

NEWPORT BAY WATERSHED EXECUTIVE COMMITTEE
Meeting Minutes

Date and Location: December 2, 2009 – 1:35 p.m. – 3:45 p.m.
Boardroom of the Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618-3102

Participants: John M. W. Moorlach, Board of Supervisors and Committee Chair
Steven Choi, City of Irvine
Joseph Edwards, The Irvine Company
Mark Tettermer, Irvine Ranch Water District
Kathryn McCullough, City of Lake Forest
Nancy Gardner, City of Newport Beach
Fred Ameri, Santa Ana Regional Water Quality Control Board
John Nielsen, City of Tustin

Committee Staff: Mary Anne Skorpanich, County of Orange
Chris Crompton, County of Orange
Amanda Carr, County of Orange
Kari Schumaker, County of Orange
Betty Ruano, County of Orange

Attendees: Scott Akenhead, S4S, Inc.
Blake Anderson, Newport Bay Naturalist and Friends
Doug Anderson, City of Tustin
Daniel Apt, RBF Consulting
Dennis Baker, Newport Bay Naturalists and Friends
Patrick Bauer, City of Costa Mesa
Garry Brown, Orange County Coastkeeper
Wanda Cross, Santa Ana Regional Water Quality Control Board
Rick Francis, Chief of Staff to Supervisor Moorlach
Nick Garrity, Phillip Williams & Associates
Deborah Gavello, Council Member City of Tustin
Irwin Haydock, Fountain Valley Resident
Phil Jones, County of Orange
Jack Keating, Newport Bay Naturalists and Friends
Dean Kirk, The Irvine Company
Mike Loving, City of Irvine
Joe Parco, City of Santa Ana
Danielle Richards, County of Orange
Doug Stack, City of Tustin
Sat Tamaribuchi Consultant, The Irvine Company
Alex Waite, City of Tustin
David Webb, City of Newport Beach
Marsha Westropp, OCWD
Robert Woodings, City of Lake Forest

Agenda Item 1 – Welcome & Introductions

The meeting was called to order by Mr. Moorlach at 1:35 p.m., followed by a moment of silence to honor and remember Jan Vandersloot, a dedicated Newport Bay Watershed stakeholder whose efforts to and success at protecting the wetlands and other open spaces in the watershed will not be forgotten. The moment of silence was followed by self-introductions.

Agenda Item 2 – Minutes from August 19, 2009 meeting

The minutes of the August 19th meeting were presented to the Executive Committee.

Motion: Approve minutes for August 19th
First/Second: Ms. McCullough/Ms. Gardner
Abstained: Mr. Ameri, Dr. Choi, Mr. Nielsen, and Mr. Tettermer
Outcome: Approved

Agenda Item 3 – Selenium Program Costs

Mr. Crompton gave a presentation on cost information for the Nitrogen and Selenium Management Program (NSMP) in response to the Committee's request at the August meeting. Mr. Crompton explained that Selenium TMDL implementation is currently anticipated to comprise two phases over a period of 15 years. The first phase will focus on technology validation and include assessments of the effectiveness of the demonstration-scale BMPs, outcomes of the groundwater-surface water model, new monitoring data, new BMP technologies, and regulatory changes. The second phase will include implementing the BMPs found to be effective during Phase I in order to comply with the California Toxics Rule selenium criterion of 5 parts per billion and the Site-Specific Objective of 12 ppb. The current estimated costs for Phase I are \$16 to \$17 Million and \$43 to \$62 Million for Phase II. The costs for Phase II may decrease depending on the results from Phase I.

Mr. Moorlach asked if there was a market for the selenium removed from Newport Bay Watershed. Mr. Crompton noted that maintenance on the Cienega treatment system occurs only once every ten to 15 years and yields about 100 pounds per year, making other sources better suited to supply selenium for commercial uses. Mr. Moorlach also asked if IRWD's treatment plant treats selenium. Mr. Tettermer responded that he was not certain if treatment addressed selenium. Since IRWD produces recycled water, treatment at IRWD would serve to transport selenium back into the watershed. Ms. Skorpanich also added that IRWD is helping to treat selenium with its Cienega system, which has been removing selenium since November 2008. Ms. Gardner commented that land is being purchased for the testing of treatment technologies that may not work; she asked who owns that land; and she suggested that source control be emphasized instead of treating selenium after-the-fact. Mr. Apt, the County's consultant, explained that specific parcels had not yet been identified. He also emphasized that Phase I of the Implementation Plan will complete tasks that will lower the projected costs for Phase II, when full

implementation is scheduled. Mr. Crompton explained that the three causes of selenium transport in the watershed are rainwater, irrigation runoff, and drainage systems constructed lower than the water table.

