

Appendix A

Public Involvement

- NOI for Stakeholder Participation
- Stakeholder Meeting Materials
- Additional Public Event Materials

NOI for Stakeholder Participation

PUBLIC HEARING NOTICE/NOTICE OF INTENTION

NOTICE OF INTENTION TO PREPARE AN INTEGRATED REGIONAL WATER MANAGEMENT PLAN (IRWMP) UPDATE AND ASSOCIATED TECHNICAL STUDIES

All interested persons are invited to attend and be heard at a public hearing to be held by the Upper Santa Clara River Regional Water Management Group (RWMG), on **Thursday, November 17, 2011 at 2:00 p.m.** at the Newhall County Water District, 23780 North Pine Street, Newhall, CA 91321. Consideration will be given to the following item: prepare an Integrated Regional Water Management Plan (IRWMP) Update and associated technical studies.

PROJECT INFORMATION: The Upper Santa Clara River RWMG was formed consistent with State law as a coalition of agencies, and consists of more than three public agencies, at least two of which have statutory authority over water supply, water quality, flood control and storm water.

On October 17, 2011 the USCR RWMG directed the publication of a notice of intention to update a regional plan in accordance with Section 10543 of the Water Code and Section 6066 of the Government Code and also directed the publication of this notice of a public hearing to be held on **November 17, 2011**. The purpose of the hearing is to initiate the update of the IRWMP, which was adopted in July, 2008, to make it consistent with new requirements mandated by Proposition 84. Being prepared concurrently with the update of the IRWMP are two focused technical studies for the watershed; a climate change technical study, required by Proposition 84 and a salt and nutrient management plan required by the State Water Resources Control Board's Recycled Water Policy.

At the conclusion of the public hearing, a regular IRWMP Stakeholder meeting will take place from **2:30 to 4:00 p.m.** at the same location. The Upper Santa Clara River IRWMP Stakeholder group was formed during the preparation of the 2008 IRWMP as part of the public participation process and will continue to hold regular meetings through the update of the IRWMP to provide an opportunity for any interested party to participate in plan development and implementation.

For more information please contact:

Ms. Lauren Everett, Water Resources Planner

Castaic Lake Water Agency

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IRWMP Update Public Meeting and
Stakeholder Kickoff Meeting, November
17, 2011

- Agenda
- PowerPoint Presentation: IRWMP
Guidelines Updates

Upper Santa Clara River Watershed Integrated Regional Water Management Plan

Thursday, November 17, 2010

IRWMP Update Public Hearing

2:00 pm-2:30 pm

Regular Stakeholder Meeting

2:30 pm –4:00 pm

Newhall County Water District Headquarters

23780 North Pine Street, Newhall, CA 91321

Meeting Objectives:

- Public Noticing of IRWMP Update
- Discuss IRWMP Update and Technical Study Preparation Work Efforts
- Watershed Updates
- Describe Ongoing and Future Funding Opportunities

AGENDA

2:00 I. Public Hearing on the Update of the IRWMP

Stakeholder Meeting

2:30 II. Welcome and Introductions

- A. Meeting purpose and outcomes
- B. Stakeholder self-introductions

Jeff Ford, CLWA

2:40 III. IRWMP Update and Climate Change Technical Study Process, Salt and Nutrient Management Plan Process

- A. Scope/Schedules
- B. Stakeholder participation
- C. Salt and Nutrient Management Plan Subcommittee membership

Meredith Clement, Kennedy/Jenks, Lauren Everett, CLWA

3:15 IV. Watershed Updates

- A. Municipal Stormwater Permit
- B. Bacteria TMDL
- C. 2010 Urban Water Management Plan

Heather Merenda, City of Santa Clarita/Jeff Ford, CLWA

3:45 V. Implementation Grant Status and Future Grant Funding Opportunities

Lauren Everett, CLWA

4:00 VI. Close

Upper Santa Clara River IRWMP

IRWMP Guideline Updates

November 15, 2011 2 pm



Prop 84 IRWMP Updates

- Address Statewide Priorities
- Meet New IRWM Plan Standards (16)
- \$6.9M implementation grant is contingent upon update of the plan!



Statewide Priorities

New Technical Studies

- Climate Change Technical Study
 - Adaptation to Climate Change Effects
 - Mitigation of Greenhouse Gas (GHG) Emissions
- Salt and Nutrient Management Plan
 - Surface and Groundwater Quality Protection
 - As required by the State Water Resources Control Board's Recycled Water Policy

Plan Standards Overview

- Governance (New RWMG Standard)
- Region Description
- Objectives
- Resource Management Strategies
- Integration
- Project Review Process (NEW)
- Impact and Benefit
- Plan Performance and Monitoring
- Data Management
- Finance
- Technical Analysis
- Relation to Local Water Planning (NEW)
- Relation to Local Land Use Planning
- Stakeholder Involvement
- Coordination
- Climate Change (NEW)

Updates

- Integration
 - Continue to use successful framework
- Governance
 - Update with narrative from Region Acceptance Process (RAP) application
- Stakeholder Involvement
 - Update with RAP and meetings undertaken as part of IRWMP Update
- Coordination
 - Update with RAP
 - California Climate Adaptation Strategy
 - Membership in CA Climate Action Registry
 - City of Santa Clarita's Climate Sensitivity Study

Updates

- Region Description
 - RAP update
 - Ongoing efforts
 - New land use map per One Valley, One Vision
 - Climate change technical study
- Impact and Benefit
 - Within IRWM region and between regions
 - DACs, EJ, Native American tribal communities

Updates

- Finance
 - O&M costs
 - Updated list of funding sources and mechanisms
- Technical Analysis
 - Update with revised technical resources
 - Climate change technical study
 - Selection of water management strategies

Updates

- Plan Performance and Monitoring
 - Data management System (DMS)
 - Track and document implementation progress
 - Store and disseminate monitoring data
 - Findings and “lessons learned”
 - Policies and procedures for adaptive management
- Data Management
 - DMS for data integration into State databases
 - RWMG document review process
 - Data sharing

Updates

- Objectives
 - Measurement and prioritization
 - Adaptation to climate change impacts
 - Update water quality improvement objective with Salt and Nutrient Management Plan
- Resources Management Strategies
 - California Water Plan Update 2009 strategies
 - “No-Regrets” adaptation strategies

Updates

- Relation to Local Water Planning
 - Standard met by existing Plan
 - Strategies from local plans to address climate change standard
- Relation to Local Land Use Planning
 - Standard met by existing Plan
 - Information sharing and collaboration with land use planning efforts to address climate change standard

Updates

- Project Review Process (NEW)
 - RAP update
 - Contribution to climate change adaptation
 - Contribution to GHG emission reductions
 - GHG emissions CEQA analysis
- Climate Change Standard (NEW)
 - Adaptation responses to climate change effects
 - Mitigation of GHG emissions
 - Technical Study

Climate Change Technical Study

- Identify Vulnerability to Climate Change
 - Influences Region Description, Objectives, Relation to Local Water Planning, Relation to Local Land Use Planning, and Project Review Process of IRWMP Update
- Identify Adaptation Strategies
 - Influences Objectives, Relation to Local Water Planning, Relation to Local Land Use Planning and Project Review Process of IRWMP Update
- Recommendations on Data Collection/Next Steps for Climate Change in IRWMP Updates

Salt and Nutrient Management Plan

- Prepare Salt and Nutrient Management Plan for submittal to RWQCB
 - Influences Objectives, Plan Performance and Monitoring, and may result in new projects for consideration in IRVWMP

Salt and Nutrient Management Plan

SWRCB Recycled Water Policy – 2009

- Local Stakeholder Cooperative Development of Implementation Plans
- Basin-wide Management of Salts and Nutrients
 - Salts – Total Dissolved Solids (TDS) and Chloride
 - Nutrients – Ammonia and Nitrate plus Nitrite (nitrogen compounds)

Salt and Nutrient Management Plan

- Required Components of the Plan:
 - Basin-wide water quality monitoring plan
 - Emerging constituents consideration (e.g., PPCPs, EDs)
 - Water recycling and stormwater recharge goals and objectives
 - Salt and nutrient source identification
 - Basin loading/assimilative capacity estimates
 - Salt mitigation strategies
 - Anti-degradation analysis

Salt and Nutrient Management Plan

- Suggested Elements of the Plan:
 - Background – to include stakeholder roles and responsibilities
 - Groundwater Basin Characteristics
 - Basin Evaluation
 - Salt and Nutrient Management Strategies
 - Basin Management Plan Elements
 - CEQA Analysis
 - Antidegradation Analysis
 - Plan Implementation

Questions?



Stakeholder Meeting, January 26, 2012

- Agenda
- PowerPoint Presentation: IRWMP Update
- Handout: Region Description Update



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Regular Stakeholder Meeting

Thursday, January 26, 2012, 2:30 pm –4:30 pm

Newhall County Water District Headquarters

23780 North Pine Street, Newhall, CA 91321

Meeting Objectives:

- Provide Update on IRWMP Update and Technical Study Efforts
- Engage in Updating Water Management Strategies for IRWMP Update
- Provide Funding Update and Other Watershed Activities

AGENDA

2:30 I. Welcome and Introductions

- A. Meeting purpose and outcomes
- B. Stakeholder self-introductions

Jeff Ford, CLWA

2:40 II. Consultant Progress Updates

- A. IRWMP Update and Climate Change Technical Study
 - Update existing sources of information
- B. Salt and Nutrient Management Plan
 - 1st Task Force Meeting 2/23

Meredith Clement, Kennedy/Jenks, Lauren Everett, CLWA

3:15 III. Water Management Strategies

- A. New Resource Strategies
- B. Updating Old Strategies

Meredith Clement, Kennedy/Jenks

3:50 IV. Funding Update

- A. Planning Grant R1 Progress Report
- B. Planning Grant R2 PSP
- C. R1 Implementation Grant Agreement
- D. Timing of Implementation Grant R2 and R3

Lauren Everett, CLWA

4:10 VI. Other Watershed Activities

- A. Climate Change Workshop – March 15, 2012
- B. Joint IRWMP meeting with WCVV SCR Watershed Region

