



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Carlsbad Fish and Wildlife Office  
6010 Hidden Valley Road  
Carlsbad, California 92011

San Diego National Wildlife Refuge Complex  
P.O. Box 2358  
Chula Vista, California 91912



In Reply Refer To:  
FWS-SDG-12B0120-12TA0194

**MAY 18 2012**

Ms. Michelle White, Environmental Policy Manager  
Government and Community Relations  
San Diego Unified Port District  
P.O. Box 120488  
San Diego, CA 92112-0488

**Subject:** Comments on the Memorandum of Understanding among the San Diego Unified Port District, the City of San Diego, and the City of Imperial Beach to Explore Uses for Pond 20

Dear Ms. White:

The U.S. Fish and Wildlife Service (Service) appreciates the opportunity to participate in the outreach process undertaken by the San Diego Unified Port District (Port) to solicit comments in your evaluation of potential future uses of Pond 20. We recognize that the Memorandum of Understanding (MOU) among the Port, City of San Diego (City), and City of Imperial Beach outlines a process for stakeholder outreach, due diligence, master plan development, and tax revenue sharing and broadly envisions potential environmental and economic development opportunities in Pond 20. We offer the following comments regarding the future uses of Pond 20 for your consideration.

### **Background**

Pond 20 is a 95.13-acre area at the southern end of San Diego Bay (Bay) owned by the Port. The Port, Service, U.S. Navy, State Lands Commission, and Western Salt Company cooperated in a complicated land acquisition and transfer that resulted in the establishment of the South San Diego Bay Unit of the San Diego Bay National Wildlife Refuge (Refuge) which is adjacent to and includes the northern portion of Pond 20. The land acquisition also set in motion the opportunity for the Port, and later the San Diego Regional Airport Authority, to improve, modernize, and expand the San Diego International Airport. The Port retained the southern portion of Pond 20 for potential future use so it was not included in the land acquisition for the San Diego Bay Refuge.

### **Biological Resources**

Like the rest of the salt ponds, Pond 20 was previously used for solar salt production. It now consists of open water channels, dikes, salt marsh, Diegan coastal sage scrub, salt pan, and non-native grassland. The parcel in its existing condition is used for foraging and nesting by several bird species. Sensitive resident and migratory birds such as Belding's savannah sparrows, gull-billed terns, California horned larks, Black-necked stilts, and killdeer have been observed using Pond 20, and a pair of the federally threatened Western snowy plover (*Charadrius nivosus nivosus*; "snowy plover"), has successfully nested onsite (R. Patton, pers. comm.).

### **Regulatory and Land Use Constraints**

Because Pond 20A currently supports wetlands and federally and state listed species, discharge of fill for development on the site may require permits from the U.S. Army Corps of Engineers, California Department of Fish and Game, California Coastal Commission and Regional Water Quality Control Board, and consultation with the Service. Impacts to wetland and listed species would need to be mitigated as required by the permits and consultation.

Pond 20 is bordered on the east by Nestor Creek and to the north by the Otay River floodplain and the salt ponds that are managed by the Refuge. Flooding models have shown that 100-year storm events will likely result in the inundation of portions of Pond 20 along Nestor Creek, and at the convergence of Nestor Creek with the Otay River (Philip Williams & Associates 2003). Parcels near Pond 20, including the mobile home park and the commercial shopping center to the east, have been known to flood during large storm events due to high water levels near the Otay River mouth (USFWS 2006). Filling Pond 20 to allow for development would require raising its elevation above the floodplain, and would result in the loss of flood storage capacity in Pond 20, thereby increasing the potential for flooding of adjacent lands. Sea level rise is expected to further contribute to inundation during large storm events, resulting in greater volumes of inundation.

Pond 20 is also adjacent to the Refuge, which is one of the most important shorebird nesting and foraging areas in southern California. The Refuge is planning the restoration of the Otay River floodplain, including the northern portion of Pond 20, and the remaining salt ponds that will increase the ecological functions of the Refuge. Development of the southern portion of Pond 20 could indirectly impact the important ecological functions and wildlife resources of wildlife resources in south San Diego Bay.

