Appendix D.

Response to Public Comments on the Draft Damage Assessment and Restoration Plan

Comment 1. Solano County Mosquito Abatement District (scanned from paper copy and pasted here- some text manually reconstructed for accuracy)

Solano County Mosquito Abatement District

2950 Industrial Ct.
Fairfield, CA94533-6500
Telephone (707) 437-1116
Fax (707) 437-1187

Meetings: Second Monday Every Month
7:30 P.M.

February 18, 2009

Mr. Bruce Joab
California Department of Fish and Game
1700 K Street
Sacramento, CA 95811

Re: Kinder Morgan Suisun Marsh Diesel Fuel Oil Spill DRAFT Damage Assessment and Restoration Plan/Environmental Assessment

Dear Mr. Joab:

The Solano County Mosquito Abatement District (SCMAD) appreciates the opportunity to provide input regarding its concerns pertaining to the Kinder Morgan Suisun Marsh Diesel Fuel Oil Spill DRAFT Damage Assessment and Restoration Plan/Environmental Assessment.

Due to the limited amount of information describing the area of concern in the document only a few generalized comments can be made.

Historically the Hill Slough Area overall has had mosquito production problems during the winter and spring months due to the accumulation of rainwater. The only mosquito production problems that have occurred during the summer were attributed to either a defective tide gate on the west side of Hill Slough or unanticipated flooding for agricultural purposes on the east side.

It has been the SCMAD's experience that tidal restoration projects believed to be designed thoroughly enough to be self-sustaining may not remain so over time. Ditches can become silted in and overgrown with vegetation to the point of muting tidal movement to the extent that mosquito production occurs. Two primary species of concern can be produced in this type of habitat. The first of these is *Aedes melanimon.* The eggs of this species are deposited singly on soil or at the base of grasses that will be inundated at a later date. Winter is usually passed in the egg stage and hatching occurs during the first flooding in spring or early summer. Daily inundation of an area and subsequent drainage during low tides inhibits mosquito production. It takes from 7-10 days to complete the life cycle to emerging adult. This species is an aggressive biter of humans and other mammals such as cattle, horses dogs and rabbits during the daylight hours as well as dusk. Flights in excess of 10 miles are possible.

The production of a second species of concern *Culex tarsalis* is possible if water should remain in isolated areas for 7-10 days. This species is the primary vector of West Nile Virus in Solano County. During 2008 documentation of West Nile Virus consisted of one human case, 7 positive dead birds, sera-conversion of 7 sentinel chickens and 1 positive mosquito pool.

It is vital that provisions be made for long-term maintenance of any ditches in terms of vegetation management and silt deposition that are constructed as part of this project. The continued enhancement of the habitat by water circulation will inhibit the production of both the above described species.

Please contact the District if you have any questions or concerns.

Sincerely,

Jon Blegen
Manager

Carol Evkhanian
Biologist

Response 1. The Trustee Council appreciates this information from the Solano County Mosquito Abatement District (SCMAD) and has passed this information on to the DFG project manager who is directly involved in the Hill Slough restoration project. Please be advised that the Hill Slough project will also have a public comment period since design and permitting phases are not yet complete, including California Environmental Policy Act (CEQA) compliance. The fact that the Trustees are receiving these comments before the design and engineering work may be especially helpful since the design/engineering work is not complete for the Hill Slough project and the Trustees anticipate that engineering-related details would be relevant toward the mosquito-related concerns expressed in this letter.

Comment 2. San Francisco Bay Conservation and Development Commission

March 12, 2009

Bruce Joab
Office of Spill Prevention and Response
1700 K Street
Sacramento, CA 95811

SUBJECT: Draft Damage Assessment and Restoration Plan/Environmental Assessment for the Kinder Morgan/Suisun Marsh Spill
BCDC Inquiry File SL.PH.7214.1

Dear Mr. Joab:

Thank you for the opportunity to comment on the Draft Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA) for the Kinder Morgan/Suisun Marsh Spill. Although the San Francisco Bay Conservation and Development Commission (Commission) has not reviewed the document, the following are staff comments based on our review of the DARP/EA in the context of the Commission's authority under the Suisun Marsh Preservation Act (Public Resources Code 29000 through 29612), the provisions of the *Suisun Marsh Plan* (Marsh Plan) and the federal Coastal Zone Management Act.

The Marsh Plan contains policies on the Marsh's natural resources and on development in the Marsh. The Commission exercises the lead state permitting authority over development in a primary management area encompassing 89,000 acres of tidal marsh, managed wetlands, adjacent grasslands, and waterways in the Marsh, and appellate authority over a buffer area of approximately 22,500 acres. Within the Primary Management Area, any person or governmental agency wishing to perform or undertake development must first secure a Marsh Development permit from the Commission. The proposed Hill Slough tidal restoration project would, as stated in the DARP, require a permit from the Commission.

As the Suisun Marsh represents a unique and irreplaceable natural resource of statewide significance, we appreciate the thoughtful evaluation of natural resource injuries resulting from the April 2004 pipeline spill, and look forward to learning the specific project designs. Please feel free to contact our Chief of Permits and Chief Biologist, Bob Batha, at bobb@bcdc.ca.gov or 415.352-3612, for assistance during the design and, of course, permitting phases of the projects.

In the meantime, if you should have any questions, please do not hesitate to contact me at 415.352-3644 or lindas@bcdc.ca.gov. Thank you again for the opportunity to review the DARP/EA.

Sincerely,

Linda Scourtis

State of California • SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION • Arnold Schwarzenegger, Governor
50 California Street, Suite 2600 • San Francisco, California 94111 • (415) 352-3600 • Fax: (415) 352-3606 • info@bcdc.ca.gov • www.bcdc.ca.gov

LINDA SCOURTIS
Coastal Planner

Response 2. The Trustee Council appreciates the letter submitted by the San Francisco Bay Conservation and Development Commission. As indicated in the DARP, prior to implementation of the proposed restoration projects described in this DARP/EA, the implementing entities will ensure any required marsh development permits are obtained for the Hill Slough tidal restoration project.

Comment 3. Submitted by Mr. Roberto Valdez Jr.

A) As-written transcription of handwritten comments submitted at Restoration Planning Meeting, Fairfield CA, on 02/26/09:

1) Your trustees need to Follow scientific assessment and data related to Salt water mouse Habitat marsh (SMHM), California rail (CCR), Black Rail, Canada geese, tar plant, chinook salmon, + other native Fish as well as endangered, threatened, Federal, + species of concern.

2) Also, Your trustees need to work closely with CF+G, CFWS, + other county/state/local agencies to allow general public to give input to your restoration plan;

3) Please explain to public why the invasive weed is a problem to wildlife

4) Thank you for opportunity to comment.

