



## MACHADO LAKE ECOSYSTEM REHABILITATION PROJECT WILMINGTON DRAIN MULTI-USE PROJECT

Meeting Summary #6  
April 29, 2009  
6:30-8:30 p.m.  
Wilmington Senior Center

On April 29, 2009 the Bureau of Engineering held its sixth community outreach meeting for the Machado Lake Ecosystem Rehabilitation and Wilmington Drain Multi-Use Projects. Approximately 32 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, project goals, and provided a recap of the previous outreach meetings held, including a workshop schedule. The project team then launched into the public presentation. See Attachment B for the slide presentation.

### Description of Project Alternatives

Nicolas Koniski was introduced to provide a description of the project alternatives. Three alternatives were presented to the community. The project team is using the Wilmington Drain channel's 1977 configuration as a baseline.

#### Alternative 1 – Return to 1977 configuration

- Use as baseline condition
- Clean sediment from the culverts at Lomita and PCH
- Extensive re-grading throughout channel infringing on sensitive habitat
- Return to the 1977 island configuration (1.3 acres), today island has doubled in size due to sedimentation buildup
- Uneven channel bottom
- Approximately 60,000 cubic yards of sediment removal

#### Alternative 2 – Minor channel modifications

- Clean sediment from the culverts at Lomita and PCH
- Re-grade transition areas at Lomita and PCH culverts
- Remove sediment plug from channel to the east of the island
- Clear vegetation from channel bottom from toe-to-toe of channel sides, between 110 Freeway and PCH; channel to be maintained several times a year to keep the channel bottom vegetation short at all times.
- Island to remain as is (2.3 acres)
- Approximately 2,000 cubic yards of sediment removal

### Alternative 3 – Additional channel modifications

- Re-grade channel bottom from Lomita Blvd. to north end of island and from south end of island to PCH to provide an even slope
- Clean sediment from the culverts at Lomita and PCH
- Re-grade transition area north of Lomita and PCH culverts
- Remove sediment plug from channel located east of the island
- One annual maintenance effort to cut vegetation and remove sediment
- Island to remain as is (2.3 acres)
- Approximately 15,500 cubic Yards of sediment removal

Alternative 3 is the recommended alternative, as it provides the hydraulic capacity to convey the 50-year storm event and additional sediment storage capacity. This option would require one scheduled annual maintenance activity whereas Alternative 2 requires multiple maintenance activities. County currently conducts annual maintenance every year in September-October. Finally, none of the sensitive habitat in the channel will be disturbed.

Other components of the project include: trash net structures at major storm drains (Project 510, discharging on the east side of the island, Wilmington Drain concrete channel; stabilizing existing gabions, as needed; naturally created low flow channel; Park BMPs and smart irrigation; and invasive plant removal.

The following questions were asked by stakeholders:

- PCH-conveyance is key. Will the weir be lowered? Are figures based on existing elevation? The weir will not be lowered. *Yes, the analysis was based on the weir elevation measured during the topographic survey for the project.*
- Weir-was this included in the modeling? *The weir was included in the model.*
- Will least Bells vireo restoration and planting occur? *There will be planting in strategic places for least Bell's vireo (LBV) restoration.*
- Clarify sediment removal numbers for cut and fill. *Alternative 1 has highest volume of cut – we are, not recommending it because it would impact the LBV habitat north of Lomita Blvd. and on the island (current 2.3 acre-island will have to be brought back to its 1977 configuration, as a 1.3 acre-island). In alternative 3, the main advantage of removing so much sediment is that it would provide sediment storage capacity for the channel. In Alternative 2, we'll be re-grading only at specific points: culverts and north side of island, but it will require more vegetation clearing maintenance, but provides less sediment storage capacity.*
- How long will it take to build the sediment back up? *Not sure, Alternative 3 represents balance, protecting habitat, achieving flood control, and conducting maintenance.*

- What is the annual sediment rate? Will you be removing sediment on a routine basis? *We expect the sediment rate to be consistent with the past, which is illustrated by these diagrams. Yes, we recommend that sediment be removed on a regular basis.*
- Noticed in slides 2-3 didn't see any regression. *We are keeping the habitat, not touching it. This is the hydraulic analysis, when we present the water quality analysis, you will see the whole picture.*
- What will be the sanitation wetlands impact on water? *Upstream there is a diversion of low flow, it will improve low flow quality.*
- How will you remove sediment from areas that don't convey water? *Sediment basins suitable for the project site will be created and maintained.*
- Potential diversion has anything been done on that? *No the primary function of channel is flood control. We haven't identified anything, out of Prop O scope.*
- Have you looked into permeable surfaces, to address runoff and water absorption? Did you model, the whole water surface, as it exists today? *The project will increase permeable surfaces to allow for greater infiltration of water park-wide. The hydrologic modeling included the entire water surface area as it exists today.*

## Water Quality Objectives

The water quality design components include:

- Install trash net structures
- Incorporate BMPs in park design
- Provide long term sediment storage capacity
- Establish channel maintenance program
- Promote nutrient uptake from dry weather flow

The selected BMP options :

- Installation of net trash capture system
- Incorporation of passive recreation open space
- Bay parking lot
- Smart irrigation
- Trash receptacles
- Enforcement and educational signage
- New walkway

Major focus is to reduce the amount of trash that makes its way into the stream. Focal point is to control trash upstream. Trash nets will also be installed within the Wilmington Drain at the 110 Freeway and at Project 510.

