



MACHADO LAKE ECOSYSTEM REHABILITATION PROJECT WILMINGTON DRAIN MULTI-USE PROJECT

Meeting Summary #1

December 1, 2009

6:30-8:30 p.m.

Kaiser Hospital Conference and Education Center

On December 1, 2009 the Bureau of Engineering held a community outreach meeting for the Machado Lake Ecosystem Rehabilitation and Wilmington Drain Multi-Use Projects. Approximately 15 people were in attendance; see Attachment A for the attendance list. Mr. Alfred Mata, Bureau of Engineering, opened the meeting by welcoming the public to the meeting and initiating a round of self introductions. Mr. Mata gave a brief overview of the project, recapped the project goals and schedule. A stakeholder requested that the schedule be posted on the project website.

Concern was also voiced over possible filtration tanks being placed near Harbor College and the potential impact it could have to students. He requested that any possible tanks be covered. Another stakeholder voiced his concern over whether this project would impact his current work to implement a camping area. Mr. Mata indicated that he would speak to the stakeholder for further details after the meeting was over.

The project team then proceeded with the public presentation. See Attachment B for the slide presentation.

Special Studies Update

Wendy Katagi (CDM) gave the audience a quick overview of the Coastal Conservancy Grant that was funding several special studies for this project. The studies are meant to support Prop O goals, provide supplemental investigations for Machado and Wilmington sites and provide input into design process. Ms. Katagi then gave an overview of the various studies that would be funded through this grant. She stated that these studies would help us make an informed decision as to how to manage the lake. A stakeholder inquired as to whether the sediment study would replace the work that was recently done by the EPA. The project team informed the audience that it was not the EPA that was working sediment sampling, but rather the Machado Lake/Wilmington Drain project team. Part of the funds that were used to complete that study were taken from the Coastal Conservancy Grant.

Overview of Recreational Fisheries at Machado Lake

Anna Toline was introduced to discuss the recreational fisheries habitat plan. The purpose of the study was to identify fish habitat features that will enhance a sustainable warm-water recreational fishery in Lake Machado under the proposed design scheme. To identify potential fish suitable for

the development of a recreational fishery, the project team reviewed historic and present fish species within Machado Lake and an overview of recreational fisheries in Los Angeles County (please see Attachment B for list). Additionally, they obtained input from California Department of Fish and Game and the City of Los Angeles' Department of Recreation and Parks. A literature review was completed to identify habitat needs for potential recreational fishery species. Following initial investigations of fish habitat needs, input from the design team was obtained to identify limitations to recreational fish habitat. From this, a set of habitat features that will not interfere with water quality or engineered structures was proposed. Funding is not currently identified for the maintenance of the recreational fishery. To this end, the desire was to develop a plan that does not require excessive funding long-term.

Dr. Toline provided an overview of general habitat features for fish that included vegetation, artificial and natural structure, and spawning habitat. A table was presented that included lists of the relative amount of various habitat features (e.g. percent vegetation cover) that are recommended for Machado Lake and which species would benefit from each feature (Please see Attachment B for table on Fish Habitat Features). The recommended placement of various habitat features is based upon limitations associated with the operation and maintenance of the overall design scheme. Elements of the design scheme that were considered with respect to fish habitat include the following:

- Pipes, compressors, and diffusers
- Viewing platforms
- Fishing piers
- Sediment traps
- Overall hydrological control
- Bathymetry
- Floating islands
- Nearby pathways

Limitations for placement of fish habitat elements were presented (please see Attachment B for list). Other considerations of the overall fishery habitat plan include signage for educational opportunities about fish and habitat, casting areas off the shoreline, "undesirable" fish control, and monitoring of habitat use, water quality, and fish populations.

Questions asked by the audience included:

- Is the current temperature of the lake harmful for the fish? *Due to the fact that it is a shallow water lake, the temperature could reach around 80 degrees; the fish identified as appropriate for a recreational fishery in Machado Lake can live at the current temperatures.*

