

**Santa Clara River Estuary Workgroup
July 15, 2009 Meeting**

Agenda

Where: Ventura City Hall
501 Poli Street

When: 10 AM – 12 PM

1. Welcome and Introductions (City)
 - Review Agenda
2. Project Scope and Schedule (Carollo/Stillwater)
3. Why are we here? Enhancement Definition (Carollo)
4. Data Gaps/Draft Monitoring Plan (Stillwater)
5. Questions/Discussion
6. Next steps/Closing remarks (City)

SANTA CLARA RIVER ESTUARY STUDY
 STAKEHOLDER WORKSHOP
 July 15, 2009

Sign-In Sheet
 (please print name & organization)

1	Richard Sweet, rsweet_46@hotmail.com, Friends of the Santa Clara River
2	Noah Home, Stillwater Sciences
3	Doug McPherson, US Bureau of Reclamation
4	Audie Holmes, Cavallo Engineers
5	Scott Pusterhoff Stillwater Sciences
6	Susan Kungren City of Ventura
7	Reed V Smith Ventura Audubon
8	Kirsten James Heal the Bay
9	Curtis Hopkins Hopkins Grandwater
10	Cheryl Hopkins " "
11	Don Tsai RWQCB - LA
12	Eisa Garway Cavallo Engineers
13	Barbara Frank CDR
14	Alexis Hamilton CDR
15	Michael Yan LARWQCB
16	Denise Steurer USFWS
17	Jenny Marvek USFWS
18	Steve Howard UWCD
19	Don Demet UWCD
20	Linda Porpos UWCD
21	Jason Weiner Ventura Coastkeeper/Wislibys
22	Rebecca Christmann LARWQCB - 1
23	Dan Blankenship Fish & Game DFG
24	
25	

CONFERENCE MEMORANDUM

Project: City of Ventura Special Studies for the Santa Clara River Estuary **Conf. Date:** July 15, 2009
Client: City of Ventura **Issue Date:** August 4, 2009
Location: City Hall, Ventura CA
Attendees: See attached list
Purpose: Update the stakeholders on the project status and solicit input on the Draft Monitoring Plan.
Distribution: Attendees **File:** 8144B.00

Discussion:

The following is our understanding of the subject matter covered in this conference. If this differs with your understanding, please notify us.

Welcome/Introductions

- Why we are here?
 - Questions have been raised about continued discharge from VWRP to the Estuary.
 - RWQCB issued permit to continue discharge. However, the RWQCB did not provide a finding on the question of whether the discharge is providing an enhancement to the Estuary. Therefore, the permit includes requirements to conduct studies (called special studies) aimed at the following questions:
 - Should discharge occur?
 - How much discharge should occur?
 - What should the WQ be of the discharge?
- Meeting focus: Primary objective is to solicit input on the 2009–2010 draft monitoring plan for the Estuary subwatershed study.

Presentation

- The sections below follow the PowerPoint presentation which is available on the project website (www.cityofventura.net/rivers).

Project Scope and Schedule

- Stakeholder Matrix (originally presented 12/1/08)
 - Used matrix to form goals and objectives as well as contractor scoping
 - Used metrics and further developed data gaps table originally distributed in December 2008 (redistributed 6/18/09)
 - Used data gaps table as basis for developing the Estuary subwatershed study draft monitoring plan (distributed 7/7/09)
- Overall Project Schedule
 - 2 yr duration (March 2009-March 2011)
 - Stakeholder meetings throughout 2 yr process

- Schedules provided for the three studies (Estuary subwatershed study, Recycled water market study, and Treatment wetlands study) - that are also posted on project website
- Estuary subwatershed study
 - Includes a significant data collection period
 - Will present interim data findings to stakeholders in January/Feb 2010
 - Study will be completed by March 2011 as required by NPDES permit
- Recycled water market study
 - Report due in March 2010
 - Stakeholder meeting in Oct/Nov 2009 to present analysis and solicit feedback
 - Study will be completed by March 2010 as required by NPDES permit
- Treatment wetlands
 - Report due in March 2010
 - Stakeholder meeting in Oct/Nov 2009 to present analysis and solicit feedback
 - Study will be completed by March 2010 as required by NPDES permit

Enhancement Definition

- Definition sets framework for studies
- Dendy (SWRCB 1974) memo - Provides guidance and framework for addressing enhancement issues
- Existing Santa Clara River beneficial uses
 - Focus of study will be impacts and enhancements to these beneficial uses.
- Enhancement examples
 - Provide precedent in other locations throughout California

Data Gaps/Draft Monitoring Plan

- Background
 - Studies follow the workplans for three special studies approved by the RWQCB in December 2008
 - Overview of Estuary Subwatershed Study components
- Estuary Subwatershed Approach
 - Data collection and analysis leads into development and evaluation of discharge scenarios
- Data Gaps Analysis
 - New and updated data are necessary due to estuary changes since 2005 storm events
 1. Water surface elevation, groundwater level
 2. Surface water and groundwater quality,
 3. Estuary and upland habitat type and extent
 - Monitoring Plan Overview
 - 3 components to address identified data gaps
 - Overall Monitoring plan schedule
 - Continuously log several parameters (water level, water quality) from July/August 2009 to October/November 2010
 - Also add 8 discrete sampling events to capture specific conditions
 - Data collected to date will be presented to stakeholders in January 2010.
 - Preliminary data analysis and input from stakeholders may lead to modifications in the monitoring plan.

