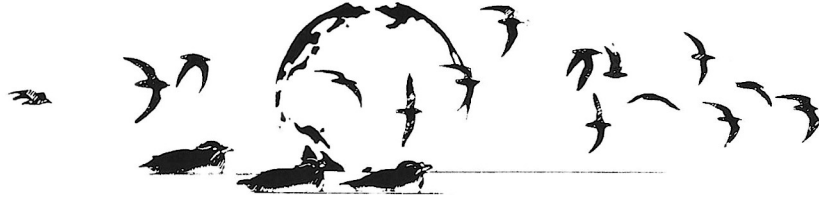

Pacific Seabird Group



DEDICATED TO THE STUDY AND CONSERVATION OF PACIFIC SEABIRDS AND THEIR ENVIRONMENT

Alan E. Burger
Chair
Biology Department
University of Victoria
Victoria, BC V8W 3N5
Canada
(250) 721-7127

Craig S. Harrison
Vice Chair for Conservation
4001 North Ninth Street #1801
Arlington, Virginia 22203
(202) 778-2240

Edward C. Murphy
Chair-Elect
Institute of Arctic Biology
Irving Building
University of Alaska, Fairbanks
Fairbanks, AK 99775-0180
(907) 474-7154

November 30, 1998

Colonel Robert T. Slusar
U.S. Army Corps of Engineers, Portland District
Attn: CENWP-EC-C
P.O. Box 2946
Portland, Oregon 97208-2946

Re: Comments on Draft Environmental Assessment: Caspian Tern Relocation

Dear Mr. Slusar:

These are the Pacific Seabird Group's (PSG) comments on the U.S. Army Corps of Engineers draft Environmental Assessment: Caspian Tern Relocation ("Draft EA"). PSG supports several of the actions presented in the Draft EA, but objects strongly to destroying the habitat for Caspian terns at Rice Island. The colony at Rice Island is the largest Caspian tern colony in the world, and apparently accounts for more than one-quarter of all Caspian terns in North America. The federal agencies have not complied with the National Environmental Policy Act and have failed to evaluate, as required by law, all of the reasonable and feasible alternatives to the proposed action. PSG is disappointed that the Draft EA did not address many of the issues that PSG has raised in its July 20, 1998 letters to Chris Wheaton, Oregon Department of Fish and Wildlife, William Stelle, National Marine Fisheries Service, and Colonel Slusar, which we incorporate by reference into these comments. As we stated in those letters, PSG firmly opposes actions that jeopardize the health of this species.

I. The Pacific Seabird Group

PSG is an international organization that was founded in 1972 to promote knowledge, study and conservation of Pacific seabirds. PSG draws its members from the rim of the entire Pacific Basin, including the United States, Canada, Mexico, Japan, China, Australia, New Zealand, and Russia. Among PSG's members are biologists who have research interests in Pacific seabirds, state and federal officials who manage seabird populations and refuges, and individuals with interests in marine conservation. PSG is especially active with regard to seabird-fishery conflicts and oil spill restoration.

II. National Environmental Policy Act and Justification For Action

As we stated previously, any action that significantly alters the nesting habitat on Rice Island would be a "major federal action significantly affecting the quality of the human environment" under section 102(2)(C) of the National Environmental Policy Act. Under 40 C.F.R. Part 1502, an environmental impact statement must provide a full and fair discussion of environmental impacts, discuss direct and indirect effects, and provide means to mitigate adverse environmental impacts.

We are disappointed that despite the statutory requirement to prepare a full environmental impact statement, the Corps of Engineers has prepared and asked for comment on a mere environmental assessment. Even if the agencies could in theory fulfill the requirements of the National Environmental Policy Act with an environmental assessment, the Draft EA is "so inadequate as to preclude meaningful analysis." See 40 C.F.R. section 1502.9(a).

Much crucial information is missing. For example, PSG asked both the Corps and NMFS in our July 20 letter to provide data for at least the past twenty years on the percentage of smolts that have returned each year to spawn in the Columbia River system. Anyone who has taken an introductory fisheries biology course knows that most fish species produce a super abundance of ova and larval fish, which are inevitably drastically reduced during their life cycle. Thus the terns' consumption of smolts does not necessarily imply that the return of adult salmon has been affected. The information we requested would allow the public and decision makers to assess whether the growth of the Caspian tern colony since the mid-1980s has had an appreciable effect on the recruitment of salmonids.

