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SANTA BARBARA • SANTA CRUZ

DAVIS, CALIFORNIA 95616

COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES AGRICULTURAL EXPERIMENT STATION DEPARTMENT OF AVIAN SCIENCES (916) 752-1300 (916) 752-8960 - FAX

May 15, 1991

Mr. Stan Senner
Oil Spill Restoration Planning Office
Department of Fish and Game
437 E Street Suite 301
Anchorage Alaska 99501

Dear Mr. Senner:

Recent events surrounding the Alaskan oil spill and others on California shores are changing public attitudes towards the preservation of wildlife, but especially the possibility of losing entire species. Here at Davis we see increasing numbers of students coming to our classes dealing with bird life and many of them are motivated to be involved in the process of solving these real or perceived problems.

These developments not only affect our teaching through course offerings in Avian Sciences but also offer opportunities to make a deliberate contribution to the preservation of endangered species. Our faculty of eight professors and four extension specialists has profound expertise in all aspects of domestic birds through years of research in relevant disciplines such as genetics, developmental biology, nutrition, physiology of reproduction, immunology, virology and toxicology of birds. While work with domestic poultry has predominated in the past some of our faculty have worked with game bird physiology, developmental problems of wild birds at Kesterson, toxicological effects of insecticide spraying on raptors, genetic and breeding projects with Spanish Red Leg partridges. One of our staff, Dr. Michael Fry is very active in matters of environmental effects on birds and serves on the Advisory Board, Scientific Committee to the U.S. Department of the Interior Minerals Management Service as you undoubtedly know.

As Chairman of the Department of Avian Sciences I see a distinct opportunity for our research capabilities to make a more purposeful contribution in research with wild birds. Foremost in our minds is the possibility of captive breeding of one or more endangered species, such as the California Clapper Rail or the Black Rail at our bird facility at Davis. We are in an excellent position to do so with extensive facilities of incubation and bird management under natural or controlled environments. Our faculty would probably not be directly involved in the necessary field work required for collection and release of birds. However, cooperation with local researchers of the U.S. Department of Fish and Wildlife as well as faculty of the University of California Department of Fish and Wildlife is well established at Davis.

While basic support of faculty and facilities are assured within the College of Agricultural and Environmental Sciences it would take substantial extramural support to launch a project in captive breeding of shore birds. Perhaps here is a possibility for your organization to lend much needed financial backing. As I see it you might be interested in discussing the possibility of adopting a species for resurrection under a contractual agreement with the University of California through the Department of Avian Sciences. Perhaps such a joint undertaking would give the Exxon Company a chance to build a reputation of active involvement in the preservation of bird life on the West Coast.

If my rather general proposal holds any potential interest for your organization I would be glad to arrange a conference or visit to Davis for yourself and others with the faculty and researchers of the Department of Avian Sciences and other interested parties of the University of California at Davis.

Sincerely yours,

Hans Abplanalp Professor and Chair













OIL SPILL RESTORATION PLANNING OFFICE

437 E Street, Suite 301 Anchorage, Alaska 99501 (907) 271-2461 FAX: (907) 271-2467

5 September 1991

Hans Abplanalp Professor and Chair Department of Avian Sciences University of Calfornia Davis, California 95616



Dear Dr. Abplanalp:

Last May you wrote to me with a general proposal for support to launch a project in captive breeding of shore birds, such as one of the rails. Your letter was misplaced in a change of personnel in this office, and I apologize for not responding in a timely manner.

The state and federal Natural Resource Damage Assessment and Restoration program, which was set up following the Exxon Valdez oil spill, must direct its attention specifically to those species and ecosystems injured by the Exxon Valdez oil spill. At this point, the need for and feasibility of captive breeding of birds in relation to the Exxon Valdez oil spill appear limited, although we are looking at these and many other options for speeding the recovery of injured populations.

If it appears that captive breeding of birds is a serious prospect, we would need to consider the availability of and costs associated with facilities to do the job. In this regard, we appreciate knowing of the opportunity with the Department of Avian Sciences at Davis.