- Estuary Hydrology and Morphology Surveys
 - Monitoring locations
 - Well locations (some will require installation).
 - 2 surface water stage monitoring locations
- Estuary Water Quality and Nutrient Surveys
 - Add to additional efforts being conducted by SCCWRP and City
 - Survey design
 - Seasonal “synoptic” surveys
 - SCCWRP study will be completed in October 2009. However, the City is going to continue sonde monitoring as long as feasible.
- Tidal and Upland Vegetation and Aquatic Habitat Mapping
 - Survey Design
 - 2005 mapping will be updated for upland vegetation
 - 2009 efforts focus on intertidal and subtidal habitats
 - This effort will include addressing the aquatic species and habitat data gap

Questions/Discussion

- Location of Discharge and Selection of Monitoring Locations - Issue raised by Jason Weiner (Ventura Coast Keeper)
 - Question - Where is the location of the VWRP discharge?
 - Response
 - Discharge channel was identified on the aerial.
 - Dan Pfeifer provided an overview of the treatment plant, ponds and discharge channel.
 - Question - Why were monitoring locations selected?
 - Response
 - Site in channel - This discharge channel provides some backwater habitat, and can provide refuge to species during storm events.
 - Other surface water monitoring sites - Selected to capture shallow and deep sections of the Estuary. The sites are generally distributed in a grid to capture spatial variability.
 - Groundwater sites- Selected to capture groundwater flow contributions to the Estuary. Available locations are limited by access/permission issues associated with private landowners.
 - General comment - Sites selected for this study have been used in previous studies and have been vetted through previous stakeholder processes.
 - Question - Was a coastal/ocean sampling location considered?
 - Coastal sampling location was not considered for this particular study
 - There may be data from other ongoing monitoring efforts
- Beach Monitoring - Issue raised by Richard Sweet (Friends of the Santa Clara River)
 - Comment - Health department is collecting bacteriological data at the beach, north of the Estuary mouth.
- Use of Aerial Photography - Issue raised by Richard Sweet (Friends of the Santa Clara River)
 - Question - Will aerial photography be used in this study?
 - Response

- Additional aerial images will not be taken for this study
 - Comment - City participation in CIRGIS may lead to availability of additional aerial imagery.
 - Response
 - Project team will follow-up with City's GIS department.
- Variability in Hydrologic Conditions - Issue raised by Kirsten James (Heal the Bay)
 - Comment - The monitoring plan includes one spring and one winter spring event. Varying hydrologic conditions can affect the conditions in winter and spring.
 - Response
 - Monitoring plan is designed to capture a range in hydrologic conditions over the 8 events.
- Wet sampling events versus dry sampling events - Issue raised by Don Tsai (LARWQCB)
 - Comment - The number of wet and dry events should be more balanced. Suggestion to increase the number of wet events.
 - Response
 - The 8 events are in addition to the ongoing City and SCCWRP monitoring programs. These other data collection programs will capture wet and dry conditions.
 - The intent of the sampling schedule was to capture the limiting condition, which is anticipated to be under dry conditions when the Estuary mouth is closed and more influenced by groundwater and/or the VWRP discharge.
- Dependence on stage-area relationship - Issue raised by Jenny Marek - US Fish and Wildlife
 - Question - The analysis relies on the stage and area relationship developed in this study extensively. How can this relationship be used in a dynamic system where the stage and area relationship changes?
 - Response
 - Agree that the analysis will be good for "current conditions" and extrapolation of this relationship will be limited.
 - The use of LiDAR data and spot bathymetry will improve the accuracy of the stage-area relationship for the current condition.
- Dynamic nature of shoreline - Issue raised by Barbara Fosbrink (McGrath State Park)
 - Comment - Recent USGS studies have noted changes in shoreline configuration and have predicted that the configuration will "normalize" in a relatively short timeframe.
 - Response
 - Project team will look into USGS studies and predictions
 - Recognize that the analysis is limited because it is a snapshot in time. However, this is the current condition.
- Dry season sampling conditions - Issue raised by Don Tsai (LARWQCB)
 - Comment - In very dry season there may be no freewater surface at some of the sampling location
 - Response