Lauren Everett, CLWA

4:20 VII. Close

Upper Santa Clara River IRWMP Update

January 26, 2012



Topics to be Addressed

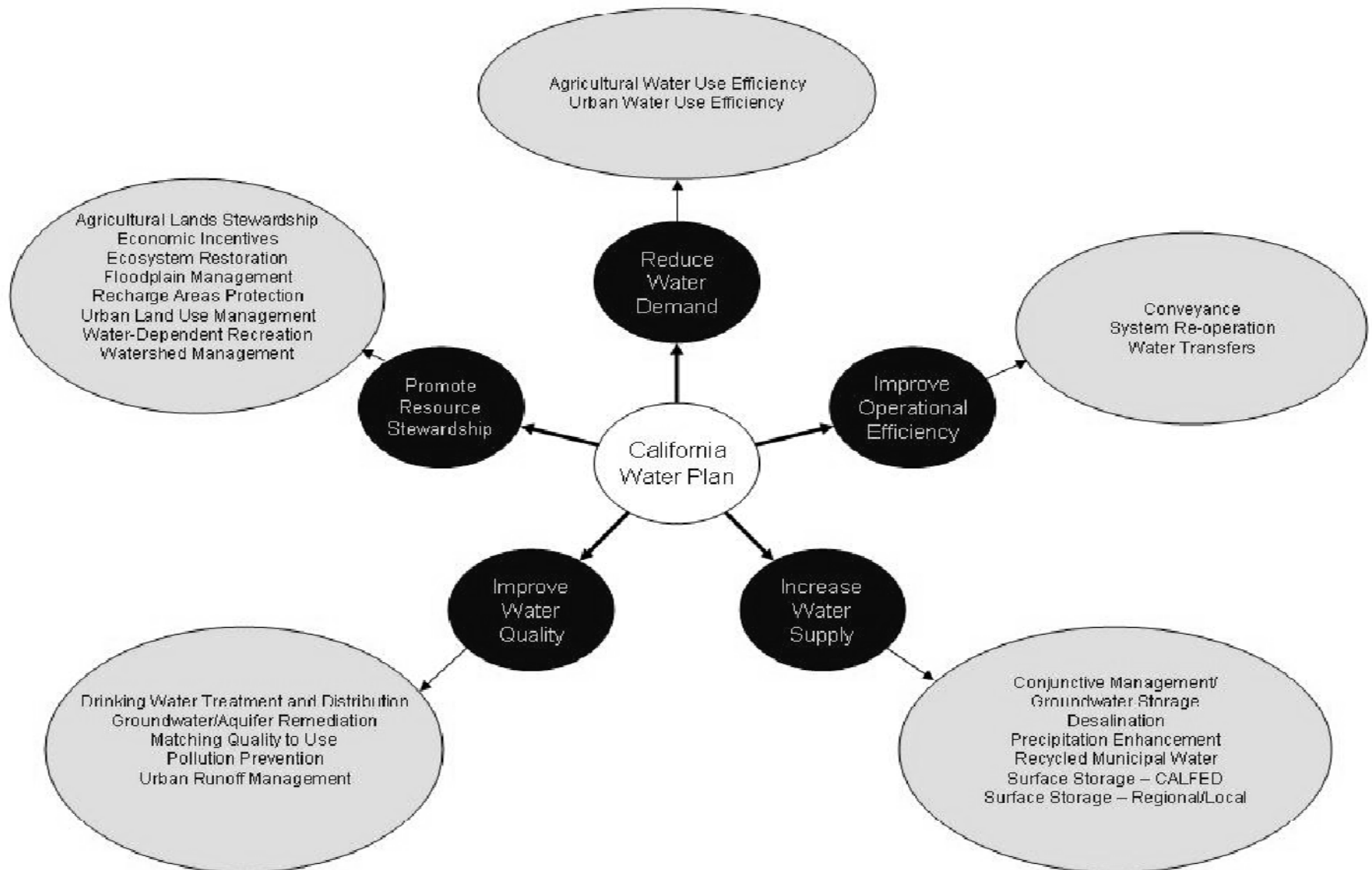
- Updated California Water Plan Strategies
 - 2005 California Water Plan
 - 24 Water Management Strategies
 - Updated 2009 California Water Plan
 - 27 Resource Management Strategies
 - Other Potential Strategies
- Plan for Updating Region Description
 - Existing Data Sources vs. New Sources

Identified Regional Objectives

The originally 24 Water Management Strategies were organized into 5 regional IRWMP objectives:

- Reduce Water Demand
- Improve Operational Efficiency
- Increase Water Supply
- Improve Water Quality
- Promote Resource Stewardship

2008 IRWMP Objectives and CA Strategies



Required Stakeholder Involvement

- Do 2008 strategies still apply?
- Are new strategies applicable to the region?
 - Examples of regional strategies
- Are there resource management strategies not listed in the California Water Plan that the group wants considered in the Plan?
 - Examples of strategies
- See handout showing current Regional Strategies (rows) and current California Water Plan Strategies (columns)

Relationship of Regional and CA Strategies

**TABLE 4.3-1
UPPER SANTA CLARA RIVER REGION WATER MANAGEMENT STRATEGIES AND CALIFORNIA WATER
PLAN RESOURCE MANAGEMENT STRATEGIES**

	California Water Plan Strategies																							
	AGRICULTURAL WATER USE EFFICIENCY	URBAN WATER USE EFFICIENCY CONVEYANCE	SYSTEM REOPERATION	WATER TRANSFERS	CONJUNCTIVE MANAGEMENT AND GROUNDWATER STORAGE	DESALINATION	PRECIPITATION ENHANCEMENT	RECYCLED MUNICIPAL WATER	SURFACE STORAGE – CALFED	SURFACE STORAGE – REGIONAL/LOCAL	DRINKING WATER TREATMENT AND DISTRIBUTION	GW/AQUIFER REMEDIATION	MATCHING WATER QUALITY TO WATER USE	POLLUTION PREVENTION	URBAN RUNOFF MANAGEMENT	AGRICULTURAL LANDS STEWARDSHIP	ECONOMIC INCENTIVES	ECOSYSTEM RESTORATION	FLOODPLAIN MANAGEMENT	RECHARGE AREAS PROTECTION	URBAN LAND USE MANAGEMENT	WATER-DEPENDENT RECREATION	WATERSHED MANAGEMENT	
REDUCE WATER DEMAND																								
Urban Water Use Efficiency Measures BMP 1: Residential Survey Programs BMP 2: Residential Plumbing Retrofit BMP 3: System Water Audits BMP 4: Metering w/Commodity Rates BMP 5: Large Landscape Conservation BMP 6: High Efficiency Clothes Washers BMP 7: Public Information Program BMP 8: School Education Programs BMP 9: Commercial Industrial Institutional BMP 10: Wholesaler Agency Assistance Programs BMP 11: Conservation Pricing BMP 12: Conservation Coordinator BMP 13: Water Waste Prohibitions BMP 14: Residential Ultra-Low Flush Toilet Replacement Program		•			•						•				•		•				•			
Agricultural Water-Use Efficiency Measures	•				•											•	•				•			
IMPROVE OPERATIONAL EFFICIENCY																								
Rehabilitation, Replacement, or Removal of Existing Facilities	•	•	•	•																				
Improved Operational Efficiency Measures	•	•																						
Intertie Projects			•	•	•																			
INCREASE WATER SUPPLY																								
Surface Reservoir or Storage Tank									•	•														
Surface Water Diversion			•																					
Groundwater Extraction Facilities					•																			
Aquifer Storage and Recovery					•							•												
Groundwater Management and Planning Policies					•							•		•							•			•
Groundwater Replenishment Including Spreading Grounds and Injection Wells Aquifer Recharge with Reclaimed Water Aquifer Recharge with Septic					•			•				•									•		•	•
Hydrologic Modeling and Monitoring			•	•				•	•						•				•					

2009 Resource Management Strategies

- Reduce Water Demand
 - Agricultural Water Use Efficiency
 - Urban Water Use Efficiency
- Improve Operational Efficiency
 - Conveyance – Delta/Regional/Local
 - System Reoperation
 - Water Transfers

2009 Resource Management Strategies

- Increase Water Supply
 - Conjunctive Management/Groundwater Storage
 - Desalination
 - 2008 IRWMP said this not applicable to Region. Still the case?
 - Precipitation Enhancement
 - 2008 IRWMP said this not applicable to Region. Still the case?
 - Recycled Municipal Water
 - Surface Storage – CALFED
 - Surface Storage – Regional/Local

2009 Resource Management Strategies

- Improve Water Quality
 - Drinking Water Treatment and Distribution
 - Groundwater/Aquifer Remediation
 - Matching Water Quality to Use
 - Pollution Prevention
 - Salt and Salinity Management (NEW)
 - Is this applicable to Region? Examples of this in Region?
 - Urban Runoff Management

2009 Resource Management Strategies

- Promote Resource Stewardship
 - Agricultural Lands Stewardship
 - Economic Incentives
 - Ecosystem Restoration
 - Forest Management (NEW)
 - Is this applicable to Region? Examples of this in Region?
 - Land Use Planning and Management/Formerly Urban Land Management
 - Recharge Area Protection
 - Water-dependent Recreation
 - Watershed Management

2009 Resource Management Strategies

- Improve Flood Management
 - Flood Risk Management (NEW)
 - Is this applicable to Region? Examples of this in Region?
- Other Strategies (NEW)
 - Crop Idling for Water Transfers
 - Dewvaporation or Atmospheric Pressure Desalination
 - Fog Collection
 - Irrigated Land Retirement
 - Rainfed Agriculture
 - Waterbag Transport/Storage Technology

Region Description Update

Major sections will be updated with most recent and available sources to address:

- Land Use
- Ecological Processes
- Water Supply
- Flood Management
- Regional Vulnerability to Climate Change

Required Stakeholder Involvement

- Other Sources for Region Description Update?
- Major Water Issues and Problem Updates?
- Strategy Update Considerations

Land Use

Existing Data Source

- 2004 Santa Clarita Valley General Plan Technical Background Report

Strategy for Updating

- 2011 City of Santa Clarita General Plan
- 2011 One Valley One Vision/Santa Clarita Valley Area Plan

Ecological Processes

Existing Data Source

- 2005 Santa Clara River Enhancement and Management Plan
- 2003 Business Plan for the Angeles National Forest
- 1999 City of Santa Clarita General Plan, Open Space and Conservation Element

Strategy for Updating

- 2011 City of Santa Clarita General Plan and Santa Clarita Valley Area Plan, Conservation and Open Space Element
- 2010 OVOV EIR
- Recent land acquisition reports/documents

Water Supply

Existing Data Source

- 2005 Urban Water Management Plan
- 2005 DWR Reliability Report
- DWR 2002 California's Groundwater Bulletin 118
- 2003 Groundwater Management Plan
- 2009 Santa Clarita Valley Water Report
- 2009 Groundwater Basin Yield Analysis

Strategy for Updating

- 2010 Urban Water Management Plan
- 2009 DWR Reliability Report
- 2010 Santa Clarita Valley Water Report
- 2010 Santa Clarita Valley Sanitation District Reduced Discharge Technical Study
- 2012 Recycled Water Master Plan Update

Flood Management

Existing Data Source

- United Water Conservation District and Castaic Lake Water Agency 1996 Water Resources Report

Strategy for Updating

- *Sources?*

Regional Vulnerability to Climate Change (NEW)

Strategy for Updating

- Climate Change Technical Study
- City of Santa Clarita, Climate Change Assessment

Thank You

Upper Santa Clara River IRWMP Update Stakeholder Meeting

Strategies for Updating the Upper Santa Clara River IRWMP Region Description

Region Section	Existing Data Source	Strategy for Updating
Land Use	<ul style="list-style-type: none"> • 2004 Santa Clarita Valley General Plan Technical Background Report 	<ul style="list-style-type: none"> • 2011 City of Santa Clarita General Plan • 2011 One Valley One Vision (OVOV) Los Angeles County Santa Clarita Valley Area Plan
Ecological Processes	<ul style="list-style-type: none"> • 2005 Santa Clara River Enhancement and Management Plan • 2003 Business Plan for the Angeles National Forest • 1999 City of Santa Clarita General Plan, Open Space and Conservation Element 	<ul style="list-style-type: none"> • 2011 City of Santa Clarita General Plan and Santa Clarita Valley Area Plan, Conservation and Open Space Element • 2010 OVOV EIR • Recent land acquisition reports/documents • <i>Others?</i>
Water Supply	<ul style="list-style-type: none"> • 2005 Urban Water Management Plan • 2005 DWR Reliability Report • DWR 2002 California's Groundwater Bulletin 118 • 2003 Groundwater Management Plan • 2009 Santa Clarita Valley Water Report • 2009 Groundwater Basin Yield Analysis 	<ul style="list-style-type: none"> • 2010 Urban Water Management Plan • 2009 DWR Reliability Report • 2010 Santa Clarita Valley Water Report • 2010 Santa Clarita Valley Sanitation District Reduced Discharge Technical Study • 2012 Recycled Water Master Plan Update • <i>Others?</i>
Flood Management	<ul style="list-style-type: none"> • 1996 Water Resources Report by United Water Conservation District and Castaic Lake Water Agency 	<ul style="list-style-type: none"> • <i>Sources?</i>
Regional Vulnerability to Climate Change	[New section]	<ul style="list-style-type: none"> • Climate Change Technical Study • City of Santa Clarita, Climate Change Assessment