[Signed] Roberto Valdez Jr. – MFA/FLV/HCP (Solano)

B) E-mail message received 03/13/09 from Mr. Roberto Valdez Jr.

March 13, 2009

Bruce Joab
California Department of Fish and Game Office of Spill Prevention and Response
1700 K Street
Sacramento CA 95811

Subject: Public Comments to Draft Damage Assessment, Restoration Plan/Environmental Assessment re: 2004 Suisun Marsh Deisel Fuel Spill.

Dear Mr. Joab:

I am a long-time Vacaville resident who is concerned with protecting our wildlife and their habitats in Suisun Marsh and our 7 natural corridors in Solano County, associated with the Multi-Species Habitat Conservation Plan of Solano County during the past 10 years.

My main concern is that there be a minimal of ecological disturbances and adverse impacts to the wildlife and their habitat in the Hill Slough, Grizzly Island, and Suisun Marshland during the clean-up operation to remove the 2004 Diesel Fuel Oil Spill within the SMRP area.

Also, since I have done some environmental research with regards the wildlife and their habitats within the proposed bridge replacement on the Grizzly Island Road at Hill Slough, I would like to recommend that your CDF&G Office as well as Project trustees and scientific panel consult the "No. EIR for Bridge 230-184:. . .(Sept. 2006)" be reviewed with the Solano County of Department of Resource Management in your Assessments. I am particularly concerned about the adverse impacts to the chinook salmon, stealhead fish, Delta/longfin smelt, California clapper/Black rail, salt marsh harvest mouse, Mason's Lilaeopsis plant, contra costa goldfields, canada geese, loggerhead shrike, white-tailed kite, tiger salamanders, Californian red-legged frogs/tiger salamanders, and wetland crustaceans which have been observed and coexist with the SMRP area.

In addition, since I was not able to access your attached article re: invasive/non-native pepperweed, I still do not understand from a biological viewpoint why this plant specie needs to be removed with the SMRP. Can you please try to email/ mail me the relevant information at my email: [removed] or home address: [removed], Vacaville, CA 95687.

Nevertheless, I would like also to like to respond with a few more questions/concerns with regards to informational material that you emailed me on February 27th. That is, to say, in the order of items received:

On 2008 SSEP Presentations:

1. Was UCD Professor Peter B. Moyle consulted with regard to native fish contaminations?

2. Can you please email or mail me to my above-mentioned address for 2nd article, i.e., "Pisces II ...Coast" which I was not able access online?

3. Interesting data.

4. How many otters were contaminated within SMRP area? Do you have additional data on the scientific findings with regard oil impact to otter population within SMRP project area?

5. Is fish oil detrimental biologically to fish, mammals, humans, and waterfowl within SMRP area?

6. Do you know how otters are coexisting in their waterway habitat within SMRP area?

7. Did oil spill affect quails/chicks with the SMRP area?

8. Is your agency aware that effective microorganism (EM1/2/3) have been used to used polluted waterways in many parts of world? For instance, EM products have been used successfully to clean the polluted ponds for flamingos at the Honolulu Zoo, State of Hawaii government has approved its safe application for natural habitats. Also, it was tested successfully with impressive results for the City of Vacaville at the local Bonafacio Septic Tank Waste Management Plant around 2003(?).

Unfortunately, Vacaville has not taken the free offer to clean-up either its Lagoon Valley Lake or pond, but it has been used to clean many rivers and lakes in Africa, South America, and Asia. So, why not use it also?

9. Were Brown Pelicans (beside American White Pelicans) also affected by the oil spill within SMRP?

10. Are you going to use laser hazing to monitor the waterfowl within the SMRP area?

11. Can you tell me when exactly did this oil spill occur within SMRP area?

12. Will the GPS monitoring results be available for public review?

On Program Guidlines:

1. Will there be opportunity for general public/stakeholders to participate in the SSEP/OSPR/TRC/Steering Committee?

2. Are there other local groups besides the Duck Club involved with this SMRP project?

Project Summaries and Final Reports:

1. Since the oil spill affected numerous waterfowl, was the Cordelia Bird Rescue Center involved with the recovery effort?
   If so, can you share their scientific findings?

Thanks you very much.

Yours Sincerely,

Roberto Valdez Jr., [address removed], Vacaville, CA 95687, telephone: [removed].

Response 3. The Trustee Council appreciates the comments submitted. Please see the enumerated specific replies below to each of the individual comments:

A1) *Your trustees need to Follow scientific assessment and data related to Salt water mouse Habitat marsh (SMHM), California rail (CCR), Black Rail, Canada geese, tar plant, chinook salmon, + other native Fish as well as endangered, threatened, Federal, + species of concern.*

Response: The Trustees for this Kinder Morgan/Suisun Marsh case are seeking to fund restoration projects that adequately compensate the public and natural resources for the injuries incurred during the 2004 diesel fuel spill at the Drake Sprig Duck Club within the Suisun Marsh. The two preferred alternatives presented in the Draft Damage Assessment and Restoration Plan/Environmental Assessment have been evaluated and are expected to provide sufficient benefit to the habitat and resources injured in this incident. Prior to implementation of each of these restoration projects, consultation pursuant to Section 7 of the Endangered Species Act must be conducted. Some additional details are presented here to address the expected benefits of each project:

Tidal Marsh Restoration Project- Restore diked and managed marsh at Hill Slough, Solano County, to tidal wetlands by restoring tidal flow to the site. From "Final Negative Declaration and Initial Study, Hill Slough West Restoration Project, March 2005". "The restoration is expected to benefit those species that inhabit brackish marshes and moist grassland habitat. Since the restored tidal brackish marsh will increase the area of low marsh dominated by California bulrush and hardstem bulrush, the project will increase the amount of available habitat for the endangered California clapper rail and other special status species, such as the California black rail, which use similar habitats. Song birds, such as saltmarsh common yellow throat, red-winged blackbirds, marsh wrens, and song sparrows, will also benefit by the expanded areas of low marsh that will come to dominate the site as the marsh habitat matures. Intertidal mudflat habitat will provide foraging and resting habitat for a number of species of shorebirds, such as western and least sandpipers, dunlin, willet, black-necked stilts; wading birds, such as the great blue heron and great egret; and other water-associated birds, such as various species of gulls. Habitat for a number of waterfowl species including northern pintail, green-winged teal, northern

shoveler, American wigeon, mallard, Cinnamon teal and gadwall will become available during periods when tidal waters are present at the restored site.

The restoration will also provide channel and subtidal habitat of benefit to fish and wildlife. Once tidal flow is restored to the site, fish and invertebrates will access the site. The restored tidal channels could provide habitat to a number of fish species including splittail, delta smelt and longfin smelt. The intertidal areas of the restored marsh will be colonized by numerous species of invertebrates, which will provide forage for fish and wildlife (primarily waterfowl, shorebirds and wading birds) utilizing the site including the California clapper rail and the California black rail. The fish probably would begin to use the tidal channels to access the site almost immediately after tidal flow is re-introduced to the site and invertebrates would begin to colonize the intertidal marsh surface within weeks of the introduction of tidal flow to the site.