Thank you again for your letter. I do apologize for the long delay in responding.

Sincerely,

Stanley E. Senner Restoration Program Manager, ADF&G













OIL SPILL RESTORATION PLANNING OFFICE

437 E Street, Suite 301 Anchorage, Alaska 99501 (907) 271-2461 FAX: (907) 271-2467

January 7, 1991

Archie S. Mossman
Professor Emeritus
Humboldt State University
Department of Wildlife
The California State University
Arcata, California 95521-4957

Dear Mr. Mossman:

On behalf of the Restoration Planning Work Group (RPWG), I would like to thank you for your comments on the August 1990 Progress Report, "Restoration Planning Following the *Exxon Valdez* Oil Spill". Your letter was distributed to all the members of the RPWG, has been retained in our files, and will be considered as we formulate our restoration plans for the coming year.

On November 19, 1990, a "Notice of Intent to prepare a draft restoration work plan and to propose a 1991 restoration program" was published in the Federal Register. Enclosed is a copy of this notice for your information.

The draft restoration work plan should be published soon in the Federal Register, and we have placed your name on our mailing list so that you should receive a copy of the notice and other mailings from the RPWG. Any further comments you may have about restoration are welcome at any time, and should be forwarded to the above address.

Once again, thank you for your input.

Sincerely,

Brian Ross

Restoration Planning Team

Buan D Rows

Enclosure

Prince William Sound
Aquaculture

P.O. Box 1110 Cordova, Alaska 99574 Phone: (907) 424-7511 Fax: (907) 424-7514

August 17, 1990

Mr. Stanley E. Senner
Restoration Planning Work Group
437 E Street, Suite 301
Anchorage, Alaska 99501

Corporation

Dear Stan:

Thanks to you and your group for the proceedings of the public symposium titled Restoration Following the Exxon Valdez Oil Spill.

I agree with the recommendations for restoration which were presented by Ken Kastner, of the fisheries panel. However, I was disappointed that the work of the Restoration Planning Work Group was not updated in the proceedings.

The symposium didn't seem to help identify or develop technically feasible restoration options for natural resources and services potentially affected by the oil spill, as concerns fisheries. Therefore, I come to you for the current proposals for fisheries restoration projects which your group has developed in-house. Can you help me with this?

I would appreciate the opportunity to comment on these and future restoration proposals developed by your working group.

Thank you for the information.

Sincerely,

John McMullen

Special Projects Manager

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OIL SPILL RESTORATION PLANNING OFFICE

437 E Street, Suite 301 Anchorage, Alaska 99501 (907) 271-2461 FAX: (907) 271-2467

20 August 1990

Mr. John McMullen
Special Projects Manager
Prince William Sound Aquaculture
 Corporation
P.O. Box 1110
Cordova, Alaska 99574



Dear John:

Thanks for your letter dated 17 August. I am glad to know that Ken Kastner's remarks at the public symposium were of interest.

The Restoration Planning Work Group has completed a progress report on our activities through July 1990. This report is now being printed, and should be available for distribution early in September. It includes many pages of matrices, presenting lists of possible restoration options versus potentially injured resources, including fishery resources.

I hope you will find that the document, including the matrices, is a rather complete summary of where we stand. We expect to be involving the public and interested organizations, such as the Prince William Sound Aquaculture Corporation, extensively in the process ahead, so you should have ample opportunity to participate in the further development and evaluation of restoration alternatives.

We are glad to know of your continued interest. I will share your letter with the other work group members.