Summary of Major Water Issues and Problems from 2008 IRWMP that may require updates:

Upper Santa Clara River IRWMP Update Stakeholder Meeting

- Continued growth in water demand while imported water supplies become less reliable. The Stakeholders expressed a need for a comprehensive picture of available water supplies and the desire to find alternative water sources
- Difficulty in maintaining open space and habitat areas given population growth and increased urbanization
- Variety of water quality issues, including perchlorate contamination, and TMDLs for chloride and nitrate compounds
- Runoff and drainage issues in the more rural areas that result in negative effects to the rural areas and areas downstream
- Runoff and drainage issues related to urbanizing areas in the floodplain

Stakeholder Meeting, March 22, 2012

- Agenda
- Handout: Upper Santa Clara River
2008 IRWMP Objectives
- Handout: Climate Change
Vulnerabilities in the USCR Region
- Handout: Upper Santa Clara River
Region Water Management
Strategies and California Water Plan
Resource Management Strategies



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Regular Stakeholder Meeting
Thursday, March 22, 2012, 2:30 pm – 4:30 pm
Newhall County Water District Headquarters
23780 North Pine Street, Newhall, CA 91321

Meeting Objectives:

- Provide update on IRWMP funding and on Consultants progress on IRWMP Update and associated technical studies
- Discuss preliminary results of Climate Change Technical Study and rank vulnerabilities
- Update IRWMP Objectives

AGENDA

2:30 I. Welcome and Introductions
A. Meeting purpose and outcomes
B. Stakeholder self-introductions
Lauren Everett, CLWA

2:35 II. Funding Update
A. Planning Grant R1 & R2
B. R1 Implementation Grant Agreement
C. Roundtable of Regions Meeting 3/20
Lauren Everett, CLWA

2:45 III. Consultant Progress Updates
A. IRWMP Update and Climate Change Technical Study
B. Salt and Nutrient Management Plan
Meredith Clement, Kennedy/Jenks, Lauren Everett, CLWA

3:00 IV. Climate Change
A. Rank Vulnerabilities
Meredith Clement, Kennedy/Jenks

3:30 V. Update IRWMP Objectives
Meredith Clement, Kennedy/Jenks

4:20 VII. Close

**UPPER SANTA CLARA RIVER 2008 IRWMP OBJECTIVES
(WITH DEFINITIONS AND MEASUREMENTS)**

Objective	Measurement
<i>Reduce Water Demand:</i> Implement technological, legislative and behavioral changes that will reduce user demands for water.	Ten (10) percent overall reduction in projected urban water demand throughout the Region by 2030 through implementation of water conservation measures. Replace up to 4,300 outdated water meters per year.
<i>Improve Operational Efficiency:</i> Maximize water system operational flexibility and efficiency, including energy efficiency.	With assistance of local energy utility, perform electrical audit on all wholesale and purveyor water facilities once every five years. Reduce, on an agency-by-agency basis, energy use per acre-foot treated and delivered.
<i>Increase Water Supply:</i> Understand future regional demands and obtain necessary water supply sources.	Increase use of recycled water by up to 17,400 AFY by 2030, consistent with health and environmental requirements. Implement long-term transfer and exchange agreements for imported water with other water agencies, up to 4,000 AFY by year 2010 and 11,000 AFY by year 2030. Increase water supply as necessary to meet anticipated peak demands at buildout in the LACWWD No. 37 service area (~0.74 mgd) and peak demands at buildout in the Acton and Agua Dulce areas (up to 12.16 mgd). Capture and recharge 5,000 to 10,000 AFY of urban and storm water runoff in a manner consistent with the pending update to the regional groundwater flow model and Basin Yield Study..
<i>Improve Water Quality:</i> Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards.	Meet all drinking water standards. Prevent migration of contaminant plumes. Comply with existing and future TMDLs.
<i>Promote Resource Stewardship:</i> Preserve and improve ecosystem health; improve flood management; and preserve and enhance water-dependent recreation.	In areas of the floodplain where invasive species have taken hold, reduce invasive species to 40 percent or less cover of the understory and canopy in years 1 to 5. Every five (5) years reduce by half the percentage of invasive species. In years 20 and beyond, keep invasive species to 2 percent or less. Keep invasive species to 2 percent or less in the upper reaches and tributaries where little to no invasive plants are currently located. Acquire acreage or conservation easements for 10,900 acres of remaining proposed South Coast Missing Linkage. Purchase private property from willing sellers in the 100-year floodplain. Acquire 12 miles along the Santa Clara River for development as a recreational trail/park corridor.

CLIMATE CHANGE VULNERABILITIES IN THE USCR REGION

Watershed Characteristics	General Overview of Vulnerabilities
Water Supply	<p>SWP Imported Water - SWP water is an important portion of the water resources available to the Region. Potential impacts on SWP water availability resulting from climate change directly affect the amount of imported water supply delivered to the Region.</p> <p>Groundwater – Changes in local hydrology could affect natural recharge to the local groundwater aquifers and the quantity of groundwater that could be pumped sustainably over the long-term. Decreased inflow from runoff, increased evaporative losses, warmer and shorter winter seasons can alter natural recharge of groundwater. In addition, additional reductions in the SWP imported water imposed by climate change would lead to more reliance on local groundwater.</p>
Water Quality	<p>SWP Imported Water – Sea level rise could result in increases in chloride and bromide (a disinfection byproduct precursor). Increased temperature could result in increases in algal blooms and taste and odor events.</p> <p>Regional Surface Water – Increased temperature could result in lower dissolved oxygen in streams. Decreases in annual precipitation could result in higher concentrations of contaminants in streams during droughts. Increased wildfire risk and flashier storms could increase turbidity loads for water treatment.</p>
Water Demand	<p>Urban and Agricultural Water Demand – Changes of hydrology in the Region as a result of climate change could lead to changes in water demand, both in quantities and patterns. Increased irrigation (outdoor landscape or agricultural) is anticipated to occur with temperature rise, increased evaporation losses with warmer temperature, and a longer growing season.</p>
Ecosystem and Habitat	<p>Increased temperature and potential decreases in annual precipitation could put stress on sensitive ecosystems and alter habitats. In addition, the Region may be subject to increased wildfire risk, which could alter habitat.</p>
Flooding	<p>Local surface flows could change as a result of more frequent and intense storm events, leading to more areas susceptible to flooding, and increasing risk of direct flood damage in the Region.</p>
Sea Level Rise	<p>The Region is not directly subject to sea level rise. However, potential effects of sea level rise would affect SWP water supply conditions. The principal concern is the potential for sea water intrusion to increase Delta salinity.</p>
Hydropower	<p>Currently, the Region does not produce hydropower; thus, climate change effects on hydropower are not likely to occur.</p>

UPPER SANTA CLARA RIVER REGION WATER MANAGEMENT STRATEGIES AND CALIFORNIA WATER PLAN RESOURCE MANAGEMENT STRATEGIES (CONT.)

	California Water Plan Strategies																											
	AGRICULTURAL WATER USE EFFICIENCY	URBAN WATER USE EFFICIENCY	CONVEYANCE	SYSTEM REOPERATION	WATER TRANSFERS	CONJUNCTIVE MANAGEMENT AND GROUNDWATER STORAGE	DESALINATION	PRECIPITATION ENHANCEMENT	RECYCLED MUNICIPAL WATER	SURFACE STORAGE – CALFED	SURFACE STORAGE – REGIONAL/LOCAL	DRINKING WATER TREATMENT AND DISTRIBUTION	GW/AQUIFER REMEDIATION	MATCHING WATER QUALITY TO WATER USE	POLLUTION PREVENTION	SALT AND SALINITY MANAGEMENT	URBAN RUNOFF MANAGEMENT	AGRICULTURAL LANDS STEWARDSHIP	ECONOMIC INCENTIVES	ECOSYSTEM RESTORATION	FOREST MANAGEMENT	LAND USE PLANNING AND MANAGEMENT	RECHARGE AREAS PROTECTION	WATER-DEPENDENT RECREATION	WATERSHED MANAGEMENT	FLOOD RISK MANAGEMENT	OTHER	
Recycled Water for Irrigation or Other Beneficial Uses Surplus Recycled Water from Other Regions									•					•														
Increased Uses for Recycled Water through Policy Change and Education									•					•														
Imported Water	•	•	•	•	•	•				•	•	•														•		
Watershed Planning																•		•				•			•			
Rainwater Collection Systems (Cisterns)		•				•											•											
Greywater Systems		•						•																				
Water Banking, Exchange and Transfer Projects			•	•	•	•																						
Drought Contingency and Emergency Planning	•	•	•	•	•	•						•	•	•														
Urban Water Management Planning		•																										
Removal of Invasive, Water-Thirsty Plants																				•			•		•		•	
Understand Total Water Usage in Region	•	•				•																	•		•			
IMPROVE WATER QUALITY																												
Build Sewer Treatment Collection and Distribution Systems															•													
Rehabilitate or Upgrade Sewer Treatment Collection and Discharge Systems															•													
Relocate and Protect Sewer Treatment Collection and Discharge Systems - Remove from Vulnerable Locations															•													
TMDL Development and Implementation															•	•	•		•									
Pump and Treat Water for Quality Enhancement															•		•		•									
Remove or Prohibit On-Site Water Softening Devices															•													
Replacement of Problematic Septic Tank Systems with Sewer Hook-Ups															•													
Fertilizer, Herbicide, and Pesticide Application Reduction	•														•			•										
Low Level Storm Water Treatment															•	•	•										•	
Non-Point Source Pollution Control Landscape/Hardscape Retrofits															•	•												
Water Quality Monitoring (Requires Coordination Among Sampling Entities to be Effective)															•													

UPPER SANTA CLARA RIVER REGION WATER MANAGEMENT STRATEGIES AND CALIFORNIA WATER PLAN RESOURCE MANAGEMENT STRATEGIES (CONT.)

	California Water Plan Strategies																										
	AGRICULTURAL WATER USE EFFICIENCY	URBAN WATER USE EFFICIENCY	CONVEYANCE	SYSTEM REOPERATION	WATER TRANSFERS	CONJUNCTIVE MANAGEMENT AND GROUNDWATER STORAGE	DESALINATION	PRECIPITATION ENHANCEMENT	RECYCLED MUNICIPAL WATER	SURFACE STORAGE – CALFED	SURFACE STORAGE – REGIONAL/LOCAL	DRINKING WATER TREATMENT AND DISTRIBUTION	GW/AQUIFER REMEDIATION	MATCHING WATER QUALITY TO WATER USE	POLLUTION PREVENTION	SALT AND SALINITY MANAGEMENT	URBAN RUNOFF MANAGEMENT	AGRICULTURAL LANDS STEWARDSHIP	ECONOMIC INCENTIVES	ECOSYSTEM RESTORATION	FOREST MANAGEMENT	LAND USE PLANNING AND MANAGEMENT	RECHARGE AREAS PROTECTION	WATER-DEPENDENT RECREATION	WATERSHED MANAGEMENT	FLOOD RISK MANAGEMENT	OTHER
Improve Water Quality Being Discharged									•			•	•	•	•	•	•					•	•		•		
Brownfields Remediation													•	•	•	•			•			•	•		•		
Wellhead Recharge and Protection													•	•	•	•											
Emerging Contaminant Problems - Monitoring and Management									•			•			•												
Control and/or Enforce Prohibitions on Illegal Discharge of Controlled or Toxic Substances													•		•												
Leaking Underground Storage Tank Remediation						•									•												
Outreach and Education															•												
Biological Treatment of Water (e.g., Treatment Via Wetlands)																				•	•					•	
Improve Riparian Habitat																				•	•						
PRACTICE RESOURCE STEWARDSHIP																											
Levee Construction																											•
Channel Improvement Projects																											•
Detention Basins																											•
Debris Basins																											•
Ongoing Facility Maintenance																											•
Removal of Hazards or Facilities from Floodways																											•
Storm Monitoring and Modeling - Flows, Water Quality																											•
Coordinated Hydrogeomorphic Modeling																					•		•				•
Incentives for Landowners - Public/Private Partnerships																				•	•	•					•
Evaluate Process for Reconstruction Following Emergencies (Floods, Landslides)																											
Public Information Programs Regarding Flood Prevention																											•
Land Acquisition for Watercourse Expansion/Flood Management																				•		•					•
Protect And Enhance Native Ecosystem Diversity																					•	•					
Control, Remove, and Prevent Invasive Species																					•	•					
Protect Existing Habitats from Degradation																					•	•					

UPPER SANTA CLARA RIVER REGION WATER MANAGEMENT STRATEGIES AND CALIFORNIA WATER PLAN RESOURCE MANAGEMENT STRATEGIES (CONT.)