The lowland alluvium will provide habitat for a number of small mammal species, including voles, mice and possibly shrews, which would provide prey for raptors, such as the northern harrier and white-tailed kite, expected to forage at the site. The high marsh area will improve the quality of habitat for the endangered slat marsh harvest mouse. The site will also provide habitat for black-tailed jackrabbits, coyote, and other medium sized mammal species." (CDFG, 2005)

The Trustees have no information indicating that the 2004 spill injured any Chinook salmon or Canada geese. However we have consulted with a DFG Biologist on the Hill Slough project, and it is expected to benefit Chinook salmon, steelhead, Delta smelt, longfin smelt, clapper rail black rail, salt marsh harvest mouse, mason's lilaeopsis, loggerhead shrike, and wetland crustaceans. White-tailed kite and the Canada goose do occur in the project area, but the project is expected not to adversely impact the species.

Managed Marsh Restoration Project. Perennial pepperweed (*Lepidium latifolium*) threatens the natural ecosystem of the Suisun Marsh. Infestations are currently widespread and cover approximately 372 acres of Department-owned acres (CDFG 2004; P. Graham, pers. comm.). This plant forms dense monospecific stands in a wide variety of habitats and is very tolerant of a wide variety of salinities (Howald 2000). Stems and roots increase in density over time, eventually out-competing even perennial native vegetation. Pepperweed also acts as a "salt pump", taking in salts from the soil via its roots and depositing them near the soil surface, altering soil salinity (Blank and Young 1997) and potentially permanently altering the habitat. Pepperweed is quickly becoming a dominant plant in many parts of the Suisun Marsh.

Unless control measures are implemented, pepperweed will continue to spread and displace native and sensitive species such as pickleweed (*Salicornia virginica*), a plant strongly associated with the endangered salt marsh harvest mouse (*Reithrodontomys raviventris*) (CDFG 2002- 2003, Shellhammer et al. 1982), and California clapper rail (*Rallus longirostris obsoletus*) (Goals Project 2000). Two endangered plant species are also affected by pepperweed. The Species and Community Profiles prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project of 2000 clearly states that pepperweed "actively encroaches on populations of endangered *Cordylanthus mollis* ssp. *mollis* [soft bird's-beak] and *Cirsium hydrophilum* var. *hydrophilum* [Suisun thistle] in Suisun Marsh." Furthermore, pepperweed displaces grasses that provide food for waterfowl in nesting areas (Howald 2000) and habitat for upland species such as Suisun shrews, northern harriers, burrowing owls, and song sparrows. Chlorsulfuron has been found to be the most effective herbicide for eradicating pepperweed (J. Trumbo, pers. comm.). Chlorsulfuron can be sprayed with a boomless application system mounted to an all-terrain vehicle in managed wetlands and uplands, and a backpack sprayer (or amphibious all-terrain vehicle in some cases)

above the mean high-water mark in tidal wetlands. Mechanical controls are less effective and biological controls have not been discovered.

The other species mentioned in the comment was "tar plant." There are 2 historic occurrences of tarplant, one for each of 2 tarplant species that considered rare, threatened, or endangered by the California Native Plant Society (List 1B) in Solano County. However, both species are likely extirpated within the county. The two species are big tarplant (*Blepharizonia plumosa* ssp. *plumosa*) and Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*). They are known to inhabit grasslands. Although it is unlikely rare tarplants will be affected by the restoration projects because they are no longer known from Solano County (big tarplant was last seen in the county in 1917 and Congdon's tarplant in 1930), the managed marsh project will have an overall net benefit to native plants in general because invasive weeds will be controlled, allowing native plants to re-establish.

A2) *Also, Your trustees need to work closely with CF+G, CFWS, + other county/state/local agencies to allow general public to give input to your restoration plan;*

Response: The Trustees in this matter are the California Department of Fish and Game and the United States Fish and Wildlife Service. Both preferred projects identified are managed by the DFG. All public comments that were submitted were reviewed and considered by the Trustee Council. As was detailed in the Draft DARP, the Hill Slough project has broad support from other natural resource agencies including the Suisun Marsh Charter group. The Suisun Marsh Charter group consists of managers with primary responsibility for actions in the Suisun Marsh. This agency formed a Charter Group to develop an implementation plan for the Suisun Marsh that would protect and enhance the Pacific Flyway and existing wildlife values, endangered species, and water-project supply quality. Because the Suisun Marsh includes private lands, the Suisun Resource Conservation District (SRCD) also serves on the Charter Group to represent the interests of private landowners. Members of the Charter Group include the USFWS, National Marine Fisheries Service (NOAA Fisheries), U.S. Bureau of Reclamation (BOR), CDFG, California Department of Water Resources (DWR), and California Bay-Delta Authority (CBDA). The Charter Group has also consulted other participating agencies, including the San Francisco Bay Conservation and Development Commission (BCDC) and U.S. Army Corps of Engineers (COE).

A3) *Please explain to public why the invasive weed is a problem to wildlife*

Response: Suisun Marsh has been invaded with non-native weeds that are altering the marsh ecosystem, perennial pepperweed notable among them. Perennial pepperweed threatens the natural ecosystem of the Suisun Marsh, with infestations currently widespread and covering approximately 371 acres of CDFG owned acres. This plant forms dense monospecific stands in a wide variety of habitats and is very tolerant of a wide variety of salinities (Howald 2000). Stems and roots increase in density over time, eventually out-competing perennial native vegetation like native grasses, sedges, and rushes (Morisawa, 1999). Pepperweed also acts as a "salt pump", taking in salts from the soil via its roots and depositing them near the soil surface, altering soil salinity (Blank and Young 1997) and essentially permanently altering the habitat. Pepperweed is quickly becoming a dominant plant in many parts of the Suisun Marsh.

Unless control measures are implemented, pepperweed will continue to spread and displace native and sensitive species such as pickleweed, a plant strongly associated with the endangered salt marsh harvest mouse (CDFG 2002- 2003, Shellhammer *et al*. 1982), and California clapper rail

(Goals Project, 2000). Two endangered plant species are also affected by pepperweed. The Species and Community Profiles prepared by the San Francisco Bay Area Wetlands Eco-system Goals Project of 2000 clearly states that pepperweed "actively encroaches on populations of endangered soft bird's-beak and Suisun thistle in Suisun Marsh." Furthermore, pepperweed out competes grasses that provide food for waterfowl in nesting areas (Howald, 2000) and which provides habitat for upland species such as Suisun shrew, northern harrier, burrowing owl, and song sparrows.