Sincerely,

Stanley E. Senner Restoration Program Manager, ADF&G





UNIVERSITY OF MARYLAND

MARYLAND BIOTECHNOLOGY INSTITUTE

Office of the Director

MEMORANDUM TO:

Stan Senner (ADF&G)

John Strand (NMFS)

FROM:

Rita R. Colwell

DATE:

August 8, 1990

SUBJECT:

YOUR REQUEST OF AUGUST 2, 1990 FOR SUGGESTIONS FOR RESTORATION PEER

REVIEWERS AND OUTSIDE EXPERTS

May I suggest that you add some chemists and microbial degradation experts to the panel. I believe I'm the only microbiologist on the list of Federal peer reviewers. I recommend Dr. David Gibson, Director, University of Texas, Center for Applied Microbiology, 430 Experimental Science Bldg., Austin, Texas 78712, and Dr. Ron Olson, 5083-73 Ave., Apt. 20, Brooklyn Park, Minnesota 55429. These two individuals have good, clear insight to the biochemistry of degradation and can be very helpful.

RRC:1s:0808



UNIVERSITY OF MARYLAND MARYLAND BIOTECHNOLOGY INSTITUTE

Office of the Director

NOTICE OF CHANGE OF TELEPHONE AND FAX NUMBER

The University of Maryland College Park Campus will be changing telephone numbers effective <u>August 17, 1990.</u>

PLEASE NOTE:

The new telephone number for the main office of the Maryland Biotechnology Institute (Dr. Rita R. Colwell) will be:

MAIN TELEPHONE NUMBER:

(301) 405-5189

MAIN FAX NUMBER:

(301) 314-9463

The new telephone number for the MBI Office of Administrative and Financial Affairs (Dr. Gail Young) will be:

MAIN TELEPHONE NUMBER:

(301) 403-4691

MAIN FAX NUMBER:

(301) 403-4693

The new telephone number for the MBI Office of External Affairs (Dr. Marvin Rogul) will be:

MAIN TELEPHONE NUMBER:

(301) 403-4696

MAIN FAX NUMBER:

(301) 403-4693

MEMORANDUM

STATE OF ALASKA

Department of Fish and Game

To: Debra Clausen
Habitat Division

Date: 23 August 1990

COPY

File No:

Telephone No: 271-2462

From: Stan Senner OSIAR Division

Subject: Valdez Duck Flats -

Critical Habitat Area?

Here is the brochure I mentioned regarding the Prince William Sound Conservation Alliance proposal to establish the Valdez Duck Flats Critical Habitat Area. At the public scoping meeting that the Restoration Planning Work Group (RPWG) held this spring in Valdez, there was a specific suggestion that we include this proposal among the recommendations in the restoration plan.

After you have had a chance to look this over, I would appreciate any reaction you have on the merits and politics of the proposal. As I stated over the telephone, there may be value in our being able to identify restoration projects that are important to the public and that can be implemented without having to wait for a settlement of an oil-spill damage claim. Perhaps this is one such project? At any rate, I will be interested in your comments.

cc: Gregg Erickson, OSIAR Lance Trasky, Habitat

Oil Spill Restoration Planning Office 437 "E" Street, Suite 301 Anchorage, Alaska 99501 (907) 271-2462

Common Birds of the Valdez Duck Flats

* = known breeders

Common loon Arctic loon Horned grebe Double-crested cormorant Canada goose Brant Mallard* Pintail* American wigeon* Northern shoveler Green-winged teal* Greater scaup Common goldeneye Barrow's goldeneye Bufflehead Harlequin duck Oldsquaw Common scoter White-winged scoter Surf scoter Common merganser Red-brested merganser Sharp-shinned hawk Bald eagle* Willow ptarmigan White-tailed ptarmigan Great blue heron Black oystercatcher* Black-bellied plover Semipalmated plover* Whimbrel Hudsonian godwit Spotted sandpiper Wandering tattler Greater yellowlegs Lesser yellowlegs Short-billed dowitcher Long-billed dowitcher Ruddy turnstone Rock sandpiper Pectoral sandpiper Least sandpiper Semipalmated sandpiper Western sandpiper

