasional small numbers of animals will need to be removed from the revised Management Zone.

Under this alternative, the current sea otter population at San Nicolas Island would be deemed to be native born to the Island and would remain there. Because of the sea otter's territorial nature and the numbers currently at the Island, which are surrounded by abundant food resources, it is unlikely the San Nicolas Island sea otters will disperse into the revised Management Zone within a 25-year time frame.

Adoption of this alternative would maintain the sea otter's experimental population status within the modified Management Zone. Thus, the exemptions from prohibitions on the incidental take of sea otters in the modified Management Zone pursuant to otherwise lawful activities would be permitted.

This alternative is fully consistent with the ecosystem management approach long advocated by the Service in that it not only protects and conserves the sea otter but it also protects and conserves other species with significant roles in the ecosystem. These species include endangered and depleted abalone and other shellfish species subject to sea otter predation. The alternative accomplishes these purposes without totally destroying California's

shellfish fisheries. Furthermore, this alternative is fully consistent with the President's national ocean policy that calls for marine spatial planning as a mechanism of ecosystem management. Indeed, this alternative could be a model for such a planning program.

Implementing this model will also allow the Service to undertake a variety of research programs and to develop new and improved ecosystem management techniques. Among these are:

1. addressing water quality issues that are the principal cause of sea otter strandings and deaths and the "main reason" for population growth problems in the parent population, DSEIS at 49;
2. realistically determining the size of a sustainable sea otter population based on the current status of the sea otter's habitat and food resources; and
3. developing ways to improve prey recruitment and growth in areas occupied by sea otters.

Simultaneously, the Service would consider appropriate sea otter management and protection techniques that include:

1. recruiting and training "vessels of opportunity" that can be rapidly deployed in response to an oil spill;
2. developing improved sea otter capture and transfer techniques that can be applied within the modified Management Zone and elsewhere in the country to further this program, as well as other spatial planning initiatives; and
3. developing and implementing an appropriate culling program if carrying capacity is reached for stranded males, males found within the modified Management Zone, or non-territorial males in poor condition along the southern front of sea otters.

Although the Commission recognizes Alternative 1 is by far the best choice with respect to an ecosystem approach that protects and conserves endangered abalone and other important shellfish resources, the Commission understands that this ecosystem management approach is not favored by some. Therefore, in the spirit of compromise, the Commission recommends consideration of Alternative 2B discussed above.

D. Address the Water Quality Issues that are the Core Problem for Sea Otter Recovery

The Service's blinder-like focus on sea otter range expansion ignores the real problem confronting sea otters. Although, the Service first determined that southern sea otters would be considered for delisting when the population level reached a three-year running average of 2,650, that number was later revised, without explanation, to 3,090. Sea Otter Recovery Plan at 29. From 1983 to 2010, the spring population count increased from 1,277 animals to 2,719 animals, 271 less than the 3,090 objective. DSEIS at 48.

The sea otter mortality associated with sea otter strandings since 2007 has averaged 8%-10% of the population. *Id.* at 49. This translates to an average annual stranding mortality of 218-272. Nearly all stranded sea otters are found dead. *Id.* at 48. In other words, if this stranding mortality were addressed, sea otters would be at or over the delisting number. Recall that the 2010 population number is only 271 below the delisting number but that 773 sea otters have stranded and died over the last three years alone, including 304 in 2010. The Service admits this stranding mortality appears to be "the main reason" for the sluggish growth and periods of decline in sea otter numbers. *Id.* at 49.

The Service identifies the two principal causes of sea otter strandings and death as shark attacks and disease caused by a variety of pollutants that enter the ocean and degrade water quality. *Id.* Thus, controlling pollution-caused mortality could result in the recovery and delisting of the sea otter. Yet, the analysis of alternatives contained in the DSEIS is devoid of any consideration of ways to address pollution-caused mortality. The failure to identify and analyze such an alternative is a fundamental and fatal flaw in the adequacy of the DSEIS.

The facts are that freshwater runoff into sea otter habitat is fed by dozens of impaired waterways requiring cleanup. The Service has the authority under the ESA to compel actions to

protect the sea otter. Yet, the Service has completely ignored, and refused to analyze, any water quality alternative.

VI. CONCLUSION

The Service is proposing to declare the translocation of sea otters to San Nicolas Island a failure. In doing so, the Service ignores the facts. The facts are that the Service's decision to translocate only about half of the number of sea otters originally planned makes it arbitrary and capricious to apply failure criteria based on translocating 100% of the planned number. This is particularly true when applying the failure criteria based on the number of sea otters actually translocated shows a success, not a failure. Further, the Service admits the San Nicolas Island population is healthy, growing, and will soon meet the breeding population nucleus sought by the Service. As the Service admits, the problem is not the health and future well being of the San Nicolas Island population but the Service's unrealistic expectations.

The Service ignores the clear and convincing data that sea otter predation on the endangered white abalone and the endangered black abalone will likely jeopardize the continued existence, and prevent the recovery, of these ESA protected species. Equally important, the Service ignores the admitted facts that the Preferred Alternative threatens several species of shellfish, perhaps leading to these species needing protection under the ESA because of the Service's action.

Finally, the Service callously dismisses as unimportant the admitted fact that adoption of the Preferred Alternative means the beginning of the end of many of California's shellfish fisheries. For the men and women who depend on these fisheries for jobs as fishermen and processors, the Preferred Alternative means unemployment and economic despair.

The Service should withdraw its finding that the translocation has failed and the Service should maintain the current regulatory system.

LITERATURE CITED

- Benech, Suzanne V. (1977), Preliminary Investigations of the Giant Red Sea Urchin Resource of San Luis Obispo Co. California *Strongylocentrotus franciscanus* (Agassiz) MS Thesis, California Polytechnic State University San Luis Obispo, 43pp.
- Benech, Suzanne V. (1978), Observations of the Sea Otter *Enhydra lutris* Population between Coon and Rattlesnake Creeks January – December, 1978; Unpublished Report, Ecomar Inc. #VII-3-78 for Pacific Gas & Electric Company.
- Benech, Suzanne V. (1994), Observations of the Sea Otter *Enhydra lutris* Population Between Point Buchon and Rattlesnake Creek, San Luis Obispo, California, January through December, Nov. 1994, 66pp.
- Bodkin, James L., George G. Esslinger and Daniel H. Monson (2004), Foraging Depths of Sea Otters and Implications to Coastal Marine Communities, *Marine Mammal Science*, 20:305-321.
- Breen, Paul A., Trudy A. Carson, J. Bristil Foster, and E. Anne Stewart (1982), Changes in Subtidal Community Structure Associated with British Columbia Sea Otter Transplants, *Marine Ecology – Progress Series*, 7:13-20.
- Burge 1973, Cruise Report 73-M-1: abalone, Calif. Dept. Fish & Game, Marine Resources, Long Beach, 7p.
- California Cooperative Oceanic Fisheries Investigators (1999), *Fisheries Review*, Vol. 40.
- CDF&G (California Department of Fish and Game) (1976), a proposal for sea otter protection and research, and request for the return of management to the state of California, 270pp., available from the California Department of Fish and Game, Sacramento.
- CDF&G (California Department of Fish and Game) (1991), Supplemental Environmental Document on Abalone Sport Fishing, California.
- Cooper, J., M. Wieland and A. Hines (1977), subtidal abalone populations in an area inhabited by sea otters, *The Veliger*, 20:163-167.
- Ebert, E. E. (1968), A Food Habits Study of the Southern Sea Otter *Enhydra lutris nereis*, California Department of Fish and Game, 54:33-42.
- Estes, J. A., B. Hatfield, and M. T. Tinker (2006), Biological Analysis of Sea Otters Ecosystems in Central and Southern California: Synopsis and Update, unpublished white paper.
- Gallo J.P. and G. B. Rathbun (1997), Status of Sea Otters (*Enhydra lutris*) in Mexico, *Marine Mammal Science*, 13(2):332-340.
- Gotschall, Daniel, L. L. Laurent, S. L. Owen, J. Grant. P. Law (1984), A Quantitative Ecological Study of Selected Nearshore Marine Plants and Animals at the Diablo Canyon Power

Plant: A Pre-Operation Baseline, CDF&G Marine Resources Technical Report No. 48 at 553.

Hansen, D. and C. Dewees, Summary Report-2006 California Sea Urchin Permit Holders Survey, January 2007.

Hobday, A. J., M. J. Tegner, and P. L. Haaker (2001), Over-Exploitation of a Broadcast Spawning Marine Invertebrate: Decline of the White Abalone, *Reviews in Fish Biology and Fisheries*, 10:493-514.

Jameson (1989), Movements, Home Range and Territories of Male Sea Otters, *Central California, Marine Mammal Science*, 5(2):159-172.

Jameson, R. J. (1993), Survey of a Translocated Sea Otter Population *IUCN Otter Spec. Group Bull*, 8:24.

Johnson, Ancel M. (1982), Status of Alaska Sea Otter Populations and Developing Conflicts with Fisheries, *North American Wildlife and Natural Resources Conference Transactions*, 47:293-299.

Johnson, C. K., M. T. Tinker, J. A. Estes, P. A. Conrad, M. Staedler, M. A. Miller, D. A. Jessup and J. A. K. Mazet (2009), Prey Choice and Habitat Use Drive Sea Otter Pathogen Exposure in a Resource-Limited Coastal System, *PNAS*, Vol. 106, No. 7:2242-2247.

Lafferty, K. D., M. D. Behrens, G. E. Davis, P. L. Haaker, D. J. Kushner, D. V. Richards, I. K. Taniguchi, M. J. Tegner (2004), Habitat of Endangered White Abalone, *Haliotis sorenseni* *Biological Conservation*, 116:191-194.

Laidre, Kristin L. and Ronald J. Jameson (2006), Foraging Patterns and Prey Selection in an Increasing and Expanding Sea Otter Population, *Journal of Mammalogy*, 87(4):799-807.

Leatherwood, Stephen, Linda J. Harrington-coulombe, and Carl L. Hubbs (1978), Relict Survival of the Sea Otter in Central California and Evidence of Its Recent Redispersal South of Point Conception, *Bull, Southern California Academy of Sciences*, 77(3):109-115.

Lowry, L. F. and J. S. Pearse (1973), Abalones and sea urchins in an area inhabited by sea otters, *Marine Biology*, 23:213-219.

Miller, D. J. (1974), The Sea Otter, *Enhydra lutris*, Its Life History, Taxonomic Status, and Some Ecological Relationships, *Marine Research, Leaflet 7*, California Dept. Fish and Game, Sacramento.

Miller, Daniel J. (1980), The Sea Otter in California, *California Cooperative Oceanic Fishery Investigation, Report*, Vol. XXXL, 11pp.

NOAA National Marine Fisheries Service (2011), Endangered Species Act Section 7 Consultation, Biological and Conference Opinion: Proposal to Issue Permit No. 14344

- for Captive Propagation, Disease Investigations and Experimental Field Planting of White Abalone Off Southern California.
- Ostfeld, Richard S. (1982), Foraging Strategies and Prey Switching in the California Sea Otter; Expanding Sea Otter Population; Journal of Mammalogy 87(4):799-807.
- Ostfeld, Richard (1982), Foraging Strategies and Prey Switching in the California Sea Otter, Oecologia, 53:170-178.
- Ribic, Christine A. (1982), Autumn Movement and Home Range of Sea Otters in California, Journal of Wildlife Management 46(3):795-801.
- Rogers-Bennett, L., P.L. Haaker, T. O. Huff and P. K. Dayton (2002), Estimating Baseline Abundances of Abalone in California for Restoration, CalCOFI Report, Vol. 43.
- Sea Otter Recovery Team (2007) Recovery Strategy for the Sea Otter (*Enhydra lutris*) in Canada, Species at Risk Recovery Strategy Series, Fisheries and Oceans Canada, Vancouver, VII:56pp.
- Tegner, Mia J., J. D. DeMartini, K. A. Karpov (1992), The California Red Abalone Fishery: A Case Study in Complexity, at 370-383.
- Tutschulte, T. C., J. H. Connell (1988), Feeding behavior and algal food of three species of Abalones (*Haliotis*) in southern California, Marine Ecology- Progress Series, Vol. 49:57-64.
- U.S. Fish & Wildlife Service (2005), Draft Supplemental Environmental Impact Statement, Translocation of Southern Sea Otters, 241pp.
- U.S. Fish & Wildlife Service (2005), Draft Supplemental Environmental Impact Statement, Translocation of Southern Sea Otters, Appendix C: Draft Evaluation of the Southern Sea Otter Translocation Program 1987-2004, 29pp.
- U.S. Fish & Wildlife Service (2011), Revised Draft Supplemental Environmental Impact Statement, Translocation of Southern Sea Otters, Volume 1, 312pp.
- U.S. Fish & Wildlife Service (2011), Revised Draft Supplemental Environmental Impact Statement, Translocation of Southern Sea Otters, Volume 3, Appendices 151pp.
- Van Blaricom, G. M., J. Butler, A. De Vogelaere, R. Gustafson, C. Mobley, D. Richards, S. Rumsey, and B. Taylor (2009), Status Review Report for Black Abalone (*Haliotis cracherodii*), NOAA NMFS 20-114pp.
- Wendell, Fred (1994), Relationship Between Sea Otter Range Expansion and Red Abalone Abundance and Size Distribution in Central California, CDF&G, Vol. 80, No. 2:45-64.

- Wendell, Fred, Christine Pattison, and Michael Harris (1996), Sea Otter, *Enhydra lutris*, Containment Management: Field Studies and Feasibility Assessment, CDF&G Marine Resources Division Administrative Report, 96-5.
- Wendell, Fred, R. A. Hardy, J. A. Ames, R. T. Burge (1986), Temporal and Spatial Patterns in Sea Otters (*Enhydra lutris*), Range Expansion in the Loss of Pismo Clam Fisheries, CDF&G 72(4) 197-212 at 210.
- Woodhouse, Charles D. *et al.* (1977), A Summary of Knowledge of the Sea Otter *Enhydra lutris*, in California and an Appraisal of the Completeness of Biological Understanding of the Species, Santa Barbara Museum of Natural History, Santa Barbara, California, U.S. Dept. of Commerce National Technical Information Service, PB-270 374, 71pp.



November 21, 2011

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RE: FWS-R8-FHC-2011-0046

Dear Ms. Carswell:

The California Sea Urchin Commission ("Commission") submits these comments as a supplement to the comments submitted by the Commission on October 24, 2011 regarding the Revised Draft Supplemental Environmental Impact Statement ("DSEIS") on the translocation of southern sea otters. Both submissions should be considered as a unified whole.

Since its first submission, the Commission has further developed the alternative it proposed and the National Marine Fisheries Service ("NMFS") has designated critical habitat for the endangered black abalone. 76 Fed Reg. 66806 (Oct. 27, 2011). This submission will address those two issues.

Black Abalone

The DSEIS incorrectly discounts and dismisses the impact of the Preferred Alternative on the endangered black abalone. Indeed, the recent critical habitat designation for black abalone further confirms the conflict between sea otters and black abalone.

In the DSEIS, the Fish and Wildlife Service ("Service") asserts there is no such conflict because black abalone will continue to survive as a species notwithstanding increased sea otter predation resulting from implementing the Preferred Alternative. While the Commission disagrees with that assertion for the reasons set forth in its October 24, 2011 submission, the designation of critical habitat imposes additional legal obligations on the Service which are not considered in the DSEIS and which preclude implementation of the Service's Preferred Alternative.

The Endangered Species Act ("ESA") requires each federal agency to "insure" that any action undertaken by the agency "is not likely to jeopardize the continued existence" of an endangered or threatened species and that the action will not result in the "destruction or adverse

modification” of any “critical habitat” designated for the species. 16 U.S.C. §1536(a)(2). The Service has defined “destruction or modification” as:

[A] direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

50 C.F.R. §402.02. Thus, the applicable legal standard is that no federal action may “appreciably diminish” the value of critical habitat for both the survival and the recovery of the listed species.

Three United States Courts of Appeals have agreed that the ESA and its implementing regulations require agencies to look at the effects of their proposed actions on both the survival and the recovery of listed species. *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004); *New Mexico Cattle Growers Association v. United States Fish and Wildlife Service*, 248 F.3d 1277 (10th Cir. 2001); *Sierra Club v. United States Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001). Here, the Service has not properly considered the impact of its Preferred Alternative on either the survival or the recovery of the black abalone.

At the outset, recall that the Service admits “[b]lack abalone inhabit water depths well within the range of sea otter predation....” DSEIS at 88. Recall also that the Service admits “a considerable portion of the black abalone’s range overlaps the current range of the southern sea otter.” *Id.* Notwithstanding these two admissions, the Service dismisses the effects of its Preferred Alternative on black abalone stating that if the Preferred Alternative is implemented black abalone can “persist” at low densities. *Id.* In short, the Service sees no problem with its Preferred Alternative because black abalone can “persist” as a species in the face of sea otter predation. The U.S. Court of Appeals for the 9th Circuit, however, specifically condemned this type of thinking stating it “offends the ESA because the ESA was enacted not merely to forestall the extinction of the species ... but to allow a species to recover to the point where it may be delisted.” *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d at 1070.

The black abalone critical habitat designation confirms that sea otters and black abalone share habitat that overlaps in depth. 76 Fed. Reg. at 66806, 66807, 66819. The designation also confirms that the geographic area where black abalone are present “directly overlaps” with the range of the sea otter. *Id.* at 66808. Further, the critical habitat designation demonstrates that the range of the black abalone overlaps the area into which the Service proposes to allow sea otters to move. *Id.* at 66819. Finally, it is admitted that sea otters prey on abalone. 75 Fed. Reg. 59900, 59902 (Sept. 28, 2010).

The Commission's October 24, 2011 submission contains ample data establishing that sea otter predation can seriously impact, and has significantly impacted, abalone populations. Comments filed by NMFS on the DSEIS confirm that "a single sea otter venturing into a cove with a few hundred abalone could have a population and possibly species-level impact on abalone." NMFS goes on to state that "just a few otters in the right place ... could hinder the recovery of [abalone] throughout its range. In NMFS' view, hindering the recovery of critically endangered species does put the entire species at greater risk of extinction."

A review of the scientific literature confirms that the Service's Preferred Alternative of unlimited sea otter range expansion threatens the survival and the recovery of black abalone. Although black abalone range currently extends to Point Arena in northern California, the vast majority of abalone populations have historically occurred south of Monterey, particularly in the southern California Islands (Karpov et al. 2000). Approximately half of the designated critical habitat for black abalone lies south of Point Conception, in areas sea otters are expected to occupy under the Preferred Alternative.

Where adult black abalone occur in sufficient densities, they are targeted by sea otters as a preferred food (Benech 1976). For example, about 40% of all observations of abalone consumed over a 20-year period in the vicinity of the Diablo Canyon Power Plant were black abalone (Benech 1992). A single sea otter needs to consume about seven adult abalone each day to satisfy its caloric needs (Ostfield 1982) and sea otters tend to take the largest, thus the most fecund, abalone first.

Based on the Service's sea otter range expansion data, it is likely that large rafts of 20 or more male sea otters moving south of Point Conception will be the first otters to encounter remnant black abalone populations in southern California and within black abalone critical habitat. These black abalone populations have already been severely depleted, declining 95%-98% because of withering syndrome ("WS"). WS is more lethal in warmer southern waters than in the cooler waters to the north (Vilchis 2005, Altstatt 1996).

The combined effects of WS in warm water and of sea otter predation will act additively, if not synergistically, to prevent the recovery of black abalone, particularly within that half of its critical habitat designated south of Point Conception. Indeed, sea otter predation of black abalone is considered a "high" threat to black abalone recovery (Neuman et al. 2010). Equally, if not more, important, we may never even get to recovery issues because sea otters expanding into newly designated black abalone habitat will, because of predation, cause the collapse and local extinction of remnant black abalone populations in southern California where black abalone population densities are already severely depleted by WS. Reproductive, and the subsequent natural, recruitment of abalone will collapse if densities are reduced to $0.32/\text{m}^2$ (Neuman et al. 2010). In many areas, black abalone are perilously near that level, and sea otter predation will likely push black abalone over the brink.

It should also be noted that black abalone recovery programs are predicated on the development of numerous, geographically widespread high density adult populations of abalone. High density populations are needed to achieve the necessary levels of reproduction and recruitment. A single sea otter at the right time and place could wipe out an entire black abalone recovery site.

Furthermore, sea otters consume intertidal mussels (Harold 1986). Removal of mussel beds by sea otter predation will remove an important biogenic shelter for the recruitment and predator protection of young, newly settled abalone.

The facts are that the Service's Preferred Alternative will likely result in the collapse and extinction of local black abalone populations in southern California where the effects of WS are most severe and will prevent the recovery of black abalone throughout its range, all contrary to the ESA.

In considering this issue, the Service can take no comfort in the fact that sea otters and black abalone share the same habitat north of Point Conception and at San Nicolas Island ("SNI"). The fact that sea otters and black abalone share the same habitat north of Point Conception and that black abalone populations are not recovering serves only to prove the point that black abalone populations are unlikely to recover in areas where sea otters are present.

Regarding SNI, black abalone densities there remained relatively stable from 1981 until the mid-1990s when WS caused over a 90% population decline (VanBlaricom 1993; Butler et al. 2009). During the 1987-1996 period, the DSEIS indicates the sea otter population at SNI was low, averaging perhaps 20 animals. For that reason, it is not surprising that black abalone density data did not indicate depletion by sea otter predation. Sea otter distributions and densities were simply too low to create a detectable impact on black abalone when other easily accessible sea otter prey items such as red abalone, sea urchins, crabs, and lobster were abundant and easily accessible. The facts are that as the SNI sea otter population grew, the SNI population of black abalone collapsed from WS, thus eliminating the ability to detect sea otter foraging effects on black abalone densities (Butler et al. 2009). Nevertheless, and even with other easily available prey, sea otters were observed foraging on intertidal black abalone about five percent of the time (Van Blaricom 1993).

Only one of nine abalone sites at SNI has showed a small increase in black abalone densities since the onset of WS and this may be attributable to some resistance to WS (Butler et al. 2009). However, as the SNI sea otter population grows, sea otter predation on black abalone will increase and will prevent the recovery, if not cause the local extinction, of the SNI black abalone population. It is only a matter of time.

The Commission's Alternative

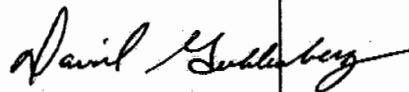
The alternative recommended by the Commission proposes a marine spatial plan that would create a protected area for black abalone and other shellfish resources around all of the Channel Islands except SNI. This is significant for black abalone survival and recovery as the Channel Islands black abalone critical habitat areas are rated as "high" value sites. In contrast, all coastal critical habitat designations are considered to have only a low or medium value. Maintaining an abalone and shellfish protected area around the Channel Islands, except SNI, will diminish the threat of sea otter predation on the natural and man-assisted black abalone populations in the southern half of the newly designated black abalone critical habitat.

Regarding the establishment of protected areas, as recommended by the Commission, it is incumbent on the Service to reassess the carrying capacity of existing and potential sea otter habitat in southern California. The increasing number of sea otter strandings that are occurring, even as sea otters have expanded their range since 1993, raises serious questions about the carrying capacity of the habitat. Unless and until the issue of water quality and other habitat limiting factors are addressed, it is quite likely that the net result of the Service's Preferred Alternative will be approximately the same number of sea otters simply spread over a larger geographic area. In that more than likely event, the net result of the Preferred Alternative will be no benefit to the sea otter, the end of California's shellfish fisheries, and the demise of the endangered black abalone.

The Commission also notes that leaving sea otters at SNI will help the Service to conduct comparative analyses of habitat conditions and capacity that could enable the Service to maintain SNI sea otters within the carrying capacity of that area. In that regard, the ability to maintain a marine protected area is well within the Service's capacity. For many years, the Monterey Bay Aquarium has operated a successful sea otter capture program featuring the temporary capture, possession, rehabilitation, transfer, and release of sea otters. This program has been operating under a Letter of Authorization and has served to successfully refine and improve sea otter capture and management strategies. Similarly, in May of this year, researchers with the Southeast Alaska Sea Otter Project, which included the Service, demonstrated the feasibility of a successful sea otter capture program.

For all of the reasons set forth in this submission, and in the Commission's previously submitted comments, the Commission recommends that the Service withdraw and correct the errors in the DSEIS and adopt as the Preferred Alternative the plan proposed by the Commission.