From CDFG's salt marsh harvest mouse monitoring data, it appears this species generally does not occupy habitat dominated by perennial pepperweed. Perennial pepperweed is replacing suitable habitat for this species and other endangered species. The invasive weed control program in sensitive areas is conducted or supervised by CDFG biologists who are both familiar with the life history of the salt marsh harvest mouse and certified in herbicide application. The herbicide(s) used to control perennial pepperweed affect plants only and do not harm animals. Every effort will be made to minimize impacts to salt marsh harvest mice during weed control efforts.

A4) *Thank you for opportunity to comment.*

Response: As Trustees for the natural resources of the State of California and nation we are grateful for the comments and input of the people on this and other cases that we work on.

B) E-mail received 03/13/09 from Mr. Roberto Valdez Jr. The responses will be to each distinct point raised in the text (in italics) as well as the enumerated points listed at the end.

My main concern is that there be a minimal of ecological disturbances and adverse impacts to the wildlife and their habitat in the Hill Slough, Grizzly Island, and Suisun Marshland during the clean-up operation to remove the 2004 Diesel Fuel Oil Spill within the SMRP area.

Response: As a clarification, the spill response and initial cleanup operation has been completed at the site of the diesel spill. Responsibility for final cleanup and monitoring of the site was turned over to the San Francisco Bay Regional Water Quality Control Board about October 2004, under the Water Board's cleanup and abatement order. The Hill Slough and Grizzly Island projects are restoration work to compensate the public for the injuries to natural resources from the diesel spill and the associated spill response activities that took place because of the spill. The Unified Command follows a system called the Incident Command System, or ICS, that allows the federal and Sate resource agencies, in this case the U.S. Fish and Wildlife Service and the California Department of Fish and Game, to have input into how the cleanup process occurs. This allows for considerations to minimize ecological disturbance where possible in the cleanup process, and this was carefully considered during the spill response or clean-up activities.

Also, since I have done some environmental research with regards the wildlife and their habitats within the proposed bridge replacement on the Grizzly Island Road at Hill Slough, I would like to recommend that your CDF&G Office as well as Project trustees and scientific panel consult the "No. EIR for Bridge 230-184:. . .(Sept. 2006)" be reviewed with the Solano County of Department of Resource Management in your Assessments. I am particularly concerned about the adverse impacts to the chinook salmon, stealhead fish, Delta/longfin smelt, California clapper/Black rail, salt marsh harvest mouse, Mason's Lilaeopsis plant, contra costa goldfields, canada geese, loggerhead shrike, white-tailed kite, tiger salamanders, Californian red-legged

frogs/tiger salamanders, and wetland crustaceans which have been observed and coexist with the SMRP area.

Response: The commenter may be referring to the EIR that was done for the construction of a new bridge on Grizzly Island Road at Hill Slough. That project is distinct from either of the preferred projects that the Trustee's are proposing for compensatory restoration in this matter. If the commenter has concern about impacts to those species by the Hill Slough restoration, the project is expected to benefit Chinook salmon, steelhead, Delta smelt, longfin smelt, clapper rail black rail , salt marsh harvest mouse, mason's lilaeopsis, loggerhead shrike, and wetland crustaceans. Please note that consultation pursuant to Section 7 of the Endangered Species Act will be required for this project. White-tailed kite and the Canada goose do occur in the project area, but the project is expected not to adversely impact these species. The other species should not be adversely impacted as they do not actually occur in the project area, though they may have had to be addressed by an EIR because of historical records or are within a certain distance of the project.

In addition, since I was not able to access your attached article re: invasive/non-native pepperweed, I still do not understand from a biological viewpoint why this plant specie needs to be removed with the SMRP. Can you please try to email/ mail me the relevant information at my email: [removed] or home address: [removed], Vacaville, CA 95687.

Response: The article to which the commenter is referring, Perennial *Pepperweed: A Threat to Wildland Areas*, was sent as an e-mail attachment on 27 Feb 2009, and sent via US mail to him on 19 March 2009. This article was originally published in the Summer 1994 CalEPPC News, which is a publication of the California Invasive Plant Council. More information on that organization is available at http://www.cal-ipc.org/.

The remaining responses will be inserted between the enumerated comments:

Nevertheless, I would like also to like to respond with a few more questions/concerns with regards to informational material that you emailed me on February 27th. That is, to say, in the order of items received:

On 2008 SSEP Presentations:

1. Was UCD Professor Peter B. Moyle consulted with regard to native fish contaminations?

Response: Yes, Dr. Moyle and his associates were involved in sampling the Suisun Slough areas just outside the levee boundaries that apparently contained the diesel fuel within the Drake Sprig Duck Club. The boundaries of the duck club are shown in Figure 1. of the DARP.

2. Can you please email or mail me to my above-mentioned address for 2nd article, i.e., "Pisces II ...Coast" which I was not able access online?

Response: The referenced slide presentation was sent to the commenter on 19 March 2009 on a compact disk (CD) and the link to it on the DFG-OSPR web site was repaired so that the public could access it directly on the web site. That link had become inoperable, but was corrected. It should be clarified that the commenter is no longer commenting on the Kinder Morgan/Suisun Marsh Draft Damage Assessment and Restoration Plan, but rather on the OSPR Scientific Study and Evaluation Program (SSEP) Symposium presentations that are available on the OSPR web site at http://www.dfg.ca.gov/ospr/about/science/ssep.html . SSEP is separate and distinct from NRDA activities related to the Kinder Morgan Suisun Marsh diesel fuel spill of 2004. The

Scientific Study and Evaluation Program within OSPR is authorized by the Lempert-Keene-Seastrand Act of 1990 (Section 8670.12) and provides funds to investigate and evaluate new oil spill response and cleanup methods, potential adverse effects of oil spills, and natural resource damage assessment tools.

3. Interesting data.

Response: No comment required.

4. How many otters were contaminated within SMRP area? Do you have additional data on the scientific findings with regard oil impact to otter population within SMRP project area?

Response: To our knowledge, no otters were contaminated in the Suisun Marsh as a result of the diesel fuel release incident in 2004 and we do not have otter population impact data from oil spills in the Suisun Marsh. It appears that the commenter may be interested in Sea Otter information available via the SSEP web site at http://www.dfg.ca.gov/ospr/report/ssep/ssep_summary.html, specifically at http://www.dfg.ca.gov/ospr/report/ssep/final_reports/2005-07_Infrared_Camera_Study_rev_1.pdf where there is a report titled, *Oiled Wildlife Infrared Camera SSEP Study P0475035* which contains some information on Sea Otter rehabilitation techniques.