Northern phalarope

Glaucous-winged gull Herring gull Mew gull Black-legged kittiwake Bonaparte's gull Arctic tern* Common murre Pigeon guillemot Rufous hummingbird Belted kingfisher Cliff swallow Violet-green swallow Steller's jay Black-billed magpie Common raven Northwestern crow Chestnut-backed chickadee Dipper Robin Varied thrush Hermit thrush Ruby-crowned kinglet Water pipit Orange-crowned warbler Rusty blackbird Common redpoll Savannah sparrow Slate colored junco White-crowned sparrow Golden-crowned sparrow Fox sparrow* Song sparrow Lapland longspur Snow bunting

Potential and existing problems:

- * Risk of continuing hydrocarbon contamination of the tidal flats and food chain from discharges from the Alyeska Ballast Water Treatment Plant.
- * Risk of pollution from damaged tankers being berthed at the City Floating Dock.
- * Risk that future developments might change the equilibrium bet ween deposition and erosion of sediments flowing into the Valdez Duck Flats, causing changes in the shoreline.
- * Risk that increased pollution might destroy the area's productivity turning the mudflats into stinking, sulfurous wastelands as has happened to many other coastal wetlands.
- * Risk that pollution might reduce the productivity of the salmon streams and estuarine nursery areas.
- * Risk that pollution would destroy critical wetlands nesting and wintering waterfowl habitat.

The Prince William Sound Conservation Alliance supports economic development of the Valdez Duck Flats that is mutually compatible with the area's rich estuarine, fisheries, and wildlife resources. To achieve mutual compatibility, we are seeking legislative protection of the Valdez Duck Flats as a Critical Habitat Area under Alaska Statute 16.20. This would require that developers apply for a permit from the Alaska Department of Fish and Game certifying that the development is compatible with present fish and wildlife resources.

What you can do:

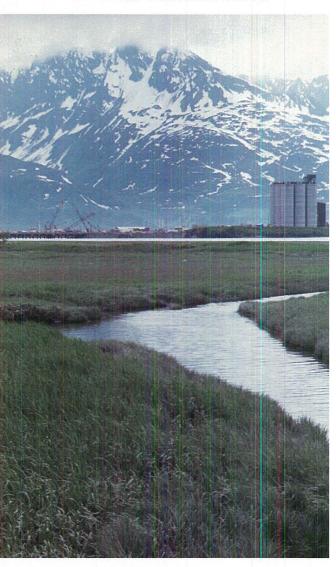
- 1. Write a letter to the Valdez City Council supporting Critical Habitat Status for the Valdez Duck Flats (please send a copy to PWSCA).
- 2. Write or call your state legislators supporting Critical Habitat Status for the Valdez Duck Flats (please send a copy to PWSCA).
- 3. Join the Prince William Sound Conservation Alliance and help us work to obtain legislative approval of Critical Habitat Status for the Valdez Duck Flats. Membership is \$25.
- 4. Make a donation to our Valdez Duck Flats Critical Habitat Fund.

Prince William Sound Conservation Alliance P.O. Box 1697, Valdez, AK 99686 (907) 835-8007

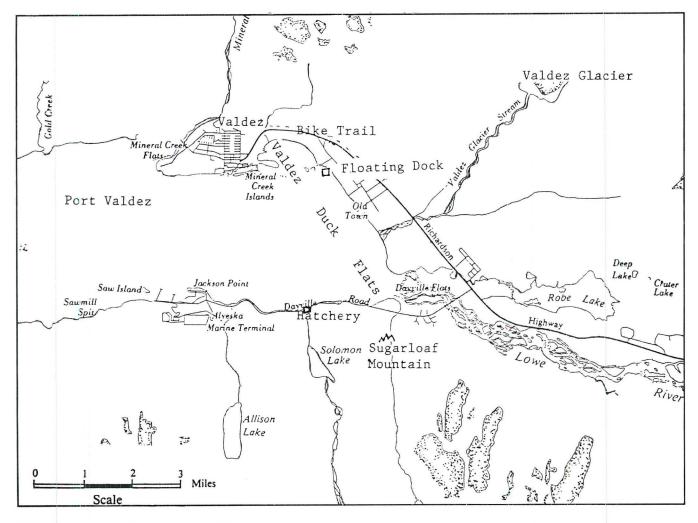
Publication of this brochure has been made possible in part by a grant from the Alaska Conservation Foundation.

