

**Meeting Minutes**  
**22 April 2011**  
**12:30 – 5:00 pm**

**Subject: Stakeholder Meeting on the Piute Ponds Management Plan, Edwards Air Force Base**

**Attendees:**

Wanda Deal, Facilitator (Edwards Air Force Base)  
Mark Hagan (Edwards Air Force Base)  
Col. Mathew Wallace, 95<sup>th</sup> Air Base Wing Commander (Edwards Air Force Base)  
Richard Paquette (Edwards Air Force Base)  
Tom Mull (Edwards Air Force Base)  
Jeff Black, Website Developer (Edwards Air Force Base)  
Sujoy Roy (Tetra Tech)  
Colleena Perez (Tetra Tech)  
Michelle Gibbs (Tetra Tech)  
Judy Hohman (U.S. Fish and Wildlife Service)  
Scott Harris (California Department of Fish and Game)  
Sarah Rains (California Department of Fish and Game)  
Rebecca Barboza (California Department of Fish and Game)  
Tom Weiland (Los Angeles County Sanitation District 14)  
Ron Kettle (Los Angeles County Sanitation District 14)  
Erika DeHollan (Los Angeles County Sanitation District 14)  
Chris Hildebrandt (Ducks Unlimited)  
Jim Moore (San Fernando Audubon)  
Vern Bernhart (Antelope Valley Audubon)  
Roger Day (Photographer)  
Cal Yorke (Researcher/Professor)  
Charles Hood (Antelope Valley College)  
Kristi Grubb (Teacher/Citizens for Piute Ponds)  
Abigail Springer (Teacher/Branch Elementary)  
Tim Post (Lahontan Regional Water Quality Control Board)

**1. Introductions**

**2. Overview of the Project (Wanda Deal)**

- Meeting goals are to:
  - Discuss what the potential “end state” of Piute Ponds should be; and
  - Determine how to get to that “end state.”
- This is an Air Force project; therefore, the Air Force mission must be considered at all times during this process.
- There is a projected decrease in flows to Piute Ponds based upon the Los Angeles County Sanitation District 14’s (District 14) 2020 Plan as it is written now. Specifically, there is an order from the Lahontan Regional Water Quality Control Board (the Board) for District 14 to go from secondary treatment to tertiary treatment of wastewater from the Lancaster Water Reclamation Plant. In addition, there is a trend for storm water diversion in the Amargosa Creek watershed which is

resulting in decreased flows to the Ponds. Finally, the Board has also issued a Cease and Desist Order to stop all discharges into Rosamond Dry Lake.

- There is currently no active management of the Ponds and habitat in the Ponds appears to be declining. Therefore, the Air Force's goal is now to actively manage the Ponds.
- Tetra Tech has been hired to prepare a Piute Ponds Development Plan to determine how to better move water between the Ponds and a Piute Ponds Management Plan to develop a long-term strategy to protect and enhance the Ponds. The Development Plan will be part of the Management Plan and the Management Plan will become part of the Integrated Natural Resources Management Plan (INRMP) for Edwards Air Force Base. The goal is to complete a draft Management Plan by September or October 2011.
- A Surface Water Flow Study is going to be completed soon as well.
- Some of the management actions that are being considered include structural modifications, including installing/repairing elevation control structures and ecosystem modifications such as the creation of islands within the Ponds and/or enhancing upland habitat around the Ponds.

### **3. Tetra Tech's Presentation on the Piute Ponds Management Plan (Colleena Perez and Sujoy Roy)**

- Tetra Tech has compiled information on optimal water depths for shorebirds and waterfowl and has determined that water depths between 1 and 6 inches and 6 to 10 inches are optimal for shorebirds and waterfowl, respectively. These depths are herein referred to "Wadeable Area (1-6 inches)" and "Wadeable Area (6-10 inches)" for the purposes of modeling how to maintain optimal water depths within the Ponds.
- Tetra Tech then modeled how changes in "maximum water depth from the surface" and the volume of water within the Ponds would affect the amount of "Wadeable Area (1-6 inches)" and "Wadeable Area (6-10 inches)" to determine the ideal flow management alternatives for the Ponds. The model was performed based upon the input of water planned under the 2020 Plan.
- The results indicate that the Ponds could dry up under the 2020 Plan for up to 5% of the time. Therefore, one recommendation is to store water from the wastewater treatment plant during the winter so that it can be used to supply Piute Ponds with water during the dry months where there is a potential for the Ponds to dry out.
- The results also tell us what "maximum water depth from the surface" is ideal for maximizing the amount of area that provides optimal water depths for shorebirds and waterfowl.