5. Is fish oil detrimental biologically to fish, mammals, humans, and waterfowl within SMRP area?

Response: Again, SSEP is separate and distinct from NRDA activities related to the Kinder Morgan Suisun Marsh diesel fuel spill of 2004. This question appears to relate to SSEP, specifically to the detrimental effect that oil, including fish oil, can have on the waterproofing of bird plumage in rehabilitation tanks provided to sea birds after washing procedures are completed in the rehabilitation process. So, yes, fish oil can be detrimental to birds that are recovering from exposure to oil in a rehabilitation facility (see report "Removal of Fish Oil from Rehabilitation Pools Using a Portable Water Filtration System (SSEP 2007-06)", available at http://www.dfg.ca.gov/ospr/report/ssep/ssep_summary.html). The Trustees have no data on whether fish oil is detrimental to mammals or humans either within or outside of the Suisun Marsh area.

6. Do you know how otters are coexisting in their waterway habitat within SMRP area?

Response: The Trustees have not monitored otters in the Suisun Marsh area and are not aware of any injury to otters resulting from the Kinder Morgan Suisun Marsh diesel fuel spill of 2004. As a result, we have no information to provide related to this question at this time.

7. Did oil spill affect quails/chicks with the SMRP area?

Response: The Trustees are not aware of any injuries to quail or quail chicks from the Kinder Morgan Suisun Marsh diesel fuel spill of 2004.

8. Is your agency aware that effective microorganism (EM1/2/3) have been used to used polluted waterways in many parts of world? For instance, EM products have been used

successfully to clean the polluted ponds for flamingos at the Honolulu Zoo, State of Hawaii government has approved its safe application for natural habitats. Also, it was tested successfully with impressive results for the City of Vacaville at the local Bonafacio Septic Tank Waste Management Plant around 2003(?).

Unfortunately, Vacaville has not taken the free offer to clean-up either its Lagoon Valley Lake or pond, but it has been used to clean many rivers and lakes in Africa, South America, and Asia. So, why not use it also?

Response: The Trustees are not familiar with this particular product. Government Code Section 8670.13.1 requires the Administrator of the Office of Spill Prevention and Response to license all oil spill cleanup agents for use in the waters of the State. An oil spill cleanup agent (OSCA) is defined as a chemical, or any other substance, used for removing, dispersing, or otherwise cleaning up oil or any residual products of petroleum in, or on, any waters of the state. This category of substances would include surface washing agents, dispersants, gelling agents, herding agents, emulsifiers-demulsifiers, chemical booms, sorbents and bioremediants. Within the Office of Spill Prevention and Response, the licensing of OSCAs is done within the Response Technologies Development Unit of the Scientific Branch. All OSCAs licensed for use in California must still be approved for use on a case-by-case basis at the time of an oil spill incident. This means that although a product can be used, it does not necessarily have to be used to address all circumstances. In addition to licensing in California and OSCA must also be listed on the National Contingency Plan Product Schedule. It is up to the discretion of the Unified Command to determine the appropriateness of any particular OSCA to address any particular situation and through formal request and approval of the Region IX Regional Response Team (RRT). Once the RRT grants approval, a product can be used. More information on the OSCA program is available at http://www.dfg.ca.gov/ospr/reg_com/osca.html .

9. Were Brown Pelicans (beside American White Pelicans) also affected by the oil spill within SMRP?

Response: The Trustees have not monitored Brown Pelicans in the Suisun Marsh area and are not aware of any injury to Brown Pelicans resulting from the Kinder Morgan Suisun Marsh diesel fuel spill of 2004. There is an SSEP report titled, *Brown Pelican Roost Site Atlas: A Database and Management Tool for the California Coast (SSEP 2007-05)* available at http://www.dfg.ca.gov/ospr/report/ssep/ssep_summary.html .

10. Are you going to use laser hazing to monitor the waterfowl within the SMRP area?

Response: The Trustees have not used lasers to haze waterfowl in the Suisun Marsh and currently have no plans to do so. There is an SSEP report available titled, *Response of Waterbirds to Hazing with a Laser (SSEP 2008-06)* available at http://www.dfg.ca.gov/ospr/report/ssep/ssep_summary.html .

11. Can you tell me when exactly did this oil spill occur within SMRP area?

Response: On 27 April 2004 an underground 14-inch diameter petroleum pipeline owned or operated by Kinder Morgan Energy Partners, L.P. (KMEP) and SFPP L.P. (the responsible parties; RPs) ruptured and discharged approximately 123,774 gallons of diesel fuel (grade 2-D) into a managed marsh located within Suisun Marsh near the city of Fairfield, California.

12. Will the GPS monitoring results be available for public review?

Response: Global Positioning System (GPS) data was collected by some of the responders and some of the Trustees and RP representatives during the spill response and NRDA data collection phase of the incident in 2004. For example, many of the water and sediment sampling locations were areas where GPS waypoint data was collected for mapping purposes in a Global Information System, or GIS, platform. The Trustees are unclear what "GPS monitoring results" refers to specifically, but if there are some particular maps that you have an interest in viewing related to this incident, please contact us for this information.

On Program Guidlines:

1. Will there be opportunity for general public/stakeholders to participate in the SSEP/OSPR/TRC/Steering Committee?

Response: SSEP is separate and distinct from NRDA activities related to the Kinder Morgan Suisun Marsh diesel fuel spill of 2004. Members of the general public are invited to view the results of the program, as may be found on the OSPR web site at http://www.dfg.ca.gov/ospr/report/ssep/ssep_summary.html , but are not to be part of the Technical Review Committee (TRC) or the Steering Committee. The guidelines for SSEP may be viewed at http://www.dfg.ca.gov/ospr/about/science/ProgramGuidelines.pdf .

2. Are there other local groups besides the Duck Club involved with this SMRP project?

Response: As noted in a previous response, representatives from the Suisun Resource Conservation District (SRCD) and the Suisun Marsh Charter group have met with Trustees regarding the restoration alternatives for this NRDA case. Additionally, regional staff from DFG has advised the Trustees on restoration projects for this NRDA case.

Project Summaries and Final Reports:

1. Since the oil spill affected numerous waterfowl, was the Cordelia Bird Rescue Center involved with the recovery effort? If so, can you share their scientific findings?

Response: Yes, the Oiled Wildlife Care Network (OWCN) was involved in the wildlife response and rehabilitation efforts for this incident, and they used their facility in Cordelia to rehabilitate oiled animals. The OWCN logs for this incident will be provided if requested.