### **City of San Diego Multiple Species Conservation Program Subarea Plan**

Pond 20 was in private ownership in 1997 when the City completed its Multiple Species Conservation Program (MSCP) Subarea Plan, and was included in the multiple habitat planning area (MHPA) or preserve in the Subarea Plan. Since then, the Port bought Pond 20. Even

though Pond 20 is now under the Port's ownership and jurisdiction, because of its importance to the City's MHPA and the Port Board includes members from the City, we recommend that any development of Pond 20 be consistent with the City's MSCP Subarea Plan. In general, the City's MSCP Subarea Plan requires avoidance of the most environmentally sensitive areas (e.g., salt marsh) and mitigation for any impacts to sensitive vegetation communities. For example, unavoidable impacts to salt marsh are mitigated at a 4:1 ratio under the City's MSCP Subarea Plan.

### **San Diego Bay Integrated Natural Resources Management Plan**

The draft San Diego Bay Integrated Natural Resources Management Plan (INRMP) lists nine top priorities for San Diego Bay (Port and U.S. Navy 2011). The first priority is to improve the habitat value of the shoreline by removing artificial (e.g., armored or diked) shoreline in exchange for natural, more biologically functional shoreline. However, development of Pond 20 would likely require armoring or increasing the heights of the dikes surrounding it, which is in direct conflict with the first priority of the INRMP. On the other hand, restoration of Pond 20 to a natural shoreline with tidal and freshwater inundation would directly implement this INRMP priority.

The INRMP also lists fish abundance, health, and habitat monitoring as a top priority. Restoration and enhancement of wetlands at Pond 20 could provide fish nursery areas that would help increase the populations of several fish species in the Bay, including recreational fishery and California least tern (*Sternula antillarum browni*; least tern) prey species.

Another INRMP top priority is the enhancement of the south Bay vicinity by creation of upland transition, intertidal, and subtidal habitat. In addition, the INRMP's mitigation and enhancement management strategy includes orienting mitigation towards improving the value of severely depleted habitats for which little opportunity exists for enhancement, including salt marsh, intertidal flats, cordgrass, and upland transition. Because Pond 20 meets several of the main criteria listed in the INRMP for potential creation/restoration areas, such as sediment qualities and linkage to adjacent ecological resources, it represents one of the few places left in the south Bay that could fulfill this priority and strategy.

Finally, the INRMP lists as a priority that a cooperative mitigation management and banking plan should be developed whereby mitigation projects may be combined for the purpose of accomplishing a larger or more ecologically effective project. Pond 20 is one of the few remaining areas in San Diego Bay that could fulfill this priority if it cannot be restored using non-mitigation related environmental funds. Including Pond 20 in cooperative mitigation management and banking plan would not only increase the ecological value of Pond 20, but also its economic value by allowing the Port to sell mitigation credits. There is already a high demand for mitigation opportunities for Port projects, and development of Pond 20 would not

only result in the loss of a potential mitigation area, but would also increase the demand for mitigation in the Bay by constructing a project that may have its own mitigation requirements.

### **Climate Mitigation and Adaptation Plan**

The draft Climate Mitigation and Adaptation Plan (CMAP) (Port 2012) recommends that upland parcels in the Bay should be identified that may allow for inland migration of wetlands due to sea level rise. Pond 20 provides a rare opportunity to create upland transition from wetlands in the Bay. Sea level rise will require a large amount of space for wetland migration into higher elevations. Undeveloped areas in the Bay that can accommodate wetlands at projected future water levels are scarce, and the development of Pond 20 would result in a loss of the opportunity to implement this draft CMAP priority.

The Port's Environmental Advisory Committee set a target of 10 percent reduction in Port greenhouse gas emissions by the year 2020 for the draft CMAP. Seawater and wetlands are significant sinks for atmospheric carbon (Trulio *et al.* 2007), and creation/restoration of wetlands is identified as an implementation measure in the draft CMAP that will help the Port reach its greenhouse gas reduction goal. Research suggests that up to 43-343 g CO<sub>2</sub> per square meter could be sequestered in restored wetlands in Pond 20 from its annual net greenhouse gas emissions (Cahoon *et al.* 1996; Chmura *et al.* 2003). Conversely, the development of Pond 20 would eliminate existing wetlands and thereby lead to a net increase in greenhouse gas emissions in the Bay.