The Valdez Duck Flats

proposed Critical Habitat Area



An opportunity for environmentally sound economic development.



Welcome to the Valdez Duck Flats

The Valdez Duck Flats at the head of Port Valdez is a fragile wetlands of constantly changing beauty and vital economic, social and environmental importance. A rich, daily interchange between organic and inorganic sediments carried by streams to the delta provide food for the detritus feeders, such as some clams and worms. These form the basis of complex and varied food chains that support a wide variety of terrestrial and marine birds and mammals, including trumperter swans, bald eagles, salmon, bear, sea otters and harbor seals. Here, ever so subtley, hearty, salt water tolerant plants, such as the yellow-flowered Pacific Silverweed, send their pioneering runners into the intertidal zones, establish a beach-head, and begin the delicate process of converting the seabed to land. In time, the soil builds up so

that less and less area is exposed to the tides. Freshwater tolerant plants, like magenta shooting stars and the black Kamchtka lily, begin to replace saltwater tolerant plants. Voles build nests in the tall rye grasses. Eventually, shrubs such as the fragrant sweet gale slowly turn the marshlands into drier shrublands. Alders and cottonwoods form thickets and forests.

The Valdez Duck Flats covers several thousand acres of wetlands that shield the shoreline from wave action, produce bacterially enriched detritus for the food chain, provide nesting, spawning, rearing, and resting habitat for aquatic and terrestrial species, and provide areas for outdoor recreation and aesthetic appreciation of the natural environment. Salmon streams support wild stocks of chum, pink and coho salmon. In some years these account for more than 12% of the eastern Prince William Sound Commercial fisheries catch. The sheer, cliff shorelines of the

three headlands provide critical nursery habitat for thousands of out-migrating wild and hatchery raised salmon fry who feed on the area's large blooms of animal plankton. In the spring, before the summer glacial meltwaters pour tons of sediments into the area, the water is clear. Young salmon fry are very adversely affected by heavy sedimentation and pollution. Any changes that increase sedimentation and pollution in the nursery habitat could seriously damage the commercial and sports fishery.

Ninety-five species of birds utilize the area for nesting, perching, feeding, migratory stop-overs, and winter habitat. Many nest in the salt and fresh marsh areas, riparian alder and cottonwood forests, and in the conifer forests of Inner and Dock Points. A flock of about 200 Canada Geese winters here. This is the farthest north wintering flock of Canada Geese in North America.

The Richardson Highway, Dayville Road, bike trail, and trails on Dock Point provide access for viewing wildlife and bird watching. Thousands of tourists enjoy watching the ducks feed. Trails on Dock Point lead through small patches of Sitka spruce forests and muskegs. Sundews, plants which eat small insects, grow in the bogs. Along the fringes, brilliant yellow skunk cabbages reach the northernmost extension of their range. Some may be hundreds of years old.

Scientists from the U of A Institute of Marine Science have found the mudflats contain a unique assemblage of invertebrates. Detritus feeders, such as the *Macoma balthica*, a small pink-shelled clam, form the basis of a food chain supporting numerous seabirds such as the colorful Harlequin duck plus Dungeness and Tanner crab and flatfishes, such as halibut, on which sea otter, harbor seals and man feed. Visitors with binnoculars can often see harbor seals hauled out on the outer islets at low tide. At high tide, they move into the mud flat areas to feed. Humpback,minke, fin and killer whales plus Dall and harbor porpise have been seen in the proposed Critical Habitat area.

The Prince William Sound Area Plan classifies the Valdez Duck Flats as crucial wildlife and estuarine habitat. The Island Flats area between Dock Point and the Valdez Floating Dock has been classified as an Area Meriting Special Attention by the Valdez Coastal Management Plan because of the potential for conflict between its high value for fisheries and wildlife resources and potential industrial and shoreline developments.