### **4. Discussion on How to Manage the Ponds**

- Wanda now went around the room to solicit everyone's opinion on how to manage the ponds.

#### **a) Tim**

- Any reservoir will fill in. Therefore, the Ponds should be managed under this assumption.

- The Board issued a Cease and Desist Order to stop overflows into Rosamond Dry Lake as a result of the Air Force claiming that it was a “nuisance condition.” However, the Board could issue a Waste Discharge Requirements permit to allow discharges to Rosamond Dry Lake. District 14 would just need to submit an amended permit application.
- How would salinity be managed in the Ponds? (Chris responded that moving water to Rosamond Dry Lake would enable flushing of the system which would improve the salinity).
- We need to ensure that all existing and new structures are sized correctly to allow water to be moved between the ponds.
- The highest water quality will provide the best benefit to the species in the Ponds.
- It is recommended that a non-profit organization be established to manage the Ponds along with a regulatory Steering Committee.

**b) Cal**

- Can we protect the North Buffer Pond as the deep pond and let the others dry out from time to time?
- Would like to see the installation of elevated observation platforms to enhancing birding and educational opportunities (e.g., like out at Salton Sea).

**c) Judy**

- What is the actual wetted surface area of the North Buffer Pond? Perhaps we can look at this measurement as an indicator of optimal habitat.
- Are there any control structures on the culverts or are they just open culverts? It seems that this is where the Ponds may be most vulnerable.
- Redundancy and replication are the keys to successful management of the system.
- A major goal of managing the Ponds should be enhancing the educational opportunities at the Ponds.
- The constraints to managing the Ponds should be identified and used to help manage the system (e.g., court orders, the Air Force’s mission, the mission of District 14).
- The U.S. Fish and Wildlife Service would like to see the system managed as a complete ecosystem, not just habitat for birds, and would like to see the system managed to obtain the highest diversity as possible.
- Recommends soliciting community support for the project and maximizing the educational, research, and recreational opportunities at the Ponds.
- Recommends considering breaking the large ponds up into smaller ponds. For example, one pond could be deep, the other pond could be terraced, and one pond could be seasonally manipulated etc. Recommends creating at least two sets of each of these to ensure replication and redundancy.

- Climate change and the trend towards more extreme storm events should be a consideration and should be factored in to all of the analyses.
- Requests a timeline for completion of the Management Plan and a proposed schedule for agency involvement.

**d) Scott**

- The loss of water from the Ponds could be a natural process and may not necessarily be a bad thing. What would happen if the Ponds were just left alone? What would the No-Action Alternative look like? A decision needs to be made at the onset as to whether the real goal is to manage the system as open water habitat or to let the natural processes take over.
- What resources are in the areas that are being proposed for expansion of the Ponds? What are the net costs/benefits of expanding the Ponds?
- Management of the Palmdale “Lake” Detention Basin affects the downstream supply of water and should be looked at for its potential effects on the Ponds.

**e) Mark**

- The current goal of the Air Force is to manage the system as an emergent open water ecosystem.
- There should be no boundaries to the discussion on how to manage the system.

**f) Richard (circulated a proposal to enhance waterfowl habitat at the Ponds)**

- Big Piute has the largest storage area but the North Buffer Pond offers more premium habitat.
- His top priorities to enhance waterfowl at the Ponds include planting species preferred by waterfowl (e.g., barnyard grass and water grass) and to conduct “moist soil management” for the species by implementing timely drawdowns of the Ponds to benefit the vegetation for waterfowl (e.g., convert permanent wetlands to seasonal wetlands). This would also benefit shorebirds. For example, water could be diverted from Little Piute to flood Big Piute, which would create a mudflat for shorebirds in Little Piute and enhance waterfowl habitat in Big Piute.
- He would like to see the primary focus be on habitat protection and enhancement rather than on installation of structures and access repairs (e.g., docks, platforms, and road repairs).