Sincerely,



David Goldenberg
Executive Director

LITERATURE CITED

- Altstatt, Jessica M., Richard F. Ambrose, John M. Engle, Peter L. Haaker, Kevin D. Lafferty, and Peter T. Raimondi, Recent declines of black abalone (*Haliotis cracherodii*) on the mainland coast of central California, Marine Ecology Progress Series Vol. 142:185-192, 1996.
- Benech, Suzanne V. (1976), Personal communication to Ed Colson, PG&E Dept. of Engineering Research, June 3, 1976 regarding observed behavior of southern front male sea otters.
- Benech, Suzanne V. (1992), Summary of observations of black and red abalone consumption among zones within the vicinity of the Diablo Canyon Power Plant, Unpublished tables to Pacific Gas & Electric Company, Five year average counts 1973-1992.
- Butler, J. A. DeVogelaere, R. Gustafson, C. Mobley, M. Neuman, D. Richards, S. Ramsey, B. Taylor, and G. VanBlaricom, Status Review Report for Black Abalone (*Haliotis cracherodii*), Leach (1814), NMFS, NOAA January 2009, pp 135.
- Harrold, Christopher and Dane Hardin (1986), Prey consumption on land by the California sea otter (*Enhydra lutris*), Marine Mammal Science, 2(4):309-313.
- Hines, Anson H. and John S. Pearse (1982), Abalones, shells and sea otters: Dynamics of prey populations in central California, Ecology, Vol. 63, No. 5, pp. 1547-1560.
- Karpov, K. A., P. L. Hasaker, I. K. Taniguchi, and L. Rogers-Bennett (2000), Serial depletion and the collapse of the California abalone fishery, Canadian special Publications, Fish and Aquatic Sciences 130, pp. 11-24.
- Neuman, Melissa, Brian Tissot, and Glenn VanBlaricom (2010), Overall Status and Threats Assessment of Black Abalone (*Haliotis cracherodii*) Leach (1814), Populations in California, Journal of Shellfish Research, Vol. 29, No. 3, 557-586, 2010.
- Ostfeld, Richard S. (1982), Foraging Strategies and Prey Switching in the California Sea Otter, Oecologia, Berl (1982), Vol. 53:170-178.
- Roger-Bennett, Laura (2007), Is Climate Change Contributing to Range Reductions and Localized Extinctions in Northern (*Haliotis kamtschatkana*) and Flat (*Haliotis walallensis*) Abalones? Bulletin of Marine Science, 81(2):283-296, 2007.
- VanBlaricom, Glenn R. (1993), Dynamics and Distribution of Black Abalone Populations at San Nicolas Island, California, Pages 323-334 in Third California Islands Symposium: recent advances in research on the California Islands, Santa Barbara Museum of Natural History.
- Vilchis, L. Ignacio, Mia J. Tegner, James D. Moore, Carolyn S. Friemand, Kristin L. Riser, Thea T. Robbins and Paul K. Dayton (2005), Ocean warming effects on growth, reproduction and survivorship of southern California abalone, Ecological Applications, 15(2), 2005, pp. 469-480.

TESTIMONY ON H.R. 4043
BY
BRUCE STEELE
BEFORE THE
SUBCOMMITTEE ON FISHERIES, WILDLIFE, OCEANS
AND INSULAR AFFAIRS

APRIL 19, 2012

I. INTRODUCTION

Mr. Chairman and Distinguished Members of this Subcommittee, I am pleased to appear before you regarding H.R. 4043. I have fished commercially for shellfish off California's coast for 40 years. I am appearing today on behalf of the California Sea Urchin Commission and all California shellfish fishermen. The Commission is a public agency created under the laws of California whose goal is to ensure a sustainable sea urchin resource for present and future generations.

My remarks will focus on new section 2283(g) added by section 2(c) of H.R. 4043. This provision of H.R. 4043 requires the Fish and Wildlife Service ("FWS") to develop a comprehensive ecosystem-based management plan for the threatened sea otter, the endangered black abalone, the endangered white abalone, and California's other shellfish resources. H.R. 4043 provides that until this ecosystem management plan is completed, FWS shall not change the existing sea otter management program.

Without this bill keeping the status quo in place until a comprehensive ecosystem management plan is prepared, FWS will implement its single species management plan to allow unrestricted geographic range expansion of the threatened sea otter. The problem is that the endangered black abalone and the endangered white abalone are directly in the path of otter range expansion. Both abalones are favorite sea otter prey. FWS' plan, unless stopped, could well mean that both abalones will become extinct because of sea otter predation.

Unless stopped, FWS' single species management plan also means that many of California's other shellfish resources, also favorite sea otter prey, could become threatened or endangered because of sea otter predation. FWS' plan means California's commercial shellfish fisheries, which employ thousands of people and which generate tens of million of dollars in domestic sales and exports, will be out of business.

Worse still, FWS' plan fails to address the real threat to sea otters – parasites like toxoplasma delivered by urban runoff along the central California coast. The sea otter population is within 400 animals of its delisting number and about 300 strand and die each year largely because of water quality related issues. Rather than address this problem, FWS has chosen to ignore it. Instead of addressing the real problem for sea otters, FWS has decided, unless you pass H.R. 4043, to allow unlimited sea otter range expansion without considering the effects of this plan on other species, including species protected under the Endangered Species Act ("ESA").

Mr. Chairman, I am not saying endangered abalones are more important than sea otters. I am not saying that other shellfish resources, and the fishermen who depend on them, are more important than sea otters. I am saying we need an ecosystem-based management plan that balances the needs of all species. We cannot achieve ecosystem management with FWS' single species management plan. The irony is that FWS has been campaigning for years against single species management and arguing vigorously for ecosystem management that considers and balances the needs of all species (including humans). Yet, for sea otters, FWS proposes a return to single species management, elevating one species over all others.

Congress should pass H.R. 4043 without amendment to prevent FWS from implementing its single species management plan and to force FWS to develop a comprehensive and effective ecosystem based management plan. Allow me to explain the problems with FWS' plan.

II. SEA OTTER PREDATION THREATENS WHITE ABALONE

White abalone was listed as endangered in 2001. This extremely depleted remnant white abalone population is projected to become extinct without human intervention. The current recovery plan is to reestablish white abalone by introducing laboratory raised animals to the wild at depths of 18-26 meters – the white abalone's historic optimal habitat.

A. Sea Otters and Abalone Share the Same Habitat

FWS single species sea otter management plan likely means the white abalone recovery plan will fail. FWS admits that 95% of the critical foraging depth for female sea otters is 2-20 meters and for males 2-40 meters. Revised Draft Supplemental Environmental Impact Statement, Translocation of Southern Sea Otters, 2011 ("DSEIS") at 44, 85. FWS also admits "historically, white abalone may have been restricted to waters deeper than 25 meters (82 feet) as a result of sea otter predation." *Id.*

Indeed, in its 2011 section 7 ESA consultation regarding the captive propagation of white abalone, the National Marine Fisheries Service ("NMFS") found that sea otters are a significant source of white abalone mortality. More importantly, NMFS determined that "sea otter predation may limit white abalone populations to small individuals ... and, thus, are expected to represent a natural threat to the recovery of the species...." NOAA 2011. In a January 3, 2006 letter to FWS, the Marine Mammal Commission ("MMC") concurred, stating FWS' "assumption that white abalone's primary habitat is in water too deep for the sea otters to forage is ... questionable" and that FWS' plan of unrestricted sea otter range expansion "would further exacerbate the decline of white abalone...." Letter to Diane K. Noda, Field Supervisor, USFWS, Ventura, CA, from David Cottingham, Executive Director, MMC, January 3, 2006. In other words, given the depth overlap between sea otters and white abalone, and the feeding preference of sea otters, if sea otters are present in areas containing white abalone, otter predation will likely cause a population collapse of white abalone.

FWS' reply is that sea otter predation will not be a problem because white abalone will have recovered to sufficient numbers by the time sea otters fully occupy white abalone habitat. Not only does this admit there is a problem with sea otter predation, but FWS offers no proof for its claim that the white abalone population will reach numbers sufficient to withstand the ravages of sea otter predation before sea otters arrive in abalone habitat. Recall the MMC's January 2006 letter that calls FWS' claim of no problem an "assumption" that is both "questionable" and "unlikely." Furthermore, in making this "questionable" and "unlikely" assumption, FWS arbitrarily limited its almost non-existent analysis of sea otter predation impacts to a ten-year time frame. This ignores the fact that the recovery of white abalone will take decades. Sea otter predation over those decades is likely to prevent the recovery of the endangered white abalone, if not jeopardize its survival.

The second problem with FWS' attempt to ignore the problem of sea otter predation is FWS' argument that all is well because white abalone habitat can be found at up to 60 meters. Even if FWS is correct that the majority of sea otter predation occurs at depths up to 40 meters, then two thirds of white abalone habitat will cease to exist if FWS proceeds with its plan.

The third problem with FWS' effort to dismiss the ecologically severe effects of unrestricted sea otter range expansion is the fact that optimal white abalone habitat occurs at depths less than 30 meters. NOAA 2011. The MMC's 2006 letter to FWS notes that the abalone's optimal habitat is "shallow, protected areas." The MMC characterizes the deeper waters to which FWS' plan would confine white

abalone as "suboptimal habitat." These conclusions are supported by the California Department of Fish and Game 1973-1974 Cruise Reports. In the 1973 survey, 80% of white abalone were located in waters less than 22 meters. In 1974, two surveys showed 68% and 57% of white abalone were found at depths of less than 22 meters. Thus, the net effect of FWS' plan is to confine white abalone to sub-optimal habitat.

In considering the significance of these data about optimal abalone habitat, recall that FWS admits critical otter foraging habitat is up to 20 meters for females and 40 meters for males. In other words, up to 80% of optimal white abalone habitat will, according to FWS, be unavailable to the abalone if FWS is allowed to proceed with its single species management plan.

The fourth problem with FWS' belief that its plan presents no problem for white abalone is FWS' claim that sea otters do not forage at depths below 40 meters. Available data says FWS is wrong. California acted to limit the accidental drowning of foraging sea otters in gill and trammel nets by prohibiting the use of such nets in waters less than 109 meters because of clear evidence that sea otters forage at those depths. The evidence included systematic aerial surveys documenting large numbers of sea otters observed beyond the 90 meter depth contour. Sea otters have also been caught in king crab trap sets in Alaska at depths of 80 meters. Time depth recorders implanted in sea otters document sea otter foraging in California and Alaska waters at depths greater than 88 meters. Multiple observations by NMFS officials of sea otters caught in Pacific cod traps set at depths ranging from 44-73 meters in Alaska further demonstrate that FWS is wrong.

Contrary to FWS' view, white abalone and sea otters share the same habitat geographically and spatially. Sea otter foraging threatens the survival and recovery of the endangered white abalone, a species estimated to be at one percent of its historic level. Rogers-Bennett et al. 2002.

B. The Effects of Sea Otter Predation on Abalone

Within established sea otter ranges, nearly all abalone populations are confined to crevices that are inaccessible to sea otters. Tegner, Mia J., J. D. DeMartini, K. A. Karpov, 1992 at 370-383. FWS admits this fact. DSEIS at 85. The reason sea otters and abalone are incompatible in the circumstances that exist today is seen by examining sea otter consumption rates of abalone. If a group of only 50 male sea otters moved into an abalone area, and each sea otter weighed an average of 60 pounds, typical for male sea otters, and each otter ate 25%-30% of its body weight daily, again typical for sea otters, and if 60% of the diet was abalone, then these 50 sea otters would consume approximately 500 pounds of abalone each day. In only one year, sea otters would consume 90 tons of abalone. For comparison purposes, in 1996, the last year the commercial abalone fishery was open, commercial abalone landings were 114.75 tons.

Further illustrating the conflict between sea otters and abalone are the events at San Nicolas Island ("SNI") after sea otters were translocated there. Although relatively few sea otters that were translocated to SNI beginning in 1987 actually remained at the Island, red abalone landings in this once vital commercial fishery declined as a percentage of State landings from 41% in 1987 to 30% in 1988, 12% in 1989, and 3% in 1990. CDF&G 1991. Indeed, studies have shown that in as short as six years, sea otter predation reduced red abalone populations by 90% within the established portion of the parent range.

C. The Abalone Recovery Plan

It is also important to consider the relationship between FWS' single species management plan and the White Abalone Recovery Plan. The Recovery Plan assumes the reintroduction of laboratory raised white abalone into its optimal habitat. White abalone reproduce better and grow faster at the shallower end of their optimal habitat where there is more drift algae and warmer water. Therefore, this will be the preferred area for reintroduction. However, it is undisputed that these shallow waters are well within the sea otter's foraging range. In other words, FWS' plan for unlimited sea otter range expansion raises the very real spectre of thwarting the White Abalone Recovery Plan by allowing sea otters into areas where abalone re-colonization might otherwise occur.

To achieve delisting, white abalone must show increases in species density as well as geographic abundance, a healthy size frequency, and reoccupation of at least 75% of its historic range. NMFS 2008. This will be a daunting task even without sea otter predation given that the current white abalone population does not appear to be self-sustaining. Hobday et al. 2001. As the Abalone Recovery Plan acknowledges, sea otters are known to quickly reduce emergent abalone abundance to about 0.007 per square meter (Wendell 1994), which is about an order of magnitude less than the required delisting number.

Further, foraging sea otters tend to eat the largest, most exposed animals first. Only the smaller animals remain in protected crevices. This predation pattern lowers reproductive success because smaller animals tend to be younger with lower egg production. Hobday et al. 2001.

Where sea otters overlap with white abalone, the abalone population will not exhibit growth but, in the best case, can only stabilize and be relegated to cracks and crevices. Cooper et al. 1977. Without some type of spatial planning, it is only a matter of time before sea otters fully occupy white abalone habitat. Once that happens, white abalone will be forever consigned to endangered status, if not extinction.

Given all of these facts, it is not surprising that the Abalone Recovery and Management Plan states at §2.1.9.3: "The survival of several depleted abalone populations in southern California could be jeopardized by expansion of the sea otter's range and the accompanying increase in sea otter predation on abalone...." FWS' claim that there are no conflicts between its single species management plan for otters and white abalone conservation and recovery is belied by the facts.

III. SEA OTTER PREDATION THREATENS BLACK ABALONE

Black abalone was listed as endangered in 2009. As with white abalone, FWS' single species management plan threatens both the survival and the recovery of black abalone. The effects of sea otter predation discussed above regarding white abalone apply with equal force here and need not be repeated.

A. Habitat Overlap

The existence of habitat overlap between sea otters and black abalone cannot be questioned. Even FWS admits "[b]lack abalone inhabit water depths well within the range of sea otter predation...." DSEIS at 88. FWS also admits that a "considerable portion of the black abalone's range overlaps the current range of the southern sea otter." *Id.* Nevertheless, FWS claims black abalone can inhabit deep fissures beneath rocks and black abalone can "persist" there. *Id.*

The fundamental problem with FWS' position is that it confines the endangered black abalone to persisting, to mere survival, at best. Although FWS admits black abalone "have nearly been extirpated in southern California waters," DSEIS at 37, FWS apparently sees no problem with introducing a voracious apex predator into an already precarious circumstance for black abalone. In response to FWS' assertion that black abalone will be able to recover to sufficient numbers before sea otter predation is a problem, not only does FWS offer no proof for its claim but the MMC's January 3, 2006 letter to FWS calls FWS' assumption "questionable" and "unlikely."

As is the case with white abalone, FWS' single species management plan for sea otters will have significant and adverse impacts on the survival and recovery of the endangered black abalone, a species estimated to be at only one percent of its historic population level. Rogers-Bennett et al. 2002. Indeed, what FWS ignores is that in the mid-1980s, a pathogen began infecting black abalone populations along the southern California and Mexican coasts, causing a 95%-98% mortality. The evidence indicates that the mass mortality associated with this disease is continuing northward. Van Blaricom et al. 2009. Adding sea otter predation on top of this devastating disease could cause a total population collapse of black abalone in southern California.

B. The Endangered Species Act

The ESA requires each federal agency to "insure" that its actions are "not likely to jeopardize the continued existence" of an endangered or threatened species and will not result in the "destruction or adverse modification" of any "critical habitat" for the species. 16 U.S.C. §1536(a)(2). FWS has defined "destruction or modification" as:

[A] direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alternations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

50 C.F.R. §402.02. Thus, the applicable legal standard is that no federal action may "appreciably diminish" the value of critical habitat for both the survival and the recovery of the listed species.

Three United States Courts of Appeals have agreed that the ESA and its implementing regulations require agencies to look at the effects of their proposed actions on both the survival and the recovery of listed species. *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004); *New Mexico Cattle Growers Association v. United States Fish and Wildlife Service*, 248 F.3d 1277 (10th Cir. 2001); *Sierra Club v. United States Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001). FWS has not properly considered the impact of its single species management plan on either the survival or the recovery of the black abalone.

At the outset, recall that FWS admits "[b]lack abalone inhabit water depths well within the range of sea otter predation...." DSEIS at 88. Recall also that FWS admits "a considerable portion of the black abalone's range overlaps the current range of the southern sea otter." *Id.* Notwithstanding these two admissions, FWS dismisses the effects of its sea otter range expansion plan on black abalone stating that if the plan is implemented, black abalone can "persist" at low densities. *Id.* In short, FWS sees no problem with its plan because black abalone can "persist" as a species in the face of sea otter predation. The U.S. Court of Appeals for the 9th Circuit, however, specifically condemned this type of thinking

stating it “offends the ESA because the ESA was enacted not merely to forestall the extinction of the species ... but to allow a species to recover to the point where it may be delisted.” *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, 378 F.3d at 1070.

The recent black abalone critical habitat designation confirms that sea otters and black abalone share habitat that overlaps in depth. 76 Fed. Reg. 66806, 66807, 66819 (Oct. 27, 2011). The critical habitat designation also confirms that the geographic area where black abalone are present “directly overlaps” with the range of the sea otter. *Id.* at 66808. Further, the critical habitat designation demonstrates that the range of the black abalone overlaps the area into which FWS proposes to allow sea otters to move. *Id.* at 66819. Finally, it is admitted that sea otters prey on abalone. 75 Fed. Reg. 59900, 59902 (Sept. 28, 2010). Indeed, comments filed by NMFS on the DSEIS confirm that “a single sea otter venturing into a cove with a few hundred abalone could have a population and possibly a species-level impact on abalone.” NMFS goes on to state that “just a few otters in the right place ... could hinder the recovery of [abalone] throughout its range. In NMFS’ view, hindering the recovery of critically endangered species does put the entire species at greater risk of extinction.”

A review of the scientific literature confirms that FWS’ plan for unlimited sea otter range expansion threatens the survival and the recovery of black abalone. Although the black abalone range currently extends to Point Arena in northern California, the vast majority of abalone populations have historically occurred south of Monterey, particularly in the southern California Islands (Karpov et al. 2000). Approximately half of the critical habitat for black abalone lies south of Point Conception, in areas sea otters are expected to occupy under FWS’ plan.

Where adult black abalone occur in sufficient densities, they are targeted by sea otters as a preferred food (Benech 1976). For example, about 40% of all observations of abalone consumed over a 20-year period in the vicinity of the Diablo Canyon Power Plant were black abalone (Benech 1992). A single sea otter needs to consume about seven adult abalone each day to satisfy its caloric needs (Ostfield 1982) and sea otters tend to take the largest, thus the most fecund, abalone first.

Based on FWS’ sea otter range expansion data, it is likely that large rafts of 20 or more male sea otters moving south of Point Conception will be the first otters to encounter remnant black abalone populations in southern California and within black abalone critical habitat. These black abalone populations have already been severely depleted, declining 95%-98% because of withering syndrome (“WS”). WS is more lethal in warmer southern waters than in the cooler waters to the north (Vilchis 2005, Altstatt 1996).

The combined effects of WS in warm water and of sea otter predation will act additively, if not synergistically, to prevent the recovery of black abalone, particularly within that half of its critical habitat designated south of Point Conception. Indeed, sea otter predation of black abalone is considered a “high” threat to black abalone recovery (Neuman et al. 2010). Equally, if not more, important, we may never even get to recovery issues because sea otters expanding into newly designated black abalone habitat will, because of predation, cause the collapse and local extinction of remnant black abalone populations in southern California where black abalone population densities are already severely depleted by WS. Reproductive, and the subsequent natural, recruitment of abalone will collapse if densities are reduced to 0.32/m² (Neuman et al. 2010). In many areas, black abalone are perilously near that level, and sea otter predation will likely push black abalone over the brink.

IV. THE IMPACT OF FWS' PLAN ON SHELLFISH

Endangered abalone are not the only species in the ecosystem that will be threatened by FWS' single species management. Many other species of shellfish will also see their populations plummet, perhaps to endangered status, if FWS goes ahead with its single species management plan. FWS states sea otters "consume an amount of food equivalent to 23 to 33 percent of their body weight per day...." DSEIS at 44. Having admitted this fact, FWS never considers its implications for the future of California's shellfish. Those implications are made clear by examining what will happen to commercial fishermen if FWS proceeds with its plan.

As scientists have noted, "Unless the sea otter is eventually contained, the State's Pismo clam, sea urchin, abalone, certain crab, and possibly lobster fisheries will be precluded. Sea otters do not extirpate these shellfish stocks, they merely reduce the exposed biomass to densities well below those necessary for profitable commercial exploitation or satisfactory recreational use. In all the cases, where sea otters have moved into either pristine areas ... there has been a reduction of over 90% in numbers of shellfish...." Burge 1973, Miller et al. 1975, California Department of Fish and Game 1976. When sea otters enter an area, over time the only remaining macro-invertebrates of edible size are observed deep in crevices where sea otters cannot reach them. Ebert 1968; Lowry and Pearse 1973, Cooper et al. 1978. "Whenever one of these large forage items leaves its protective habitat where sea otters are established, it apparently quickly becomes otter food." Miller 1980 at 11.

Other scientists also recognize that when sea otters reoccupy an area, the result of sea otter predation on shellfish is the end of commercially viable fisheries. "The documented loss of shellfish fisheries associated with sea otter reoccupation strongly suggests the pattern can be used to predict future losses whenever sea otter range expansion occurs." Wendell 1994 at 45-64. Yet another scientist concluded: "within their established range, otter foraging clearly precludes commercial fisheries for abalone and sea urchins." Tegner et al. 1992 at 370-383. Still other scientist have stated: "There is little doubt that the movement of sea otters into [abalone fishery] areas was the cause of the decline and eventual elimination of the commercial abalone fishery." Gotshall et al. 1984. Yet another scientific study concluded: "Our observations of the decline of the Pismo Beach Pismo clam fishery ... provide further evidence that sea otters are directly responsible for the loss of these sport fisheries." Wendell et al. 1986 at 210.

A. The Impact of the Preferred Alternative on California's Shellfish Resources and Shellfish Fisheries

The impact of unlimited sea otter range expansion on California's shellfish fisheries will be devastating. As the MMC stated: "It is likely that the southward movement of sea otters will seriously affect all shellfish fisheries in California. Currently the sea urchin, sea cucumber, and lobster fisheries are sustainable and represent important economic assets." The MMC continued, stating: "the abandonment of sea otter range management could, over the long term, lead to the elimination of virtually all of the shellfish fisheries along the West Coast; these fisheries have long been major economic and cultural assets over the entire region." Letter to Ms Diana K. Noda, Field Supervisor, USFWS, Ventura, from Marine Mammal Commission, David Cottingham, Executive Director, January 3, 2006.

The view expressed by the MMC is rooted in scientific fact. Sea otters tend to first target the most abundant and easily retrievable prey. For that reason, the sea urchin is normally the first

invertebrate prey species to be depleted once sea otters enter an area where sea urchin exist in high densities, followed by abalone and large crabs, if available. Ostfeld 1982.

A twenty-year study of sea otter diets in a ten mile section of the California coast near Point Buchon, just south of Morro Bay, demonstrates the significant effect sea otters have on sea urchin. The study was initiated in 1973, shortly after sea otters initially migrated into the area. During the next five years, 1973-1977, sea urchin averaged 20% of sea otters diets, with a high of 36% in 1975. For the remainder of the study period to 1993, sea urchin represented just 1.4% because sea otter predation had exhausted the sea urchin population. Benech 1994. This same study examined the density of sea urchin populations, finding that red sea urchin densities approximated 3 per square meter before sea otters began foraging. After only four years of sea otter foraging, the sea urchin densities had dropped below detection levels (less than one per 300 square meters).

Other studies show a much higher predation rate of sea urchins by sea otters. Published observations of sea otter consumption in areas of high sea urchin density show that sea urchins are more than 60% of the sea otter diet. Bodkin, Esslinger, and Monson 2004; Breen, Carson, Foster, and Stewart 1982; Laidre and Jameson 2006; and Miller 1974.

To put these consumption preferences into a very clear perspective, an average size sea otter weighing 50 pounds will consume 12.5 pounds of food daily (25% of its weight using the very low end of consumption set forth in the DSEIS). When sea urchins are available, the favored sea otter prey is the sea urchin roe. Roe often makes up just 7% of the sea urchins weight. Thus, it would take 178 pounds of whole sea urchin each day to provide 12.5 pounds of food for a single sea otter. Annualized, that equals 65,000 pounds of sea urchin in just one year. At this rate, only 169 sea otters, feeding exclusively on sea urchin, would consume the entire annual sea urchin harvest by sea urchin divers. ($169 \times 65,000 = 11$ million pounds).