- Did you review fish that were historical to area or historical to lake? *We provided lists of native and non-native fish in the lake present both currently and historically.*
- Could the non native fish identified (i.e. mosquito fish) have been put there by Vector Control? *This is possible, the use of these fish for mosquito control is very common.*
- How should we manage non-native and undesirable fish? *The fish recommended for the recreational fishery are non-native. But, there are fish in the lake considered "undesirable" (e.g. carp). Several approaches to "undesirable" species management will be considered for Machado Lake. These include biological, chemical, and physical control methods. Whether or not to perform non-native species control depends on the risk of the non-native species to the system and the ability to be successful long-term.. There has not been a final decision on how best to manage non-native species in the lake.*
- What is the health of the fish currently found in the lake; people are fishing and possibly eating what they catch. *Information about Machado Lake fish contaminants can be found online (http://www.swrcb.ca.gov/water_issues/programs/swamp/lakes_study.shtml). According to the Office of Environmental Health Hazard Assessment (OEHHA) "OEHHA is rescinding the advisory for Harbor Park Lake (also called Lake Machado). Current information does not show high levels of chlordane, DDTs, or other chemicals." (http://oehha.ca.gov/fish/so_cal/harborlake.html). However, water quality issues exist in Machado Lake and is being addressed in the overall design scheme..*
- *Can we look at ordinances with Council Office to address non-native control and maintenance? To improve overall control of the input of "undesirable" species into the system (both aquatic and terrestrial) will require an education/outreach component. The design team will work with the City to steward this process.,*
- *Need signage posted prohibiting dumping at lake. LA Recreation and Parks will address this.*
- *Look at sensitive birds and habitat protection (i.e. boats for recreational use). This is being considered.*
- *Do we want native reptiles/amphibians (will they be compatible)? These species are being considered in the overall restoration program.*
- *Request that references to Wilmington Drain be changed to Wilmington Channel. This will be done in the final fish habitat plan.*

Summary and Results of Macroinvertebrate Surveys

Linda Archer was introduced to present on the results of the Macroinvertebrate Surveys. She began with an overview of why they were using macroinvertebrates. Macroinvertebrates are the most sensitive indicator of overall water quality improvement as they are sensitive to environmental stressors. She explained that they are tolerant of varying degrees of stressors and play an important role in the ecosystem (i.e. food for fish, amphibians and water birds, breakdown and cycling of organic matter.) Ms. Archer explained that the purpose of these surveys was to determine what the water quality was like now by documenting existing conditions, then comparing existing conditions with future conditions, thus validating ecosystem improvements.

Sample stations were positioned around Machado Lake and Wilmington Drain. The results showed that there were a low total number of species, low diversity- indicating species richness and abundance, as well as few pollution intolerant species. Aquatic earthworms were the most common to be found and at least three species of leeches were found. Non native species that were found included apple snail and the New Zealand Mud snail. Ms. Archer explained that macroinvertebrate changes with water quality improvements; as the water quality improves will get other types of species that can compete in the system.

Questions from stakeholders included:

- How will invasive removal occur within the Wilmington Channel? *Will not fish them out, as water quality improves you will see a change in species that can compete within the system.*
- How deep will the channel be dredged? *At southern end, will be a maximum of 5 feet, at northern end 1-2 feet.*
- Was the crayfish studied and if so, what is the removal plan?

Cultural Resources Survey Results

Mark Robinson was introduced to provide an overview of the Cultural Resources Survey. Mr. Robinson began with an overview of the Gabrielino/Tongva territory. A map was provided to show the vastness of the area which included the watersheds of the San Gabriel, Santa Ana and Los Angeles Rivers, portions of the Santa Monica and Santa Ana Mountains, the Los Angeles Basin, the coast from Aliso Creek to Topanga Creek; as well as the San Clemente, San Nicolas and Santa Catalina Islands. One of the largest Gabrielino/Tongva Native American villages was located southeast of Machado Lake. Mr. Robinson proceeded to detail the history of the inhabitants of the area starting with the Spanish period through modern day. A literature review was also used to research the inhabitants. 2009 Cultural Resource Literature Review Results indicated that the project is northeast of a site claimed to be the Gabrielino village of Swanna, or Suang-na. The 2009 Cultural Resources Survey Results showed no new discovered sites/resources observed. Within Machado Lake seven sites were previously recorded, and none have been recorded for Wilmington Drain. The study conclusions found that the area has a rich history but due to ongoing land use, no significant cultural resources were found. Construction monitoring will ensure no significant impacts to cultural resources.

Stakeholders had the following questions:

- Are there any records of Fort Ross or camp's involvement with lake? *No records*
- Check Martin Reiter's book for additional cultural resources data.
- Request that presentation be posted to Prop O website.

Wrap Up and Next Steps

Mr. Mata wrapped up the meeting by thanking everyone for coming and for their continued participation in the project. He asked if there were any additional questions before closing the meeting. Stakeholders had the following questions/concerns:

- Keep recreation as focus of project, don't want to see project as wildlife preserve.
- Have consistently discussed removing non native species within project area, this was the first meeting where mentioned would be introducing non native fish into lake, is this new or was this always considered? *Results arose from studies, will take study recommendations into consideration, but stocking of fish will be done in consultation with Recreation and Parks.*
- Tongva tribe members are undergoing a study to look at saltwater interface, interest in reestablishing it.
- Jesse Marquez indicated that as part of a settlement with the Port of Los Angeles, negotiated funds for wetlands restoration, can access funds for studies.

Seeing no other questions, Mr. Mata stated that the next meeting would be scheduled once the EIR was completed. Stakeholders would be notified once the meeting was scheduled.