**g) Chris (discussed the current proposal planned by Ducks Unlimited in the Ponds)**

- A project is currently underway by Ducks Unlimited that will be implemented next year to install a few new water control structures in the Ponds and to conduct seasonal drawdowns in certain locations.
- Wants a Safe Harbor Agreement in place from the U.S. Fish and Wildlife Service for future management of the Ponds (Judy clarified that this process is not possible because the Ponds are on federal land, however, the section 7 consultation process would be the equivalent process).
- Recommends establishing an annual maintenance fund for the roads and water control structures.

- Recommends improving all-weather access to the Ponds.
- He sees a lot of potential for restoration and enhancing diversity through creation of permanent and seasonal wetlands within the system.
- Seasonal wetlands would benefit waterfowl and would also benefit shorebirds.
- He is encouraged by this collaborative effort and the congeniality conveyed in this room and hopes that this will continue in the future.
- District 14 should be given maximum flexibility to manage the water going to the Ponds.

**h) Col. Wallace**

- The mission takes precedent and that is my primary task. However, having said that, it is my job to also maximize the recreational opportunities at Edwards Air Force Base.

**i) Jim**

- The four ponds are not supporting as many shorebirds as they used to. The north and south impoundments used to have more mudflat habitat. Shorebirds prefer water depths less than 1-inch; basically, open mudflats without vegetation.
- Seasonal drawdowns may work for shorebirds as well.
- All of the ponds are currently too deep for shorebirds. The ideal situation would be to maintain at least one 3 to 6-inch deep permanent pond and then allow the other ponds to be drawn down on a seasonal basis.
- The creation of islands would also enhance habitat for shorebirds.

**j) Tom (Chris, Richard, and Judy wanted to know what is going to happen with the input of water to the Ponds under the 2020 Plan)**

- The 2020 Plan is designed to eliminate overflows to Rosamond Dry Lake. Instead, the water would go to municipal reuse and for agricultural use once it undergoes tertiary treatment. There is a trend in the region for an increasing demand for water for municipal reuse and agriculture.
- Multiple facilities have already been built to go to tertiary treatment.
- Under the 2020 Plan, enough water has been set aside to keep the Ponds at its current size (400 acres), and District 14 has enough storage onsite for this. There is an existing Memorandum of Understanding (MOU) between District 14 and Edwards Air Force Base that sets aside enough water to maintain 200 acres. Therefore, a revised MOU may be necessary.
- Recommends balancing the need to restore the habitat with the potential disturbance of habitat.
- We need to determine what the regulatory jurisdictions are for the Ponds (Tim replied that the Ponds are not considered a wetland under the jurisdiction of Sections 404/401 of the Clean Water Act).

**k) Erica**

- There needs to be regulatory flexibility to enable management of the Ponds.

**l) Wanda**

- Wants to enhance habitat for the tricolored blackbird.

**m) Vern**

- Recommends maintaining the system for maximum durability and flexibility.
- Recommends minimizing the need for maintenance of the system.
- Likes the idea of having redundant culverts.

**n) Roger**

- Would like better control of water between the ponds and better all-weather access to the system (e.g., better maintenance of the roads, making the roads all-weather, creating a bridge over the cement low-flow crossing).

**o) Charles**

- Would like to see installation of docks to enhance educational opportunities.
- Would like to see creation of islands and control of vegetation on those islands so that they are not overgrown. Islands just under or just above (e.g., 1-inch above) the surface of the water are ideal.
- Recommends having an art show on Piute Ponds (this idea was well received by multiple members of the group as well).

**p) Michelle**

- Given the potential future decrease of water under the 2020 Plan, it may be important to prioritize protecting the existing system over expanding it.
- Also, given the potential future decrease of water under the 2020 Plan, it may be important to prioritize the ponds for protection (e.g., determine which ponds offer the best habitat and should be protected over the others).

**q) Rebecca**

- There needs to be an agreement to ensure that this collaborative effort established today continues.

**r) Sarah**

- Invasive (“unwanted”) species should be managed.

- If sediment will be moved, a location should be identified as soon as possible.

s) **Kristi**

- The Ponds are a very important resource to provide educational opportunities to youth.
- Would like to see better all-weather access to the Ponds.
- Would like some of the experts present within the room today to attend her field visits with her students.

t) **Abigail**

- The Ponds are a very important resource to provide educational opportunities to youth.

**5. Exercise on How to Get to that “End State”**

- Members of the group were asked to mark up maps of Piute Ponds with the locations of any proposed projects.