While sea urchin divers are limited by regulations to not taking small sea urchin, sea otters are not and they typically eliminate any meaningful sea urchin resource within their feeding area. Once an area becomes part of the sea otter's established range, the shellfish population is decimated and the commercial fishery in that area collapses. Benech 1977.

There is ample empirical data documenting the collapse of shellfisheries when sea otters enter an area. These include the collapse of the abalone fishery around Morro Bay, the collapse of the sea urchin fishery around Port San Luis, and the reduction in harvest of red sea urchins by 90% in the area from Point Conception to Santa Barbara within two years after sea otters entered the area in 1998. Long term surveys near Port San Luis revealed that sea urchin densities dropped to 1% of pre-otter densities after only 27 months of sea otter occupation. Benech 1978.

During the winter of 1997/98, approximately 100 sea otters migrated southeast of Point Conception, the southern border of the existing sea otter management zone and just north of Santa Barbara. Within one year, predation on sea urchins was so severe that sea urchin harvesting was no longer viable, at which time the sea otters returned to the northern, familiar portion of their range. The following winter, 1998/99, another raft (or group) of sea otters returned to an area southeast of Point Conception, slightly farther than the previous winter. Again, predation was so severe that sea urchin harvesting in this area is no longer possible. According to records of the California Department of Fish and Game, this area just southeast of Point Conception produced nearly one million pounds of sea

urchin annually prior to 1997, representing a loss of nearly \$700,000 in at-the-dock value to sea urchin divers in the area.

Without question, the impact of FWS' plan on California's shellfish resources and the fishermen and processor workers who depend on those resources will be devastating. Researchers considering this situation have stated: "We believe that ... sea otter range expansion will result in the loss of most recreational and commercial shellfish fisheries along the north Pacific rim." Wendell, Pattison, and Harris 1996.

Once sea otters establish themselves in an area with an abundance of sea urchin capable of supporting a commercial fishery they are likely to specifically target red sea urchin (*Strongylocentrotus franciscanus*) as their primary prey since it is easy to catch and has a high nutrient value relative to the energy cost to capture and relative to alternatives. Ostfeld 1982; Breen, Carson, Foster, and Stewart 1982; Laidre, Kristin, and Jameson 2006; Miller (1974).

Sea otters will then target the same age and size class of other sea urchin living at the same depths (Bodkin et al 2004) as the commercial sea urchin fishery targets. This will result in the collapse or loss of a viable fishery. Benech 1977, Johnson 1982.

The sad reality is that FWS simply dismisses as unimportant the clearly foreseeable impacts of its single species management plan on California's shellfish resource and its dependent shellfish fisheries. Yet, FWS admits that "when sea otters permanently reside in a given area, the commercial fisheries for sea urchin, lobster, crab, and sea cucumber will no longer be viable in that area." DSEIS at 93. FWS also admits there is a "direct relationship between percent occupation of habitat and percent loss of shellfish fisheries...." *Id.* at 76. In other words, "when 50 percent of the available habitat [is] occupied by sea otters, shellfish harvests would be reduced by 50 percent." *Id.* at 75. The facts are that shellfish fisheries cease to exist when sea otters are present. As FWS admits "once an area is permanently occupied by sea otters, the commercial sea urchin fishery would no longer be viable in that area." *Id.* at 97-98. Rather than address the true ecosystem impacts of its single species management plan on the shellfish resources off California's, FWS simply decides that these parts of the ecosystem, and the fishermen who depend on them, are expendable.

B. The Economic Impact of the Preferred Alternative

Leaving aside the fact that FWS completely abandons all concepts of ecosystem management, its single species management plan will also have serious economic consequences. The sea urchin industry is California's fifth largest fishery with over \$13 million in domestic sales, \$8.7 million in exports, and employing hundreds of people. FWS identifies the sea urchin fishery, along with the lobster, crab, sea cucumber, halibut and white sea bass fisheries, as the fisheries impacted by its plan for sea otters. The economic value of these fisheries approximates \$40 million using standard multipliers of ex-vessel value. Wendell 1994.

Today, California has 300 permitted sea urchin divers and an equivalent number of licensed deckhands. Thirty percent of all divers make 100% of their household income from the sea urchin fishery and the average diver derives 63% of all household income from the fishery. Hansen and Dewees 2006. These fishermen will suffer irretrievable harm from FWS' plan.

FWS' plan will also have irreversible impacts on the fish processing industry. If the sea urchin fishery collapsed in southern California, the two sea urchin processors in northern California might

survive, but it is likely that only two of the nine southern California processors would survive, and they would survive only because they deal in other seafood products. Even so, these two processors would experience a significant reduction in business.

Each sea urchin processor employs 30-60 workers, depending on the season. This employment represents approximately 495 workers statewide year around. Overwhelmingly, processor employees earn the legal minimum wage and would face difficulties if they needed to find alternative employment. The National Ocean Economics Program, tracking wages paid in ocean related industries, reports that in 2004 the average seafood processing employee in California was paid \$33,853. National Ocean Economics Program, www.oceaneconomics.org. A sample survey of sea urchin processors by the California Sea Urchin Commission suggests a lower average wage is more appropriate, something in the range of \$22,000 annually. This would result in an estimated payroll for all California sea urchin processors of approximately \$10,890,000 annually – a sizable contribution to the State's coastal communities. If the southern portion of the sea urchin fishery collapsed due to the adoption of FWS' plan, the seven processors who deal in sea urchin exclusively could be forced to terminate nearly 315 employees. This could mean a loss of \$6,930,000 to local economies from lost wages alone. Again, FWS improperly dismisses these impacts as inconsequential.

V. FWS' PLAN PROCEEDS FROM THE WRONG PRESUMPTION

FWS seems to think its plan for unlimited sea otter range expansion is required because the translocation of sea otters to San Nicolas Island authorized by P.L. 99-625 has failed and, therefore, range expansion is the only way to help the sea otter.

Let's start with the purpose of the translocation. FWS admits its "primary purpose...was to bring southern sea otters closer to recovery and to eventual delisting..." DSEIS at 5. The final rule establishing the translocation program states that once the SNI colony is established, southern sea otters could be considered for delisting. 52 Fed. Reg. 29754 (Aug. 11, 1987) at 29775.

FWS believes translocation has failed because the SNI population is "small, and its future uncertain." DSEIS at 5. The intent of translocation was to establish a breeding nucleus of 70 that would expand to 150. *Id.*, Appendix C. at 4. To get there the plan was to translocate 250 otters. *Id.* However, FWS translocated only 140 – 56% of the planned number. *Id.* at 1.

Given that FWS stopped the actual translocation at just over 50% of the original objective, it is arbitrary and capricious to judge success of the current population level at San Nicolas Island based on the original assumptions about when and how population levels would be achieved if 250 sea otters were translocated.

In that regard, the status and current trend of the SNI population is illuminating. The 2010 population survey at SNI counted 46 animals. *Id.* at 13. This is 66% of the initial goal for the breeding nucleus. If the full translocation program had been implemented, it is reasonable to assume we would now have a breeding nucleus of 70 animals and would be moving toward the population level of 150. Significantly, at the current reproduction rate, which is approximately 10% annually, the San Nicolas Island population should reach 70 within four years. Even FWS admits the initial objective of 70 sea otters at San Nicolas Island will occur. DSEIS at 77, 89. The fact that this event may not have occurred as rapidly as FWS hoped does not mean the translocation program failed, particularly when FWS' implementation of the program is a principal cause of the delay.

It is noteworthy that the Draft Evaluation of the translocation program accompanying FWS' 2005 Draft Supplemental Impact Statement ("2005 Draft Evaluation") concluded there is nothing that threatens the "health and well-being of the [San Nicolas Island] population ... to the point that the colony's continued survival is unlikely...." 2005 Draft Evaluation at 26. FWS restated this conclusion in 2011. DSEIS, Appendix C at 29. FWS then admits the sea otters at San Nicolas Island "are expected ... to increase in number...." DSEIS at 89. From this perspective, the translocation program is far from the failure declared by FWS.

Four other factors, all ignored by FWS, confirm the success of the translocation. First, virtually all of the sea otters at San Nicolas Island are offspring of the originally translocated population. DSEIS, Appendix C at 13. That means there is a healthy and successfully reproducing population at San Nicolas Island.

Second, at least 150 pups have been born at San Nicolas Island, further confirming the presence of a healthy reproducing population. *Id.* Indeed, FWS has admitted that given the restricted number of animals moved to SNI, and after applying the accepted first year pup mortality to new births, FWS "would not expect to have many more sea otters at the island than we currently have." 2005 Draft Evaluation at 24. The population is where it should be, contrary to claims in the DSEIS that expectations have not been met and that translocation has failed.

Third, the SNI population is reproducing at a rate of 10% annually. Estes et al. at 3-4. This is precisely in the middle of the 5-15% reproduction rate FWS expected. DSEIS, Appendix C at 4. This reproduction rate is better than the 5%-6% rate of the parent population and represents an "exponential population increase." Estes et al. 2006 at 3. This does not sound like failure.

Fourth, the San Nicolas Island population is healthier than the parent population. A comparison of the translocated population with the parent population found that the "length and mass at age and the age-specific mass to length ratios were significantly greater for sea otters at San Nicolas Island than in the central population." Estes et al. 2006 at 6. The DSEIS confirms this fact noting that the San Nicolas Island sea otters "were in a better body condition" than the sea otters along the central California coast.

The problem is not that the SNI population is unhealthy. The problem is FWS had unrealistic expectations. FWS admits: "In retrospect, our expectations for success were overly optimistic." DSEIS, Appendix C at 18. Because the SNI population did not achieve the population numbers within the time frame originally expected by FWS, FWS says the program failed. Rather than change its unrealistic original assumptions, FWS pretends those assumptions are still valid and declares translocation a failure. In so doing, FWS ignores the current state of the population, ignores the fact that its expectations were questionable, and conveniently forgets that its decision to translocate only 140 sea otters instead of 250 contributed to, if not caused, the slower time frame. FWS incorrectly concludes that "the creation of an established southern sea otter population at San Nicolas Island does not appear to be achievable." *Id.* at 19. The facts outlined above regarding the status, trend, and health of the SNI population belie that conclusion.

The history of other sea otter translocations proves the point. Slow starts to successful translocated sea otter populations due to dispersion are not unexpected. Many of the 89 sea otters translocated to the coast of British Columbia from 1969 to 1972 did not survive. But by 2004, the remnant population had grown to 3,185. Sea Otter Recovery Team, 2007. Similarly, between 1965 and 1969, 412 sea otters were translocated to six sites in southeast Alaska. Recent population estimates

indicate this 412 has grown to as many as 12,632. *Id.* As a final example, as few as ten sea otters remained in the early 1970s after the translocation of 59 animals off the coast of Washington. Jameson, R. J. 1993. The most current population counts in 2006 estimated 790 animals were present, which means the population displayed a mean population growth of 8% since 1989. Sea Otter Recovery Team, 2007

In light of all of these facts, the FWS' conclusion that the SNI translocation has failed is simply wrong.

VI. CONCLUSION

FWS' single species management plan for unlimited sea otter range expansion not only abandons a preferable ecosystem management plan that balances the needs of all species, but FWS' plan threatens the future, and the survival, of many shellfish species, including endangered white abalone and endangered black abalone. H.R. 4043 should be passed without amendment to stop FWS from proceeding with its single species management plan until a comprehensive and effective ecosystem management plan is developed – and all species are protected.

Indeed, it is worth noting that the Administration, including FWS, are strong supporters of a marine spatial planning initiative. I know that proposal has generated much controversy before this Subcommittee and I am not here to discuss its overall merits. What I would like to point out, what I find ironic, is that while FWS thinks marine spatial planning and ecosystem management are great ideas for everyone else, when it comes to protecting endangered abalone and the shellfish resources of California, including the fishermen who depend on them, all of a sudden, ecosystem management and marine spatial planning are ideas to be rejected – rejected in favor of a single species management plan that ignores the ecosystem and the needs of other species.

RECEIVED

JUN 08 2012

CALIFORNIA
COASTAL COMMISSION

TH17b

Comments: CD-019-12

**Steven L. Rebuck
PO Box 571
San Luis Obispo, CA 93406
805/543-2248**

Opposition

US Fish and Wildlife Service

Comments: CD-019-12 (U.S. Fish and Wildlife Service, So. California)
Hearing Date: Thursday June 14, 2012
Agenda item: Th17b
RE: Opposition to the staff recommendation on consistency declaration

Dear Commissioners:

My name is Steven L. Rebuck. I was the primary negotiator for the commercial and recreational fishermen in creating the laws governing the Management Zone. Following the translocation of sea otters to San Nicolas Island in 1987, I appeared at every California Coastal Commission (CCC) hearing on this subject for nearly 2 years, representing commercial and recreational fishermen of the affected region. I also served as the Abalone Technical Consultant to the Southern Sea Otter Recovery Team from 1993-2004. I have also appeared before congress 4 times (1984, 1985, 2001, 2003) on these subjects. I am personally disappointed in the proposed action taking place here today. Years of very hard work will be lost if this action is taken.

Historical Perspective: As originally proposed, the translocation of sea otters to San Nicolas Island (SNI) was illegal. It violated taking provisions of the Marine Mammal Protection Act (MMPA). In order for the US Fish and Wildlife Service (FWS) to proceed, congress passed a special law, Public Law 99-625. This law allowed FWS to capture "non-essential" and "excess" sea otters. It also provided protections of other resource users at all other mainland and Channel Island sites. This included commercial and recreational fishermen, plus the offshore oil industries. These protections were also spelled out in the Federal Register Tuesday August 11, 1987, Vol. 52, No. 154 and Federal Rulemaking 1997, Endangered Species Act Authorization for Fiscal Years 1986, 1987, 1988, House of Representatives, et al.

Addressing water quality and fishery conflict issues, the Dobbins mapping study (Marine Mammal Commission 1984) found that southern California was "unsuitable" for sea otters due to: 1) poor water quality, and 2) conflicts with fisheries.

What congress did in 1986, passing PL 99-625, was to create "Zonal Management" of sea otters in California, modeled after the Zonal-Management plan for gray wolves in Minnesota. By doing so, congress created a situation where sea otters were preserved and shellfish fisheries conserved. The Staff Report advocates elimination of this congressional mandate, with admitted devastating affects on fisheries.

Unfortunately, FWS has violated all of these laws and rules since 1993.

"Thus, the decision by the USFWS to no longer maintain the "no otter" zone triggers the need for a new federal consistency review to determine if the project continues to be undertaken in a manner consistent with CCMP."
(Letter, CCC to FWS, April 30, 1999).

At this particular juncture in 1999, CCC was concerned about the lack of containment of otters to SNI. Containment was the reason the translocation program was found to be consistent in 1987.

The sea otter in California was listed as threatened under the ESA primarily due to oil spill risks. The Staff Report downplays the significance of natural oil seeps in the Santa Barbara Channel which is estimated at 70,000 bbl per year. Also, the Staff Report ignores the offshore oil infrastructure and shipping. Can we conclude that oil is not the threat to sea otters it was once thought to be?

In my opinion, the staff recommendations are in error.

First: The staff report cites Section 30220, 30230, 30234, 30234.5. It would appear that the staff report violates each of these sections. All of these sections are strong on protection of commercial and recreational fishing, infrastructure and coastal economics. The Staff Report admits expanding sea otters will cause loss of fisheries.

Second: The scientific citations used to justify this change in consistency are one-sided, obviously manipulating the decision making process. This Staff Report is inadequate and lacks a balanced airing of known facts.

Economics: The Staff Report downplays the economics of they're proposal. Ex-vessels values of some fisheries are mentioned, but economic multipliers (2.7) are ignored. The staff Report must correct these deficiencies to properly reflect the economic impacts to the region. The combined commercial fishery multiplied 2011 values of Santa Barbara alone are estimated at \$40,000,000. (California Dept. Fish and Game, 2012). Full values would demonstrate the loss to coastal communities.

Wendell (CDFG 1994) estimated PL 99-625 preserved and multiplied values (2.7) of commercial landings at \$73,000,000, recreational values \$150,000,000. and oil and gas risk values of \$12,600,000,000. The Staff Report missed this. What are the true 2012 values? The Staff Report is inadequate.

The Staff Report fails to recognize what we already know about sea otters from experiences from Monterey to Port San Luis over the past 75 years. Many valuable fisheries have already been lost: abalone, sea urchin, Pismo clam, and halibut, rockfish and sea bass net fisheries. This has caused extreme financial hardship to the affected coastal communities. Is it really necessary to force more losses now on cities from Santa Barbara south?

At the time the translocation began in 1987, 41% of red abalone landings originated from SNI. By 1993, this number reached zero (CDFG 1998). By 1997, this unfortunate result, not caused by fishermen, but by sea otters, contributed to close the abalone fishery south of San Francisco. From 1916 until 1963, an average 2 million pounds was landed at Morro Bay annually, this before sea otters (Cox, 1962). Red abalone was a very "sustainable" fishery before sea otters.

The Staff Report uses FWS interpretations to explain away possible negative impacts on endangered white and black abalone. These citations are in direct conflict with published data by the National Marine Fisheries Service (NMFS) the agency in charge of recovery of these abalone species, as reported in ESA abalone recovery plans. The Staff Report should be amended to reflect this difference of opinion between these two federal agencies.

Sea otter health: Sea otters in the range from Monterey to Santa Barbara are facing declining health issues. These animals are capable of depletion of their food resources (Kenyon, 1969). Malnutrition has become a significant cause of mortality. Many preferred food items (nearly 60 species) have decline, not due to human fishing, but by over-utilization by foraging sea otters. It is predictable that even with range expansion southward, these animals will ultimately create the same situation for themselves at some future date. Sacrificing all of the various fisheries in Monterey and San Luis Obispo Counties, and now Santa Barbara County hasn't solved this problem. Sea otters in their current range are at carrying capacity.

Kelp Theory: The Staff Report relies on a myth in California that sea otters enhance kelp and thereby fin-fish. The Staff Report cites data from Alaska as evidence of this. I would ask, where is the data from California? Cited in the Staff Report are studies by Foster and Schiel, 1987, et al, which demonstrate that macro-invertebrates like sea urchins and abalone have a less than 10% effect on kelp canopy structure. This is the best published data on this subject. It is simply wishful thinking that fin-fish enhancement is a sound economic trade-off.

Options: Instead of supporting the FWS, it would appear preferable for CCC to obey governing statutes and support the economic interests of the state of California and coastal cities and counties.

It appears to me that sea otters in California are near and/or at the number needed to remove them from protections of the Endangered Species Act. De-listing could increase management options, something which is not possible now. Sea otters in California would still receive federal MMPA and state protection.

Petitions for this action have been submitted over the years, but ignored by FWS. In addition, petitions for taxonomic clarification have also been ignored. These petitions need to be reviewed by the National Science Foundation. (NSF). Stonewalling by FWS has prevented a fair and honest review of sea otters in California. Sacrificing fisheries has been the preferred option by FWS. CCC has the opportunity to correct this process.

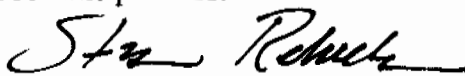
Respectfully,

Steven L. Rebuck

PO Box 571

San Luis Obispo, CA 93406

805/543-2248



Memorandum

~~EXHIBIT 7~~

To : Mr. Rolf Mall, Chief
Marine Resources Division

Date: January 25, 1994

From : Department of Fish and Game - Sea Otter Project

Subject: Estimated Value of Resources Preserved by P.L. 99-625

You directed the project to estimate the value of the shellfish resources available for human use south of Point Conception as long as P.L. 99-625 remains in affect. Generating the estimate has been an interesting assignment. This is what I came up with:

1) Value of commercial landings	\$27,340,000
2) Value of recreational activity	\$55,700,000
3) Oil and gas risked value	\$4,666,000,000

These estimates are so soft, I can't forward them without explanation. A description of the method and assumptions used to generate each component follows:

1) Value of commercial landings: This is the easy one. This estimate is simply the ex-vessel dollar value reported for selected species of shellfish landed in 1992 in all statistical areas south of Monterey (ie. Santa Barbara south). The species selected include all abalone, all sea urchins, lobster, and all crab other than spider crab. A small percentage of the landings were probably made in Morro Bay and Port San Luis and were taken in the area just north of the management zone. I'm assuming the landings from these ports are negligible. I'm also assuming that the reported values accurately reflect actual landings.

2) Value of recreational activity: This estimate is based on information provided by NOAA in Technical Memorandum SWFSC-164 (Results of the Southern California Sportfish Economic Survey) for southern California shellfish recreational activity in 1989. They provided two facts: 1) an estimate of the number of trips made in southern California by "recreational shell fishers" over an 8 month period (381,000 trips) and 2) an estimate of the total recreational trips in a year and the expenditures associated with those trips (5.5 million trips expending \$536 million dollars). I assumed that the 8 months for which we have data on recreational shell fishing activity (trips) accurately reflects the rate at which trips are made on an annual basis and that a recreational shell fisher's trip incurred expenditures comparable to trips made by other recreational resource users. The rest is a simple ratio expansion.

3) Oil and gas risked value: This estimate is based on information provided in the EIS on the translocation of sea otters to San Nicolas Island. The EIS provided two facts: 1) an estimate of the risked mean resource value of unexploited oil and gas resources within the San Nicolas Island translocation zone (\$1.4 - 2.8 million) and 2) a statement that the risked mean resource estimate for San Nicolas Island represents 0.03% of the total unleased resources in the Southern California Planning Area. I assumed that unleased resources were at risk of a jeopardy decision by the U.S. Fish and Wildlife Service under Section 7 consultations if the protection provided by P.L. 99-625 disappears.

I did not apply any economic multipliers to the estimates provided above. I'm not sure which would be the most appropriate value to use, so I'm providing both. The typical economic multiplier used to estimate the economic ripple effect is 2.7. Applying this multiplier increases the estimates to:

1) Value of commercial landings	\$73,800,000
2) Value of recreational activity	\$150,400,000
3) Oil and gas risked value	\$12,600,000,000

I also estimated how much revenue the commercial use of these shellfish resources generates for the Department. The estimate and assumptions are attached for your consideration. If I can provide any further clarification or information, please let me know.

Fred Wendell

Fred Wendell
Associate Marine Biologist

FW:fw

Attachment

cc: Mr. Paul Wild
Senior Biologist (Marine/Fisheries)

CALIFORNIA POLYTECHNIC STATE UNIVERSITY

SAN LUIS OBISPO, CALIFORNIA 93407



AGRICULTURE & NATURAL RESOURCES • ENGINEERING & TECHNOLOGY • ARCHITECTURE & ENVIRONMENTAL DESIGN •

27 October 1975

The Director (FWS/LE)
U. S. Fish and Wildlife Service
P.O. Box 19183
Washington, D.C. 20036

Dear Sir,

I wish to comment on the inclusion of the 'southern sea otter' on the list of species being proposed for addition to the endangered species list, to appear on the Convention on International Trade. I do not favor its inclusion on such a list for the following reasons:

1. 'Enhydra lutris nereis', the 'southern sea otter', is not a valid subspecies. Available information on the taxonomic status of sea otters has been summarized in my 1973 paper (reprint attached). I feel this paper adequately establishes the fact that the California population of sea otters is a minor local variation of a single subspecies, which also includes sea otters from mainland Alaska, the Aleutians, and the Commander Islands. The California otters differ from those in Alaska and the Aleutians much less than does the Kurile Island population, which is considered a distinct subspecies.

In the near future Davis and Lidicker (in press) intend to present a re-evaluation of the data summarized in my paper, in which they come to a different conclusion (that E. l. nereis is valid). I have examined a copy of their paper and find their analyses fail to recognize some of the factors involved, and are actually in error on some points. I am preparing a rebuttal to their re-evaluation.

2. Even if sea otters in California were to be considered a valid subspecies, they do not meet the criteria for being considered endangered. Consider:

- a. The habitat of sea otters in California is not presently threatened. Although the possibility of pollution from sewage, biocides, or an oil spill exists, this possibility does not in itself constitute a threat.
- b. Sea otters in California are not currently being exploited - tourists are interested in seeing them, but this activity does the otter no harm.
- c. Disease and predation are at a level which has not interfered with the natural growth of the population.
- d. Existing regulatory mechanisms appear to be adequately protecting the sea otters in California waters; the population is growing.

For the above reasons, California's sea otter population cannot truly be considered 'endangered'.

Very sincerely,

Arjan Roest
Dr. Arjan I. Roest
Biol. Sci. Dept.