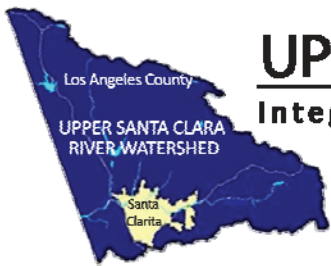
	California Water Plan Strategies																											
	AGRICULTURAL WATER USE EFFICIENCY	URBAN WATER USE EFFICIENCY	CONVEYANCE	SYSTEM REOPERATION	WATER TRANSFERS	CONJUNCTIVE MANAGEMENT AND GROUNDWATER STORAGE	DESALINATION	PRECIPITATION ENHANCEMENT	RECYCLED MUNICIPAL WATER	SURFACE STORAGE – CALFED	SURFACE STORAGE – REGIONAL/LOCAL	DRINKING WATER TREATMENT AND DISTRIBUTION	GW/AQUIFER REMEDIATION	MATCHING WATER QUALITY TO WATER USE	POLLUTION PREVENTION	SALT AND SALINITY MANAGEMENT	URBAN RUNOFF MANAGEMENT	AGRICULTURAL LANDS STEWARDSHIP	ECONOMIC INCENTIVES	ECOSYSTEM RESTORATION	FOREST MANAGEMENT	LAND USE PLANNING AND MANAGEMENT	RECHARGE AREAS PROTECTION	WATER-DEPENDENT RECREATION	WATERSHED MANAGEMENT	FLOOD RISK MANAGEMENT	OTHER	
Urban Stream Restoration and Revitalization																												
Land Acquisition and/or Easements for Protection and Restoration of Habitat Areas Landscape Linkages/Wildlife Movement																												
Protect and Restore Fish and Wildlife Migration Corridors and Landscape Linkages; Where Necessary Create Or Modify Structures to Facilitate Fish and Wildlife Movement, such as Fish Ladders, Road Undercrossings, etc.																												
Restore Natural Hydrograph and Sediment Transport in Local Watercourses																												
Mitigation Banking																												
Integrated Watershed GIS "Spatial Database"																												
Identify and Collect Biological Resources Data for Comprehensive Database: 1) Ecosystem Function Analysis 2) Water Quantity and Quality Needs of Fish and Wildlife																												
Provide for Long-Term Stewardship of Natural Resources, Especially Public Land: Staff, Funding, Organizational Structure (District or Conservancy) Monitoring and Enforcement																												
Conservation Plans: 1) Evaluate Multiple Scale Habitat Needs of Aquatic and Riparian Dependent Species																												
Active and Passive Recreation Areas Related to Water Resources																												
Enhance Appropriate Public Access																												
Updates and Modifications to General Plan Policies																												
Watercourse Set-Back Ordinances or Policies																												
Riparian Corridor Buffers																												
Floodplain Development Restrictions																												
Sensitive Biological Areas Overlay Zones																												
Flood Hazard Mapping																												
Require Evaluation of Footprint Impacts in Newly Developing Areas																												
Create Incentives (Tax Credits) for Landowners to Protect and Restore Habitats and Ecosystems on Their Property																												
Agricultural Lands Stewardship																												
Post-Fire Rehabilitation																												
Landscape Guidelines for Fuel Modification/Defensible Space in New Development																												

UPPER SANTA CLARA RIVER REGION WATER MANAGEMENT STRATEGIES AND CALIFORNIA WATER PLAN RESOURCE MANAGEMENT STRATEGIES (CONT.)

		California Water Plan Strategies																											
		AGRICULTURAL WATER USE EFFICIENCY	URBAN WATER USE EFFICIENCY	CONVEYANCE	SYSTEM REOPERATION	WATER TRANSFERS	CONJUNCTIVE MANAGEMENT AND GROUNDWATER STORAGE	DESALINATION	PRECIPITATION ENHANCEMENT	RECYCLED MUNICIPAL WATER	SURFACE STORAGE – CALFED	SURFACE STORAGE – REGIONAL/LOCAL	DRINKING WATER TREATMENT AND DISTRIBUTION	GW/AQUIFER REMEDIATION	MATCHING WATER QUALITY TO WATER USE	POLLUTION PREVENTION	SALT AND SALINITY MANAGEMENT	URBAN RUNOFF MANAGEMENT	AGRICULTURAL LANDS STEWARDSHIP	ECONOMIC INCENTIVES	ECOSYSTEM RESTORATION	FOREST MANAGEMENT	LAND USE PLANNING AND MANAGEMENT	RECHARGE AREAS PROTECTION	WATER-DEPENDENT RECREATION	WATERSHED MANAGEMENT	FLOOD RISK MANAGEMENT	OTHER	
Urban Landscape Management Planning																													
Open Space Acquisition/Purchase																					•		•	•					

Stakeholder Meeting, May 24, 2012

- Agenda
- PowerPoint Presentation: City of Santa Clarita Climate Action Plan
- Handout: Linkages between IRWMP Objectives, Strategies and Projects
- Handout: Upper Santa Clara River 2012 IRWMP Objectives Draft (with edits from March Stakeholder Meeting)
- Upper Santa Clara River 2012 IRWMP Objectives Draft (Results from May Stakeholder Meeting)



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Stakeholder Meeting

Thursday, May 24, 2012, 2:30 pm – 4:30 pm

Newhall County Water District Headquarters

23780 North Pine Street, Newhall, CA 91321

Meeting Objectives:

- Consultant Progress & Funding Updates
- Complete IRWMP Objectives Update
- Call for Projects

AGENDA

2:30 I. Welcome

Lauren Everett, Castaic Lake Water Agency (CLWA)

2:40 II. Presentation on the City of Santa Clarita Climate Action Plan

David Peterson, City of Santa Clarita

3:15 III. Consultant Progress Updates

A. IRWMP Update and Climate Change Technical Study

B. Salt and Nutrient Management Plan

Meredith Clement, Kennedy/Jenks (KJ), Lauren Everett, CLWA

3:25 IV. Funding Update

A. Planning Grant R1 & R2

B. R1 Implementation Grant

Lauren Everett, CLWA

3:35 V. IRWMP Objectives

Meredith Clement, KJ

4:10 VI. Call for Projects

Meredith Clement, KJ

4:30 VII. Close

City of Santa Clarita Climate Action Plan

May 24, 2012

IRWMP Stakeholder Meeting
Newhall County Water District

Introduction

- What is a Climate Action Plan (CAP)?
- Why is the City doing a CAP?
 - Assembly Bill 32
 - Office of the Attorney General
 - New General Plan
 - Local thresholds for environmental review of projects
- What if the City doesn't do a CAP?
 - Compliance Order

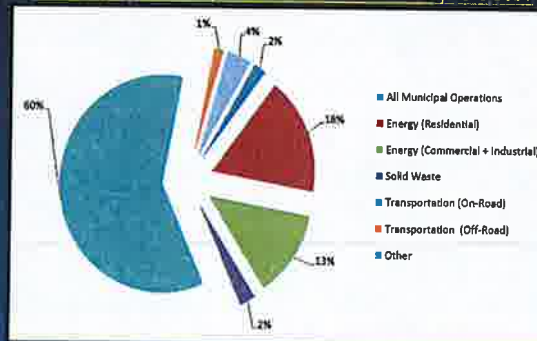
Climate Action Plan Contents

- Inventory
 - Establish base year emissions
- Forecast and Analysis
 - Compare base year emissions to forecast emissions
- Mitigation
 - Quantify strategies for reducing GHG emissions to achieve state mandate
- Monitoring
 - Plan for monitoring progress
- Outreach component
- ENVIRON International – Consultant

Inventory

- Establish base year emissions:
 - Base year of 2005 at the recommendation of CARB and SCAG
 - Why not 1990?
- Base Year Emissions of 1.71 mmtCO₂e
 - What is mmtCO₂e?

2005 (Baseline) GHG Emissions by Sector



Forecast and Analysis

- Compare base year emissions to forecast emissions - 2020:
 - Business as Usual (BAU): 1.98 mmtCO₂e
 - BAU – “Big 3”: 1.84 mmtCO₂e
 - 120,562 mtCO₂e between 2005 and 2020 to mitigate

Mitigation

- Quantify strategies for reducing GHG emissions to achieve state mandate
- New General Plan Goals, Objectives and Policies & Existing City Programs since 2005
- Forecast Emission Reductions (in mmtCO₂e):
 - VMT Reduction & Land Use – 124,631
 - Open Space Acquisition & Tree Planting - 40,083
 - Water Efficiency – 21,507
 - Energy Conservation – 6,085
 - Total GHG Reductions: 193,020 mtCO₂e
- Net 2020 Emissions: 1.65 mmtCO₂e

Monitoring

- Will develop performance measures based on goals, objectives and policies included in the General Plan
- Progress reports created every four years
 - Annexations included
- Update of greenhouse gas inventory and mitigation measures every eight years

Implementation

- All development must be consistent with the CAP
 - Will require General Plan Amendments, Zone Changes and some larger development projects to demonstrate a 12% reduction of GHG emissions from “business as usual”

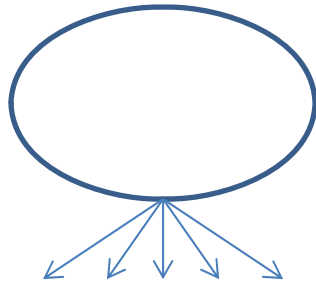
Tentative Public Process Calendar

- 30 Day Public Review – May 17th to June 18th
 - Required by CEQA
 - Negative Declaration
 - CAP Document will be available on:
<http://www.greensanclarita.com/climate-action-plan.asp>
- Planning Commission – June 19th
- City Council – August 28th

Questions

David Peterson
Assistant Planner II
City of Santa Clarita, Planning Division
(661) 284-1406
dpeterson@santa-clarita.com

Linkage between IRWMP Objectives, Strategies and Projects

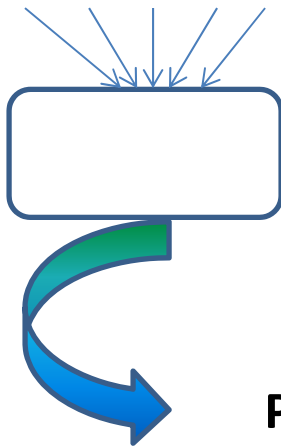


Regional needs, issues and goals the IRWMP addresses

Ex. Increase water supply

General means for addressing identified needs and achieving broad objectives

Ex. Groundwater replenishment; increase recycled water use; removal of invasive plants