Comment 4. Submitted by Mr. Charles L "Bud" Tonnesen

A. Time frame for completion of Hill Slough Project?

B. If the project exceeds cost – where will the balance of money come from?

C. Talking about Hill Slough Project- it was stated that Grizzly Island Road would be raised and culverts installed under raised Grizzly Island Road. No information was available as to: 1. size of culverts, 2. number of culverts. 3. calculations to remove water from the approximately 1,000 acres. A major concern is that with only 200 acres +- on the west side of Grizzly Island Road, where the break will be created and 800 acres on the east side of Grizzly Island Road, will the culverts be large enough to move water from the west side to the east side? The west side, assuming the break is large enough, will fill up fast but, will the water flow through the culverts to fill up the east side. Assuming the east side does fill, will the culverts take the water out fast enough to drain properly? If not, you will have silting.

D. It was stated ALL the money will go to the State Fish and Game Grizzly Island Unit. No money will go to private property. The reason was stated that the State Fish and Game would or could maintain and control the area (Grizzly Island) much better than the private sector. I would assume that means there is no control on private property that the work is being completed. The simple fact is: The State Fish and Game has limited personnel and budget. As of now they are responsible for approximately 14, 000 acres and they can't keep that area up. If you think the personnel and budget restraint is going away – just review what has happen this year with the budget and in fact, what has happen in the past years?

E. It was stated that $150,000 will be allocated to Pepper weed control, again, will be given to the State Fish and Game on its property. It was also stated that the Fish and Game has identified the area and in 10 years they could have Pepper Weed controlled. So, with no acreage break down, location and if you think you can control Pepper Weed in 10 year, which is $15,000 per year, maybe a consultant should contacted to confirm if this can be completed.

F. The Fish and Game (Grizzly Island unit) have a great group of individuals and they accomplish so much with the small crew. Now, you plan to throw more work at them (maintenance of gates, roads, levees, disking, repairs of miscellaneous equipment, Pepper Weed control) just to name a few. Has anyone given any though to how we (meaning the tax payers) will pay for all the additional personnel, equipment, overtime? The State owns so much property on Grizzly Island that is not hunted or taken care of, how can you expect anything else to get done.

G. At the meeting of February 26, 2009 at the Solano County Center I believe you had 5 people from the State. In the audience there were approximately 9 to 10 private citizens. Many questions were asked and many could not be answered. It was stated, write in comments or e-mail. I didn't think the meeting was called to write in comments or e-mail but, to attend and ask questions, so much for thinking.

H. I didn't hear much about a mosquito problem that will be created by The Hill Slough Project. Has anyone address this problem, will the state contribute to mosquito control? As you know, this property abuts Suisun and Fairfield, who will assume the responsibility? Has anyone address a West Nile problem?

I. And in closing, comments were made to Global warming and The Hill Slough Project could handle the rise in sea level. No height was given and I assume that the information is

documented. I attended a meeting approximately 2 years ago that had to do with Global warming, put on by the State, and I recall it was estimated that the sea level could rise from 2 feet to 10 feet. My question –why are we spending millions of dollars if within a number of years this whole area will be salt water and the sea level be encroaching into all of Suisun, Fairfield and all of Grizzly Island including Hills Slough Project. MAYBE WE SHOULD THINK OUTSIDE THE BOX.

Submitted by:
Charles L "Bud" Tonnesen
[Address removed]
Fairfield, Ca. 94533

Response 4. The Trustee Council responses are provided after each enumerated question.

A. Time frame for completion of Hill Slough Project?

Response: Since design and permitting phases are still incomplete, and due to unpredictable delays in receiving funding, the time frame for completing the Hill Slough project is undetermined. However, the project manager estimates that planning and permitting will be completed in 2010, construction will begin in 2011, and the project will finish construction 2013.

B. If the project exceeds cost – where will the balance of money come from?

Response: Costs for this project have not yet been determined since the engineering and design is currently incomplete. However, in addition to the NRDA funds from this case, the project is currently funded by the CALFED ERP to complete planning and permitting. There has also been $770,000 committed from the Suisun Marsh Preservation Agreement Phase A funds for construction. Project managers expect to seek additional ERP funding to augment the NRDA and Suisun Marsh funds to complete project construction.

C. Talking about Hill Slough Project- it was stated that Grizzly Island Road would be raised and culverts installed under raised Grizzly Island Road. No information was available as to: 1. size of culverts, 2. number of culverts. 3. calculations to remove water from the approximately 1,000 acres. A major concern is that with only 200 acres +- on the west side of Grizzly Island Road, where the break will be created and 800 acres on the east side of Grizzly Island Road, will the culverts be large enough to move water from the west side to the east side? The west side, assuming the break is large enough, will fill up fast but, will the water flow through the culverts to fill up the east side. Assuming the east side does fill, will the culverts take the water out fast enough to drain properly? If not, you will have silting.

Response: The engineering and design is currently incomplete, so it is not possible to answer this question definitively, but this question/comment will be brought to the attention of the project manager for consideration during the design phase.

D. It was stated ALL the money will go to the State Fish and Game Grizzly Island Unit. No money will go to private property. The reason was stated that the State Fish and Game would or could maintain and control the area (Grizzly Island) much better than the private sector. I would assume that means there is no control on private property that the work is being completed. The simple fact is: The State Fish and Game has limited personnel and budget. As of now they are responsible for approximately 14, 000 acres and they can't keep that area up. If you think the

personnel and budget restraint is going away – just review what has happen this year with the budget and in fact, what has happen in the past years?

Response: The proposed allocation of the NRDA settlement fund was actually a split between two preferred alternatives; a Tidal Marsh Restoration Project at Hill Slough and Managed Marsh Restoration Project consisting of perennial pepperweed control using Chlorsufuron (Telar®) herbicide. While projects on private property were evaluated, the Trustees consider the prospects on public lands to be more favorable from the standpoint of the "Duration of Benefits" and the "Maintenance and Oversight of Project" criteria outlined in the Restoration Project Selection Criteria section, when compared with projects on private lands. It is simply easier for Trustees to monitor the restoration on public land. The Trustees make no assumption about the efficacy of weed control efforts on private property. While budget constraints are certainly a concern for the Grizzly Island Unit lands, which are owned and managed by the California State Department of Fish and Game, the Trustees believe that the history of good conservation management demonstrated by DFG over time, despite economic cycles, has been sufficient to warrant consideration of compensatory restoration funds from this case.

DFG will use the funds to control weeds in the highest priority areas first: outlying areas (new establishing infestations), any problem areas (such as those adjacent to private lands), and locations where control prevents spread to sensitive habitat. Control will be ongoing and success will be monitored through DFG's triennial vegetation survey.