The whole channel acts as sediment basin protects the lake. This requires that regular maintenance be conducted to maintain sediment capacity in the drain. 50-60% of the sediment in the watershed is captured in the Wilmington Drain channel. This removal rate is typical of "engineered" sediment basins. Localized basins only have storage capacity for less than 10% of sediment load. This is expensive to construct and would effectively eliminate any real park development. Wilmington Drain has been and will continue to be depositional area for majority of sediment load from tributary watersheds. There was a discussion of whether the sediment could be mixed with mulch and given away to the public and whether there would be sufficient funds to haul away the sediment if it tested as toxic.

The public had the following questions/concerns:

- How do you remove massive amounts of sediment? *Excavation equipment will have to be used.*
- Will there be a new policy to complete regular scheduled sediment removal so that the sediment does not build up, and can it be done annually? *As a result of the project, a new maintenance standard will be established. Many steps in the process, we'll work with permitting agencies to develop what will ultimately be a maintenance plan. This will happen as we further define the project.*
- Will this project have shared maintenance activities by both the City and County? How will the nature of channel maintenance change? *A master agreement would have to be developed.*
- A master monitoring program needs to be developed for water quality, habitat, sediment, flood, etc. One monitor for all of these issues.
- What is the decision making structure for the County, so we as stakeholders can understand who we need to lobby regarding our concerns? *Premature, we will get there. We need to work out this master agreement, many things have to come into place first. We are working together.*

## Recommended Park Concepts

There are several key components of the Wilmington Drain project:

- Removal of invasive materials

- Reintroduce native plant materials in park
- Incorporation of smart irrigation
- Provide 6ft fencing
- Three main points of entry
- Two types of gates
- Inclusion of permeous multipurpose trail
- Park amenities: Walkway with benches, interpretive signs, and info kiosk at parking lot

The community had the following questions and concerns:

- How tall will the wall be and what will it be made out of? *6ft high, wrought iron.*  
Community concerned not tall enough.
- Will there be an opportunity to volunteer before sediment removal, for planting, etc? *There is plenty of opportunity to volunteer with Audubon Society's monthly events.*
- What will be placed near condos? Do not want benches placed in this area. Can there be tree buffers? *It is being focused as open space.*
- Will there be vehicular access on the eastside during the project? There is currently no access point in this area. *We received your comments about that, and are in discussions with the county.*
- Are there any possibilities of reintroducing endangered species into this area? *Target species are LBV, there is a lot of opportunity to bring this back in the area. The restoration efforts will also support other listed species such as the California gnatcatcher and others. We will work with Fish & Game and US Fish and Wildlife Service on the endangered species issues.*
- Tongva Tribe would like to be on site caretakers for this project.
- If the homeless population leaves park, will we see more in the neighborhoods? *Want to create an area where people feel welcome to go to. Every city has the same problem don't have an answer for that.*
- Can we thin out old willows for LBV? Yes.
- Can we look at arundo removal outside of project area but adjacent to our site?  
Partnership opportunities could be explored such as grant funding.

## Habitat Restoration and Maintenance

A map was displayed showing where the invasive removal would occur. Habitat enhancements will require invasive plant removal. Primrose is rooted in the shore zone and expands into deeper water

with floating mats. Goal of project is to remove invasive plants. As part of the project, will remove primrose roots from channel as well as accumulated nutrient rich sediment. An adaptive management approach will be utilized. We will be planting native plants to outcompete the primrose. The corridor will be restored. There will be a one- time major removal of invasives along with a replanting. Maintenance access and activities will be incorporated.

- Review maintenance requirements for selected alternative in Wilmington Drain given USFWS, Corps, DFG, and RWQCB guidance
- Development of project description for use in permit applications
- Begin formal consultation with resources agencies

The project team was not able to give final answers because negotiations are just starting. The community had the following questions and concerns:

- Is the primrose dangerous to native plants and animals? *No, but overtakes system by taking resources for native species to thrive, leading to an ecosystem breakdown.*
- Has a sequence been worked out yet for sediment and plant removal? *Activities will be tiered, sediment removal type of activities taking place at certain points of channel, phased approach.*
- Will you be cutting back native vegetation to improve it? *Looking to see what we can do to improve the hydraulic conditions of the channel, looking at a few options. Narrowed down to the three alternatives.*
- Would prefer electric dredging equipment, if not available low-sulfur diesel fuel, or if choice between diesel and natural gas, would prefer natural gas.

## Next Steps

Mr. Mata closed the meeting and announced the next meeting date would be May 20, 2009. The May meeting will review water quality elements for the Machado Lake Project, including goals and objectives, storm water BMP options and lake rehab options. Park/recreation options, habitat enhancement and maintenance as well as wetlands options will also be discussed.

**Attachment A**

**April 29, 2009 - Meeting Attendees**

- Cecilia Mora
- Jesse Marquez
- Randall Davis
- Madeleine Marine
- Steve Lipkor
- Lani Alfonso
- Martin Byhower
- Afred Mata
- Susan Prichard
- Maria Martin
- Rachel Malarich
- David Sundstrom
- Sharon Dursche
- Daniel Hughes
- Sofia Carrillo
- Jonathan Erickson
- Joyce Fredericks
- Susanne Klüh
- Deborah Deets
- Roxy Lowe
- Greg Donnan
- Meagan McKay
- Grant Reed
- Mark Hall
- David Attaway
- Jacob Gutierrez
- Bianca Villanueva
- Teri Pacheco
- Herbert Pacheco
- Diana Diankoff
- Coco Blakely
- Richard Corneille
- Nicolas Koniski
- Stephanie Bache
- Wendy Katagi