Specific implementable means of carrying out strategies and ultimately realizing objectives

Ex. SCR San Francisquito Creek Arundo and Tamarisk Removal Project

Project evaluation and prioritization based in part on applicability to regional objectives

**UPPER SANTA CLARA RIVER 2012 IRWMP OBJECTIVES
(WITH DEFINITIONS AND MEASUREMENTS)**

Objective	Measurement
<p>Reduce <u>Potable</u> Water Demand: Implement technological, legislative and behavioral changes that will reduce user demands for water.</p>	<p>Twenty (20)Ten (10) percent overall reduction in projected potableurban water demand throughout the Region by 202030 through implementation of water conservation measures.</p> <p>Replace up to 4,300 outdated water meters per year.</p>
<p>Improve Operational Efficiency: Maximize water system operational flexibility and efficiency, including energy efficiency.</p>	<p>With assistance of local energy utility, perform electrical audit on all wholesale and purveyor water facilities once every five years.</p> <p>Reduce, on an agency-by-agency basis, energy use per acre-foot treated and delivered.</p>
<p>Increase Water Supply: Understand future regional demands and obtain necessary water supply sources.</p>	<p>Increase use of recycled water by up to 47,4009,600 AFY by 2030, consistent with health and environmental requirements.</p> <p>Improve water system operational flexibility and efficiency.</p> <p>Implement long-term transfer and exchange agreements for imported water with other water agencies, up to 4,000 AFY by year 2010 and 11,000 AFY by year 2030.</p> <p>Increase water supply as necessary to meet anticipated peak demands at buildout in the LACWWD No. 37 service area (-0.747.91 mgd) and peak demands at buildout in the Acton and Agua Dulce areas (up to 12.16 mgd).</p> <p>Capture and recharge 5,000 to 10,000 AFY of urban and storm water runoff in a manner consistent with the pending update to the regional groundwater flow model and Basin Yield Study..</p>
<p>Improve Water Quality: Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards.</p>	<p>Meet all drinking water standards.</p> <p>Prevent migration of contaminant plumes.</p> <p>Comply with existing and future TMDLs.</p>
<p>Promote Resource Stewardship: Preserve and improve ecosystem health; improve flood management; and preserve and enhance water-dependent recreation.</p>	<p>In areas of the floodplain where invasive species have taken hold, reduce invasive species to 40 percent or less cover of the understory and canopy in years 1 to 5. Every five (5) years reduce by half the percentage of invasive species. In years 20 and beyond, keep invasive species to 2 percent or less. Keep invasive species to 2 percent or less in the upper reaches and tributaries where little to no invasive plants are currently located.</p> <p>Acquire acreage or conservation easements for 10,900 acres of remaining proposed South Coast Missing Linkage. (To date, 6,100 acres have been conserved)</p> <p>Purchase private property from willing sellers in the 100-year floodplain.</p> <p>Acquire <u>up to</u> 12 miles along the Santa Clara River for development as a recreational trail/park corridor.</p>
<p><u>Flooding/Hydromodification</u></p>	<p>???</p>
<p><u>Take actions within the watershed to adapt to climate change</u></p>	<p><u>Identify and implement “no regret” strategies for flood management, water supply, water quality, water dependent recreation, water-dependent habitat, and fire risk.</u></p>

Objective	Measurement
<u>Promote projects and actions that reduce greenhouse gas (GHG) emissions</u>	<u>Prioritize development and use of water sources with lowest GHG emissions.</u> <u>Identify and implement the use of renewable energy and conservation of energy within water and wastewater systems.</u> <u>With assistance of local energy utility, perform energy audits on all water-related facilities regularly.</u> <u>Reduce, on an agency-by-agency basis, energy use per volume treated or delivered.</u>

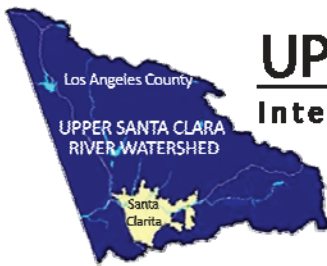
**UPPER SANTA CLARA RIVER 2012 IRWMP OBJECTIVES
(WITH DEFINITIONS AND MEASUREMENTS)**

Objective	Measurement
<p>Reduce <u>Potable</u> Water Demand: Implement technological, legislative and behavioral changes that will reduce user demands for water.</p>	<p>Twenty (20)<u>Ten (10)</u> percent overall reduction in projected potable<u>urban</u> water demand throughout the Region by 202030<u>2030</u> through implementation of water conservation measures <u>and/or recycled water</u>.</p> <p>Replace up to 4,300 outdated water meters per year.</p>
<p>Improve Operational Efficiency: Maximize water system operational flexibility and efficiency, including energy efficiency.</p>	<p>With assistance of local energy utility, perform electrical audit on all wholesale and purveyor water facilities once every five years.</p> <p>Reduce, on an agency-by-agency basis, energy use per acre-foot treated and delivered.</p>
<p>Increase Water Supply: Understand future regional demands and obtain necessary water supply sources.</p>	<p>Increase use of recycled water by up to <u>47,409,600</u> AFY by 2030, consistent with health and environmental requirements.</p> <p><u>Improve water system operational flexibility and efficiency.</u></p> <p><u>Implement long-term transfer and exchange agreements for imported water with other water agencies, up to 4,000 AFY by year 2010 and 11,000 AFY by year 2030.</u></p> <p>Increase water supply as necessary to meet anticipated peak demands at buildout in the LACWWD No. 37 service area (-0.747.91 mgd) and peak demands at buildout in the Acton and Agua Dulce areas (up to 12.16 mgd).</p> <p>Capture and recharge 5,000 to 10,000 AFY of urban and storm water runoff in a manner consistent with the pending update to the regional groundwater flow model and Basin Yield Study.</p>
<p>Improve Water Quality: Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards.</p>	<p>Meet all drinking water standards.</p> <p>Prevent migration of contaminant plumes.</p> <p>Comply with existing and future TMDLs.</p>
<p>Promote Resource Stewardship: Preserve and improve ecosystem health; <u>improve flood management</u>; and preserve and enhance water-dependent recreation.</p>	<p>In areas of the floodplain where <u>the majority of plant species are</u> invasive species have taken hold,</p> <ul style="list-style-type: none"> • <u>R</u>educe invasive <u>plant</u> species to 40 percent or less cover of the understory and canopy in years 1 to 5. • Every five (5) years <u>thereafter</u> reduce by half the percentage of invasive <u>plant</u> species. • In years 20 and beyond, keep invasive <u>plant</u> species to <u>2-5</u> percent or less. • Keep invasive <u>plant</u> species to 2 percent or less in the upper reaches and tributaries where little to no invasive plants are currently located. <p>Acquire acreage or conservation easements for 10,900 acres of remaining proposed South Coast Missing Linkage.</p> <p>Purchase private property from willing sellers in the 100-year floodplain.</p> <p>Acquire <u>up to</u> 12 miles along the Santa Clara River for development as a recreational trail/park corridor.</p>

Objective	Measurement
<p><u>Flooding/Hydromodification:</u> Reduce the negative effects on waterways and watershed health caused by hydromodification and flooding outside the natural erosion and deposition process endemic to the Santa Clara River.</p>	<p><u>Implement EPA recommended bioengineering techniques and reduce hydromodification in existing urban areas.</u></p> <p><u>Address reduction of impervious areas within the unincorporated area of Los Angeles County.</u></p>
<p><i><u>This objective still under review</u></i></p>	<p><u>Increase a percent of pervious surface.</u></p>
<p><u>Take actions within the watershed to adapt to climate change</u></p>	<p><u>Identify and implement “no regret” strategies that adapt for flood management, water supply, water quality, water dependent recreation, water-dependent habitat, and fire risk for climate change, but also have other benefits that would occur in the absence of climate change (“no regret strategies”).</u></p>
<p><u>Promote projects and actions that reduce greenhouse gas (GHG) emissions</u></p>	<p><u>Prioritize development and use of water sources with lowest GHG emissions.</u></p> <p><u>Identify and implement the use of renewable energy and conservation of energy within water and wastewater systems.</u></p> <p><u>With assistance of local energy utility, perform energy audits on all water-related facilities regularly.</u></p> <p><u>Reduce, on an agency-by-agency basis, energy use per volume treated or delivered.</u></p>

Stakeholder Meeting, July 26, 2012

- Agenda
- PowerPoint Presentation: Highlights of Proposition 84 and 1E 2012 Draft Guidelines and PSPs
- Handout: Upper Santa Clara River 2012 IRWMP Objectives
- Upper Santa Clara River 2012 IRWMP Objectives (finalized)
- Handout: Project Prioritization Schedule
- Handout: Proposed Project Scoring and Ranking Methodology (with edits from July Stakeholder Meeting)
- Handout: Summary of Major Water Issues and Problems



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Stakeholder Meeting

Thursday, July 26, 2012, 2:30 pm – 4:30 pm

Newhall County Water District Headquarters

23780 North Pine Street, Newhall, CA 91321

Meeting Objectives:

- Consultant Progress & Funding Updates
- Develop strategy for evaluating IRWMP projects
- Update Plan's discussion on regional water issues

AGENDA

2:30 I. Welcome

Lauren Everett, Castaic Lake Water Agency (CLWA)

2:40 II. Santa Clarita Environmental Education Consortium

Jia-Yi Cheng-Levine, Ph.D., College of the Canyons

3:00 III. Consultant Progress Updates

A. IRWMP Update and Climate Change Technical Study

- Flood Control Objective

B. Salt and Nutrient Management Plan

Meredith Clement, Kennedy/Jenks (KJ), Lauren Everett, CLWA

3:10 IV. Funding Update

A. Planning Grant R1 & R2

B. Implementation Grant R1 & R2

- New Draft Guidelines and Proposal Solicitation Packages

Lauren Everett, CLWA, Meredith Clement, KJ

3:30 V. 2nd Solicitation - Call for Projects

Lauren Everett, CLWA

3:40 VI. Project Scoring/Project Prioritization

Meredith Clement, KJ

4:10 VII. Discussion on Summary of Major Water Issues and Problems

Meredith Clement, KJ

4:30 VIII. Close

Upper Santa Clara IRWMP

Highlights of Proposition 84 and 1E 2012 Draft Guidelines and PSPs



Funding

Proposition 84

- \$31,294,000 available for Los Angeles-Ventura
- Funding Match: 25%
 - Waivers possible for DAC projects

Proposition 1E Stormwater Management

- Maximum grant amount: \$30M
- Funding Match: 50%

Approximate Schedule Prop 84 Implementation

Applicant Workshops	January 2013
Application Deadline	March 2013
Public Meeting on Funding Recommendations	August 2013
DWR Approval of Final Grant Awards	September 2013

Approximate Schedule

Prop 1E Stormwater

Applicant Workshops	November 2012
Application Deadline	December 2012
Public Meeting on Funding Recommendations	May 2013
DWR Approval of Final Grant Awards	July 2013

Changes to Plan Standards

- Reduce dependence on Delta
- More detailed Climate Change vulnerability assessment
 - > Climate Change Handbook
 - > California Ocean Protection Council
 - > No more initial “no regret” strategies

Eligible Grant Projects

Proposition 84

- Projects shall address at least one of the criteria included in 2010, such as
 - > Water supply reliability, stormwater capture, watershed protection, etc.
- Must be implementation projects
 - > DAC projects may include studies

Proposition 1E

- Must yield multiple benefits

Grant Project Eligibility Criteria

- Consistency with adopted IRWMP
- Proponents must adopt the IRWMP **New**
- GWMP , UWMP, AB1420
- Agriculture WMP **New**
- Surface Water Diversion Reporting **New**
- Water Meter Requirements
- Groundwater monitoring – CASGEM
- IRWMP must reduce dependence on Delta supplies (Prop 84) **New**

Grant Application Attachments

13 attachments, 7 are scored

Criteria/Attachment	Maximum Points
Work Plan	15
Budget	5
Schedule	5
Monitoring, Assessment and Performance Measures	5
Technical Justifications	10
Benefits Costs Analysis	30
Program Preferences	10
Total	80

Benefit Cost Analysis **Update**

- Analysis completed for each project
- Evaluation done cumulatively
- Scoring based on magnitude of benefits and quality of analysis
- DWR method or RWMG method
- Different Benefit Cost Analysis options depending on project or benefit type

NEW

Application Attachments **New**

Technical Justification

- Measures of project accomplishments
- Scoring based on benefits, not magnitude
- Documentation may include technical reports, feasibility studies, expert opinion, etc.