THE CALIFORNIA STATE UNIVERSITY & COLLEGES

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SANTA BARBARA MUSEUM OF NATURAL HISTORY

2559 Puesta Del Sol Road • Santa Barbara, California 93105

March 19, 1981

Mr. Dean Roberts
Acting Director
U.S. Fish & Wildlife Service
Department of the Interior
Washington, D.C. 20240

Dear Mr. Roberts:

Regarding the matter of taxonomic designation for the California population stock of sea otters, there appears to be reason to question the validity of the separation of that stock at the subspecific level from those in Alaska. While I am aware that considerations of threatened, depleted or endangered status deal with population stocks which may or may not be discreet taxonomic units, there is reason to address the subspecific status of sea otters relative to their management and eventual removal from the threatened list. This point was brought out during a joint meeting on 24-25 July, 1980, that involved your agency, the Marine Mammal Commission, the California Department of Fish and Game and its scientific advisory committee. The minutes of that meeting, prepared by Dr. Hofman of the Marine Mammal Commission, give a detailed account of the taxonomic considerations and concerns that were discussed. The salient point raised concerns the wider range of management options available if in fact there are no biologically significant differences between "southern" (Californian) and "northern" (Alaskan) sea otters. Given this possibility, northern animals could be used to replenish the California stock should it be seriously diminished by man made or natural causes. Another thought is that northern animals could be used to maintain the genetic heterozygosity of the southern population should the latter show signs of genetic weakness. I refer you to Dr. Hofman's minutes for further details.

The background of published systematics concerning the designation and subsequent questioning of the subspecies Enhydra lutris nereis is summarized in Woodhouse, et al. (1977). Essentially all of the work is based on cranial morphometrics, but the trend of applying increasingly sophisticated statistical treatment in more recent studies provides strong evidence for a biological cline within the species. The most recent findings are those of Dr. Aryan Roest. His results give strong evidence for similarity particularly between historic stocks from Prince William Sound, southeastern Alaska and California. In my opinion, based on these recent studies, there is plausible reason to question the validity of the nereis subspecies.

Mr. Dean Roberts -- Page two

The distribution of E. l. nereis is presented in Hall and Kelson (1959). This source has been cited in a number of places including the deliberations which led to E. l. nereis being declared threatened. Unfortunately, there is an error which needs to be resolved in any considerations of synonymizing E. l. nereis and E. l. lutris. Hall and Kelson (1959) erroneously list the range of the former as the Strait of Juan de Fuca to Sebastian Vizcaino Bay, Baja California. The source of error lies in a misquote from a paper by Taylor and Shaw (1929) which is simply a "Provisional List of the Mammals of the State of Washington", and makes no reference to a northern or southern limit in the range of the subspecies nereis. If there were two reproductively isolated populations prior to the fur trade, then in all probability the limits to their respective distributions would most likely have been controlled by some natural barrier. On the basis of what is known of the behavior and movements of contemporary animals, I would not anticipate that the Strait of Juan de Fuca would be a barrier to the north-south movement of the species.

Finally, I would reiterate a point covered in Dr. Hofman's minutes of the July 1980 meeting. In any considerations to establish significant differences or similarities among sea otter stocks, genetic and electrophoretic studies would be desirable. One major difficulty, however, may be ruling out contemporary differences as a consequence of the "founder effect", which may not reflect differences which existed prior to the fur trade.

Sincerely,



Dr. Charles D. Woodhouse, Jr.
Assistant Director and
Acting Curator of Vertebrate Zoology

CC: Lad Handleman
Robert Hofman -
E. C. Fullerton

Attachment

CDL/kwr



ADDRESS ONLY THE DIRECTOR
FISH AND WILDLIFE SERVICE

United States Department of the Interior

FISH AND WILDLIFE SERVICE

WASHINGTON, D.C. 20240

In Reply Refer To:
FWS/OES 920.2H
OES 1942

APR 30 1982

Mr. Lad Handelman
Save Our Shellfish
219 "E" Stearns Wharf
Santa Barbara, California 93101

Dear Mr. Handelman:

Thank you for your March 27 letter concerning the taxonomic status of the southern sea otter.

We do not believe we can go forward with a public meeting until further information is available. We are currently reviewing a proposal to conduct genetic studies, and we are actively seeking the needed funding support. It is our intention to have the study monitored by an independent entity to insure that the study will provide sufficient information with which to make informed management decisions.

We will, however, consider your letter as the 60 day notice required to commence a civil action as provided under Section 11(g) of the Endangered Species Act of 1973, as amended.

We appreciate your comments.

Sincerely yours,

Harold L. O'Connor

Deputy Associate Director

*Rec'd 5/6/82
SOS*

nutritional source. Because of the general depletion of invertebrates and the apparent inability of juvenile otters to obtain an adequate number of fish and mollusks, these young animals are compelled to eat the abundant and easily obtained immature sea urchins. An otter would have to consume nearly 6,500 of these immature urchins daily to supply the 3,000+ calories which appear to be required.

Depletion of Food Resources

The requirement for large amounts of food by sea otters has been discussed. Feeding grounds are limited by depth to relatively shallow waters and tag returns indicate that individual sea otters do not range widely along the coast (see Home Range). Because of these circumstances which concentrate feeding activities in rather limited areas, it appears probable that a large population of sea otters could seriously deplete food resources within their home range. Evidence is available that this does in fact occur.

SEA URCHIN DEPLETION

McLean (1962) presents convincing evidence that the sea urchin *Strongylocentrotus franciscanus* has been nearly exterminated in a particular area on the California coast which is occupied by a considerable number of sea otters. Of the area he studied he says (p. 101) "the large sea urchin was totally absent, although spines and test fragments were present in gravel samples."

Indirect evidence from Amchitka Island, where a large sea otter population exists, indicates that sea otter predation has drastically reduced certain food species there. Small green sea urchins are abundant. It is not possible, however, to find large individuals in the intertidal zone and I seldom saw an otter eating an urchin that approached in size the large individuals which are abundant in other Aleutian areas where the sea otter is scarce or absent. Bottom samples obtained by R. D. Jones, while diving with SCUBA equipment, both at Amchitka and in comparable areas at Adak (where at the time few sea otters occurred), showed that sea urchins at Amchitka are relatively scarce and small.

~~EXHIBIT 2~~

Of all four zones, it appears that San Nicolas Island may provide the least conflicts with shellfisheries considering simultaneously both existing commercial and sport fisheries. This is assuming that the animals will not disperse throughout the Channel Islands. Should dispersal take place to other island shelves such as the northern archipelago, (San Miguel, Santa Rosa, Santa Cruz, Anacapa) and Santa Barbara Island, conflicts arising from the selection of San Nicolas would be greater (in economic terms) than conflicts arising from dispersal from the other zones. Dispersal outside the other zones would also affect the magnitude of conflicts with existing commercial and sport fisheries.

Summary

The study results indicate that there is no single zone that provides suitable habitat, while also presenting no environmental risk and no conflicts with an existing shellfish fishery. The availability of reliable and comparable data for the entire study area has surfaced as an important limitation to the objective comparison of the alternative zones. Such limitations were particularly severe with respect to food species concentrations, one of the most important factors in determining habitat suitability. There were limited comparable statistics on the economic value of commercial and sport fisheries. In addition, the prediction of primary and secondary economic impacts and benefits of a translocation could not be addressed.

In addition to the factors considered during the course of this project, there are several other important considerations that may enter into the selection of a translocation zone. These include, for example, the feasibility of temporary and long-term containment of otters in different nearshore environments, the logistics of the actual release, the implications of the presence of Alaskan otters and local and regional economics. The project therefore represents an early phase of the overall process of selecting a translocation zone.

EXCERPT:Dobbin, James (1984) Compilation and Mapping of Available Biological, Ecological and Socio-Economic Information Bearing on the Protection, Management and Restoration of the Southern Sea Otter, U.S. Marine Mammal Commission, Contract No. 14-16-0009-81-050

Bobby McKinley
1104 Del Sol Ave.
Santa Barbara, CA 93109-2108
805/403-8899

June 2, 2012

Mr. Mark Delaplaine
California Coastal Commission
45 Fremont St., Suite 2000
San Francisco, CA 94105-2219

RE: CD-019-12 (U.S. Fish and Wildlife Service, So. California
Agenda Item: Th17b
June 14, 2012

Dear Mr. Delaplaine:

Enclosed are 20 copies of a DVD from video tape which was shot in 1997 and 1998 of the Cojo Pipeline, northern Santa Barbara County, San Miguel Island and a few other coast sites. Some of this video was shot in 1997 to demonstrate healthy populations of abalone, prior to the closure of abalone fishing, south of Point Conception.

The following year, 1998, approximately 100 sea otters showed up in this Cojo area, at the northern end of the US Fish and Wildlife Service, "No-Otter/Management Zone."

This video demonstrates how quickly an area like this can be depleted of abalone, sea urchin, crab etc. This dramatic before and after video says far more than words can describe. In addition, there are interviews which help to tell the story. We estimate the value of this formerly important fishing ground at approximately \$2.2 million, ex-vessel value in lobster, abalone, sea urchin and crab.

We would appreciate it if you could distribute these copies to each of your commissioners and alternates.

Respectfully,

Bobby McKinley
Sea Urchin Diver

Try to Understand Cojo Pipeline Revisited

Content:

Video of the Cojo Pipeline, West of Santa Barbara, taken before and after sea otters were allowed to disperse from the management zone.

Interview with Paul Dayton,
Professor, Scripps Institution, San Diego.

Interview with Bill Hooten,
California Abalone Association, Vice President,
Commercial Abalone/Urchin Diver for 24 years. (measuring urchins underwater).

Interview with Fred Wendel,
California Department of Fish and Game Biologist, 1973-1999,
Conducted Sea Otter Research for 14 years.

Interview with Captain Hugh Thomas,
Patrol Captain, California Department of Fish and Game, 1956-1982,
Supervised 17 Counties from Santa Barbara to San Mateo. Charter Member, Friends of the Sea Otter.

Interview with Lad Handelman,
Fisherman/Diver, 12 years, Underwater Contracting, 15 years
Founder, CEO, Oceaneering International, Associate Marine Mammal Group
Consulting Group, 5 years, Founder, S.O.S. 1980.

Interview with former U. S. Congressman Robert Lagomarsino.

Video of San Miguel Island: The Last Stand to Save Our Shellfish

This film was made by fishermen and concerned parties to make the world aware of a problem that affects all the people of California and how the resources of our oceans are managed. It is hoped that the picture we present here will be worth a thousand words.

Please, Try to Understand.

Video and Content © 1999

Sea Urchin Harvesters Association of California (SUHAC)

For additional copies of this video, un-edited interview footage or further information

Contact: SUHAC: Fax 805 966 6088

Credits: Producer - Bob Hay, Footage - CA DF&G, Chris Bell,

Camera Crew - Bob Hay, Dennis Holder, Harry Liquornik, Edited at Barking Lizard

Support - SUHAC, California Abalone Association, California Seafood Council, Jalama Studio



Huntington Beach. Thursday June 14, 2012
Agenda Item 17b (CD-019-12) (U.S. Fish and Wildlife Service, So. California)

Support
Brian Segee, Environmental Defense Center

June 8, 2012

Charles Lester, Executive Director
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

Dear Mr. Lester:

On behalf of the Environmental Defense Center (EDC) and The Otter Project, we thank you for this opportunity to provide comment to the California Coastal Commission (CCC) regarding item 17b on the CCC's June 14 agenda, pertaining to a consistency determination (CD) by U.S. Fish and Wildlife Service (FWS) for termination of the southern sea otter translocation program in southern California coastal waters (including the Channel Islands).

EDC is a non-profit law firm with offices in Santa Barbara and Ventura, with approximately 3,000 members. EDC represents itself and other organizations in protecting coast and ocean resources, open spaces and wildlife, and human and environmental health. The Otter Project is a non-profit organization based in Monterey, California with more than 3,000 members. The Otter Project's mission is to protect our watersheds and coastal oceans for the benefit of California sea otters and humans through science-based policy and advocacy. EDC and The Otter Project have advocated for the termination of the failed translocation program, and associated "no otter zone" that currently encompasses the entire southern California bight with the exception of San Nicolas Island and a small perimeter around that island, for more than a decade. As explained in more detail below, EDC and The Otter Project strongly support the CCC staff report recommendation that the Commission concur with FWS' CD and find the project consistent with the marine resource and commercial and recreational fishing policies (Sections 30230, 30234, 30234.5, and 30220) of the California Coastal Act.

1. FWS' Decision Has Been Unduly Delayed for More Than 20 Years, and is Required Under the Settlement Agreement Reached in *The Otter Project v. Salazar*

In 2009, EDC filed a federal lawsuit on behalf of itself and The Otter Project alleging that FWS' failure to make a required final determination on whether or not the translocation program has failed constituted an "unreasonable delay" of required agency action pursuant to the federal Administrative Procedure Act. FWS and intervening defendants including the California Sea Urchin Commission and California Abalone Association contested the suit, alleging in a motion to dismiss that FWS had no legal duty to make a final failure determination. The court rejected this argument, stating that "since FWS enumerated criteria for determining whether the translocation program failed, and included benchmarks at specified time intervals for making such a determination, the Court finds that FWS intended to make the failure determination a required action." *The Otter Project v. Salazar*, 712 F. Supp. 2d 999, 1006 (E.D. Cal. 2010) (case docket N.D. Cal. CV-09-4610).

Following this decision, the parties ultimately reached a November 23, 2010 settlement agreement. Under that agreement, FWS agreed to publish a draft failure determination and proposed rule by September 1, 2011, and a final decision and rule by December 7, 2012. Accordingly, it is imperative that the CCC hear and make a decision on FWS' CD at the June 14 meeting in Huntington Beach, according to the agenda as currently published.

2. FWS' Proposed Action to Terminate the Translocation Program and "No Otter Zone" Is Fully Consistent with the California Coastal Management Program

Both the FWS CD and CCC staff report are well written, addressing the project description and background, marine resources, and commercial and recreational fishing in a readable and thorough, yet succinct, fashion. As detailed in both documents, the pending decision to terminate the "no otter zone" is one that will benefit marine resources and *overall* commercial and recreational fishing opportunities, in accordance with Coastal Act policies. As summarized in the CCC staff report:

[I]n examining the history of the Program and the above "failure" analysis, it is clear that the Service is essentially formally acknowledging what it has understood for two decades, and in practice implemented, which is to accept that natural range expansion is critical to otter recovery, and that it should stop remov[al] of sea otters from the "no otter" management zone because it is contrary to sea otter protection needs. Moreover, it is also clear that allowing natural otter population expansion benefits the overall health of the marine environment, due to the otters' role as a "keystone" species, including but not limited to its role in benefitting kelp production.

CCC Staff Report, at p. 12. We urge the Commission to adopt the well-reasoned recommendation of its staff to concur with FWS' CD.

3. Ending the "No Otter Zone" Will Benefit the Southern California Economy, Including Water-Oriented Recreational Activities and Commercial and Recreational Fishing

Providing for greater protection of the southern sea otter will not only benefit the natural environment, but the economic health of coastal communities. As stated in FWS' Revised Draft Supplemental Environmental Impact Statement for the Southern Sea Otter Translocation Program (August 2011) (RSDEIS), ocean-dependent tourism and recreation constitute approximately 54 percent of California's ocean economy, "more than transportation, construction, living resources, minerals, and ship and boat building combined." RSDEIS, at p. 61. Expenditures for wildlife watching activities in California totaled approximately \$4.2 billion in 2006, and the number of people participating in wildlife watching "was more than three times the number of people participating in recreational fishing and hunting." *Id.* Like sea otters in Monterey and Morro Bay, it can be assumed that the consistent presence of otters in Santa Barbara and other coastal communities in the southern California bight will be a significant attraction for visitors, who then contribute to local economies.

As acknowledged in the FWS CD and CCC staff report, the expansion of southern sea otters into southern California waters will have negative impacts on some fisheries, in particular the sea urchin fishery, and could preclude the reopening of abalone fisheries. Importantly, however, the overall impact on fisheries will not be "zero sum." Instead, as stated in the CCC staff report, while "some portions of the commercial and recreational fishing industry will be adversely affected by the termination of the Program, the fin fishing portion of the industry is expected to benefit, and in the long run the termination of the Program is expected to result in a healthier ecosystem, which ultimately benefits commercial and recreational fishing generally." CCC Staff Report, at p. 23.

Despite these predictions, the shellfish industry continues to lobby intensely against the long overdue proposal to end the "no otter zone," claiming that FWS "neglects the basic issue of biodiversity by failing to fully and properly analyze the impact of the proposal on the endangered black abalone and the endangered white abalone." California Sea Urchin Commission June 5, 2012 letter to CCC.

First, this statement is simply inaccurate, as evidenced by the detailed analysis of this issue in both the FWS CD and RSDEIS. In addition, that analysis indicates that with respect to black abalone, "the fact that sea otters and black abalone historically co-occurred and continue to co-occur" at San Nicolas Island "suggests that black abalone populations have sufficient refuge from sea otter predation to maintain viable populations there." FWS CD, at p. 23. Moreover, this disingenuous attempt to fault the *sea otter* for abalone endangerment oddly ignores that fact that it is the *shellfish industry* that serially depleted, to the brink of extinction, not only the black and white abalone, but the red, pink, and green abalone populations, all in a span of little more than 50 years. Indeed, the "collapse of the black abalone stocks was the most recent in the series of serial depletions that characterized the California abalone fishery before its closure in 1996." RSDEIS, at p. 42. In fact, the industry now appears to be on a course to repeat itself, as "harvests of sea urchins have exhibited a pattern resembling the serial depletion that characterized the decline and collapse of the abalone fisheries in the mid-1990s." *Id.* at p. 54. The repetition of the pattern suggests that the shellfish industry should stop expending so much time and energy attempting to vilify the southern sea otter, and instead focus on improving its own unrestrained fishing practices, which have continually resulted in the total depletion of California shellfish fisheries within the span of one or two human generations.

4. The Translocation "Failed" under Criterion 2, and Has Failed to Meet the Goal of Establishing a Self-Sustaining "Reserve Colony" Contributing to Species Recovery and Delisting.

As noted in the CCC staff report and FWS CD, the translocation met the technical criterion for failure three years after the first translocation in August 1987. Legal documents and arguments, as they must, focus on the technical points of failure. It is, however, also important to step back to evaluate whether the broader purpose of the program has been met. The southern sea otter is listed as "threatened" under the federal Endangered Species Act and the translocation was meant as a recovery action to potentially offset the risk of an oil spill wiping out the entire Central Coast population. The intended function of the San Nicolas Island population was to serve as a self-sustaining "reserve colony for providing stock to restore subsequently damaged areas" in the otter's range. *Establishment of an Experimental Population of Southern Sea Otters*, 52 Fed. Reg. 29,754, at 29,774 (Aug. 11, 1987). Accordingly, as stated by FWS, "[u]ltimately, failure is determined by our inability to attain the objectives of the translocation Program, which are clearly set out in the final rule for the establishment of experimental population of southern sea otters." *Termination of the Southern Sea Otter Translocation Program; Proposed Rule and Notice of Availability*, 76 Fed. Reg. 53,381, at 53,385 (Aug. 26, 2011).

In the 25 years since initiation of the program in 1987, the San Nicolas population has grown from 14 to just 53 otters; far short of the 150 otters FWS considers an "established" population. FWS states, "it is unlikely that the [SNI] colony will ever be large enough to supply the numbers of sea otters necessary to perform a successful translocation and re-establishment of population in the mainland range if the parent population were reduced or eliminated by a catastrophic event." *Id.*

The translocation technically failed in 1990 but the program was never declared a failure and the no-otter zone persisted. The broader goal of a self-sustaining reserve population has not been met and FWS has stated it may never be met. Because of the lack of protection given sea otters returning to their natural territory within the zone, the no-otter zone now works against the species' recovery and de-listing.

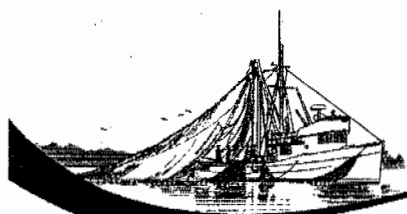
Conclusion

The background and rationale for FWS' proposed action to terminate the southern sea otter translocation program is fully consistent with Coastal Act policies, as detailed in FWS' CD and the CCC staff report. We support the proposed action and respectfully urge the Commission to support staff's recommendation to concur with the FWS CD.

Sincerely,

A handwritten signature in black ink, appearing to be 'JS' with a stylized flourish.

Brian Segee
Staff Attorney



California Wetfish Producers Association

PO Box 1951 • Buellton, CA 93427 • Office: (805) 693-5430 • Mobile: (805) 350-3231 • Fax: (805) 686-9312 • www.californiawetfish.org

June 9, 2012

Mary Shallenberger, Chair
California Coastal Commission
P.O. Box 354
Clements, CA 95227-0354

RE: Agenda Item Th 17b –
U. S. Fish and Wildlife Services Consistency Determination No. CD-019-12

Dear Chairwoman Shallenberger:

The California Wetfish Producers Association (CWPA) is a non-profit organization representing the majority of fishermen and processors who land and market "wetfish", coastal pelagic species including sardines, mackerels, anchovy and market squid. California's wetfish industry is the most valuable fishery complex in the Golden State, representing more than 80 percent of total statewide landings and 44 percent of dockside value of all California fisheries in 2010. On behalf of the CWPA membership and industry at large, we request a continuance of this agenda item. We believe there is significant additional information that the staff and members of the California Coastal Commission (CCC) should review before considering this matter.

We oppose the staff recommendation that the CCC concur with consistency determination CD-019-12 by the U.S. Fish and Wildlife Service (FWS). As an organization of individuals who care about biodiversity in our coastal waters and the continuation of sustainable fisheries, we have grave concerns about the FWS' proposal. We urge a detailed review of all available information, which we believe will lead the CCC to the conclusion that the FWS is focusing on one species to the detriment of all other species. In contrast, Section 30230, states the Coastal Zone Act will "maintain healthy populations of all species of marine organisms adequate for long term commercial, recreational, scientific and educational purposes."

After nearly a quarter century, the Service is now proposing to abandon its translocation program to San Nicolas Island (SNI) ostensibly because the translocation has failed. According to the FWS, it failed because the number of animals did not meet the highly unrealistic benchmark estimated 25 years ago. This simply proves that the Service was a bad judge of sea otter behavior. In reality, by any objective biological standard, the SNI translocation is a roaring success, with a growing population now numbering at least 50 animals, and the pup reproduction rate estimated at 10 percent or better – double the rate of the central coast otter population.

Representing California's Historic Fishery

But beyond this common sense finding, the FWS EIS missed the mark on numerous counts – economic as well as biological. Examples of economic deficiencies include the following:

- Although the EIS predicts that southern CA shellfisheries will disappear entirely, the EIS described the predicted economic impacts only for the next 10 years. It fails to address long term biological and economic impacts on valuable commercial and recreational fisheries, as required by the Coastal Act.
- The Service failed to provide any economic value for recreational lobster fisheries between Point Conception and Oxnard. The CCC should understand the value of recreational lobster diving and hoop-netting along the coast to gain an accurate picture of the socio-economic loss of southern CA shellfisheries.
- The Service failed to recognize that virtually ALL fisheries in southern CA are at risk from citizen lawsuits and potential restriction, once the management zone and exemption from accidental interaction with these animals goes away, one condition of the failure declaration. The management zone south of Pt. Conception was implemented through PL 99-625, the law that codified the FWS translocation agreement in the 1980s and authorized a zonal management program, setting aside SNI for sea otters and preserving valuable shellfisheries throughout the remainder of S.CA.
- The Coastal Act mandate to maintain long-term healthy populations of all species for multiple purposes, including recreational and commercial fisheries, is diametrically opposed to the FWS admission that its declaration action will cause these fisheries to disappear. The Service simply wants to wash its hands and walk away from Public Law. In our view, the Service's action should be found to be inconsistent with the Coastal Act.

As for biological considerations, as illustrated in the graph below, sea otter foraging causes an approximate 90 percent decline in about 60 species of invertebrates. The Fish and Wildlife Service has acknowledged that shellfish fisheries in southern California will be eliminated by expanded sea otter foraging. Among shellfish at risk, possibly of extinction, from sea otter expansion are endangered white and black abalone, both now protected under the Endangered Species Act.

Section 30231 of the Coastal Zone Act mandates:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff...

The FWS EIS mentioned water quality and disease in passing, but failed to meet the standards of the Coastal Zone Act. Although disease caused by non-point source pollution is the number one cause of otter mortality, the FWS failed to address restoring watersheds, controlling runoff or other mechanisms to counteract toxins entering the marine environment from terrestrial inputs. The Service also failed to point out hazardous watersheds within the expanded sea otter range, or to recommend mitigations to address those threats.

Unlike the dominant reef habitat that characterizes the central coast otter range, the largely sand-dominated coastline between Gaviota and Los Angeles will provide forage items including clams and sand crabs. But both of these prey species are problematic due to disease issues, i.e. periodic concentration of *Toxoplasma gondii*, domoic acid and other marine toxins.

The sea otter's so-called beneficial effect on kelp is refuted in recent research (Reed, 2011). According to Reed et al, kelp productivity is doubled south of Point Conception (outside the current sea otter range), compared to Point Lobos, the center of the range where sea otters have existed for nearly a century.