- If this is the case at the upstream control site then a shallow groundwater sample will be collected.
 - If this is the case at other sampling locations, these sites will be moved to the nearest area with a freewater surface.
- Water discharged and reused - Issue raised by Richard Sweet (Friends of the Santa Clara River)
 - Question - Does the city have records of the amount of water treated and discharged to the Estuary
 - Response: City has records of wastewater flows, including reuse flows and discharge to the Estuary.
- SCWWRP Monitoring program - Issue raised by Steve Howard (United Water)
 - Question - How often is SCCWRP data downloaded and is it available
 - Response
 - Downloaded onsite every 5 to 6 weeks
 - SCCWRP is collecting/storing the data
 - SCWRRP report on data collection is due in October 2009
 - Additional comment that the City will continue the sonde data collection effort as part of this study.
- History of Estuary - Issue raised by Dan Detmer (United Water)
 - Question: How far back will the historical analysis cover?
 - Response
 - Topography and estuary volume data is limited (1990s)
- Groundwater Sources - Issue raised by Reed Smith (Ventura Audubon)
 - Question - How much groundwater comes from various sources, in particular on the north side
 - Response
 - Limited information available. Collecting groundwater data on north side of Estuary is not currently planned for this study. Assumptions will be made. (See note in the “meeting results” that project team is looking into drilling an additional monitoring well on the north side of the Estuary).
- Wildlife Populations - Issue raised by Reed Smith (Ventura Audubon)
 - Question - Will other wildlife besides birds be considered in the evaluation of enhancement?
 - Response
 - Predictions of wildlife populations will not be made as part of study.
 - Study will report on suitable habitat for various types of wildlife
- Water Balance - Issue raised by Kirsten James (Heal the Bay)
 - Question - Surface water flows are an important component of the water balance. Will study include investigation of flow inputs upstream of the diversion?
 - Response
 - The gage at the Victoria Avenue bridge will be the primary source of surface water flow data into the Estuary.
 - Groundwater wells will provide information on groundwater inputs

- Comment - Other researchers have suggested that there needs to be more freshwater in the Estuary to improve steelhead habitat. The City has water rights that are not being used that could be exercised to provide more water in the river.
- Follow-up comment by Steve Howard (United Water)
 - It is expected that in the future there will be an increase in flow into the Estuary due to upstream changes in water management.
- Pharmaceutical and Personal Care Products - Issue raised by Jenny Marek (US Fish and Wildlife) and Kirsten James (Heal the Bay)
 - Question - Why are pharmaceuticals not being included in this study? Why are these compounds not considered in evaluation of enhancement?
 - Response
 - There are no current EPA or state approved methods for analyzing these trace organic compounds in wastewater. The City will monitor for these compounds when standard methods are available and as requested by the RWQCB.
 - This is not a research project aimed at understanding or documenting estrogenic effects on species.
 - Don Tsai (RWQCB) response - Since there are no EPA approved methods, the RWQCB can not require monitoring at this time.
- Estuary Breaching - Issue raised by Mike Lyons (LARWQCB).
 - Question - What are the forcing factors that cause the estuary to stay closed or to breach?
 - Response
 - Physical conditions of the Estuary (current and historical) will be investigated in the study
 - Generally Estuary is open in the winter and closed in the summer but there are exceptions
 - Changes in beach morphology and hydrologic conditions affect breaching frequency
 - Comment - Barbara Fosbrink (McGrath State Park)
 - Noted that ACOE has found that dredging activities in the harbor area are not effecting sand accumulation in the Estuary.
- Impacts of Freeman Diversion on Breaching - Issue raised by Jason Weiner (Ventura Coast Keeper)
 - Question - Will breaching frequency since construction of the Freeman Diversion be investigated and what other factors besides VWRP discharge flows contribute to breaching frequency.
 - Response
 - Factors contributing to breaching will be investigated. This is a dynamic system that will be a challenge to understand. From the City's perspective they do not have control of upstream conditions.
- Stakeholder input on the Treatment Wetlands Feasibility Study and the Recycled Water Market Study - Issue raised by Kirsten James (Heal the Bay) and by Jenny Marek (US Fish and Wildlife)

- Comment/Question - Meeting did not provide stakeholders an opportunity to comment on these studies. Will there be another meeting between today and October/November to allow stakeholder input on these studies?
- Response
 - Invite stakeholders to look at maps in room and to ask the project team members questions after the meeting
 - There will be two opportunities for stakeholders to provide input on these studies. The first will be in October/November 2009 where the analysis will be presented prior to developing draft reports. The second will in January 2010, where the stakeholders will be invited to comment on the draft reports.
- Purpose of Wetlands - Issue raised by Jenny Marek (US Fish and Wildlife)
 - Comment - Stakeholders will want to provide input on whether the primary purpose of the wetlands should be for treatment or for habitat.
 - Response
 - The first priority will be to investigate if wetlands can provide additional treatment of the wastewater effluent. The second priority will be to investigate how wetlands can be designed to also provide habitat.

Additional Comments

- Any additional comments on the Draft Monitoring Plan or on other project components should be submitted to the City of Ventura no later than July 24, 2009.

Meeting Results

- As a result of the discussion on the influence that groundwater may have on Estuary inundation, quality, and habitat, the project team is investigating the feasibility of adding another groundwater monitoring site to the monitoring plan. The new well would be located near or at the Olivas Park Golf Course.
- As a result of the discussion on other pollutants that may be in the groundwater, the project team is investigating the feasibility of additional analysis of one or more groundwater samples for screening of metals and pesticides.
- Obtain USGS studies on current and predicted Estuary morphology?
- Include potential upstream water management strategies that would impact surface water flows into upstream boundary of Estuary into the scenario evaluation tasks. Information on upstream release scenarios to be provided by United Water.

Prepared By:

Elisa Garvey