THANK YOU

**UPPER SANTA CLARA RIVER 2012 IRWMP OBJECTIVES
(WITH DEFINITIONS AND MEASUREMENTS)**

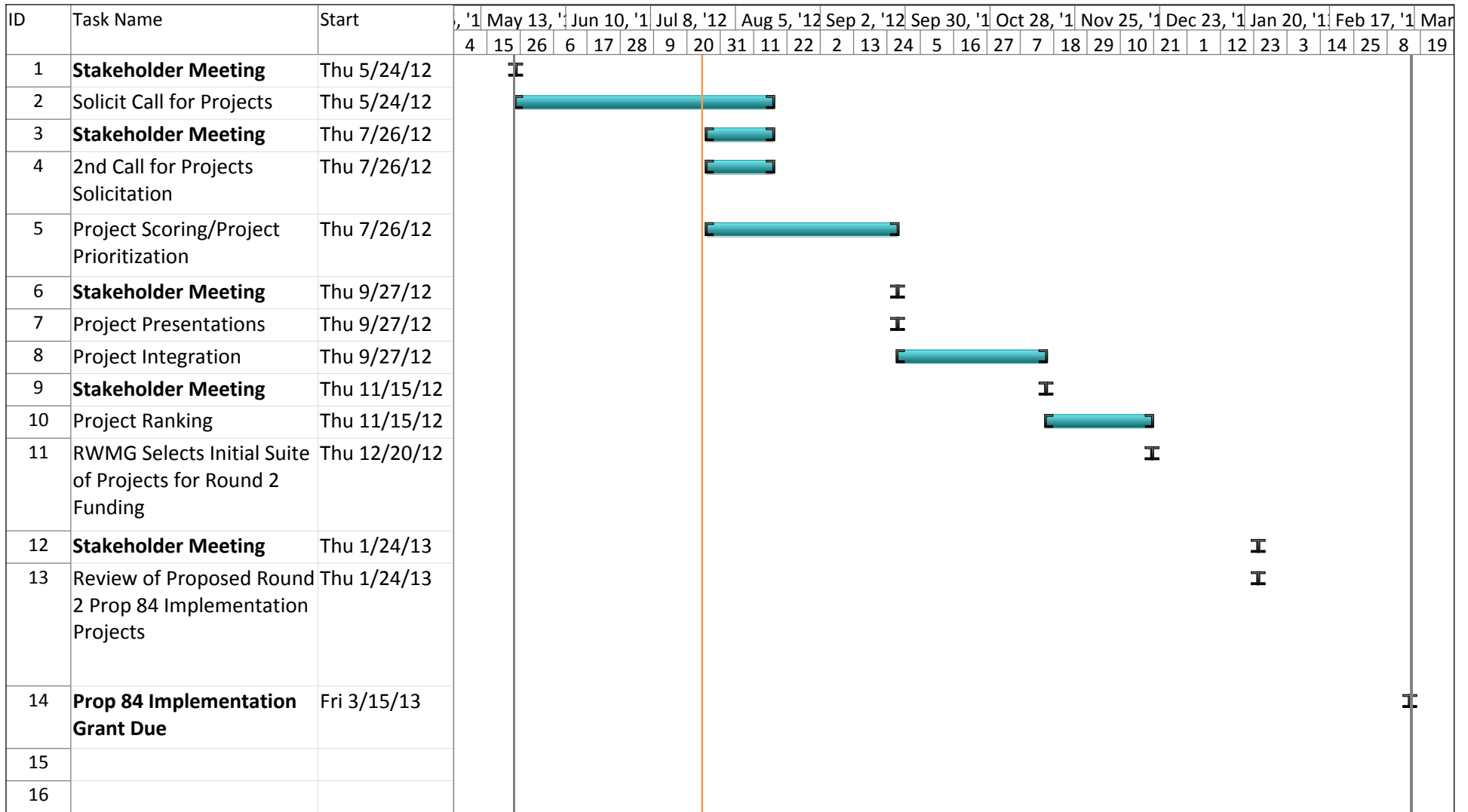
Objective	Measurement
Reduce Potable Water Demand: Implement technological, legislative and behavioral changes that will reduce user demands for water.	Twenty (20) percent overall reduction in projected potable water demand throughout the Region by 2020 through implementation of water conservation measures and/or recycled water.
Increase Water Supply: Understand future regional demands and obtain necessary water supply sources.	<p>Increase use of recycled water by up to 9,600 AFY by 2030, consistent with health and environmental requirements.</p> <p>Improve water system operational flexibility and efficiency.</p> <p>Increase water supply as necessary to meet anticipated peak demands at buildout in the LACWWD No. 37 service area (7.91 mgd) and peak demands at buildout in the Acton and Agua Dulce areas (up to 12.16 mgd).</p>
Improve Water Quality: Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards.	<p>Meet all drinking water standards.</p> <p>Prevent migration of contaminant plumes.</p> <p>Comply with TMDLs.</p>
Promote Resource Stewardship: Preserve and improve ecosystem health; and preserve and enhance water-dependent recreation.	<p>In areas of the floodplain where the majority of plant species are invasive ,</p> <ul style="list-style-type: none"> • Reduce invasive plant species to 40 percent or less cover of the understory and canopy in years 1 to 5. • Every five (5) years thereafter reduce by half the percentage of invasive plant species. • In years 20 and beyond, keep invasive plant species to 5 percent or less. <p>Keep invasive plant species to 2 percent or less in the upper reaches and tributaries where little to no invasive plants are currently located.</p> <p>Acquire acreage or conservation easements for 10,900 acres of remaining proposed South Coast Missing Linkage.</p> <p>Purchase private property from willing sellers in the 100-year floodplain.</p> <p>Acquire up to 12 miles along the Santa Clara River for development as a recreational trail/park corridor.</p>
<p>Flooding/Hydromodification: Reduce the negative effects on waterways and watershed health caused by hydromodification and flooding outside the natural erosion and deposition process endemic to the Santa Clara River.</p> <p><i>This objective still under review (quantitative analysis of measurement targets will be development during the plan update)</i></p>	<p>Implement EPA recommended bioengineering techniques<u>Meet state permits and policies related to stormwater management.</u></p> <p>Address reduction of<u>Reduce impervious areas within the watershed. within the unincorporated area of Los Angeles County.</u></p> <p>Increase a percent of pervious surface.</p> <p><u>Promote low impact development and green streets</u></p>

Objective	Measurement
<i>Take actions within the watershed to adapt to climate change</i>	Implement strategies that adapt flood management, water supply, water quality, water dependent recreation, water-dependent habitat, and fire risk for climate change, but also have other benefits that would occur in the absence of climate change (“no regret strategies”).
<i>Promote projects and actions that reduce greenhouse gas (GHG) emissions</i>	<p>Prioritize development and use of water sources with lowest GHG emissions.</p> <p>Identify and implement the use of renewable energy and conservation of energy within water and wastewater systems.</p> <p>With assistance of local energy utility, perform energy audits on all water-related facilities regularly.</p> <p>Reduce, on an agency-by-agency basis, energy use per volume treated or delivered.</p>



















UPPER SANTA CLARA RIVER 2012 IRWMP OBJECTIVES (WITH DEFINITIONS AND MEASUREMENTS)

Objective	Measurement
Reduce Potable Water Demand: Implement technological, legislative and behavioral changes that will reduce user demands for water.	Twenty (20) percent overall reduction in projected potable water demand throughout the Region by 2020 through implementation of water conservation measures and/or recycled water.
Increase Water Supply: Understand future regional demands and obtain necessary water supply sources.	<p>Increase use of recycled water by up to 9,600 AFY by 2030, consistent with health and environmental requirements.</p> <p>Improve water system operational flexibility and efficiency.</p> <p>Increase water supply as necessary to meet anticipated peak demands at buildout in the LACWWD No. 37 service area (7.91 mgd) and peak demands at buildout in the Acton and Agua Dulce areas (up to 12.16 mgd).</p>
Improve Water Quality: Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards.	<p>Meet all drinking water standards.</p> <p>Prevent migration of contaminant plumes.</p> <p>Comply with TMDLs.</p>
Promote Resource Stewardship: Preserve and improve ecosystem health; and preserve and enhance water-dependent recreation.	<p>In areas of the floodplain where the majority of plant species are invasive ,</p> <ul style="list-style-type: none"> • Reduce invasive plant species to 40 percent or less cover of the understory and canopy in years 1 to 5. • Every five (5) years thereafter reduce by half the percentage of invasive plant species. • In years 20 and beyond, keep invasive plant species to 5 percent or less. <p>Keep invasive plant species to 2 percent or less in the upper reaches and tributaries where little to no invasive plants are currently located.</p> <p>Acquire acreage or conservation easements for 10,900 acres of remaining proposed South Coast Missing Linkage.</p> <p>Purchase private property from willing sellers in the 100-year floodplain.</p> <p>Acquire up to 12 miles along the Santa Clara River for development as a recreational trail/park corridor.</p>
Flooding/Hydromodification: Reduce flood damage and/or the negative effects on waterways and watershed health caused by hydromodification and flooding outside the natural erosion and deposition process endemic to the Santa Clara River.	<p>Meet state permits and policies related to stormwater management.</p> <p>Reduce impervious area within the watershed.</p> <p>Promote low impact development, green streets and other stormwater recharge projects</p>
Take actions within the watershed to adapt to climate change	Implement strategies that adapt flood management, water supply, water quality, water dependent recreation, water-dependent habitat, and fire risk for climate change, but also have other benefits that would occur in the absence of climate change (“no regret strategies”).

Objective	Measurement
<i>Promote projects and actions that reduce greenhouse gas (GHG) emissions</i>	Prioritize development and use of water sources with lowest GHG emissions. Identify and implement the use of renewable energy and conservation of energy within water and wastewater systems. With assistance of local energy utility, perform energy audits on all water-related facilities regularly. Reduce, on an agency-by-agency basis, energy use per volume treated or delivered.



Project: Project Prioritization Scheme
Date: Wed 7/25/12

Task		External Milestone		Manual Summary Rollup	
Split		Inactive Task		Manual Summary	
Milestone		Inactive Milestone		Start-only	
Summary		Inactive Summary		Finish-only	
Project Summary		Manual Task		Deadline	
External Tasks		Duration-only		Progress	

Upper Santa Clara River Integrated Regional Water Management Plan

Proposed Project Scoring and Ranking Methodology

Projects will receive a score based on the point system described in the table below. Projects receiving the highest number of points will have priority for implementation.