Best available science should inform the Coastal Commission, not old data from 2,000 miles away in Alaska. Also the hypothesized beneficial effects of kelp on increased finfish numbers are also conjecture and not borne out by fisheries statistics. According to the CA Nearshore Fishery Management Plan (Table 2.3-8),

finfish values in the Monterey-Morro Bay area, within the sea otter range, totaled \$1.3 million. In the Santa Barbara-Los Angeles "no otter" zone, the value totaled \$1,470,000.

Facts should inform the Coastal Commission decision – not conjecture.

The Service will not make a final decision on the failure of the translocation program until December 2012. We recommend the Coastal Commission defer a consistency determination until AFTER the public process has concluded.

The Coastal Commission should also review the other options discussed in the EIS document. Beyond the FWS "preferred" option, the Commission should review the consistency of other options that will better address the letter of law in the Coastal Zone Act, including maintenance of healthy populations of all species of marine organisms adequate for long term commercial, recreational, scientific and educational purposes, for the long-term benefit of all Californians.

We believe it is premature to decide on any option before the public process is complete, and all facts are afforded serious consideration.

Sincerely,



Diane Pleschner-Steele
Executive Director

Attachments:

Figure 4 from Reed et al (2011). Wave disturbance overwhelms top-down and bottom-up control of primary production in California kelp forests Ecology, 92(11), 2011, pp. 2108–2116

Figures 2 from Kvitek et al. QUANTITATIVE ASSESSMENT OF SEA OTTER BENTHIC PREY COMMUNITIES WITHIN THE OLYMPIC COAST NATIONAL MARINE SANCTUARY: 1999 RE-SURVEY OF 1995 AND 1985 MONITORING STATIONS

Figure 4 from Reed et al (2011). Wave disturbance overwhelms top-down and bottom-up control of primary production in California kelp forests *Ecology*, 92(11), 2011, pp. 2108–2116

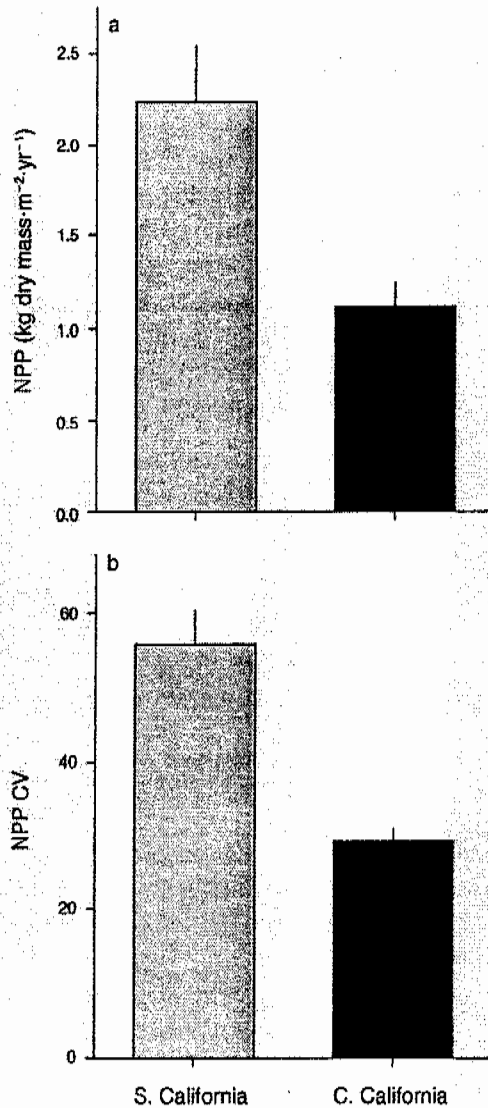


FIG. 4. (a) Annual net primary production (NPP) by giant kelp. Data represent regional nine-year means (\pm SE) averaged over sites within each region ($n = 8$ sites in central California and 9 sites in southern California). (b) Interannual variation in net primary production by giant kelp. Plotted are regional mean coefficients of variation (\pm SE) averaged over sites within each region. Coefficients of variation for each site were calculated from annual means averaged over the period 2001–2009.

Figures 2 from Kvitek et al. QUANTITATIVE ASSESSMENT OF SEA OTTER BENTHIC PREY COMMUNITIES WITHIN THE OLYMPIC COAST NATIONAL MARINE SANCTUARY: 1999 RE-SURVEY OF 1995 AND 1985 MONITORING STATIONS

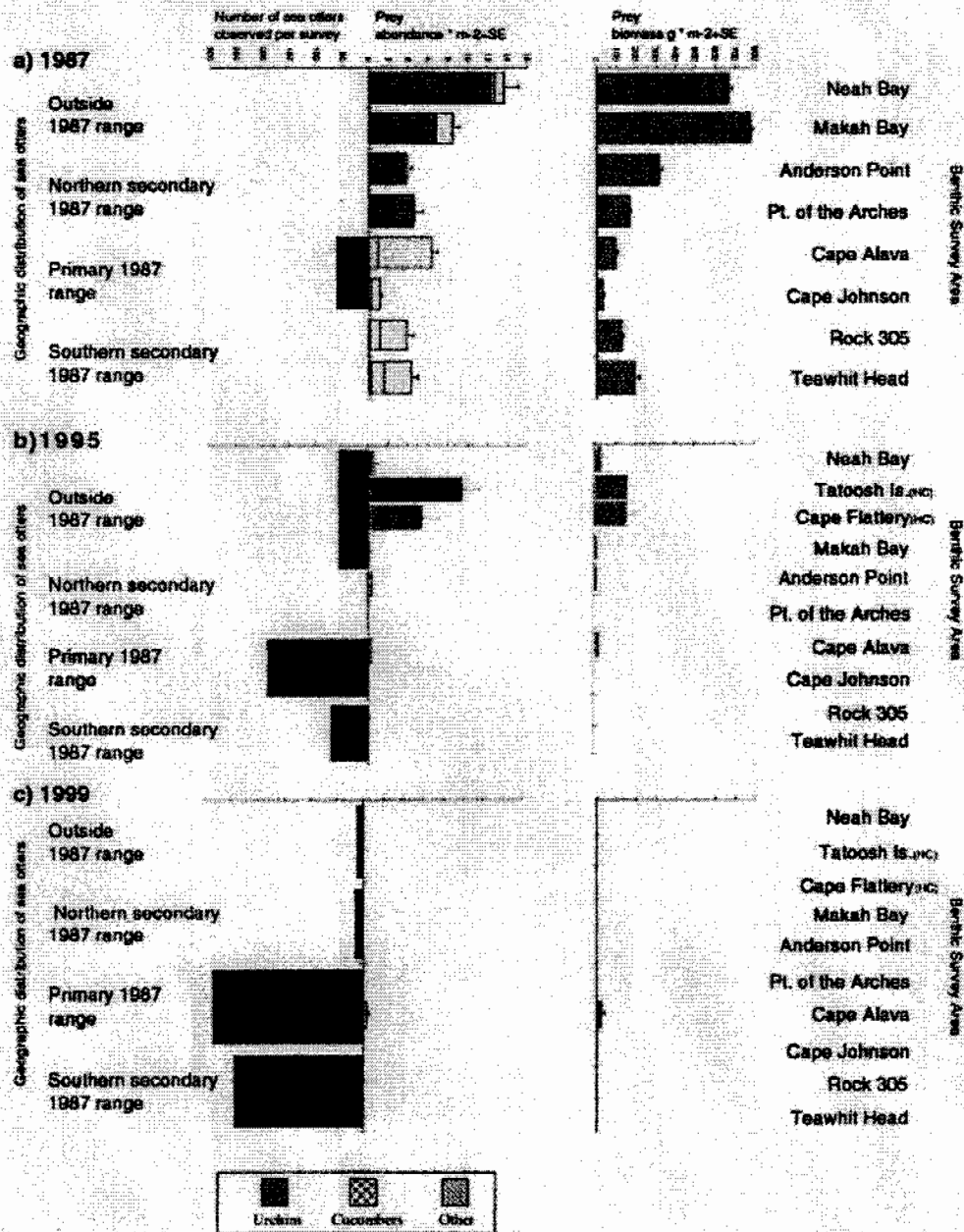


Figure 2. Invertebrate prey abundance at benthic sampling sites for 1987, 1995 and 1999, related to sea otter abundance. HC = high current areas at Tatoosh Island and Cape Flattery. These two sites were sampled in 1995 and 1999 only.

SAMPLE OF 350+ EMAILS

Charles Lester
Executive Director
California Coastal Commission
www.coastal.ca.gov
45 Fremont Street, Suite 2000
San Francisco, CA 94105
415-904-5202

From: stigvall@hotmail.co.uk [mailto:stigvall@hotmail.co.uk]
Sent: Friday, June 08, 2012 9:48 AM
To: Lester, Charles@Coastal
Subject: CD-019-12 (US Fish and Wildlife Service, So. California)

June 8, 2012
Dr. Charles Lester
45 Fremont Street, Suite 2000
San Francisco, CA

Dear Charles Lester,

SUPPORT for Agenda Item 17b
(CD-019-12) (U.S. Fish and Wildlife Service, So. California)

As a member of The Otter Project, I urge you to vote Yes on the motion to find the U.S. Fish and Wildlife Service's decision to terminate the failed Southern Sea Otter Translocation Program and to end the "No-Otter" management zone in Southern California fully consistent with the enforceable policies of the California Coastal Management Program and the Coastal Act.

The past few years the southern sea otter has experienced a significant population decline with 2011 reporting the highest number of sea otter deaths on record. Allowing sea otters to expand their home range will ensure that the southern sea otter will have a fighting chance at recovery.

The return of sea otters to Southern California waters will also be beneficial to the marine environment and the local economies.

Sincerely

Andrew Vallender
Lambert Road
Leicester, CA LE3 2AG
GB

FISH AND WILDLIFE SERVICE PROPOSAL IS INCONSISTENT WITH THE CALIFORNIA COASTAL ACT

SUMMARY

- The staff report of the California Coastal Commission ("CCC") proposes that the CCC concur with consistency determination CD-019-12 by the U.S. Fish and Wildlife Service ("FWS") that declaring the sea otter translocation program a failure is consistent with sections 30230, 30234, 30234.5 and 30220 of the California Coastal Act. We believe this analysis is flawed, and that the FWS proposal is inconsistent with the goals of the Coastal Act.
- FWS' proposal is a single species management plan for sea otters, which neglects to take into account the effects of sea otter range expansion on other species. The endangered black abalone and the endangered white abalone – major food sources for the sea otter - are directly in the path of the planned sea otter range expansion. FWS' single species plan could well mean that both abalones will become extinct because of sea otter predation, directly contravening the Coastal Act's mandate that "Uses of the marine environment...will maintain health populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes" (Section 30230).
- FWS' proposal is inconsistent with the Coastal Act's mandate that "The economic, commercial, and recreational importance of fishing activities shall be recognized and protected" (Section 30234.5). The potential result of this single species approach includes other shellfish populations becoming threatened or endangered because of sea otter predation. This would then result in the loss of livelihood for shellfish fishermen and all related jobs, including those at processing facilities in the state. The economic impact of the industry to the state of California is over \$40 million a year.

BACKGROUND

- In 1986, Congress passed P.L. 99-625 authorizing the FWS to translocate California sea otters to start a new colony. The purpose was to help recover the species, which is listed as threatened under the Endangered Species Act ("ESA"). Because the likely translocation site at SNI was near important shellfish fisheries and because sea otter predation can deplete shellfish populations, P.L. 99-625 provided special protections for fishermen while the translocation experiment was conducted. Among the protections was a marine spatial management plan that called for otters migrating into fishing areas to be removed and returned to the parent population. This protection for fishermen was key for the CCC's consistency determination (Federal Register Vol. 52, No. 154, 29789)
- FWS moved about half the otters originally planned for translocation to SNI. The implementing regulations provided that if FWS determined the translocation was a failure, FWS would remove the otters from SNI. FWS has made a preliminary determination the translocation has failed and will make a final decision in December. However, FWS has also decided if it declares translocation a failure, it will leave the otters at SNI and end the management zone; thus allowing unlimited sea otter range expansion throughout southern California waters.

SEA OTTER PREDATION ON ENDANGERED ABALONE AND OTHER SHELLFISH

- The staff report relies exclusively on FWS documents and analyses, neglecting to include comments from other federal agencies that FWS' conclusions are questionable. These other agencies question FWS' analyses of both sea otter range expansion on other endangered species and the impact to commercial fisheries. CCC should consider these comments from other agencies before agreeing that the FWS proposal is consistent with Sections 30230 and 30234.5.
- In 2011, the National Marine Fisheries Service ("NMFS") determined that "sea otter predation may limit [the endangered] white abalone populations to small individuals ... and, thus, [is] expected to represent a natural threat to the recovery of the species...." The Marine Mammal Commission concurred, stating FWS' "assumption that white abalone's primary habitat is in water too deep for the sea otters to forage is ...questionable" and that FWS' plan of unrestricted sea otter range expansion "would further exacerbate the decline of [the endangered] white abalone...." The very same problems exist for black abalone, also listed as endangered. The Abalone Recovery and Management Plan states: "The survival of several depleted abalone populations in southern California could be jeopardized by expansion of the sea otter's range and the accompanying increase in sea otter predation on abalone...." Comments filed by NMFS on FWS' sea otter range expansion plan confirm that "a single sea otter venturing into a cove with a few hundred abalone could have a population and possibly a species-level impact on abalone." NMFS then states that "just a few otters in the right place ... could hinder the recovery of [abalone] throughout its range." FWS' claim that there are no conflicts between its single species management plan for otters and the conservation and recovery of endangered abalone is simply wrong.
- Unlimited sea otter range expansion will also have a devastating impact on California's shellfish fisheries. As the Marine Mammal Commission noted: "It is likely that the southward movement of sea otters will seriously affect all shellfish fisheries in California. Currently the sea urchin, sea cucumber, and lobster fisheries are sustainable and represent important economic assets." The Commission also stated that: "the abandonment of sea otter range management could, over the long term, lead to the elimination of virtually all of the shellfish fisheries along the West Coast...." FWS admits that "when sea otters permanently reside in a given area, the commercial fisheries for sea urchin, lobster, crab, and sea cucumber will no longer be viable in that area," and there is a "direct relationship between percent occupation of habitat and percent loss of shellfish fisheries...." In other words, "when 50 percent of the available habitat [is] occupied by sea otters, shellfish harvests would be reduced by 50 percent." The facts are that shellfish fisheries cease to exist when sea otters are present. As FWS admits "once an area is permanently occupied by sea otters, the commercial sea urchin fishery would no longer be viable in that area."
- FWS' plan fails to address the real threat to sea otters – degraded water quality along the central California coast, which is inconsistent with Section 30231. The sea otter population is about 400 below its delisting number and about 300 strand and die each year largely because of water quality related issues.

SNI SEA OTTER POPULATION EXPANSION

- FWS claims its plan for unlimited sea otter range expansion is required because the translocation of sea otters to SNI has failed. Given that FWS stopped the actual translocation at just over 50% of the original objective, it is wrong to judge the current population level at SNI based on the original assumptions about when and how population levels would be achieved.

- FWS' analysis of the sea otter population expansion at SNI is inconsistent with Section 30230's inclusion of "long-term" protection of marine resources.
- The status and current trend of the SNI population is illuminating. The 2012 population survey counted 58 animals including 10 pups. This is 80% of the initial goal for the breeding nucleus of 70. If the full translocation program had been implemented, it is reasonable to assume we would now have a breeding nucleus of 70 animals. At the current reproduction rate, approximately 10% annually, the SNI population should reach 70 soon. Even FWS admits the initial objective of 70 sea otters at SNI will occur. The fact that this event may not have occurred as rapidly as FWS hoped does not mean the translocation program failed, particularly when FWS' implementation of the program is the principal cause of the delay. Even FWS' evaluation of the translocation program concludes there is nothing that threatens the "health and well-being of the SNI population ... to the point that the colony's continued survival is unlikely." FWS then admits the SNI sea otters "are expected ... to increase in number." From this perspective, the translocation program is far from a failure.

COVER PAGE

California Coastal Commission Staff Report Comments

**U.S. Fish & Wildlife Service, So. California.
Hearing Date: Thursday, June 14 2012**

**Jeffrey W. Crumley
6/4/2012**

This comment has been mailed to California Coastal Commission staff at:
45 Fremont suite 2000
San Francisco, California 94105 – 2219
For dispersal to commissioners, staff and alternates.

(Page 1 of 3)

Comments: CD-019-12

Jeffrey W. Crumley
P.O. box 2742
Capistrano Beach, California 92624
(949) - 496 -1300
jeff@jeffcrumley.com

RE: Opposition to staff recommendation
on consistency declaration

Dear Commissioners:

My name is Jeff Crumley. I have been a sea urchin fisherman since 1993.

Historical Perspective: As originally proposed, the translocation of sea otters to San Nicolas Island (SNI) was illegal. It violated taking provisions of the Marine Mammal Protection Act (MMPA). In order for the US Fish and Wildlife Service (FWS) to proceed, congress passed a special law, Public Law 99-625. This law allowed FWS to capture "non-essential" and "excess" sea otters. It also provided protections of other resource users at all other mainland and Channel Island sites. This included commercial and recreational fishermen, plus the offshore oil industries. These protections were also spelled out in the Federal Register Tuesday August 11, 1987, Vol. 52, No. 154 and Federal Rulemaking.

Addressing Water quality and fishery conflict issues, the Dobbins Mapping study (Marine Mammal Commission 1984) Found that southern California Was "unsuitable" For sea otters due to: 1) Poor water quality, and 2) conflicts with fisheries

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(Page 2 of 3)

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Wendell (CDFG 1994) estimated PL 99-625 preserved and multiplied values (2.7) of commercial landings at \$73,000,000, recreational values \$150,000,000. and oil and gas risk values of \$12,600,000,000. The Staff Report missed this.

The Staff Report fails to recognize what we already know about sea otters from experiences from Monterey to Port San Luis over the past 75 years. Many valuable fisheries have already been lost: abalone, sea urchin, Pismo clam, and halibut, rockfish and sea bass net fisheries. This has caused extreme financial hardship to the affected coastal communities. Is it really necessary to force more losses now on cities from Santa Barbara south?

At the time the translocation began in 1987, 41% of red abalone landings originated from SNI. By 1993, this number reached zero (CDFG 1991). By 1997, this unfortunate result, not caused by fishermen, but by sea otters, contributed to close the abalone fishery south of San Francisco. From 1916 until 1963, an average 2 million pounds was landed at Morro Bay annually, this before sea otters (Cox, 1962).

The Staff Report uses FWS interpretations to explain away possible negative impacts on endangered white and black abalone. These citations are in direct conflict with published data by the National Marine Fisheries Service (NMFS) the agency in charge of recovery of these abalone species, as reported in ESA abalone recovery plans. The Staff Report should be amended to reflect this difference of opinion between these two federal agencies.

Sea otter health: Sea otters in the range from Monterey to Santa Barbara are facing declining health issues. These animals are capable of over shooting their food resources (Kenyon, 1969). Malnutrition has become a significant cause of mortality. Many preferred food items (nearly 60 species) have decline, not due to human fishing, by over-utilization by foraging sea otters. It is predictable that even with range expansion southward, these animals will ultimately create the same situation for themselves at some

(page 3 of 3)

future date. Sacrificing all of the various fisheries in Monterey and San Luis Obispo Counties, and now Santa Barbara County hasn't solved this problem.

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Options: Instead of supporting the FWS, it would appear preferable for CCC to obey governing statutes and support the economic interests of the state of California and coastal cities and counties.

It appears to me that sea otters in California are near and/or at the number needed to remove them from protections of the Endangered Species Act. De-listing could increase management options, something which is not possible now. Sea otters in California would still receive federal MMPA protection.

Petitions for this action have been submitted over the years, but ignored by FWS. In addition, petitions for taxonomic clarification have also been ignored. These petitions need to be reviewed by the National Science Foundation. (NSF). Stonewalling by FWS has prevented a fair and honest review of sea otters in California. Sacrificing fisheries has been the preferred option by FWS. This needs to stop.

Respectfully,

Jeffrey W. Crumley
PO box 2742
Capistrano Beach, California 92624
(949) - 496 - 1300
jeff@jeffcrumley.com

COMMITTEES

NATURAL RESOURCES, CHAIR
 SELECT COMMITTEE ON DISABILITIES, CHAIR
 SELECT COMMITTEE ON WINE, CHAIR
 JOINT COMMITTEE ON FISHERIES AND
 AQUACULTURE, CHAIR
 BUDGET
 BUDGET SUBCOMMITTEE #1
 JOINT LEGISLATIVE BUDGET
 ENVIRONMENTAL SAFETY AND
 TOXIC MATERIALS
 GOVERNMENTAL ORGANIZATION

Assembly Th 17b

California Legislature



WESLEY CHESBRO
 ASSEMBLYMEMBER, FIRST DISTRICT

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 P.O. BOX 942849
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 (916) 319-2001
 FAX (916) 319-2101

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 EUREKA, CA 95501
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 FAX (707) 445-6607

50 "D" STREET, SUITE 450
 SANTA ROSA, CA 95404
 (707) 576-2526
 FAX (707) 576-2297

200 SOUTH SCHOOL STREET, SUITE D
 UKIAH, CA 95482
 (707) 463-5770
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June 9, 2012

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JUN 11 2012

CALIFORNIA
 COASTAL COMMISSION

Mary Shallenberger, Chair
 California Coastal Commission
 P.O. Box 354 Clements, CA 95227-0354

**RE: Request Continuance for Agenda Item Th 17b - U. S. Fish and Wildlife Services
 Consistency Determination No. CD-019-12**

Dear Chairwoman Shallenberger:

I write today to request a continuance of Agenda Item Th 17b - U.S. Fish and Wildlife Services Consistency Determination No. CD-019-12. Based on constituent input, I am very concerned there may be significant additional information that staff and members of the California Coastal Commission (CCC) have not yet heard and should review before considering this matter.

I believe that more time is required to allow for public development of information and arguments before the consistency determination CD-019-12 by the U.S. Fish and Wildlife Service (USFWS) is made.

I urge that more time for public comment and careful review of all available information be provided.

Thank you for consideration of this request. Please feel free to contact me with any questions you may have.

Respectfully,

WESLEY CHESBRO
 Assemblyman, 1st District



COVER PAGE

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JUN 11 2012

CALIFORNIA
COASTAL COMMISSION

California Coastal Commission Staff Report Comments

U.S. Fish & Wildlife Service, So. California.

Hearing Date: Thursday, June 14 2012

Jeffrey W. Crumley

6/4/2012

This comment has been mailed to California Coastal Commission staff at:
45 Fremont suite 2000
San Francisco, California 94105 – 2219
For dispersal to commissioners, staff and alternates.

Th17b

(Page 1 of 3)

Comments: CD-019-12

Jeffrey W. Crumley
P.O. box 2742
Capistrano Beach, California 92624
(949) - 496 -1300
jeff@jeffcrumley.com

RE: Opposition to staff recommendation
on consistency declaration

Dear Commissioners:

My name is Jeff Crumley. I have been a sea urchin fisherman since 1993.

Historical Perspective: As originally proposed, the translocation of sea otters to San Nicolas Island (SNI) was illegal. It violated taking provisions of the Marine Mammal Protection Act (MMPA). In order for the US Fish and Wildlife Service (FWS) to proceed, congress passed a special law, Public Law 99-625. This law allowed FWS to capture "non-essential" and "excess" sea otters. It also provided protections of other resource users at all other mainland and Channel Island sites. This included commercial and recreational fishermen, plus the offshore oil industries. These protections were also spelled out in the Federal Register Tuesday August 11, 1987, Vol. 52, No. 154 and Federal Rulemaking.

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Respectfully,

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(949) - 496 - 1300
jeff@jeffcrumley.com

Catalina Offshore Products, Inc.

5202 Lovelock Street
San Diego, California 92110
(619) 297-9797 FAX (619) 297-9799
Catalinaop.com
June 11, 2012

Th 17b

Mary Shallenberger,
Chair, California Coastal Commission
P.O. Box 354
Clements, CA 95227-0354

RE: Agenda Item Th 17b - U. S. Fish and Wildlife Services Consistency Determination No. CD-019-12

Dear Chairwoman Shallenberger:

I write today to request a continuance of this agenda item because I believe there is significant additional information that the staff and members of the CCC should review before considering this matter. Additionally, I oppose the staff recommendation that the California Coastal Commission ("CCC") concur with consistency determination CD-019-12 by the U.S. Fish and Wildlife Service ("FWS"). As an individual who cares about biodiversity in our coastal waters and the continuation of commercial fisheries, I have serious concerns about the FWS proposal. I urge the careful review of all available information, which I believe will lead the CCC to the conclusion that the FWS is focusing on one species, while the CCC has a responsibility to "all species of marine organisms." This letter is also being provided to appropriate CCC staff.