Table 3 of the Draft EA provides returns of salmonids for 1993, 1994, 1995 and 1996. Total 1996 salmon returns (903,000 fish) exceeded total returns in 1994 (861,000 fish) and 1995

(751,000 fish). These data suggest that the problems attributed to the growth of the Caspian tern colony are exaggerated. Moreover, page 15 of the Draft EA states that the terns' diet includes steelhead (43%), coho (31%) and chinook (11%). Table 3 shows that the returns of steelhead and coho -- which represent most of the salmonids in the terns' diet -- essentially were the same in 1996 as they were in 1993. The biggest salmonid declines between 1993 and 1996 were sockeye (down 65%) and spring chinook (down over 50%). But the terns consume no sockeye and little spring chinook. We prefer assessing decades of data, but the four years of data in Table 3 suggest that the terns have little or no effect on salmon returns.

NMFS provided us additional information on the recruitment of salmonids in its response to the Freedom of Information Act request that we filed shortly after NMFS, FWS and the Corps promised a Senate subcommittee that they would remove the terns from Rice Island before the 1999 breeding season. We will not, however, have time to analyze the contents of those thousands of pages of reports before the deadline for these comments. It is ironic, to put it mildly, that we have had to resort to the Freedom of Information Act to obtain such information when this analysis should have been included in a document that is ostensibly prepared to comply with a public disclosure statute. The regulations that implement NEPA, 40 C.F.R. section 1500.1, state the National Environmental Policy Act's purpose is to:

insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.

The "scientific" information in the Draft EA cannot be deemed to be of "high quality." Indeed, the single "scientific" reference to justify the belief of the NMFS fishery managers that terns are harming salmon recruitment is found on page 2 of the Draft EA:

Junge (1967) provides a strong argument that ocean survival is not density dependent and concludes ". . . that a reduction of smolts by a fraction m will on average reduce the production of returning adults by a fraction m ."

This "scientific" reference on the central issue of the Draft EA -- a 31 year old 8-page report -- was not published in any peer reviewed journal and does not even achieve the level of gray literature. In any event, Junge assumed that there were no artificial factors that would affect the natural behavior of the salmon. As Dr. David Ainley discusses in his comments on the Draft EA, Junge's assumptions are violated in this situation.

Hatchery-raised salmonid smolts do not behave the same as wild salmon and unnaturally large pulses of hatchery smolts draw the attention of seabirds and other predators. Recent studies by Shimioto et al. (Marine Ecology Progress Series 150: 75-85, 1997) suggest that pulses of hatchery raised salmon deplete availability of prey for wild salmon, thus discrediting the view that survival at sea is not density-dependent. The Draft EA cannot possibly meet the requirements of 40 C.F.R. section 1502.1, which requires that the agencies provide a "full and fair discussion" of environmental impacts. In NMFS' rush to "commit resources prejudicing selection of alternatives," see section 1502.2, it seems that relevant information is being withheld rather than disclosed.

A discussion of reasonable alternatives "is the heart" of environmental assessment. 40 C.F.R. section 1502.14. We believe that a "full and fair discussion" of alternatives must include changing water flows in the enormous Columbia River dams (e.g., Bonneville 1,061 MWe; Dalles 1,814 MWe; John Day 2,160 MWe; McNary 986 MWe) and various improvements in fish hatchery techniques. We addressed these issues in our July 20, 1998 letter and will not repeat that discussion here. We also believe that the proposed action violates the Migratory Bird Treaty Act and treaties with Canada, Mexico, Japan and Russia that forbid the federal government from destroying seabird colonies by ruining their habitat except under extreme circumstances that are not present here. See July 20, 1998 letter.

III. Status of Caspian Tern Populations in North America

Caspian tern populations may be declining in California and are considered to be vulnerable in British Columbia. These trends must be considered in managing this species in the Columbia River. As Dr. David Ainley pointed out during the November 17 meeting in Portland, the North American population of Caspian terns is smaller than those of several seabird species that the U.S. Fish & Wildlife Service lists as threatened or endangered under the Endangered Species Act: roseate terns, marbled murrelets (lower 48 population), California brown pelicans, Hawaiian petrels, and Newell's shearwaters. One of PSG's goals is to avoid the necessity of having to protect additional seabirds under the Endangered Species Act -- or any "evolutionary significant unit" (ESU) of a seabird species. Mismanagement of the Caspian tern population on Rice Island -- another "train wreck" in the words of Secretary of the Interior Babbitt -- could easily lead to the listing of this species.