Criterion	Possible Points
Project and Project Applicant Eligible	<p>Pass/Fail Criteria</p> <p>If project affects groundwater:</p> <ol style="list-style-type: none"> (1) There must be a GWMP prepared and implemented in compliance with CWC §10753.7 or applicant consents to be subject to a GWMP or other program that meets the requirements of CWC §10753.7. (2) Or the proposal must include development of a GWMP within 1 year of grant submittal date. (3) Or the project conforms to requirements of an adjudication of water rights in the subject groundwater. <p><i>If no to all 3 = Fail</i></p> <p>If project proponent or project beneficiary is Urban Water Supplier:</p> <ol style="list-style-type: none"> (1) They must have completed and submitted an Urban Water Management Plan (2) And be in compliance with AB1420 (3) And meet water meter requirements (CWC §525) <p><i>If no to any of the three = Fail</i></p> <p>5 points if Project Proponent has adopted or will adopt the Integrated Plan</p>
Readiness to Proceed	<p>25 points for each item below, up to Up to 200-points based on the following:</p> <p>200 Local Cost Share Confirmed and items below completed</p> <p>480 Construction Drawings and items below completed</p> <p>450 Permits and all items below completed</p> <p>420 CEQA/NEPA and all items below completed</p> <p>400 Project benefits and costs defined at a level of detail that will allow cost-effectiveness analysis or benefit-cost analysis</p> <p>90 Preliminary Design and Cost Estimates and all items below complete</p> <p>60 Feasibility and all items below complete</p> <p>30 Conceptual Plans complete</p>
Addresses Multiple Objective	15 points for each objective addressed, up to 100 points
Integrates Multiple Resource Management Strategies	5 points for each applicable Resource Management Strategy, up to 100 points
Benefits a Disadvantaged Community/Increases Disadvantaged Community Participation	<p>Yes = 50 points</p> <p>No = 0 points</p>
Addresses Critical Water Issues for Native American Tribal Communities	<p>Yes = 50 points If Native American Tribal Community Qualifies as DAC, points will be awarded per box above and this box will not apply.</p> <p>No = 0 points</p>
Environmental Justice Concerns	50 points- Project redresses inequitable distribution of environmental burdens
Consistent with Local Land Use Plans	<p>Yes = 100 points</p> <p>No = 0 points</p>
Improves Interregional Coordination	<p>Yes = 100 points</p> <p>No = 0 points</p>
Tie – Breaker Points	<p>For any projects ranked in the top 15 with the same score the following points will be awarded:</p> <p>10 <u>pts</u> Project with lower cost per acre-foot of water conserved</p> <p>10 <u>pts</u> Project with the greatest reduction in electrical/energy use per acre-foot of water</p> <p>10 <u>pts</u> Project with lower cost per new acre-foot of water supply</p> <p>10 <u>pts</u> Project with lower cost per acreage of habitat improved</p> <p>10 <u>pts</u> Project with lower cost for per unit of flood reduction</p>

Summary of Major Water Issues and Problems – from 2008 IRWMP

Over the course of the series of Stakeholder meetings, many issues and topics were discussed. However, many of the issues raised can be summarized into five themes:

- Continued growth in water demand while imported water supplies become less reliable.
- Difficulty in maintaining open space and habitat areas given population growth and increased urbanization.
- Variety of water quality issues, including perchlorate contamination, and TMDLs for chloride and nitrate compounds.
- Runoff and drainage issues in the more rural areas that result in negative effects to the rural areas and areas downstream.
- Runoff and drainage issues related to urbanizing areas in the floodplain.

Major Water Issues and Problems – IRWMP Update (Proposed)

- Continued growth in water demand while imported water supplies become less reliable.
- Difficulty in maintaining open space, habitat areas, and groundwater infiltration areas given population growth and increased urbanization.
- High cost of producing and supplying recycled water.
- Variety of water quality issues, including chloride and nitrate compounds, as well as the ongoing cost of monitoring and treating perchlorate contamination.
- Runoff and drainage issues in the more rural areas that result in negative effects to the rural areas and areas downstream.
- Runoff and drainage issues related to urbanizing areas in the floodplain.
Increased regulatory compliance burden to limit pollution in stormwater runoff.

Stakeholder Meeting, September 27,
2012

- Agenda
- Stakeholder Project
Presentations/Handouts:
 - o LACDPW
 - o NCWD
 - o SCWD
 - o SCVSD



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Stakeholder Meeting

Thursday, September 27, 2012, 2:30 pm – 4:30 pm

Newhall County Water District Headquarters
23780 North Pine Street, Newhall, CA 91321

Meeting Objectives:

- Consultant Progress & Funding Updates
- Stakeholder Project Presentations

AGENDA

2:30 I. Welcome

Lauren Everett, Castaic Lake Water Agency (CLWA)

2:35 II. Consultant Progress Updates

- A. IRWMP Update and Climate Change Technical Study
- B. Salt and Nutrient Management Plan

Meredith Clement, Kennedy/Jenks (KJ), Lauren Everett, CLWA

2:45 III. General Updates

- A. Planning Grant R1 & R2
- B. Implementation Grant R1 & R2
- C. Next joint meeting with lower Santa Clara River watershed stakeholder group – November 1, 2012
- D. DWR sponsored one-day IRWMP interactive workshops

Lauren Everett, CLWA

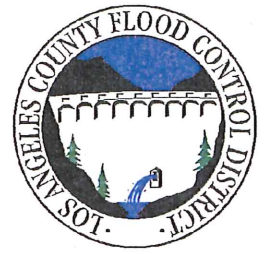
3:00 IV. Stakeholder Presentations

Los Angeles County Department of Public Works, Santa Clarita Water Division, Newhall County Water District, Santa Clarita Valley Sanitation District

4:30 VIII. Close - next meeting date: October 25, 2012



SANTA CLARA RIVER SOUTH FORK RUBBER DAM NO. 1 AND SPREADING GROUNDS



WHAT

The South Fork of the Santa Clara River joins the main Santa Clara River just east of the McBean Parkway crossing and turns south and then southwest to its headworks near the Interstate 5 crossing on the southwestern part of the City of Santa Clarita. The Los Angeles County Flood Control District proposes to install a rubber dam in the Santa Clara River South Fork and divert water to a new adjacent recharge facility.

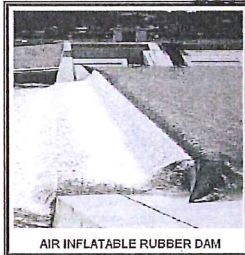
WHY

Rubber dams will greatly increase groundwater recharge from local storm water. This proposed project will primarily improve the health and long-term sustainability of the basin, increase local groundwater supplies, and reduce the region's reliance on water imports. Additional benefits are water quality enhancements that will help to alleviate downstream concerns. Trash will be collected at diversion facilities. The river

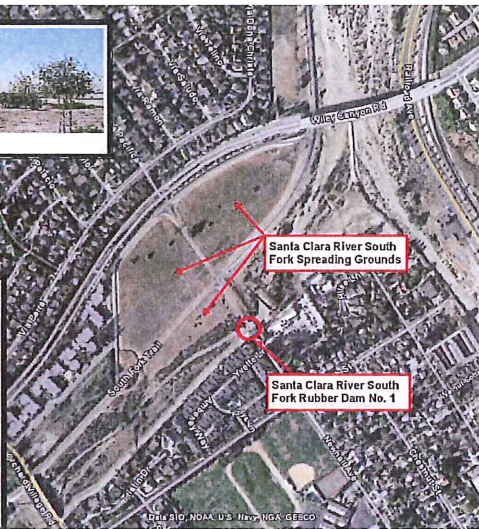
Santa Clarita River South Fork



NATIVE LANDSCAPING



AIR INFLATABLE RUBBER DAM



has recreation in the form of bike paths along river and additional recreation. These areas are adjacent to power line easements which may provide an opportunity for habitat restoration.

WHEN

The design phase was completed in March 2012. Environmental permits and land easements will need to be obtained. The construction phase could begin in the summer of 2014.

WHERE

Los Angeles County Supervisorial District 5

Preliminary Construction Cost Estimates: \$4 - \$6 million

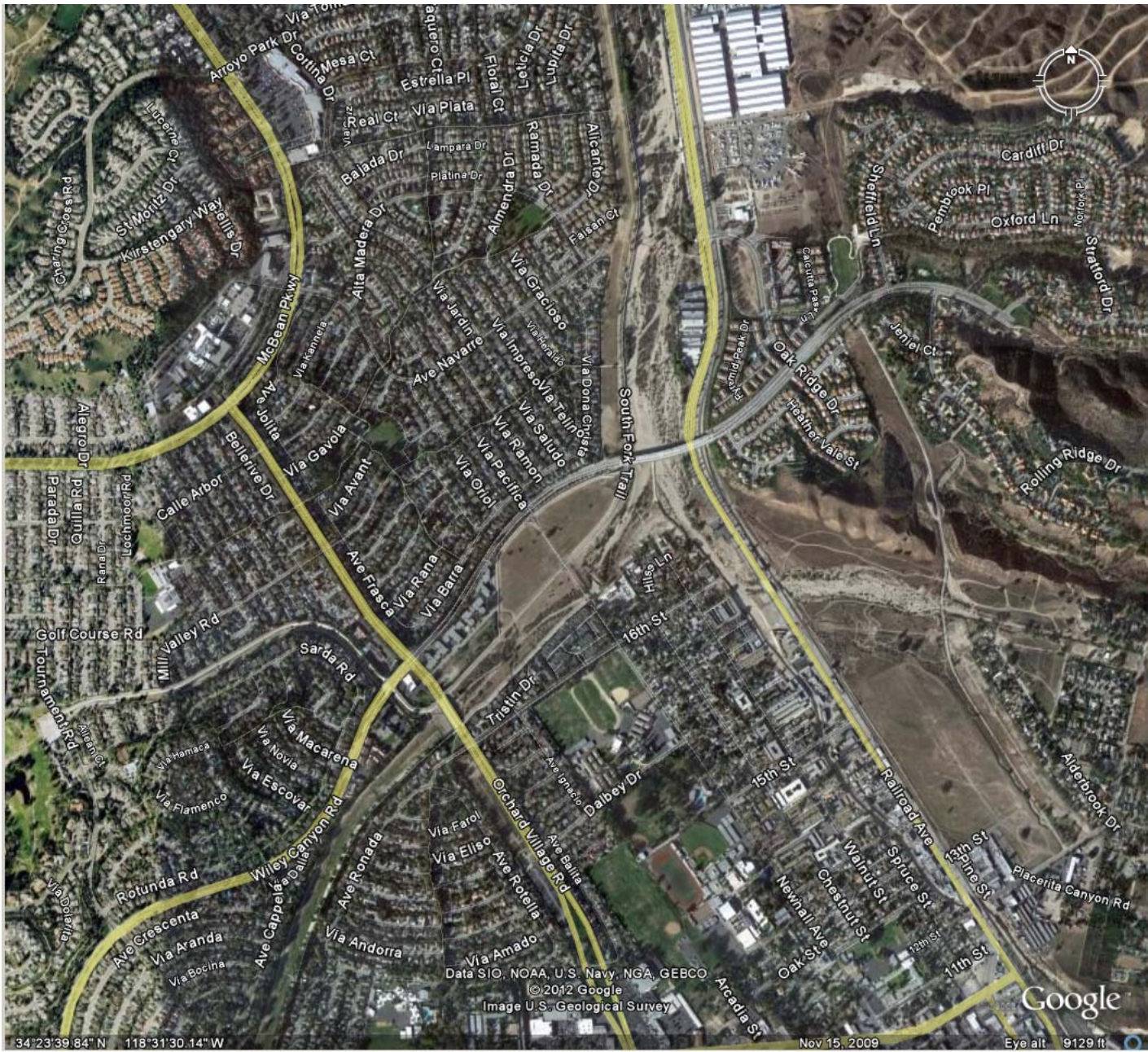
Cost sharing Partners & Funding Opportunities