I support recovery of the threatened sea otter and the 1986 agreement that forfeit prime fishing grounds to sea otter predation so that a new colony of sea otters could be established at San Nicolas Island. That agreement was codified in P.L. 99-625. Now, FWS wants to change the sea otter management program established pursuant to P.L. 99-625 to allow unlimited otter range expansion. Marine invertebrates are prey for the sea otter, and these species have been depleted in areas where sea otters have reached carrying capacity. As invertebrate food sources are depleted, the sea otter's diet changes from sea urchins and abalone to other smaller prey species. Without a management plan that addresses the effects of sea otter range expansion on all species, the FWS proposal is inconsistent with Section 30230 of the Coastal Act, which states that "Marine resources shall be maintained, enhanced, and, where feasible, restored...Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes."

FWS also neglects to consider how degraded water quality affects the sea otter, which is inconsistent with Section 30201 of the Coastal Act, where it is clear that the "quality of coastal waters...appropriate to maintain optimum populations" is an issue to be considered by the CCC.

FWS' proposal is also inconsistent with the Coastal Act's mandate that "The economic, commercial, and recreational importance of fishing activities shall be recognized and protected" (Section 30234.5). The potential result of this single species approach includes other shellfish populations becoming threatened or endangered because of sea otter predation. This would then result in the loss of livelihood for shellfish fishermen and all related jobs, including those at processing facilities in the state. In addition, sport fishermen would lose the recreational use of the ocean. This would impact bait and tackle shops, marine sales, and port infrastructure, to say the least.

I request the CCC approve a continuance of this item. As discussed above, I oppose the FWS' proposal and request that the CCC deny the consistency determination request. The FWS should implement an ecosystem management plan that protects all species; otherwise, FWS is acting in direct opposition to the Coastal Act's protection of all species of marine organisms and commercial and recreational fishing activities.

Sincerely,

Dave Rudie
President

Hearing Date: Thursday June 14, 2012

Comments: Agenda item. Th 17b. CD-019-12

From: Jim Marshall
1838-3 San Andres St.
Santa Barbara, CA 93101
ijmarsh@verizon.net

Dear Commissioners,

My name is Jim Marshall. I've participated in the commercial dive fisheries for over forty years. Also, for the last forty years, I have closely followed and engaged in the ongoing saga that is Federal sea otter management. As a concerned, engaged and unwilling participant in this saga I am able to speak from my experience on the fishing grounds as well as my experience in California's commission-regulated natural resources management.

The FWS has sold the Staff, as well as the rest of the citizenry, a pig-in-a-poke. Sea otters are already expanding their range into the management zone and have been for 19 years. Otters experience no restriction to their expansion from the law. The limits to sea otter expansion are environmental. There is no "failure" of the population at San Nicholas Island, there are more there than there ever was. Only FWS gains if you find consistency, as the embarrassing law that they've ignored for so long will go away if their false claim that the colony at San Nicholas is a failure is found consistent with California policy by the Commission.

The Staff agrees with FWS that California existing businesses are worth gambling with. Unfortunately, it's our livelihoods that are being gambled, and this is a sure loser. If you find consistency with the Federal plan it will be a disservice to California residents who eat local shellfish. The only consistency in such an action would be that California fishermen and consumers get thrown under the bus by both Federal and State government.

Sincerely,

A handwritten signature in cursive script that reads "Jim Marshall". The signature is written in dark ink and is positioned below the word "Sincerely,".

RECEIVED

JUN 11 2012

**CALIFORNIA
COASTAL COMMISSION**

Th17b

CD-019-12 (US Fish and Wildlife Service, S. California)

Lad Handelman
121 Via Del Cielo
Santa Barbara, CA 93109
805-966-0097

Opposition

Please distribute to all Commissioners and Alternates

Save Our Shellfish – S.O.S.
Lad Handelman
121 Via Del Cielo
Santa Barbara, CA 93109
Phone (805) 966-0097 * Fax (805) 966-9161
laddieh@cox.net

June 7, 2012

Mark Delaplaine
California Coastal Commission
45 Fremont St, Suite 2000
San Francisco, CA 94105-2219

Ref: Hearing June 14, 2012 Agenda Item: Th17b
CD-019-12 (US Fish and Wildlife Service, So. California)

Dear Mr. Delaplaine:

Regardless of their respective positions on offshore development and/or environmental and marine mammal impacts, each and every study, report and/or article has one inescapable factoid. The near-shore waters south of Pt. Conception release a massive amount of oil on a daily basis. **Over 10,000 gallons of fresh oil per day are released into the kelp beds and surrounding waters off Coal Oil Point at exactly where sea otters will forage.** If indeed the primary danger to the sea otter is oil and the agencies primary thrust is to protect sea otters from oil, then to take an action which would unquestionably put the sea otters directly into the path of North America's largest oil seeps would be an unthinkable violation of the purpose of the Marine Mammal Protection Act. To protect this unique marine mammal for its own sake and future chances of survival, the proposed action must be halted altogether.

Sincerely,



Lad Handelman

Founder, Save Our Shellfish

**Save Our Shellfish – S.O.S.
Lad Handelman
121 Via Del Cielo
Santa Barbara, CA 93109
Phone (805) 966-0097 *Fax (805) 966-9161**

laddieh@cox.net

June 7, 2012

My name is Lad Handelman, a resident of Santa Barbara. I have worked as a fisherman up and down the California coast and islands from San Diego to Big Sur. I founded and was CEO of two ocean-related marine construction and engineering companies, Oceaneering International and Helix, both now listed on the New York stock exchange.

I was an original founder in 1980 of Save Our Shellfish, SOS, a non-profit volunteer group dedicated to the preservation and enhancement of open ocean shellfish populations. SOS involvement in this controversy arose from the simple fact that sea otters voraciously consume shellfish. Although SOS is not opposed to the presence of sea otters in California, the sea otter population, without proper management, will, in the near future, eradicate all commercial and recreational shell-fishing in California. Furthermore, to allow sea otters to forage freely south of Point Conception where massive oil seeps abound, oil platforms are prevalent and where ocean-going ships discharge heavy amounts of oil and pollution defeats the entire premise that the sea otters' largest danger is from oil.

I believe I am uniquely qualified to speak about this important issue.

Lad Handelman
Save Our Shellfish

This letter was submitted to the US Fish and Wildlife Service on October 24, 2011.

October 24, 2011

Lad Handelman
121 Via Del Cielo
Santa Barbara, CA 93109
805-966-0097

Addendum to Testimony of Lad Handelman
Cover Letter and Various Enclosures

As I understand it, USFWS's primary objective regarding the Southern Sea Otter is to establish Policy and Regulations as deemed necessary to protect and expand this species. The proposed action, Revised Draft Supplemental Environmental Impact Statement (SEIS), the effect of which will allow otters to roam free from Point Conception to the Mexican border, flies in the face of this primary objective.

Attached is a sampling of the many scientific studies and articles which document the enormous amount of oil flowing daily into the waters south of Point Conception. Contrary to protecting this species, this proposed action would instead expose the species not only to natural oil on the water but to other natural and man-made hazards as well. There are more than 1,000 recorded natural oil seeps which flow daily into the very same waters which are in the immediate path of the otters' southward migration. These hazards are well known and scientifically unchallengeable. Rather than "opening the door" further into these waters, if USFWS's objective is to protect this species, a more logical action is to close this door, to examine why the capture-and-relocate has not been pursued in good faith and to reinstate this effort.

Note: When critically analyzed, it can be seen that the capture-and-relocate methods used at the time of the original translocation to San Nicolas Island were indeed quite successful – contrary to later unsupportable statistics.

There can be no question as to the presence of huge amounts of oil-on-the-water south of Point Conception. Sources which document the presence of oil-on-the-water south of Point Conception include the California State Lands Commission, NOAA, California Dept. of Fish & Game, Santa Barbara County Energy Division, Crustal Studies Dept. of University of California at Santa Barbara, Journal of Geology and others.

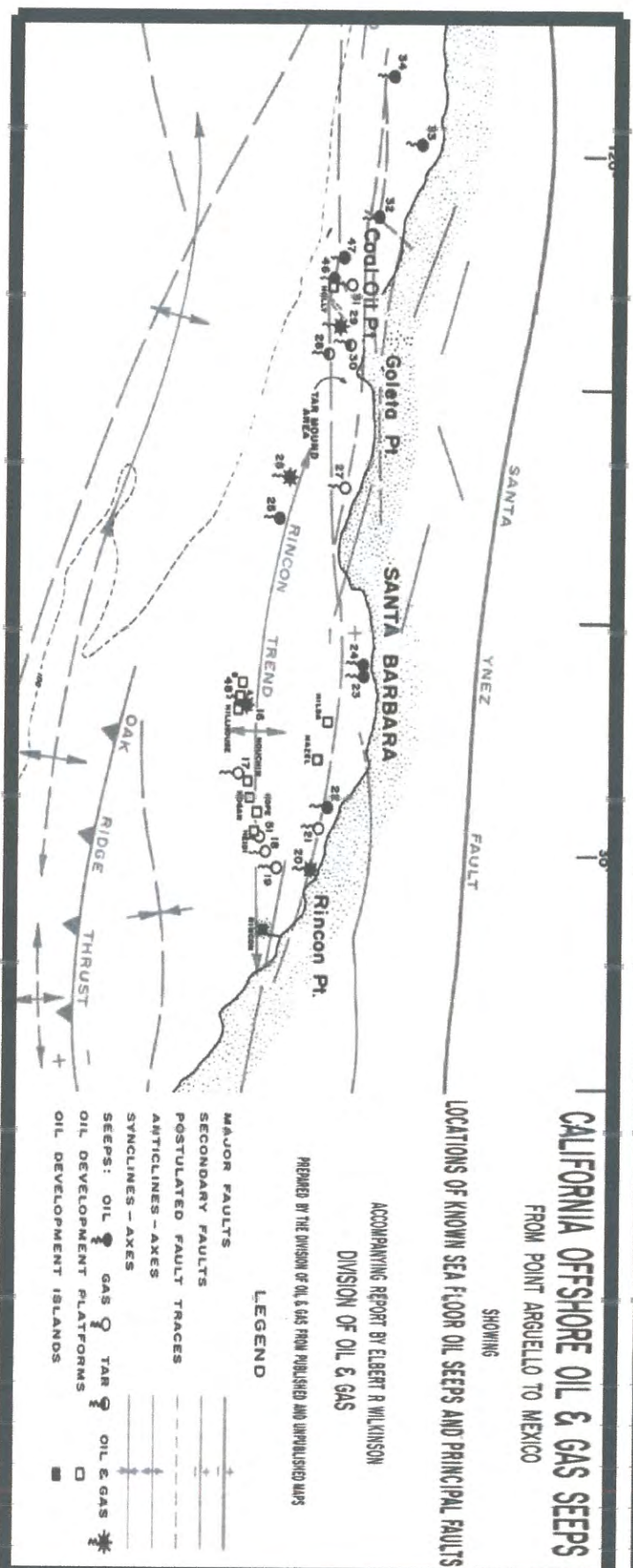
Southern Sea Otters will be far more threatened during the course of further southward migration than they are now. Unless USFWS is able to demonstrate otherwise, then USFWS' proposed action should be canceled. For the otters' own protection, Zonal Management needs to be implemented and enforced.

Submitted by:
Lad Handelman, SOS Founder

EXCERPT FROM SANTA BARBARA COUNTY ENERGY DIVISION REPORT

Santa Barbara's petroleum seeps have been much studied since the early 1970s. The most extensive survey was lead by Peter Fisher, [3] whose team documented some 2,000 natural seeps offshore from Point Conception to Rincon. While the most active seep areas are directly south of Coal Oil Point, several concentrations of seeps are found along the coast. As summarized by Quigley, whose Master's thesis includes a good background review on seeps:

SB SEEPS + FAULT LINES



2,000 active natural seeps lie below fault lines along California Coast. Seeps occur all along Santa Barbara County Coastline

Earthquakes can also expand sea floor fissures, releasing unpredictable quantities of trapped oil

Submarine Oil Seep Study

Southern Santa Maria Basin and Western Santa Barbara Channel

Jointly funded by: MMS,
USGS, County of Santa
Barbara



Oil seeps naturally all along the coast of California, notably in the Santa Barbara Channel near Coal Oil Point. The widespread nature of oil seeps historically is documented by early explorers and by coast-dwelling Chumash Indians.

Scientists want to know where the seeps are, especially in the less studied areas like the Southern Santa Maria Basin. We also want to know whether we can tell the difference between oil found seeping naturally from the ocean floor and oil being produced from offshore platforms. Since both the seeping oil and the oil production mostly come from the same Monterey formation, up to now, chemists haven't been able to reliably tell them apart. But this study may let us do that.

[Download a printable version of this document.](#)



[Submarine Oil Seeps off the Southern Santa Maria Basin](#)



Our Most Recent Cruise

In October, numerous natural seeps were sampled on the ocean floor off Point Conception, off Gaviota and near Coal Oil Point.

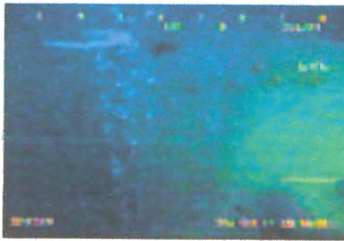


Tar seeps found in 100-200 feet of water offshore Point Conception exhibit heavy oil and little gas. Benthic communities common on rocky reefs colonize older portions of the tar.



Tar seeps visible from the surface at Gaviota come from seeps that resemble flat patties on a predominately sandy ocean floor.





Tar seeps in the Coal Oil Point area near the underwater seep tents are characterized by gas bubbles and a white, sulfur-eating bacteria called *Beggiatoia*.



Sampling Seeps for Fingerprinting

Tar "whips" on the ocean floor (left) break off and float to the surface (right). USGS scientists successfully recovered a few for fingerprinting from the water's surface. (Some photos below are screen captures from live underwater video, hence the image quality is not always consistent.)



Sampling with an ROV



Samples are also recovered using the ROV's (remotely operated vehicle) mechanical arm and are brought to the surface for analysis.



Santa Barbara County Energy Division

Natural Oil Seep Inventory

Santa Barbara County is situated adjacent to two offshore basins: the Santa Maria Basin, which is offshore of the northern coast of the County, and the Santa Barbara-Ventura Basin, which forms the Santa Barbara Channel. Both basins contain natural oil and gas seeps, and both are sites of offshore oil and gas development. The natural seepage leaves deposits of oil residues along the County's coastline, typically in the form of "tar balls." Seeps in the Santa Barbara Channel have been studied more thoroughly than those in the Santa Maria Basin, and rough estimates exist for Channel seep volumes. .

Offshore oil development carries a significant risk of oil spills that can also leave oil residues on the County's coastline. Oil spills from offshore oil projects adversely impacted the coastal and marine environment of the County in 1969 and 1997. A large number of small spills also occur, most of which probably have little impact. According to the Minerals Management Service (MMS) database, a total of 841 spills were reported in the Pacific Outer Continental Shelf (OCS) Region between 1969 and 1999, of which 95% were less than 1 barrel (42 gallons). An important distinction between natural seeps and major oil spills is that seeps are distributed over a large region and throughout the year, whereas spills are concentrated in both space and time.

When an offshore oil spill fouls the coastal environment, the operator has responsibilities under state and federal law, and under County permit conditions, for spill cleanup, resource restoration, and environmental damages. However, assessment of shoreline impacts is complicated by the ubiquitous presence on beaches of oil residues originating in natural seeps. Because the precise chemical composition of oil varies among oil reservoirs, oil originating in natural seeps can be differentiated from spilled oil by chemical fingerprinting of oil from both seeps and wells. Similarly, a baseline inventory of shoreline tar deposits can be developed by sampling and chemical fingerprinting of tar found along the shore. Such an inventory would facilitate determining the source of shoreline contamination. The United States Geological Survey (USGS) has previously undertaken preliminary reconnaissance of the coastal tar residues, comparing collected samples with a small set of reference crude oils. Most of these samples appeared to originate in natural offshore seeps.

In 2001 the USGS and MMS began a three-year, \$900,000 project to examine natural seepage in the southern Santa Maria Basin. Work during the first year focused on assessing existing information and shoreline sampling of tar deposits. Work in year two involved surveys to locate offshore seeps in the study area, chemical characterization of onshore tar

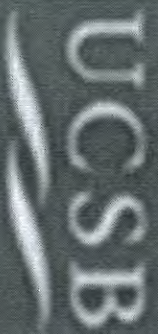
samples, and development of statistical methods for differentiating tar samples. Progress was made in building the tar fingerprint library and construction of a GIS that brings together in a spatial database many sources of data on offshore seep locations, together with other data layers, such as bathymetry and geology. In the third year, USGS will sample tar at offshore seeps, using divers and remotely operated vehicles (ROVs). Researchers in the USGS laboratory will concentrate on refining their strategy for discriminating tar from different sources and will work to develop a better picture of the beach tar deposition data.

In spring, 2002, the County of Santa Barbara received funding from the California Coastal Resources Grant Program to participate in the project. The Energy Division participation consists of beach tar sampling and support for USGS laboratory analysis of the additional tar samples generated. With the state funding, we have been able to increase the number of beaches sampled from 4 to 10, increase the sampling frequency from quarterly to monthly, and extend sampling period for a full year. The funding also covers laboratory costs for analysis of the additional samples, including support for a laboratory technician in USGS' Menlo Park laboratory, employed full-time for 14 months to analyze tar samples, perform statistical analyses, and maintain the tar database. The enhanced sampling program will allow USGS to learn more about the sources of beach tar and to develop a better estimate of how much tar is present on the beaches throughout the year.

The Energy Division has now completed its beach tar sampling program, which ran from June, 2002, to May, 2003. Beach tar was sampled monthly at ten beaches spaced out along Santa Barbara's coast, from Brown's beach, near the San Luis County line, to Loon Point, near Carpinteria. The sampling was carried out by two field teams of three students from the Department of Geology at U.C.S.B., coordinated by John Day, a Planner in the Energy Division. The sampling methodology was developed in cooperation with the USGS, following their established protocol. Tar deposition was estimated by weighing the tar found along transects positioned at random locations along the beaches, and tar samples were collected for chemical analysis. During the year, the field teams weighed tar at nearly 600 transects and collected over 300 tar samples for analysis, of which more than 160 have been chemically analyzed, as of June, 2003.

Some preliminary results of the study may be available by the end of 2003, following further data analysis by USGS scientists. The USGS final report will be published following completion of the 3-year project in 2004.

Please contact Dr. John Day for more information.



UNIVERSITY OF CALIFORNIA, SANTA BARBARA

PRESS RELEASE: November 18, 1999

- Peer Reviewed Studies- November 1999 Geology Magazine & Journal of Geophysical Research- Oceans
- "Natural seepage of hydrocarbons from the ocean floor... has been significantly reduced by oil production."
- "Studies of the area around Platform Holly show a 50% decrease in natural seepage over 22 years"
- If oil was pumped out of the La Goleta Seep, researchers state that there would be "a reduction in non-methane hydrocarbon emission rates equivalent to removing half of the on-road vehicle traffic from Santa Barbara County. In addition, a 50 percent reduction in seepage from the La Goleta seep would remove about 25 barrels of oil per day from the sea surface, which in turn would result in a 15 percent reduction in the amount of tar found on Santa Barbara beaches."

[excerpts from www.ia.ucsb.edu/pa/display.aspx?pkey=412]

OIL AND GAS SEEPAGE FROM OCEAN FLOOR REDUCED BY OIL PRODUCTION

November 18, 1999

(Santa Barbara, Calif.) Next time you step on a glob of tar on a beach in Santa Barbara County, you can thank the oil companies that it isn't a bigger glob.

The same is true around the world, on other beaches where off-shore oil drilling occurs, say scientists, although Santa Barbara's oil seeps are thought to be among the leakiest.

Natural seepage of hydrocarbons from the ocean floor in the northern Santa Barbara Channel has been significantly reduced by oil production, according to two recently published peer-reviewed articles, one in November's *Geology Magazine*, the other in the *Journal of Geophysical Research - Oceans*.

The Santa Barbara Channel provides an excellent natural laboratory, as it is among the areas with the highest levels of seepage in the world, said co-author Bruce P. Luyendyk, professor and chair of the Department of Geological Sciences at the University of California, Santa Barbara.

The studies were not funded by oil companies, but rather by the University of California Energy Institute and the U.S. Minerals Management Service, states Luyendyk, responding to the fact that the results favor off-shore oil production and are opposed by some environmentalists.

"We've done a good piece of science," said Luyendyk. "We've developed a good understanding of a natural process. It's all public data; it's all straightforward. If I thought the study was compromised I wouldn't be involved in it."

Most of the seepage is methane, a potent greenhouse gas which escapes into the atmosphere, said Luyendyk. About 10 percent of the seepage is composed of "higher hydrocarbons," or reactive organic gases which interact with tailpipe emissions and sunlight, creating air pollution.

The researchers state that the production rate of these naturally-occurring reactive organic gases is equal to twice the emission rate from all the on-road vehicle traffic in Santa Barbara County in 1990.

According to the articles, studies of the area around Platform Holly showed a 50 percent decrease in natural seepage over 22 years. The researchers show that as the oil was pumped out the reservoir, pressure that drives the seepage dropped.

"If the decrease in natural seepage found near Platform Holly is representative of the effect of oil production on seepage worldwide, then this has the potential to significantly alter global oil and gas seepage in the future," state the researchers in the article "The World's Most Spectacular Marine Hydrocarbon Seeps: Quantification of Emissions " in the Sept. 14 issue of the *Journal of Geological Research - Oceans*.

They continue, "For example if the 50 percent reduction in natural seepage rate that occurred around Platform Holly also occurred due to future oil production from the oil field beneath the La Goleta seep, this would result in a reduction in non-methane hydrocarbon emission rates equivalent to removing half of the on-road vehicle traffic from Santa Barbara County. In addition, a 50 percent reduction in seepage from the La Goleta seep would remove about 25 barrels of oil per day from the sea surface, which in turn would result in a 15 percent reduction in the amount of tar found on Santa Barbara beaches."

They conclude by saying that the rate of increase of global methane atmospheric concentrations has been declining for the past 20 years, and that a "worldwide decrease in natural hydrocarbon seepage related to onshore and offshore oil production may be causing a global reduction in natural methane emission rates."

UCSB'S STUDY OF COAL OIL POINT'S NATURAL SEEPS

Background

The Institute of Crustal Studies, UCSB performed a study that estimated a 50% reduction in gas and oil released from the Coal Oil Point natural seeps adjacent to Platform Holly, comparing data from 1973 through 1996. This research was peer reviewed and published in the journal "Geology". The paper was authored by six scientists specializing in geology, geography, and crustal studies. Five of these scientists are from UCSB. Excerpts from this report (Quigley *et al.* 1999):

"Oil production affects seepages as reservoirs of hydrocarbons are drawn down by producing wells, leading to reduction in reservoir pressure."

- Declines in reservoir pressure and depletion of seep hydrocarbon sources associated with oil production are the mechanisms inferred to explain the declines in seep area and emission volume."
- A comparison of past to present oil release showed that pollution was reduced by 50% since inception of production from the natural seeps.
- A comparison of past to present gas release showed that air pollution was reduced by 1 million feet of gas per day from the natural seeps. End of *Geology* excerpts.

Survey of Offshore Hazards in Southern California

Larry Kooker (left) and cruise chief scientist Mike Fisher monitor seismic-reflection data on the *Auriga*.

By Michael A. Fisher, Christina E. Gutmacher, and Helen Gibbons
August 2002

in this issue:
next story

On June 14, the contract vessel *Auriga* left the USGS' Marine Facility in Redwood City, CA, bound for Southern **California**. Its mission was to conduct a two-week survey of **offshore** geologic hazards in the Santa Barbara Channel, a large east-west waterway between the coastal city of Santa Barbara on the north and several of the Channel Islands on the south. This waterway is prized equally, but with continued controversy, for its wildlife and Mediterranean climate and for its rich **offshore oil** reserves. Over a long time scale, the area's tranquillity has been disrupted by **offshore** earthquakes and submarine landslides, both of which can trigger tsunamis. Each of these issues was addressed by the recent cruise, whose main goals were to

- collect seismic-reflection data to investigate **offshore** geological hazards, such as earthquakes, landslides, and tsunamis
- conduct subsidiary research funded by the Department of Interior's Minerals Management Service (MMS), which is keenly interested in locating natural submarine seeps of tar and heavy **oil** in its efforts to determine whether **oil** on the shoreline comes from spills or seeps

The USGS scientists conducting this survey benefited from early, close consultation with cooperating scientists at the University of **California**, Santa Barbara, and at Moss Landing Marine Laboratories. Data collected during the survey will be interpreted in collaboration with academic colleagues to support several National Science Foundation proposals.



Cruise map: Study area in Southern **California**. Zigzag lines **offshore** show track of the *Auriga* as it collected seismic-reflection data to investigate **offshore** geologic hazards, such as earthquakes, landslides, and tsunamis.