There is an ever-decreasing availability of suitable nesting habitat for Caspian terns in this nation, which need vegetation-free and predator-free habitat near aquatic food. In many cases, the only such habitat is sand bars, which are notoriously

unstable. It is because options for moving no longer exist that a related species, the least tern, is endangered. In San Francisco Bay, which harbors the largest colony in California, Caspian terns are now relegated to nesting in just three major sites, all of which are artificial because no natural habitat remains. Maintaining these sites is expensive, and the existence of two on salt evaporation pond levees is tenuous because this activity is uneconomic. The San Francisco Bay area is a microcosm of this species' predicament on a larger scale, and we suspect that plenty of natural habitat for this species in the Columbia River estuary has been destroyed by humans, perhaps including dredging and the construction of huge dams.

With regard to the competing federal and state obligations as natural resource trustees for salmonids and Caspian terns, we distinguish between hatchery-raised salmonids and the populations listed under the Endangered Species Act as ESUs. The Draft EA has not explained why hatchery smolts might have the requisite characteristics to be considered ESUs, nor how they can or should be provided protection under the Endangered Species Act. This problem underscores the piecemeal approach of in the Draft EA -- in which destroying Caspian tern habitat is considered in isolation from dozens of other options. It also indicates that the goals of the proposed actions are confused. If the issue is recovery of ESUs under the Endangered Species Act, PSG believes that Caspian tern predation should be addressed in the recovery plan(s) in conjunction with all of the other options that may recover the ESUs. If the purpose is a general increase of salmon populations for sport and commercial fisheries and Junge's premise is correct, we do not understand why NMFS is so focused on Caspian terns rather than advocating the complete removal of the dams.

IV. PSG's Recommended Actions

PSG endorses work to enhance habitat on East Sand Island so that some Caspian terns might select nest sites there instead of on Rice Island. This includes removal of vegetation, using decoys, recordings of tern vocalizations, gull control as outlined in the Draft EA, or other techniques. We believe that similar habitat enhancement work (including social attraction) should be undertaken at Willapa Bay (where the island may be too low and becomes inundated with water too often) and Grays Harbor. This work will likely take several years if it is to be successful.

PSG accepts the proposals in the Draft EA to make Miller Sands Island, which is adjacent to Rice Island, less attractive to terns by planting vegetation, using barriers or similar techniques.

In general, we object to actions (harassment by dogs or humans, altering substrates, etc.) that completely destroy the Caspian tern nesting habitat on Rice Island in 1999 because there is no certainty that suitable habitat will be created on East Sand Island or elsewhere. In a spirit of cooperation, we can agree to the compromise suggested by the representative of the National Audubon Society at the November 17 meeting. This compromise would allow the temporary fencing of one-fourth of the terns' nesting area on Rice Island (2 acres) and the vegetation of another one-fourth (2 acres) without the completion of a complete environmental impact statement in 1999. This agreement is contingent upon a guarantee by the agencies that they will make a multi-year effort to create suitable nesting habitat at East Sand Island. That island may be too low to provide good nest sites and, therefore, needs more fill. This program requires a continuing commitment for several years to ensure that weeds do not sprout, possibly by use of herbicides or suitable dredged material. A gull-control program must be in place and a seasonal warden must occupy the island to ward off humans, deal with problem gulls, and control vegetation. Moreover, the agencies must remove raccoons and other predators from Rice Island this winter. If there is non-lethal hazing during spring 1999 it should stop three weeks before the date of the earliest laid egg in the region. Three weeks provides 13 days for egg formation and an additional week for nest construction/courtship. Under this approach, hazing would probably stop in mid-March.

V. Conclusion

PSG will continue to work with the state and federal agencies on these important seabird-fishery issues in an attempt to find common ground for intelligent natural resource management. We are concerned about ill-conceived or under-funded "solutions" that may not work and could irretrievably harm Caspian tern populations. Please give me a call (202-778-2240) or contact me at charrison@hunton.com if you have any questions concerning these issues.

Sincerely,



Craig S. Harrison
Vice Chair for Conservation