Mr. Apt responded to Mr. Ameri's concern over how to remove deposits that have been in the watershed for so long without making the situation worse; he noted Phase I included an assessment of where the selenium could be sequestered followed by an assessment of treatment. Mr. Edwards asked if all aspects of Phase I would occur concurrently and if other more cost-effective solutions could be added as the process moves forward; he was given an affirmative answer to both questions. Mr. Crompton also noted that despite the focus on selenium, the treatment technologies will be evaluated for their ability to meet other regulatory requirements. Ms. McCullough asked if the land being acquired selenium would be tested to ensure it does not become contaminated. Mr. Apt replied that selenium would be sequestered within a treatment system to allow easy removal and protection of the environment. Technologies for further evaluation have already been screened for detrimental side effects. Ms. Carr also assured the Committee that regular monitoring will be conducted to measure both removal efficiency and effects on the environment. Ms. McCullough requested frequent updates on the progress of this project. Mr. Crompton replied updates will continue on progress towards the adoption of the new TMDL and related activities.

Ms. Gardner asked how long the groundwater-surface water model would take to complete; Mr. Apt replied that it would take four years to have a complete and functional model. Ms. Skorpanich added that per the recommendation from the City of Newport Beach, a water balance analysis will be included as part of that effort. Mr. Edwards asked if the animals impacted by selenium would also be monitored to make sure that the selenium removal is actually protecting the target species. Mr. Crompton replied that bird eggs, fish tissue, and water quality would all be monitored to determine treatment effectiveness.

Mr. Moorlach inquired about the original drainage pattern of San Diego Creek and how selenium enters the waterways. Mr. Crompton explained that San Diego Creek used to terminate in the area known as Swamp of the Frogs. A channel was dug in the 1960s in order to drain the swamp so now the San Diego Creek Watershed drains into Newport Bay. Selenium is naturally occurring in ancient marine sediments throughout the watershed. Rain and irrigation water absorbed by the land carry selenium into the groundwater. Shallow groundwater seeps in the creek and flood control channels, some of which are deeper than the surrounding groundwater table.

Dr. Choi asked about the observable negative consequences of selenium. Ms. Skorpanich and Mr. Crompton described wildlife and livestock fatalities and deformities from high concentrations of selenium in California's Central Valley. There have been no biological effects directly linked to selenium in the Newport Bay Watershed. However, similar concentrations of selenium elsewhere have been associated with inhibited growth, development, and reproduction in birds.

Mr. Ameri asked about how remediation of selenium in the watershed might affect nitrogen, another constituent regulated by a TMDL. Mr. Apt replied that most of the Best

Management Practices remove nitrogen prior to removing the selenium. Mr. Ameri noted the benefit of selenium BMPs achieving removal of two pollutants rather than one. Mr. Crompton added that treatment technologies would be evaluated for their effectiveness with multiple constituents of concern. Increasingly better BMPs will reduce program costs overall. He presented a rough draft on what the costs for the program would be and explained that full implementation of the program is anticipated to occur over an extended period of years and that adaptive management will be critical to this process.

Ms. Gardner expressed concern about the ability of cities and county to pay for this program out of their general funds. She suggested more creativity for funding sources, including evaluation of a watershed-wide fee. Deborah Gavello, Tustin City Council Member, questioned why alternative treatment technologies were being explored when IRWD has a successful system and noted potentially lower operational costs if treatment systems were standardized. Ms. Carr noted that no single technology is likely to be workable throughout the watershed. The Cienega Treatment System requires substantial land area so it would be too large to fit in many areas where treatment is needed. Multiple technologies will be evaluated on a small scale in order to select the best to implement as full-scale systems. The ABMet system has been tested on a very small, pilot scale. It proved to be as effective as Cienega for removing selenium but also removes other pollutants and comes with a performance guarantee from the manufacturer, General Electric. Ms. Gavello encouraged creative solutions and suggested that source control should be encouraged, runoff should be reduced or eliminated in the watershed, and any other less costly options should be studied. Ms. Skorpanich responded that source control was part of the Implementation Plan although dischargers do not have the ability to completely control groundwater sources.