The *Auriga* and its crew enjoyed splendid weather during the early-morning departure past the glittering cityscape of downtown San Francisco, then ran headlong into full-gale conditions in southern **California**. On the way south, the 150-ft-long ship was crowded with crew and equipment. The tools of the marine geologist's

trade jammed the rear deck: four bright-yellow "fish" housed the sidescan-sonar, the Huntec, the chirp profiler, and the 12-kHz bathymetric-profiler systems. Also on deck were the multichannel seismic streamer, the air compressor, and various winches. Much of the deck space was occupied by four large shipping containers, which housed facilities for data recording and archiving, and tools and repair space for all USGS equipment.

The vessel was staffed by six members of the ship's crew, six USGS geologists, three technicians from the USGS' Marine Facility in Redwood City, CA, one technician under contract, and five biologists from Cascadia Research, a nonprofit research organization based in Olympia, WA. These 21 people shared 14 first names, as well as tight quarters. "Mike" was the go-to guy, as there were five of them.

Seismic-reflection data: Dual monitors display seismic-reflection data from the chirp subbottom profiler. The image displayed across the two monitors represents data collected along a seismic line about 2 km long. Approximate thickness of the sedimentary deposits (resting on bedrock) is labeled in two spots on the right-hand screen. An unconformity within the sedimentary deposits is clearly evident on the same screen.

The first part of the survey involved 4 days of collecting sidescan-sonar data near Point Conception for the MMS. Sidescan-sonar data provide a photograph-like view of the sea-floor surface. These data will help the MMS update its map of natural **oil** and gas seeps in this area. The main issue is that long stretches of beach are befouled by tarballs, and iridescent **oil** sheens are evident **offshore**, much to the dismay of the local populace. Scientists and managers in MMS are working with USGS scientists to assess the extent of natural sea-floor **seepage** of tar and heavy oils. USGS geochemists are also "fingerprinting" the natural oils, which will help MMS distinguish them from produced oils spilled during human activities. Previous surveys showed numerous sea-floor pockmarks and both acoustic and methane anomalies in the water column. Fortunately, this work in the typically windiest area was completed before the gales struck.

Ray Sliter (left) and Mike Boyle maneuver the 12-kHz fish back into its cradle after two weeks' steady duty.

The main and later part of the survey focused on collection of seismic-reflection data to support studies of geologic hazards, such as earthquakes, landslides, and tsunamis. Seismic-reflection data reveal information about sediment layers and bedrock features below the sea floor. Such data were collected to image some of the more ominous **offshore** features, such as the Oak Ridge thrust fault and its along-strike extension, the Mid-Channel thrust fault, which might be capable of generating damaging earthquakes. The scientists surveyed the area where the Oak Ridge fault intersects the coast, to fill gaps between maps of onshore and **offshore** fault segments. Also, they surveyed numerous fault strands that offset rocks very close to shore near the city of Santa Barbara. This survey of possible **earthquake** faults sets the stage for important future research goals, which include obtaining rock and sediment samples from opposite sides of some of the main faults to determine deformation rates and **earthquake**-recurrence intervals.

The scientists also investigated the Goleta submarine landslide, which is famous among marine researchers, in part because of its clear expression in bathymetric maps created from multibeam-sonar data. To foster research into the mechanics of slide generation and emplacement, the USGS scientists obtained both high-resolution and airgun seismic-reflection data over this feature. The high-resolution data provide a detailed look at sediment

layers as much as 75 m below the sea floor. The airgun data provide less detail but give scientists a look at features as much as 1 km below the sea floor.

Surveying had to be suspended whenever marine mammals got too close to the vessel, which occurred several times each day and occasionally lasted for more than half an hour. Starting in the mid-1990s, marine researchers planning to use sound energy to probe beneath the sea floor were required to obtain permits specifying the conditions under which they could operate seismic sound sources, such as airguns. The permit requirement was established to protect marine mammals that use sound themselves for various purposes, including communication, navigation, and locating prey. Once a bureaucratic quagmire, acquiring permits to conduct seismic surveys near marine mammals has become routine. A new twist is that endangered marine turtles have been added to the list of protected species. For last June's *Auriga* cruise, the USGS scientists obtained permits from the **California** Coastal Commission, the **California** State Lands Commission, and the National Marine Fisheries Service. The Channel Islands National Marine Sanctuary also advised them.

The biologists aboard the *Auriga* identified and observed the behavior of marine mammals, such as blue and humpback whales; common, Pacific white-sided, and Risso's dolphins; and **California** sea lions, harbor seals, and sea otters. Surveying operations were suspended while the animals were in the designated safety zones, which differed by species and sound source, as specified in the permit. One night, operations were suspended for 3 hours while dolphins followed the *Auriga* despite the crew's efforts to evade them.

Other cooperative work was conducted with Cascadia Research biologists who are investigating the effects of airgun signals on large whales. Their ship, the research vessel *Robert Gordon Sproul* from the Scripps Institution of Oceanography, and the *Auriga* converged at Santa Rosa Island, where, by chance, 20 to 30 large whales loitered. Biologists on both ships and in an inflatable boat observed whale behavior as the *Auriga* fired its airgun along several tracklines. Initial reports from the biologists are that the whales first made room as the *Auriga* approached them and then returned to the original area once the vessel departed. Apparently, the airgun caused neither hurried dispersal nor long-term interruption of whale activities. Eventually, such investigations will provide answers to outstanding controversies about whether sound sources used for marine research actually harm ocean animals.

Dolphin: A common dolphin (*Delphinus* sp.) swims near the *Auriga*. It was one of hundreds of dolphins surrounding the ship, all moving so swiftly in and out of the water that this is the sole photo!

Commonly, seismic data are collected with the ship headed parallel to the troughs of **offshore** waves. This direction is good for data but stressful for people. To atone for long seasick hours, we celebrated the end of the cruise with a swim call. Many participants, faces in frozen shock, spent as much as 30 seconds in the 52°F water.

THE SEA OTTERS WORST FEAR - OIL

The very basis for listing of the Sea Otter was fear of the catastrophic spill, "from a passing tanker". While this fear may be valid it is the nevertheless remote. In contrast, the following excerpts depict a fear which is anything but remote-a time bomb already set, waiting to ignite! Consider the following excerpts carefully.

Santa Barbara County is more highly vulnerable to a marine biological mega-catastrophe than virtually any other location on the planet. No other metropolis sits adjacent to so many sea floor fractures which overlay such huge subterranean oil deposits. Local geologists agree Santa Barbara will experience larger seismic activity. Should a large quake occur offshore, even no stronger than the 1925 quake, history may repeat itself and as reported by early sea-goers, "the entire sea will [again] be black with oil".
MMS- James M. Galloway, Geologist, Pacific OCS Region

"It is known that a very widespread slick covered a large area of the eastern Santa Barbara Channel during early October 1974, and fouled the eastern channel beaches on October 3, 4, and 5. There were also reports of widespread slicks in 1975 and 1976. Following the 1925 Santa Barbara earthquake, the Santa Barbara Channel was reportedly covered by thick patches of oil."- *excerpt California State Lands Commission - Seeps Report*

Trapped oil under great pressure wants to escape. Once unleashed, immeasurable volumes of oil and gas will pour out with a pollution potential 100's of times greater than the catastrophic 1969 spill. This natural outpouring will continue until equilibrium is reached, perhaps for decades, as is the case with molten lava, still flowing from Mt. Kilauea, Hawaii, reeking havoc on everything in its path.

"Of all the disasters that could befall the Central Coast, a direct hit from a major earthquake, is probably the most worrisome - and likely - officials say". *Santa Barbara News Press Sept. 19, 2005*

TH17b

Comments: CD-019-12

Steven L. Rebuck
PO Box 571
San Luis Obispo, CA 93406
805/543-2248

Opposition

US Fish and Wildlife Service

Please distribute to each commissioner and alternate

Exhibits

*Memorandum. CDFG biologist, Fred Wendell to CDFG Chief, Rolf Mall, January 25, 1994. Subject: PL 99-625 economics. 2 pp.

*Letter. Dr. Charles Woodhouse, to, Dean Roberts, USFWS, March 19, 1981. Subject: Sea otter taxonomy. 2 pp.

*Letter. Dr. Aryan Roest, Cal Poly State University, to Director, USFWS, October 27, 1975. Subject: Sea otter taxonomy and ESA listing. 1pp.

*Excerpt. Karl Kenyon, 1969 The Sea Otter in the Eastern Pacific Ocean, Subject: Depletion of Food Resources. 1pp.

*Excerpt. Executive Summary, James Dobbins Associates, 1984, Compilation and Mapping of Available Biological, Ecological and Socio-economic Information Bearing on the Protection, Management and Restoration of the Southern sea Otter, US Marine Mammal Commission. Subject: Summary of conflicts. 1pp.

*Letter. Harold O'Connor, USFWS, to Lad Handelman, Save Our shellfish, April 30, 1982. Subject: How to sue the federal government

Comments: CD-019-12 (U.S. Fish and Wildlife Service, So. California)

Hearing Date: Thursday June 14, 2012

Agenda item: Th17b

RE: Opposition to the staff recommendation on consistency declaration

Dear Commissioners:

My name is Steven L. Rebuck. I was the primary negotiator for the commercial and recreational fishermen in creating the laws governing the Management Zone. Following the translocation of sea otters to San Nicolas Island in 1987, I appeared at every California Coastal Commission (CCC) hearing on this subject for nearly 2 years, representing commercial and recreational fishermen of the affected region. I also served as the Abalone Technical Consultant to the Southern Sea Otter Recovery Team from 1993-2004. I have also appeared before congress 4 times (1984, 1985, 2001, 2003) on these subjects. I am personally disappointed in the proposed action taking place here today. Years of very hard work will be lost if this action is taken.

Historical Perspective: As originally proposed, the translocation of sea otters to San Nicolas Island (SNI) was illegal. It violated taking provisions of the Marine Mammal Protection Act (MMPA). In order for the US Fish and Wildlife Service (FWS) to proceed, congress passed a special law, Public Law 99-625. This law allowed FWS to capture "non-essential" and "excess" sea otters. It also provided protections of other resource users at all other mainland and Channel Island sites. This included commercial and recreational fishermen, plus the offshore oil industries. These protections were also spelled out in the Federal Register Tuesday August 11, 1987, Vol. 52, No. 154 and Federal Rulemaking 1997, Endangered Species Act Authorization for Fiscal Years 1986, 1987, 1988, House of Representatives, et al.

Addressing water quality and fishery conflict issues, the Dobbins mapping study (Marine Mammal Commission 1984) found that southern California was "unsuitable" for sea otters due to: 1) poor water quality, and 2) conflicts with fisheries.

What congress did in 1986, passing PL 99-625, was to create "Zonal Management" of sea otters in California, modeled after the Zonal-Management plan for gray wolves in Minnesota. By doing so, congress created a situation where sea otters were preserved and shellfish fisheries conserved. The Staff Report advocates elimination of this congressional mandate, with admitted devastating affects on fisheries.

Unfortunately, FWS has violated all of these laws and rules since 1993.

"Thus, the decision by the USFWS to no longer maintain the "no otter" zone triggers the need for a new federal consistency review to determine if the project continues to be undertaken in a manner consistent with CCMP."
(Letter, CCC to FWS, April 30, 1999).

At this particular juncture in 1999, CCC was concerned about the lack of containment of otters to SNI. Containment was the reason the translocation program was found to be consistent in 1987.

The sea otter in California was listed as threatened under the ESA primarily due to oil spill risks. The Staff Report downplays the significance of natural oil seeps in the Santa Barbara Channel which is estimated at 70,000 bbl per year. Also, the Staff Report ignores the offshore oil infrastructure and shipping. Can we conclude that oil is not the threat to sea otters it was once thought to be?

In my opinion, the staff recommendations are in error.

First: The staff report cites Section 30220, 30230, 30234, 30234.5. It would appear that the staff report violates each of these sections. All of these sections are strong on protection of commercial and recreational fishing, infrastructure and coastal economics. The Staff Report admits expanding sea otters will cause loss of fisheries.

Second: The scientific citations used to justify this change in consistency are one-sided, obviously manipulating the decision making process. This Staff Report is inadequate and lacks a balanced airing of known facts.

Economics: The Staff Report downplays the economics of their proposal. Ex-vessels values of some fisheries are mentioned, but economic multipliers (2.7) are ignored. The staff Report must correct these deficiencies to properly reflect the economic impacts to the region. The combined commercial fishery multiplied 2011 values of Santa Barbara alone are estimated at \$40,000,000. (California Dept. Fish and Game, 2012). Full values would demonstrate the loss to coastal communities.

Wendell (CDFG 1994) estimated PL 99-625 preserved and multiplied values (2.7) of commercial landings at \$73,000,000, recreational values \$150,000,000. and oil and gas risk values of \$12,600,000,000. The Staff Report missed this. What are the true 2012 values? The Staff Report is inadequate.

The Staff Report fails to recognize what we already know about sea otters from experiences from Monterey to Port San Luis over the past 75 years. Many valuable fisheries have already been lost: abalone, sea urchin, Pismo clam, and halibut, rockfish and sea bass net fisheries. This has caused extreme financial hardship to the affected coastal communities. Is it really necessary to force more losses now on cities from Santa Barbara south?

At the time the translocation began in 1987, 41% of red abalone landings originated from SNI. By 1993, this number reached zero (CDFG 1998). By 1997, this unfortunate result, not caused by fishermen, but by sea otters, contributed to close the abalone fishery south of San Francisco. From 1916 until 1963, an average 2.million pounds was landed at Morro Bay annually, this before sea otters (Cox, 1962). Red abalone was a very "sustainable" fishery before sea otters.

The Staff Report uses FWS interpretations to explain away possible negative impacts on endangered white and black abalone. These citations are in direct conflict with published data by the National Marine Fisheries Service (NMFS) the agency in charge of recovery of these abalone species, as reported in ESA abalone recovery plans. The Staff Report should be amended to reflect this difference of opinion between these two federal agencies.

Sea otter health: Sea otters in the range from Monterey to Santa Barbara are facing declining health issues. These animals are capable of depletion of their food resources (Kenyon, 1969). Malnutrition has become a significant cause of mortality. Many preferred food items (nearly 60 species) have decline, not due to human fishing, but by over-utilization by foraging sea otters. It is predictable that even with range expansion southward, these animals will ultimately create the same situation for themselves at some future date. Sacrificing all of the various fisheries in Monterey and San Luis Obispo Counties, and now Santa Barbara County hasn't solved this problem. Sea otters in their current range are at carrying capacity.

Kelp Theory: The Staff Report relies on a myth in California that sea otters enhance kelp and thereby fin-fish. The Staff Report cites data from Alaska as evidence of this. I would ask, where is the data from California? Cited in the Staff Report are studies by Foster and Schiel, 1987, et al, which demonstrate that macro-invertebrates like sea urchins and abalone have a less than 10% effect on kelp canopy structure. This is the best published data on this subject. It is simply wishful thinking that fin-fish enhancement is a sound economic trade-off.

Options: Instead of supporting the FWS, it would appear preferable for CCC to obey governing statutes and support the economic interests of the state of California and coastal cities and counties.

It appears to me that sea otters in California are near and/or at the number needed to remove them from protections of the Endangered Species Act. De-listing could increase management options, something which is not possible now. Sea otters in California would still receive federal MMPA and state protection.

Petitions for this action have been submitted over the years, but ignored by FWS. In addition, petitions for taxonomic clarification have also been ignored. These petitions need to be reviewed by the National Science Foundation. (NSF). Stonewalling by FWS has prevented a fair and honest review of sea otters in California. Sacrificing fisheries has been the preferred option by FWS. CCC has the opportunity to correct this process.

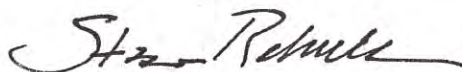
Respectfully,

Steven L. Rebuck

PO Box 571

San Luis Obispo, CA 93406

805/543-2248



Memorandum

EXHIBIT 7

TO : Mr. Rolf Mall, Chief
Marine Resources Division

Date: January 25, 1994

FROM : Department of Fish and Game - Sea Otter Project

Subject: Estimated Value of Resources Preserved by P.L. 99-625

You directed the project to estimate the value of the shellfish resources available for human use south of Point Conception as long as P.L. 99-625 remains in affect. Generating the estimate has been an interesting assignment. This is what I came up with:

1) Value of commercial landings	\$27,340,000
2) Value of recreational activity	\$55,700,000
3) Oil and gas risked value	\$4,666,000,000

These estimates are so soft, I can't forward them without explanation. A description of the method and assumptions used to generate each component follows:

1) Value of commercial landings: This is the easy one. This estimate is simply the ex-vessel dollar value reported for selected species of shellfish landed in 1992 in all statistical areas south of Monterey (ie. Santa Barbara south). The species selected include all abalone, all sea urchins, lobster, and all crab other than spider crab. A small percentage of the landings were probably made in Morro Bay and Port San Luis and were taken in the area just north of the management zone. I'm assuming the landings from these ports are negligible. I'm also assuming that the reported values accurately reflect actual landings.

2) Value of recreational activity: This estimate is based on information provided by NOAA in Technical Memorandum SWFSC-164 (Results of the Southern California Sportfish Economic Survey) for southern California shellfish recreational activity in 1989. They provided two facts: 1) an estimate of the number of trips made in southern California by "recreational shell fishers" over an 8 month period (381,000 trips) and 2) an estimate of the total recreational trips in a year and the expenditures associated with those trips (5.5 million trips expending \$536 million dollars). I assumed that the 8 months for which we have data on recreational shell fishing activity (trips) accurately reflects the rate at which trips are made on an annual basis and that a recreational shell fisher's trip incurred expenditures comparable to trips made by other recreational resource users. The rest is a simple ratio expansion.

3) Oil and gas risked value: This estimate is based on information provided in the EIS on the translocation of sea otters to San Nicolas Island. The EIS provided two facts: 1) an estimate of the risked mean resource value of unexploited oil and gas resources within the San Nicolas Island translocation zone (\$1.4 - 2.8 million) and 2) a statement that the risked mean resource estimate for San Nicolas Island represents 0.03% of the total unleased resources in the Southern California Planning Area. I assumed that unleased resources were at risk of a jeopardy decision by the U.S. Fish and Wildlife Service under Section 7 consultations if the protection provided by P.L. 99-625 disappears.

I did not apply any economic multipliers to the estimates provided above. I'm not sure which would be the most appropriate value to use, so I'm providing both. The typical economic multiplier used to estimate the economic ripple effect is 2.7. Applying this multiplier increases the estimates to:

1) Value of commercial landings	\$73,800,000
2) Value of recreational activity	\$150,400,000
3) Oil and gas risked value	\$12,600,000,000

I also estimated how much revenue the commercial use of these shellfish resources generates for the Department. The estimate and assumptions are attached for your consideration. If I can provide any further clarification or information, please let me know.

Fred Wendell

Fred Wendell
Associate Marine Biologist

FW:fw

Attachment

cc: Mr. Paul Wild
Senior Biologist (Marine/Fisheries)



SANTA BARBARA MUSEUM OF NATURAL HISTORY

2559 Puesta Del Sol Road • Santa Barbara, California 93105

March 19, 1981

Mr. Dean Roberts
Acting Director
U.S. Fish & Wildlife Service
Department of the Interior
Washington, D.C. 20240

Dear Mr. Roberts:

Regarding the matter of taxonomic designation for the California population stock of sea otters, there appears to be reason to question the validity of the separation of that stock at the subspecific level from those in Alaska. While I am aware that considerations of threatened, depleted or endangered status deal with population stocks which may or may not be discreet taxonomic units, there is reason to address the subspecific status of sea otters relative to their management and eventual removal from the threatened list. This point was brought out during a joint meeting on 24-25 July, 1980, that involved your agency, the Marine Mammal Commission, the California Department of Fish and Game and its scientific advisory committee. The minutes of that meeting, prepared by Dr. Hofman of the Marine Mammal Commission, give a detailed account of the taxonomic considerations and concerns that were discussed. The salient point raised concerns the wider range of management options available if in fact there are no biologically significant differences between "southern" (Californian) and "northern" (Alaskan) sea otters. Given this possibility, northern animals could be used to replenish the California stock should it be seriously diminished by man made or natural causes. Another thought is that northern animals could be used to maintain the genetic heterozygosity of the southern population should the latter show signs of genetic weakness. I refer you to Dr. Hofman's minutes for further details.

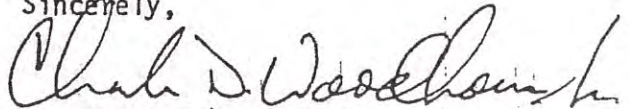
The background of published systematics concerning the designation and subsequent questioning of the subspecies Enhydra lutris nereis is summarized in Woodhouse, et al. (1977). Essentially all of the work is based on cranial morphometrics, but the trend of applying increasingly sophisticated statistical treatment in more recent studies provides strong evidence for a biological cline within the species. The most recent findings are those of Dr. Aryan Roest. His results give strong evidence for similarity particularly between historic stocks from Prince William Sound, southeastern Alaska and California. In my opinion, based on these recent studies, there is plausible reason to question the validity of the nereis subspecies.

Mr. Dean Roberts -- Page two

The distribution of E. l. nereis is presented in Hall and Kelson (1959). This source has been cited in a number of places including the deliberations which led to E. l. nereis being declared threatened. Unfortunately, there is an error which needs to be resolved in any considerations of synonymizing E. l. nereis and E. l. lutris. Hall and Kelson (1959) erroneously list the range of the former as the Strait of Juan de Fuca to Sebastian Vizcaino Bay, Baja California. The source of error lies in a misquote from a paper by Taylor and Shaw (1929) which is simply a "Provisional List of the Mammals of the State of Washington", and makes no reference to a northern or southern limit in the range of the subspecies nereis. If there were two reproductively isolated populations prior to the fur trade, then in all probability the limits to their respective distributions would most likely have been controlled by some natural barrier. On the basis of what is known of the behavior and movements of contemporary animals, I would not anticipate that the Strait of Juan de Fuca would be a barrier to the north-south movement of the species.

Finally, I would reiterate a point covered in Dr. Hofman's minutes of the July 1980 meeting. In any considerations to establish significant differences or similarities among sea otter stocks, genetic and electrophoretic studies would be desirable. One major difficulty, however, may be ruling out contemporary differences as a consequence of the "founder effect", which may not reflect differences which existed prior to the fur trade.

Sincerely,



Dr. Charles D. Woodhouse, Jr.
Assistant Director and
Acting Curator of Vertebrate Zoology

CC: Lad Handleman
Robert Hofman -
E. C. Fullerton

Attachment

CDL/kwr

CALIFORNIA POLYTECHNIC STATE UNIVERSITY

SAN LUIS OBISPO, CALIFORNIA 93407



AGRICULTURE & NATURAL RESOURCES • ENGINEERING & TECHNOLOGY • ARCHITECTURE & ENVIRONMENTAL DESIGN • BUSINESS & SOCIAL SCIENCES • COMMUNICATIVE ARTS & HUMANITIES • HUMAN DEVELOPMENT & EDUCATION • SCIENCE & MATHEMATICS

27 October 1975

The Director (FWS/LE)
U. S. Fish and Wildlife Service
P.O. Box 19183
Washington, D.C. 20036

Dear Sir,

I wish to comment on the inclusion of the 'southern sea otter' on the list of species being proposed for addition to the endangered species list, to appear on the Convention on International Trade. I do not favor its inclusion on such a list for the following reasons:

1. 'Enhydra lutris nereis', the 'southern sea otter', is not a valid subspecies. Available information on the taxonomic status of sea otters has been summarized in my 1973 paper (reprint attached). I feel this paper adequately establishes the fact that the California population of sea otters is a minor local variation of a single subspecies, which also includes sea otters from mainland Alaska, the Aleutians, and the Commander Islands. The California otters differ from those in Alaska and the Aleutians much less than does the Kurile Island population, which is considered a distinct subspecies.

In the near future Davis and Lidicker (in press) intend to present a re-evaluation of the data summarized in my paper, in which they come to a different conclusion (that E. l. nereis is valid). I have examined a copy of their paper and find their analyses fail to recognize some of the factors involved, and are actually in error on some points. I am preparing a rebuttal to their re-evaluation.

2. Even if sea otters in California were to be considered a valid subspecies, they do not meet the criteria for being considered endangered. Consider:
- The habitat of sea otters in California is not presently threatened. Although the possibility of pollution from sewage, biocides, or an oil spill exists, this possibility does not in itself constitute a threat.
 - Sea otters in California are not currently being exploited - tourists are interested in seeing them, but this activity does the otter no harm.
 - Disease and predation are at a level which has not interfered with the natural growth of the population.
 - Existing regulatory mechanisms appear to be adequately protecting the sea otters in California waters; the population is growing.

For the above reasons, California's sea otter population cannot truly be considered 'endangered'.

Very sincerely,

Aryan Roest
Dr. Aryan I. Roest
Biol. Sci. Dept.