Weed control is very expensive and private landowners in Suisun Marsh can take advantage of various grants for weed control. The Solano County Suisun Marsh Specific Fund Grant Program, overseen by the Solano County Park and Recreation Commission (in its role as the County Fish and Wildlife Commission), is directed by the Solano County Board of Supervisors ("Guidelines for Kinder Morgan Settlement Funds," Item 31 of Board Agenda of January 22, 2008). The Solano County Board of Supervisors allocated $100,000 in Fiscal Year (FY) 2008/2009 to provide grants for projects in Suisun Marsh for: habitat restoration, enhancement, creation, or protection; reduction or elimination of habitat impacts and threats; wildlife assistance, monitoring, conservation, or protection; or studies on the long-term preservation of Suisun Marsh. **Applications for FY 2008/2009 grant money were due by COB April 24, 2009. However, $200,000 will be available for FY 2009/2010 and another $200,000 will be available for the FY 2010/2011. Solano County anticipates that the application deadline for FY 2009/2010 monies will be set sometime around the March - April 2010 timeframe.** Entities eligible to receive grant awards under this program include private landowners, public agencies, including special districts, organized under federal, state or local laws, accredited educational institutions and private non-profit organizations with current 501(c)(3) status **Proposals such as invasive weed control on private lands are eligible for grant awards. Solano County requires that the applicant provide a matching fund amount that is at least 25% of the requested grant amount.**

Information about the grant program can be obtained by contacting Solano County at:

Suisun Marsh Specific Fund Program
C/o Solano County General Services Department
675 Texas Street, Suite 2500
Fairfield, CA 94533-6336
Phone: (707) 784-7905

E. *It was stated that $150,000 will be allocated to Pepper weed control, again, will be given to the State Fish and Game on its property. It was also stated that the Fish and Game has*

identified the area and in 10 years they could have Pepper Weed controlled. So, with no acreage break down, location and if you think you can control Pepper Weed in 10 year, which is $15,000 per year, maybe a consultant should contacted to confirm if this can be completed.

Response: Weed control in the Suisun Marsh, including for perennial pepperweed, has been conducted for many years by the DFG land managers at the Grizzly Island Unit. The successes have been notable, especially when financial resources are adequate, and several of their staff are experienced certified pesticide applicators. Some of the general strategies discussed between the land managers and the Trustees included an initial aggressive effort of weed control including deployment of aerial resources such as helicopters, with follow-up and maintenance spraying done with personnel on the ground. A reserved portion of the money would be left to do maintenance efforts in following years to maintain the weed control obtained in the initial effort. This reserved portion of the money was estimated to allow for an extended period of maintenance spraying prolonging these weed control benefits. It was in this context that we believe the 10 year timeframe was described at the public meeting.

F. The Fish and Game (Grizzly Island unit) have a great group of individuals and they accomplish so much with the small crew. Now, you plan to throw more work at them (maintenance of gates, roads, levees, disking, repairs of miscellaneous equipment, Pepper Weed control) just to name a few. Has anyone given any though to how we (meaning the tax payers) will pay for all the additional personnel, equipment, overtime? The State owns so much property on Grizzly Island that is not hunted or taken care of, how can you expect anything else to get done.

Response: The Trustees consulted with the very same personnel to whom you refer, and wrote the preferred alternatives for weed control largely based upon their recommendations and acknowledgement of limited funding sources for weed control supplies. The Trustees currently believe that this staff is capable and willing to implement the restoration and weed control in a manner consistent with the objectives described in the DARP, giving the citizens of California compensatory restoration for the injuries sustained to the marsh from the incident in 2004. Perhaps the Trustees have a different perspective than that expressed in this comment regarding the level of care that the dedicated DFG staff has rendered to the habitat under their management. However, the Trustees appreciate the concern expressed, and will continue to monitor the capability of implementing these restoration goals as we are charged to do on behalf of the public.

G. At the meeting of February 26, 2009 at the Solano County Center I believe you had 5 people from the State. In the audience there were approximately 9 to 10 private citizens. Many questions were asked and many could not be answered. It was stated, write in comments or e-mail. I didn't think the meeting was called to write in comments or e-mail but, to attend and ask questions, so much for thinking.

Response: The Trustees appreciate all forms of public comment on the DARP, including the comments and questions posed in the public meeting and the written comments that the public have submitted. As engineering and design details are completed for the Hill Slough project, answers for the detailed hydrological questions should be more available. Additionally, there will be future opportunity for public comment on the Hill Slough project in the future.

H. I didn't hear much about a mosquito problem that will be created by The Hill Slough Project. Has anyone address this problem, will the state contribute to mosquito control? As you know, this property abuts Suisun and Fairfield, who will assume the responsibility? Has anyone address a West Nile problem?

Response: The Trustees have also received comments from the Solano County Mosquito Abatement District (SCMAD) regarding mosquito-related concerns from the Hill Slough area. The fact that the Trustees are receiving these comments before the design and engineering work is completed is helpful, and the Trustees anticipate that design details will be relevant toward the mosquito-related concerns expressed in this letter. Initial information that the Trustees have received from the project manager of the Hill Slough restoration project indicate that they are working with the SCAMD to ensure that mosquito-issues are properly addressed.

I. And in closing, comments were made to Global warming and The Hill Slough Project could handle the rise in sea level. No height was given and I assume that the information is documented. I attended a meeting approximately 2 years ago that had to do with Global warming, put on by the State, and I recall it was estimated that the sea level could rise from 2 feet to 10 feet. My question –why are we spending millions of dollars if within a number of years this whole area will be salt water and the sea level be encroaching into all of Suisun, Fairfield and all of Grizzly Island including Hills Slough Project. MAYBE WE SHOULD THINK OUTSIDE THE BOX.

Response: The Trustees share concern for sea-level rise and the impacts that it may have on restoration projects including the ones identified in this DARP. Recent peer-reviewed studies estimate a rise of between seven to 55 inches by 2100 along California's coast (DWR 2008). Initial information regarding the Hill Slough site indicate that elevation and grade of the site offer the opportunity for the lower, middle, and upper marsh zones to migrate as sea levels rise occurs, providing some assurance that the project can provide the projected natural resource benefits in the time frames that were estimated in the scaling model used to quantify the amount of restoration that was owed in this case.

Comment 5. Synthesised set of verbal comments based on Trustee notes taken at Public Meeting held 26 February 2009 in Fairfield, CA.

1 - Duck club representatives expressed concerns over the proposed weed control. Invasive weed control is very expensive, and what about funding for weed control on private lands? How will invasive plants be controlled over time and how will CDFG utilize the funds?

2- An individual asked if invasive weeds are really a problem and expressed general concern about the salt marsh harvest mouse. He also emphasized that potential impacts of the Hill Slough West project should be specified and made available to the public. He expressed concern that the HSW project could potentially impact sensitive species and stressed the project should be done properly.

3 - A duck club representative commented he thought the NRDA money would be spent for landowners at or near ground zero for the Kinder Morgan spill. He was concerned about the focus on assistance to public lands versus private lands. He stressed the need for money on private lands and that private landowners could use weed control assistance.