Dennis Baker, Newport Bay Naturalists and Friends, asked how the delay of the TMDL adoption would affect building projects. Mr. Crompton explained that the time schedule order (TSO) adopted in December allows discharges to continue as long as compliance measures are performed. Without the TSO, discharges would be subject to minimum mandatory penalties from the Regional Water Board. Irwin Haydock, Fountain Valley resident, encouraged water conservation instead of discharge to the ocean and he suggested that perhaps a marine organism might be found that could ingest selenium and remove it from the environment. David Webb, City of Newport Beach, stated that the City of Newport Beach could do a presentation on their work with Big Canyon. He thanked County staff for their efforts and recommended that a water balance be completed. Additionally, Mr. Webb suggested the need for other funding models for the Implementation Plan, possibly a water fee that is uniform across the watershed. He also asked for three phases rather than two, as follows: (1) identification of upfront costs; (2) identification of treatment technologies; and (3) identification of long-term treatment strategy. Doug Stack, City of Tustin, seconded Mr. Webb's suggestions. Blake Anderson, Newport Bay Naturalists and Friends, noted that discharges of selenium to the sewer system would need to meet sewer discharge regulations. Selenium would either remain in the water discharged to the ocean or be captured in the sludge, which is subject to a different set of regulations. Therefore, discharging selenium to the sewer system would move the selenium to the ocean outfall but not eliminate it from the environment or solve the problem. Mr. Anderson said that the solution to the selenium issue will be developed by watershed stakeholders working together.

Mr. Moorlach requested that all of the recommendations from this meeting be noted and agendaized for discussion at the next Committee meeting. Ms. Gardner asked if there would be a vote on the process before this program is initiated. Mr. Crompton replied that the current funding agreement is expiring in six months. All of the NSMP Working Group members need to agree on what to fund and execute a new agreement for the compliance program to continue.

Ms. Carr informed the Committee that the budget for the NSMP would be completed in January or February and Ms. Skorpanich asked if the NBEC would like to see that information. Ms. McCullough said yes Mr. Ameri asked for clarification about whether or not the Committee has any legal authority to approve the costs of the NSMP. Mr. Crompton answered that no the Committee does not have this authority, that approval of program costs must be done on a city by city and funding partner by funding partner basis. That being the case, Ms. McCullough emphasized that individual city councils and boards would be the ones approving the program costs, and that they would probably request budget information before they would approve such costs. Mr. Ameri concurred, but noted that for the Committee such budget info would be an information item. Mr. Stack made the case that the NSMP is a difficult issue because of the regulatory requirements and the desire to not be fined by the Regional Water Board. Mr. Ameri assured the rest of the Committee and the meeting attendees that part of his reason for sitting on the Committee is to hear such concerns; he promised that if the Newport Bay Watershed shows a sincere effort, that he for one would stand up and support any requests for deadline extensions or modifications to requirements.

Motion: ***To receive and file***
First/Second: ***Dr. Choi / Mr. Edwards***
Abstained: ***None***
Outcome: ***Approved***

Agenda Item 4 – Trash Booms Reinstallation along San Diego Creek

Ms. Skorpanich informed the Committee that the reinstallation of the trash boom in San Diego Creek was completed on November 2, 2009, and she presented a video that IRWD created about the reinstallation. Ms. Skorpanich extended a special thanks to IRWD for their expertise in creating the video that demonstrates the many benefits of the trash boom and she also thanked the OC Public Works, Regulatory Permits Section, and Nardy Khan in particular, who worked extremely hard to make the reinstallation possible.

Mr. Choi was impressed by the video and was pleased to see the positive results from the trash boom. He mentioned that about 400 volunteers had gathered on November 21, 2009, with the Pacific American Volunteer Association to cleanup San Diego Creek. Since the trash boom is so effective, however, Dr. Choi wondered whether such volunteer efforts and source collection are still important. If they are important, then he wanted to know if once a year was enough or if perhaps a semi-annual creek clean-up would be appropriate and beneficial. Ms. Skorpanich confirmed that volunteer efforts are extremely effective in couple of ways. First the volunteers help by removing much of the trash, and

second when volunteers participate in their first creek cleanup they realize the actual amount of trash that ends up in local waterways. Volunteer efforts therefore provide both a direct and indirect benefit to the health of our waterways. The community becomes more aware and is more cautious about the way they dispose their trash.