THE CALIFORNIA STATE UNIVERSITY & COLLEGES

nutritional source. Because of the general depletion of invertebrates and the apparent inability of juvenile otters to obtain an adequate number of fish and mollusks, these young animals are compelled to eat the abundant and easily obtained immature sea urchins. An otter would have to consume nearly 6,500 of these immature urchins daily to supply the 3,000+ calories which appear to be required.

Depletion of Food Resources

The requirement for large amounts of food by sea otters has been discussed. Feeding grounds are limited by depth to relatively shallow waters and tag returns indicate that individual sea otters do not range widely along the coast (see Home Range). Because of these circumstances which concentrate feeding activities in rather limited areas, it appears probable that a large population of sea otters could seriously deplete food resources within their home range. Evidence is available that this does in fact occur.

SEA URCHIN DEPLETION

McLean (1962) presents convincing evidence that the sea urchin *Strongylocentrotus franciscanus* has been nearly exterminated in a particular area on the California coast which is occupied by a considerable number of sea otters. Of the area he studied he says (p. 101) "the large sea urchin was totally absent, although spines and test fragments were present in gravel samples."

Indirect evidence from Amchitka Island, where a large sea otter population exists, indicates that sea otter predation has drastically reduced certain food species there. Small green sea urchins are abundant. It is not possible, however, to find large individuals in the intertidal zone and I seldom saw an otter eating an urchin that approached in size the large individuals which are abundant in other Aleutian areas where the sea otter is scarce or absent. Bottom samples obtained by R. D. Jones, while diving with SCUBA equipment, both at Amchitka and in comparable areas at Adak (where at the time few sea otters occurred), showed that sea urchins at Amchitka are relatively scarce and small.

KENYON, KARL W., 1969, THE SEA OTTER IN THE EASTERN PACIFIC OCEAN, NORTH AMERICAN FAUNA # 68, BUREAU OF SPORT FISHERIES AND WILDLIFE

EXHIBIT 2

Of all four zones, it appears that San Nicolas Island may provide the least conflicts with shellfisheries considering simultaneously both existing commercial and sport fisheries. This is assuming that the animals will not disperse throughout the Channel Islands. Should dispersal take place to other island shelves such as the northern archipelago, (San Miguel, Santa Rosa, Santa Cruz, Anacapa) and Santa Barbara Island, conflicts arising from the selection of San Nicolas would be greater (in economic terms) than conflicts arising from dispersal from the other zones. Dispersal outside the other zones would also affect the magnitude of conflicts with existing commercial and sport fisheries.

Summary

The study results indicate that there is no single zone that provides suitable habitat, while also presenting no environmental risk and no conflicts with an existing shellfish fishery. The availability of reliable and comparable data for the entire study area has surfaced as an important limitation to the objective comparison of the alternative zones. Such limitations were particularly severe with respect to food species concentrations, one of the most important factors in determining habitat suitability. There were limited comparable statistics on the economic value of commercial and sport fisheries. In addition, the prediction of primary and secondary economic impacts and benefits of a translocation could not be addressed.

In addition to the factors considered during the course of this project, there are several other important considerations that may enter into the selection of a translocation zone. These include, for example, the feasibility of temporary and long-term containment of otters in different nearshore environments, the logistics of the actual release, the implications of the presence of Alaskan otters and local and regional economics. The project therefore represents an early phase of the overall process of selecting a translocation zone.

EXCERPT:Dobbin, James (1984) Compilation and Mapping of Available Biological, Ecological and Socio-Economic Information Bearing on the Protection, Management and Restoration of the Southern Sea Otter, U.S. Marine Mammal Commission, Contract No. 14-16-0009-81-050



ADDRESS ONLY THE DIRECTOR
FISH AND WILDLIFE SERVICE

United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

In Reply Refer To:
FWS/OES 920.2H
OES 1942

APR 30 1982

Mr. Lad Handelman
Save Our Shellfish
219 "E" Stearns Wharf
Santa Barbara, California 93101

Dear Mr. Handelman:

Thank you for your March 27 letter concerning the taxonomic status of the southern sea otter.

We do not believe we can go forward with a public meeting until further information is available. We are currently reviewing a proposal to conduct genetic studies, and we are actively seeking the needed funding support. It is our intention to have the study monitored by an independent entity to insure that the study will provide sufficient information with which to make informed management decisions.

We will, however, consider your letter as the 60 day notice required to commence a civil action as provided under Section 11(g) of the Endangered Species Act of 1973, as amended.

We appreciate your comments.

Sincerely yours,

Harold L. O'Connor

Deputy Associate Director

*File 5/6/82
505*

Agenda Item Th 17b
Bruce Steele
OPPOSE

BRUCE A. STEELE
PO Box 336
Buellton, CA 93427

June 8, 2012

Mary Shallenberger, Chair
California Coastal Commission
P.O. Box 354
Clements, CA 95227-0354

RE: Agenda Item Th 17b –
U. S. Fish and Wildlife Services Consistency Determination No. CD-019-12

Dear Chairwoman Shallenberger:

I am Bruce Steele, a sea urchin diver in Santa Barbara who has dived for sea urchins in southern California for more than 40 years.

Chapter 3, Section 30230, states the Coastal Zone Act will "maintain healthy populations of all species of species of marine organisms adequate for long term commercial, recreational, scientific and educational purposes."

Sea otters cause an approximate 90 percent decline in about 60 species of invertebrates. Even the Fish and Wildlife Service acknowledges that shellfish fisheries in southern California will be eliminated by extended sea otter foraging.

The Fish and Wildlife Service (FWS) Environmental Impact Statement (EIS) declaring the San Nicolas Island otter translocation a failure only describes the predicted economic effect for the next 10 years. Although this may satisfy FWS standards, it fails to address long term biological and economic effects on valuable commercial and recreational fisheries, as required by the Coastal Zone Act.

The FWS fails to give any economic value to recreational lobster fisheries between Point Conception and Oxnard. Although the Service admits this fishery will disappear, the Coastal Commission should better understand the value of recreational lobster diving and hoop-netting along the coast. Again, the Coastal Act mandate to maintain long-term healthy populations of all species is contrary to the FWS admission that these fisheries will disappear. In our view, the Service's action should be found to be inconsistent with the Coastal Act.

Section 30231 of the Coastal Zone Act mandates:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff ...

The FWS EIS mentions water quality and disease in passing, but fails to meet the standards of the Coastal Zone Act. Although disease caused by non-point source pollution is the number one cause of otter mortality, the Service fails to mention restoring watersheds, controlling runoff or other mechanisms to address toxins entering the marine environment via terrestrial sources. The Service also fails to point out

U. S. Fish and Wildlife Services Consistency Determination No. CD-019-12

Page 2

potentially hazardous watersheds within the projected expansion of the otter range, or to recommend potential mitigations to address those threats.

Unlike the primarily reef habitat that dominates the central coast sea otter range, the largely sand-dominated coastline between Gaviota and Los Angeles will provide forage items including clams and sand crabs. But both of these prey species are problematic due to disease issues, i.e. possible concentration of *toxoplasma gondii*, domoic acid and other marine toxins.

The sea otter's effect on kelp is questioned by current research (Reed, 2011). According to Reed et al, kelp productivity is doubled south of Point Conception (outside the current sea otter range), compared to Point Lobos, the center of the range where sea otters have existed for nearly a century. Best available science should inform the Coastal Commission, not old data from 2,000 miles away in Alaska. Any and all knock-down effects of kelp or increase in finfish numbers are conjecture and not borne out by fisheries statistics.

According to the California Nearshore Fishery Management Plan, Table 2.3-8
Finfish values in the Monterey-Morro Bay area, within the sea otter range, totaled \$1.3 million.
In the Santa Barbara-Los Angeles "no otter" zone, the value totaled \$1,470,000.

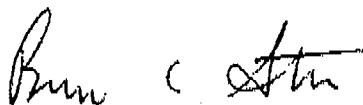
Facts should inform the Coastal Commission decision – not conjecture.

The FWS will not make a final decision on the failure of the translocation program until December. I suggest the Coastal Commission defer your consistency determination until AFTER the public process has concluded.

The Coastal Commission should also review the other options discussed in the FWS EIS document. Although the Service may have a "preferred" option, the Commission should review the consistency of other options that may better address the maintenance of shellfish resources, as well as commercial and recreational fisheries, for the long-term benefit of all Californians.

It seems premature to decide on any one option before the public process is complete.

Sincerely,



Bruce A. Steele

Attachments:

Figure 4 from Reed et al (2011). Wave disturbance overwhelms top-down and bottom-up control of primary production in California kelp forests Ecology, 92(11), 2011, pp. 2108–2116

Figures 2 from Kvitek et al. QUANTITATIVE ASSESSMENT OF SEA OTTER BENTHIC PREY COMMUNITIES WITHIN THE OLYMPIC COAST NATIONAL MARINE SANCTUARY: 1999 RE-SURVEY OF 1995 AND 1985 MONITORING STATIONS

Figure 4 from Reed et al (2011). Wave disturbance overwhelms top-down and bottom-up control of primary production in California kelp forests *Ecology*, 92(11), 2011, pp. 2108–2116

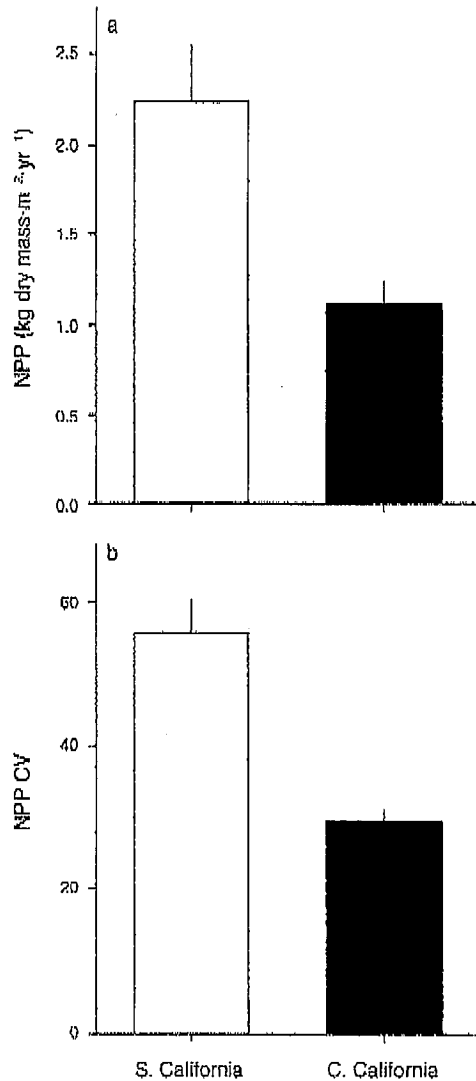


FIG. 4. (a) Annual net primary production (NPP) by giant kelp. Data represent regional nine-year means (\pm SE) averaged over sites within each region ($n = 8$ sites in central California and 9 sites in southern California). (b) Interannual variation in net primary production by giant kelp. Plotted are regional mean coefficients of variation (%) (\pm SE) averaged over sites within each region. Coefficients of variation for each site were calculated from annual means averaged over the period 2001–2009.

Figures 2 from Kvitek et al. QUANTITATIVE ASSESSMENT OF SEA OTTER BENTHIC PREY COMMUNITIES WITHIN THE OLYMPIC COAST NATIONAL MARINE SANCTUARY: 1999 RE-SURVEY OF 1995 AND 1985 MONITORING STATIONS

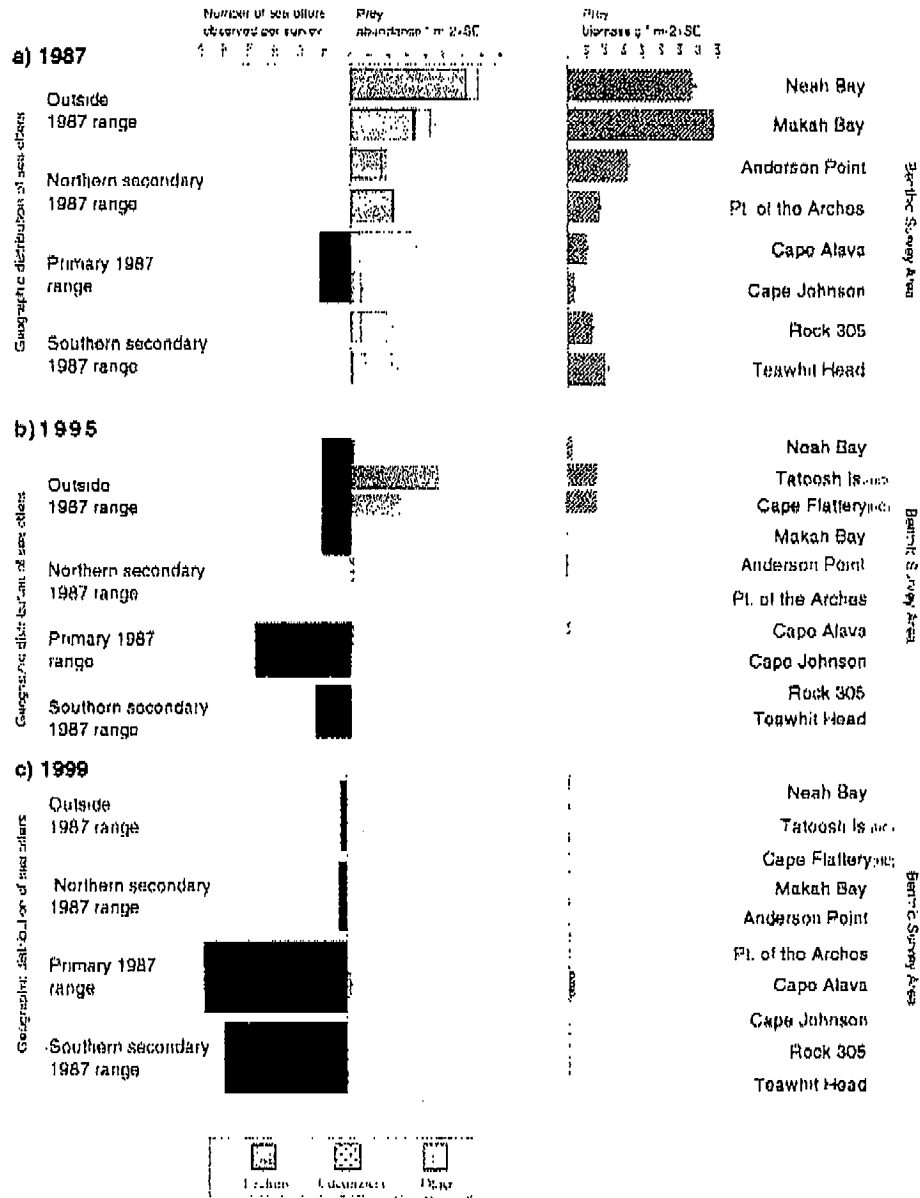


Figure 2. Invertebrate prey abundance at benthic sampling sites for 1987, 1995 and 1999, related to sea otter abundance. HC = high current areas at Tatoosh Island and Cape Flattery. These two sites were sampled in 1995 and 1999 only.

June 9, 2012

Mary Shallenberger
Chair
California Coastal Commission
P.O. Box 354
Clements, CA 95227-0354

RE: Agenda Item Th 17b - U. S. Fish and Wildlife Services Consistency Determination No. CD-019-12

Dear Chairwoman Shallenberger:

I write today to request a continuance of this agenda item because I believe there is significant additional information that the staff and members of the CCC should review before considering this matter. Additionally, I oppose the staff recommendation that the California Coastal Commission ("CCC") concur with consistency determination CD-019-12 by the U.S. Fish and Wildlife Service ("FWS"). As an individual who cares about biodiversity in our coastal waters and the continuation of commercial fisheries, I have serious concerns about the FWS proposal. I urge the careful review of all available information, which I believe will lead the CCC to the conclusion that the FWS is focusing on one species, while the CCC has a responsibility to "all species of marine organisms." This letter is also being provided to appropriate CCC staff.

I support recovery of the threatened sea otter and the 1986 agreement that forfeit prime fishing grounds to sea otter predation so that a new colony of sea otters could be established at San Nicolas Island. That agreement was codified in P.L. 99-625. Now, FWS wants to change the sea otter management program established pursuant to P.L. 99-625 to allow unlimited otter range expansion. Marine invertebrates are prey for the sea otter, and these species have been depleted in areas where sea otters have reached carrying capacity. As invertebrate food sources are depleted, the sea otter's diet changes from sea urchins and abalone to other smaller prey species. Without a management plan that addresses the effects of sea otter range expansion on all species, the FWS proposal is inconsistent with Section 30230 of the Coastal Act, which states that "Marine resources shall be maintained, enhanced, and, where feasible, restored...Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes."

FWS also neglects to consider how degraded water quality affects the sea otter, which is inconsistent with Section 30201 of the Coastal Act, where it is clear that the "quality of coastal waters...appropriate to maintain optimum populations" is an issue to be considered by the CCC.

FWS' proposal is also inconsistent with the Coastal Act's mandate that "The economic, commercial, and recreational importance of fishing activities shall be recognized and protected" (Section 30234.5). The potential result of this single species approach includes other shellfish populations becoming threatened or endangered because of sea otter predation. This would then result in the loss of livelihood for shellfish fishermen and all related jobs, including those at processing facilities in the state. In addition, sport fishermen would lose the recreational use of the ocean. This would impact bait and tackle shops, marine sales, and port infrastructure, to say the least.

I request the CCC approve a continuance of this item. As discussed above, I oppose the FWS' proposal and request that the CCC deny the consistency determination request. The FWS should implement an ecosystem management plan that protects all species; otherwise, FWS is acting in direct opposition to the Coastal Act's protection of all species of marine organisms and commercial and recreational fishing activities.

Sincerely,



Scott B Thompson

Commercial Fisherman / Sea Urchin Diver

7110 Gobernador Cyn.

Carpiateria CA 93013

(805) 450-3474

June 9, 2012

Mary Shallenberger
Chair
California Coastal Commission
P.O. Box 354
Clements, CA 95227-0354

RE: Agenda Item Th 17b - U. S. Fish and Wildlife Services Consistency Determination No. CD-019-12

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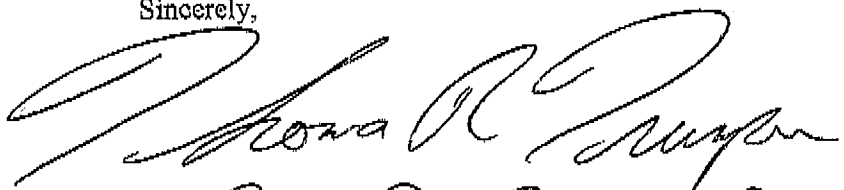
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Sincerely,


owner: Pacific Rim Seafood.

Member: Regional Stakeholder Group
North Coast Region - MLPA.

June 12, 2012

Agenda Item Th 17b
Bob Bertelli
OPPOSE

Mary Shallenberger
Chair
California Coastal Commission
P.O. Box 354
Clements, CA 95227-0354

RE: Agenda Item Th 17b- U.S. Fish and Wildlife Services Consistency Determination
NO. CD-019-12

Dear Chairwoman Shallenberger:

My name is Bob Bertelli, and I am the current Chair of the California Sea Urchin Commission, (CSUC), as well as an Ex-Officio board member of the California Lobster and Trap Fishermen's Association, (CLTFA), and the Southern California Trustee for the California Fisheries Coalition, (CFC), who's membership includes a diverse group of sport and commercial fishing interests, ocean dependent businesses, and entities.

I was also a member of the Stakeholders Advisory Group for the South Coast Marine Life Protection Act Initiative, and served as a stakeholder on the recently completed California Fish and Wildlife Strategic Vision Process, as one of the three Marine Resources Interests positions, as opposed to one of the fishing appointments.

I am giving you (and the other Commissioners), this recent biography of myself, so you might better judge the weight of the following comments on the issue before you.

One of the things that has been a constant through out the entire California MPA process, the Strategic Vision process, The West Coast Governors agreement on managing marine resources, and our National Oceans Policy, has been the science based foundational principal of Ecosystem Based Management (EBM), where the failed idea of single species management, has been replaced by holistic ecological principals of resources management. By applying rigorous science from all the related disciplines, including economics and social science, management strategies can be developed, for various ecosystems, some like the current sea otter range, where otters are allowed to dominate, some for man and shell fish, and some that are protected from any take: by otters or man, (no take MPA's).

However, what the U.S. Fish and Wildlife Service (FWS), and some Environmental NGO's are advocating for, is the simplistic, and misleading notion, that by declaring P.L. 99-625,(the sea otter translocation), a failure, and adopting a non-plan, that fails to address the known water quality issues in the current range, that are responsible for the vast majority of otter strandings each year, and allowing them (otters) to expand into an area, the Southern California Coast, that has even poorer water quality, will somehow be good for otters.

The FWS tell us that the translocation to San Nichols Island (SNI) has been a failure, but they are only partially right. While by their own admission, they have failed to carry out their own translocation plan, due to their own mistakes, and miscalculations, the sea otter has somehow managed to establish a small, but healthy and growing colony at SNI!

It is not a failure when nature, in this case sea otters, does not follow mans plan, but instead finds its' own way. It should be pointed out that the number of otters at SNI, per the 2012 survey, is 58 animals, including 10 pups. A very similar number of otters that was discovered over 100 years ago at Big Sur, which has grown to over 2,700 animals in the parent range ! Yes, there was failure here, and it was the FWS that failed, not the sea otter.

This number, 58, is 80% of the initial goal of 70 animals, as a breeding nucleus. It is currently estimated that the SNI population is expanding at an annual rate of 10%. At this rate, the otters will soon reach that goal.

Now the FWS, and some others, are coming before you, to ask the Coastal Commission to rubber stamp their failure. However, in doing so, they are also asking you to violate sections 30230, 30234, 30234.5 and 30220 of the California Coastal Act. The are asking you to violate your own policies and laws, but also those many other state agencies who have a role in marine management, e.g. the California Department of Fish and Game (DFG), and the California Fish and Game Commission (FGC).

I would recommend the C.C.C. do two things: First reject the Consistency Determination CD-019-12, by the FWS; second request that the FWS, after the FINAL EIS has been published, consult with all Sate and Federal Agencies that have a role to play, along with stakeholders, and develop basic outline of the process to develop **EBM**? for the Southern Sea Otter that protects otters and shell fish.

Please reject single species management; it is just bad public policy.

Thank you for considering my views on this item.

Bob Bertelli
PO Box 1001 Seal Beach CA 90740

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Washington, DC 20515-0524

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• CHAIRMAN, IMMIGRATION POLICY
AND ENFORCEMENT
• COURTS, COMMERCIAL AND
ADMINISTRATIVE LAW

June 11, 2012

The Honorable Mary Shallenberger
Chair
California Coastal Commission
P.O. Box 354
Clements, CA 95227-0354

RE: Agenda Item Th 17b - U. S. Fish and Wildlife Services Consistency Determination No. CD-019-12

Dear Chairwoman Shallenberger:

I write today to express my opposition to the staff recommendation that the California Coastal Commission ("CCC") concur with consistency determination CD-019-12 by the U.S. Fish and Wildlife Service ("FWS"). As a Member of Congress who represents Naval Base Ventura County and shellfish fisherman, I am very concerned about the impact that this FWS proposal will have on our national security, marine environment, and the long-term health of our fisheries.

The agreement made in 1986 was codified in P.L. 99-625 to establish a new colony of sea otters at San Nicolas Island to help recover the threatened species. This agreement was the product of a compromise among the Navy, the FWS and the shellfish fisherman to help the sea otters, but also to protect both the Navy's testing at San Nicholas Island and southern California shellfish fisheries. Now, the FWS wants to determine the project a failure, based upon questionable analyses, and change the terms of the original agreement.

The FWS is proposing a path forward that focuses on the sea otter to the detriment of the Navy and shellfish, some of which are endangered. Single species management is unprecedented and this proposed plan would prevent vital testing and exercises of the Navy throughout Southern California waters while allowing shellfish populations to become threatened, endangered, or extinct because of sea otter predation. It would result in compromising our national security along with the lost livelihood for shellfish fishermen and all related jobs, including those at processing facilities in the state. The economic impact of the industry to the state of California is over \$40 million a year.

For these reasons, the House of Representatives unanimously adopted language I drafted for the National Defense Authorization Act for Fiscal Year 2013 (NDAA). This language allows the Navy to maintain its incidental taking exemption through the creation of new military readiness areas. It also requires FWS, when planning for the recovery and expansion of sea otters, to coordinate with both the state of California to assist the State in continuing a viable commercial

shellfish industry and the Secretary of Commerce regarding the protection of any other endangered species in the environment.

Given House approval of this provision and the expected Senate passage of the NDAA in the coming months, I believe it would be premature for the Coastal Commission to consider and act on the FWS proposal. Therefore, I urge you to refrain from voting on support for the FWS proposal at this time.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Elton Gallegly', with a stylized, flowing script.

ELTON GALLEGLY
Member of Congress