### **Restoration Opportunities**

All of Pond 20 was historically tidelands and salt marsh habitats (Grossinger *et al.* 2011). It has been demonstrated that salt marsh restorations which use historical salt marsh sediments, consisting of finer sediments with below-ground detritus, are highly successful (Levin *et al.* 2000). Due to historical and current presence of salt marsh, Pond 20 is an excellent candidate for salt marsh restoration. Restoration of Pond 20 could provide significant opportunities to increase available nesting and foraging habitat for shorebirds, including the federally listed California least tern, western snowy plover, and light-footed clapper rail.

Restoration of Pond 20 is supported by the California Coastal Commission's (Commission) letter, dated February 28, 2011, that states that the location and resources on Pond 20 clearly indicate that the best and highest use of the site would be habitat restoration. The letter also states that the Commission's approval in 1979 of the 45-unit residential complex to the west of Pond 20 was based on the assumption that Pond 20 would provide a buffer between the development and sensitive wetlands.

### Conclusion

Pond 20 would provide a significant ecological resource to the Bay and the Port if restored and/or used as a mitigation bank. Developing Pond 20 would likely require mitigation, indirectly impact the ecological functions and wildlife resources of wildlife resources in south San Diego Bay, and represent the loss of one of the few remaining opportunities for the Port to fulfill the goals of the INRMP and the draft CMAP. Along with the restoration of the Otay River and the remaining salt ponds, restoration of Pond 20 would create a large, ecologically significant portion of the south Bay that would provide habitat for sensitive species, as well as potential mitigation for future projects and space for sea level rise. Therefore, we urge the Port to use Pond 20 for habitat restoration instead of development.

Thank you for the opportunity to comment on this matter. If you have any questions regarding this letter, please contact Lauren Kershek of the Carlsbad Fish and Wildlife Office at (760) 431-9440.

Sincerely,



Karen A. Goebel  
Assistant Field Supervisor  
Carlsbad Fish and Wildlife Office

Sincerely,



Andrew Yuen  
Project Leader  
San Diego National Wildlife Refuge Complex

### LITERATURE CITED

- Cahoon, D.R., Lynch, J.C., Powell, A.N. 1996. Marsh vertical accretion in a Southern California estuary, U.S.A. *Estuarine, Coastal and Shelf Science* 43(1): 19-32.
- Chmura, G.L., Anisfeld, S.C., Cahoon, D.R., and Lynch, J.C. 2003. Global carbon sequestration in tidal, saline, wetland soils. *Global Biogeochemical Cycles* 17(4): 22-1 – 22-12.
- Grossinger, R., Stein, E.D., Cayce, K., Askevold, R., Dark, S., and A. Whipple. 2011. Historical Wetlands of the S. California Coast – An Atlas of the US Coast T-Sheets, 1851-1889. Prepared for the California Coastal Conservancy.

Levin, L.A., Talley, T.S., and P. Dayton. 2000. Faunal recovery in restored wetlands. Unpublished Final Technical Report R/CZ-140, 15p.

Philip Williams & Associates, Ltd. 2003. Lower Otay River Salt Marsh and Wetland Restoration: Hydrodynamic Modeling Analysis.

Trulio, L., Callaway, J., and Crooks, S. 2007. White Paper on Carbon Sequestration and Tidal Salt Marsh Restoration. Report by Phillip Williams and Associates to the Resources Legacy Fund.

Unified Port of San Diego. 2012. Draft Climate Mitigation and Adaptation Plan.

Unified Port of San Diego and the U.S. Navy. 2011. San Diego Bay Integrated Natural Resources Management Plan.

U.S. Fish and Wildlife Service. 2006. Final Comprehensive Conservation Plan and Environmental Impact Statement: San Diego Bay National Wildlife Refuge, Sweetwater Marsh and South San Diego Bay Units.

Personal Communication:

Patton, Robert. 2012. Consulting biologist and California least tern monitor in San Diego Bay. Personal communication on observations of avian species seen on Pond 20. On file, Carlsbad Fish and Wildlife Office.