4 - A duck club representative expressed concern that the HSW project would cause a significant increase in tule growth and increased water levels. He also expressed concern that the project would result in an increase of birds flying into the Travis AFB flight line.

Response 5. The Trustee Council responses are provided after each enumerated question.

1 - Duck club representatives expressed concerns over the proposed weed control. Invasive weed control is very expensive, and what about funding for weed control on private lands? How will invasive plants be controlled over time and how will CDFG utilize the funds?

Response: Weed control is very expensive and private landowners in Suisun Marsh can take advantage of various grants for weed control. The Solano County Suisun Marsh Specific Fund Grant Program, overseen by the Solano County Park and Recreation Commission (in its role as the County Fish and Wildlife Commission), is directed by the Solano County Board of Supervisors ("Guidelines for Kinder Morgan Settlement Funds," Item 31 of Board Agenda of January 22, 2008). The Solano County Board of Supervisors allocated $100,000 in Fiscal Year (FY) 2008/2009 to provide grants for projects in Suisun Marsh for: habitat restoration, enhancement, creation, or protection; reduction or elimination of habitat impacts and threats; wildlife assistance, monitoring, conservation, or protection; or studies on the long-term preservation of Suisun Marsh. Entities eligible to receive grant awards under this program include private landowners, public agencies, including special districts, organized under federal, state or local laws, accredited educational institutions and private non-profit organizations with current 501(c)(3) status.

DFG will use the funds to control weeds in the highest priority areas first: outlying areas (new establishing infestations), any problem areas (such as those adjacent to private lands), and locations where control prevents spread to sensitive habitat. Control will be ongoing and success will be monitored through DFG's triennial vegetation survey.

While projects on private property were evaluated, the Trustees consider the prospects on public lands to be more favorable from the standpoint of the "Duration of Benefits" and the

"Maintenance and Oversight of Project" criteria outlined in the Restoration Project Selection Criteria section, when compared with projects done on private lands. The Trustees make no assumption about the efficacy of weed control efforts on private property. While budget constraints are certainly a concern for the Grizzly Island Unit lands, which are owned and managed by the California State Department of Fish and Game, the Trustees believe that the history of good conservation management demonstrated by DFG over time, despite economic cycles, has been sufficient to warrant consideration of compensatory restoration funds from this case.

2- An individual asked if invasive weeds are really a problem and expressed general concern about the salt marsh harvest mouse. He also emphasized that potential impacts of the Hill Slough West project should be specified and made available to the public. He expressed concern that the HSW project could potentially impact sensitive species and stressed the project should be done properly.

Response: Suisun Marsh has been invaded with non-native weeds that are altering the marsh ecosystem, perennial pepperweed notable among them. Perennial pepperweed threatens the natural ecosystem of the Suisun Marsh, with infestations currently widespread and covering approximately 371 acres of CDFG owned acres. This plant forms dense monospecific stands in a wide variety of habitats and is very tolerant of a wide variety of salinities (Howald 2000). Stems and roots increase in density over time, eventually out-competing perennial native vegetation like native grasses, sedges, and rushes (Morisawa, 1999). Pepperweed also acts as a "salt pump", taking in salts from the soil via its roots and depositing them near the soil surface, altering soil salinity (Blank and Young 1997) and essentially permanently altering the habitat. Pepperweed is quickly becoming a dominant plant in many parts of the Suisun Marsh.

Unless control measures are implemented, pepperweed will continue to spread and displace native and sensitive species such as pickleweed, a plant strongly associated with the endangered salt marsh harvest mouse (CDFG 2002- 2003, Shellhammer *et al*. 1982), and California clapper rail (Goals Project, 2000). Two endangered plant species are also affected by pepperweed. The Species and Community Profiles prepared by the San Francisco Bay Area Wetlands Eco-system Goals Project of 2000 clearly states that pepperweed "actively encroaches on populations of endangered soft bird's-beak and Suisun thistle in Suisun Marsh." Furthermore, pepperweed out competes grasses that provide food for waterfowl in nesting areas (Howald, 2000) and which provides habitat for upland species such as Suisun shrew, northern harrier, burrowing owl, and song sparrows.

From CDFG's salt marsh harvest mouse monitoring data, it appears this species generally does not occupy habitat dominated by perennial pepperweed. Perennial pepperweed is replacing suitable habitat for this species and other endangered species. The invasive weed control program in sensitive areas is conducted or supervised by CDFG biologists who are both familiar with the life history of the salt marsh harvest mouse and certified in herbicide application. The herbicide(s) used to control perennial pepperweed affect plants only and do not harm animals. Every effort will be made to minimize impacts to salt marsh harvest mice during weed control efforts.

3 - A duck club representative commented he thought the NRDA money would be spent for landowners at or near ground zero for the Kinder Morgan spill. He was concerned about the focus on assistance to public lands versus private lands. He stressed the need for money on private lands and that private landowners could use weed control assistance.

Response: While projects on private property were evaluated, the Trustees consider the prospects on public lands to be more favorable from the standpoint of the "Duration of Benefits" and the "Maintenance and Oversight of Project" criteria outlined in the Restoration Project Selection Criteria section, when compared with projects done on private lands. Weed control is costly and private landowners in Suisun Marsh can take advantage of various grants for weed control. The Solano County Suisun Marsh Specific Fund Grant Program, overseen by the Solano County Park and Recreation Commission (in its role as the County Fish and Wildlife Commission), is directed by the Solano County Board of Supervisors ("Guidelines for Kinder Morgan Settlement Funds," Item 31 of Board Agenda of January 22, 2008). The Solano County Board of Supervisors allocated $100,000 in Fiscal Year (FY) 2008/2009 to provide grants for projects in Suisun Marsh for: habitat restoration, enhancement, creation, or protection; reduction or elimination of habitat impacts and threats; wildlife assistance, monitoring, conservation, or protection; or studies on the long-term preservation of Suisun Marsh. Entities eligible to receive grant awards under this program include private landowners, public agencies, including special districts, organized under federal, state or local laws, accredited educational institutions and private non-profit organizations with current 501(c)(3) status.

4 - A duck club representative expressed concern that the HSW project would cause a significant increase in tule growth and increased water levels. He also expressed concern that the project would result in an increase of birds flying into the Travis AFB flight line.

Response: The Trustees have been advised that various marsh habitats will be created at the Hill Slough project, including lower, middle, and high marsh areas, each with characteristic vegetation types. Vegetation and re-vegetation is expected to be monitored, as will the hydrological aspects of this tidal restoration project. A regional biologist has advised the Trustees that other portions of the Hill Slough property have been restored that are closer to Travis Air Force Base than the land currently being considered for tidal restoration and it has not created an increase in bird-related incidences at the base. The Trustees appreciate that this concern has been raised, and have communicated it to the project manager of the Hill Slough restoration effort for consideration.

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