Motion: *To receive and file*
First/Second: *Ms. McCullough/Ms. Gardner*
Abstained: *None*
Outcome: *Approved*

Agenda Item 5 – Information Items

Agenda Item 5a – Serrano Creek Restoration, Borrego Wash Study, and Upper Newport Bay Ecosystem Restoration Project

Ms. Skorpanich provided an update on efforts to obtain grant funding. Recent grant applications have not competed successfully because design documents and cost-sharing agreements are not in place. In addition, the current economic situation has hindered potential cost-sharing partners' abilities to contribute. Ms. Gardner asked for a ballpark cost estimate for the engineering plans and Ms. Skorpanich replied that it would be an estimated \$2 million of a total \$24 million project.

Ms. Skorpanich reported that the grant-funded Borrego Canyon Wash Study has been proceeding successfully and is expected to be completed in December. A technical working group identified various solutions to stabilizing the channel and is developing recommendations.

Ms. Skorpanich then provided an update on Upper Newport Bay Ecosystem Restoration Project. The project received \$17.4 million of federal stimulus funds, which will allow for its completion and some future maintenance. The Army Corps of Engineers is planning to host a ribbon cutting ceremony for Phase II in the near future. Ms. Gardner noted that the City of Newport Beach worked very hard to help obtain those funds. In addition, Mr. Ameri acknowledged the efforts of Senator Feinstein to secure the stimulus funding and the Committee requested that the Senator and the rest of the Orange County delegation be invited to attend.

Agenda Item 5b – TMDL Update

Mr. Crompton briefly discussed the progress on each of the TMDLs. For the Nutrient TMDL, there has been general compliance with the overall TMDL targets; however, concerns still exist with urban nutrient allocations and the San Diego Creek Reach 2 nitrate objective. Average sediment load and basin capacity requirements are being met for the Sediment TMDL. The Source Management Plan is nearing completion for the Fecal Coliform TMDL and many areas in the Bay are meeting standards. The Selenium TMDL is under development with adoption anticipated in spring 2010. The Toxicity

Reduction and Investigation Program for the Organochlorine TMDL is on hold. The Regional Board is developing a Metals TMDL.

Agenda Item 5c – Cooperative Agreement Finalization

Ms. Skorpanich updated the Committee on the Cooperative Agreement. The third amendment was executed to consolidate the original agreement with subsequent amendments and expand the geographic scope and areas of interest. The California Department of Fish and Game (CDFG) is the last party to execute the third amendment but their approval is expected within 30 days. Ms Skorpanich thanked Mr. Edwards for his help in encouraging CDFG's continued participation. As soon as CDFG executes the agreement, all the parties will be requested to execute the fourth amendment to add Santa Ana and Costa Mesa.

Agenda Item 5d – Update on Phase III Central IRWMP

Ms. Skorpanich presented the three main goals expressed in the plan: Water Resources, Balanced Environmental Sustainability, and Collaboration. The agenda packet provided additional details of the plan's contents. Ms. Gardner asked if there would be an issue with the water resources objectives being too specific. Ms. Skorpanich answered that the direction that was given from the Committee was to provide these specifics in order to be able to evaluate the projects, and prioritize them.

Agenda Item 5e – Update on Business Plan

The item was continued to the next meeting in the interest of time.

Agenda Item 6 – Next Meeting Date

Meetings for 2010 were scheduled as follows:

Wednesday, February 17, 2010, 1:30 to 3:30pm, IRWD Board Room
Wednesday, May 19, 2010, 1:30 to 3:30pm, IRWD Board Room
Wednesday, August 18, 2010, 1:30 to 3:30pm, IRWD Board Room
Wednesday, November 17, 2010, 1:30 to 3:30pm, IRWD Board Room

The Committee approved the meeting schedule for 2010.

Agenda Item 7 – Executive Committee Member Comments

Mr. Nielsen thanked everyone and expressed his appreciation for being able to participate on the Committee and enthusiasm for being a new Committee member.

Agenda Item 8 – Public Comments

Mr. Baker extended an invitation to any interested parties to contact him if they would like to tour Upper Newport Bay, potentially via outrigger canoe.

Agenda Item 9 – Adjourn

The meeting was adjourned at 3:45 p.m.