LA County Flood Control District; Possible grant funding from IRWMP

Santa Clara River South Fork Rubber Dam No. 1 & Spreading Grounds



Los Angeles County Flood Control District
Water Conservation Planning Section



34°23'39.84" N 118°31'30.14" W

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
©2012 Google
Image U.S. Geological Survey

Nov 15, 2009

Eye alt 9129 ft

Proposed Water Recharge Project: Location Map





Existing Drop Structure at Rubber Dam Location No. 1 (Looking Upstream)



Pedestrian Bridge and Bike Trail at Dam Location No. 1 (Looking Downstream)



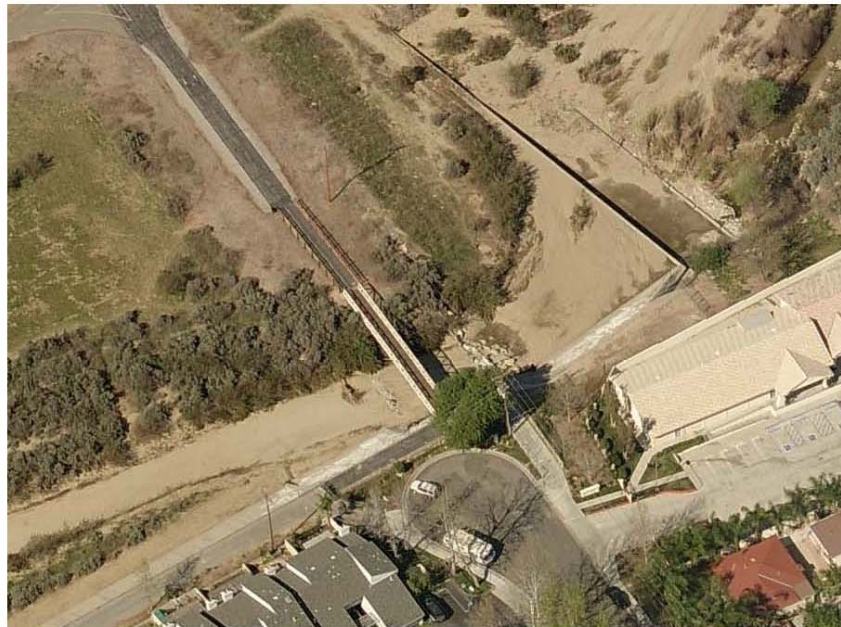
Existing Drop Structure at Rubber Dam Location No. 1 (Looking Upstream)



East Side Slopes Downstream of the Pedestrian Bridge (Looking Downstream)



Stream Bed and Proposed Location of Rubber Dam No. 1 (Looking Downstream)



Aerial Photo (Looking North)



Aerial Photo (Looking East)



Streamgaging Station in the River

Castaic Lake Water Agency Newhall County Water District
Los Angeles Waterworks District 36 Santa Clarita Water Division Valencia Water Company
Upper Santa Clara River Integrated Regional Water Management Plan
Project – Santa Clarita Valley Residential Turf Removal Program



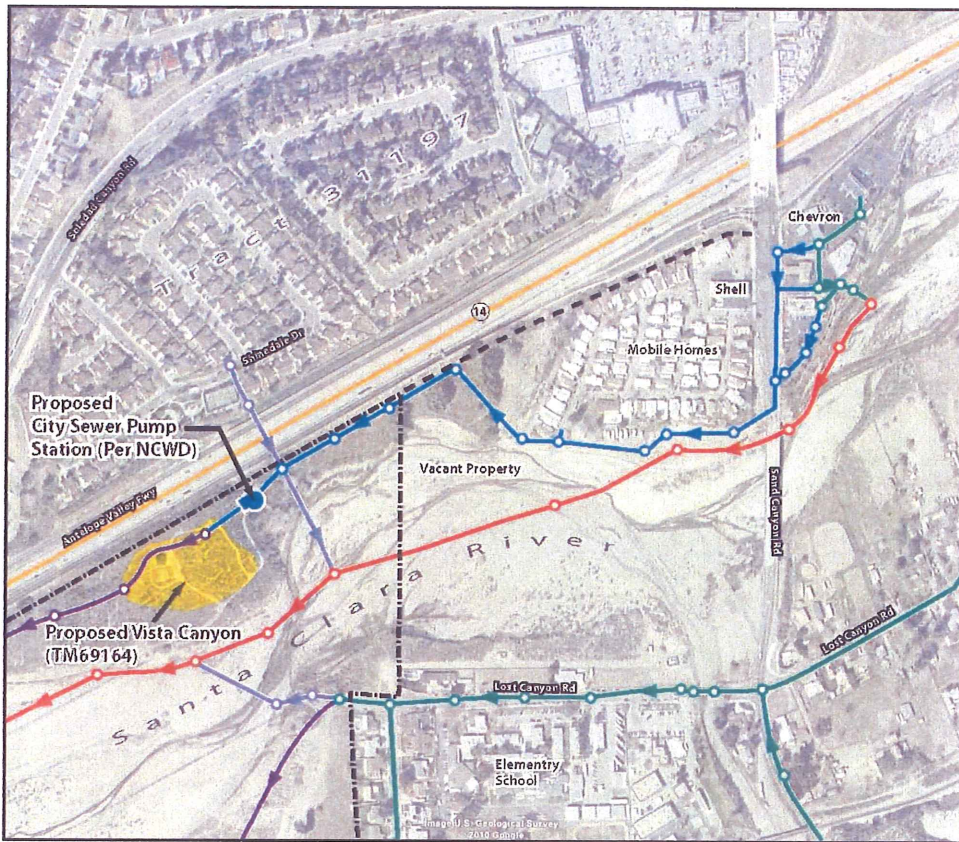
Readiness to Proceed

The project would offer residential customers a rebate of \$1.00 per sq ft of turf removed up to \$1,500 per residence. All water agencies have agreed to participate in the program.

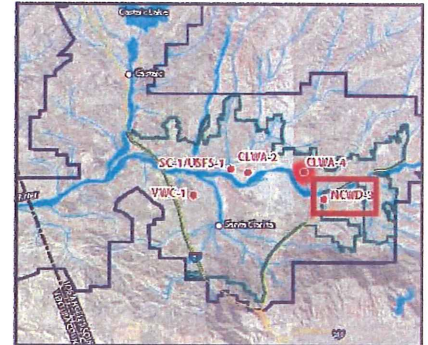
IRWMP Objectives Addressed – Phase 2 & 3 (Construction)

1. *Reduce Potable Water Demand* – The program would reduce potable water usage by 20 – 21 ac ft in year 1 and 40 – 42 ac ft in year 2.
2. *Flooding Hydromodification* – the program would reduce the amount of irrigation runoff from over watering turf.

Newhall County Water District
Upper Santa Clara River Integrated Regional Water Management Plan
Project – Sewer Trunk Line Relocation Phase II and III



Vicinity Map



Current Project Status – Phase 1 (Design and Permitting)

1. Engineering firm selected
2. cursory review of alternatives to a sewer lift station underway
3. Discussions underway regarding areas requiring easements

Readiness to Proceed – (At Completion of Phase 1)

1. Local Cost Share – NCWD will budget for the shared portion
2. Phase 1 includes – construction drawings, permitting, CEQA, and cost estimates
3. Consistent with Land Use Plans

IRWMP Objectives Addressed – Phase 2 & 3 (Construction)

1. *Increase Water Supply* – the avoidance of lost groundwater supply in the event of a sewer break located in the Santa Clara River
2. *Improve Water Quality* – the avoidance of groundwater quality degradation in the event of a sewer break in the Santa Clara River
3. *Promote Resource Stewardship* – the avoidance of wildlife and riparian habitat exposure to raw sewage in the event of a sewer break in the Santa Clara River.

**Newhall County Water District
Upper Santa Clara River Integrated Regional Water Management Plan
Project – Pellet Water Softening Treatment Plant Phase 1**

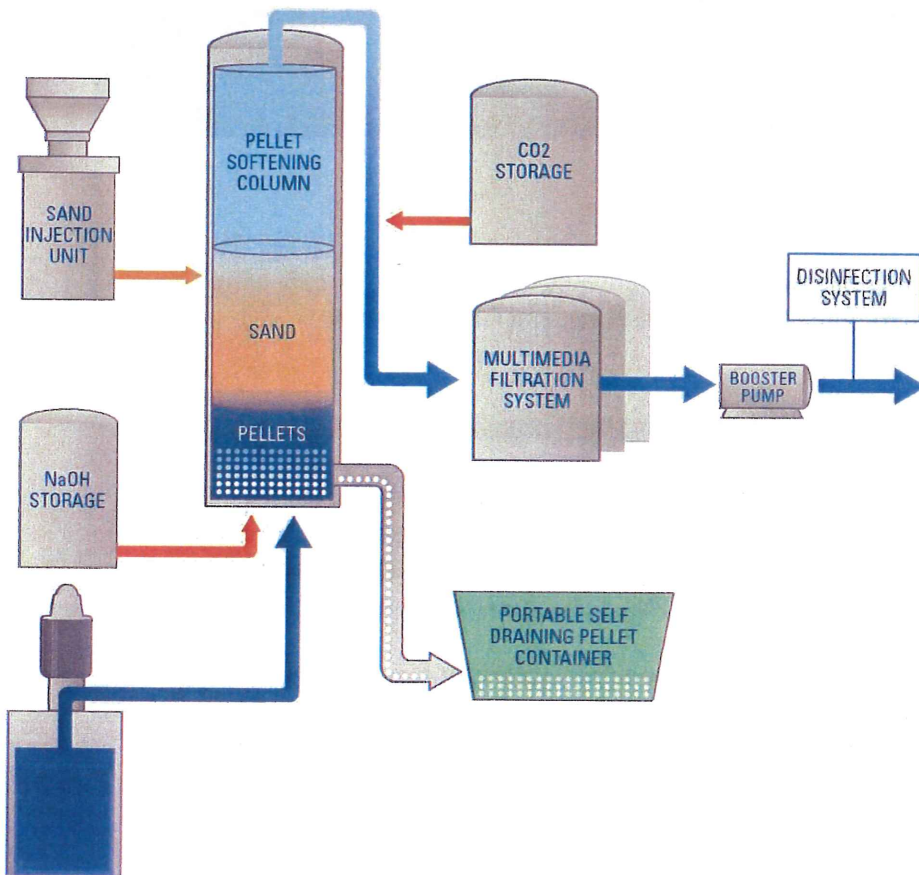
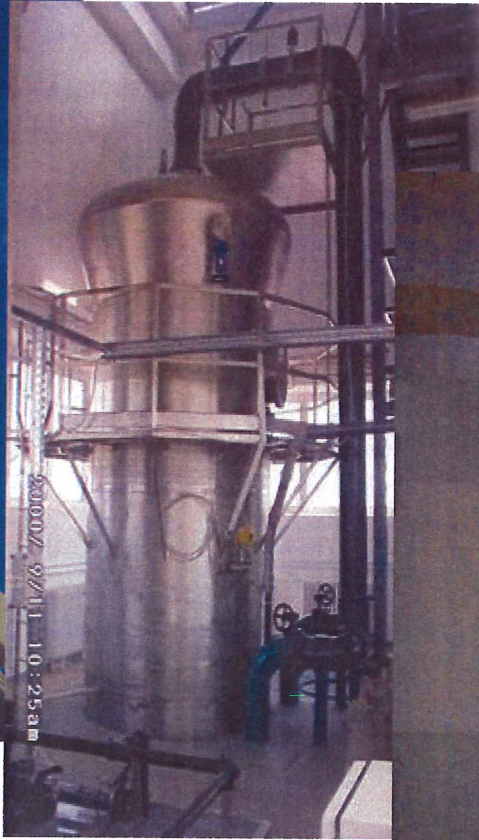
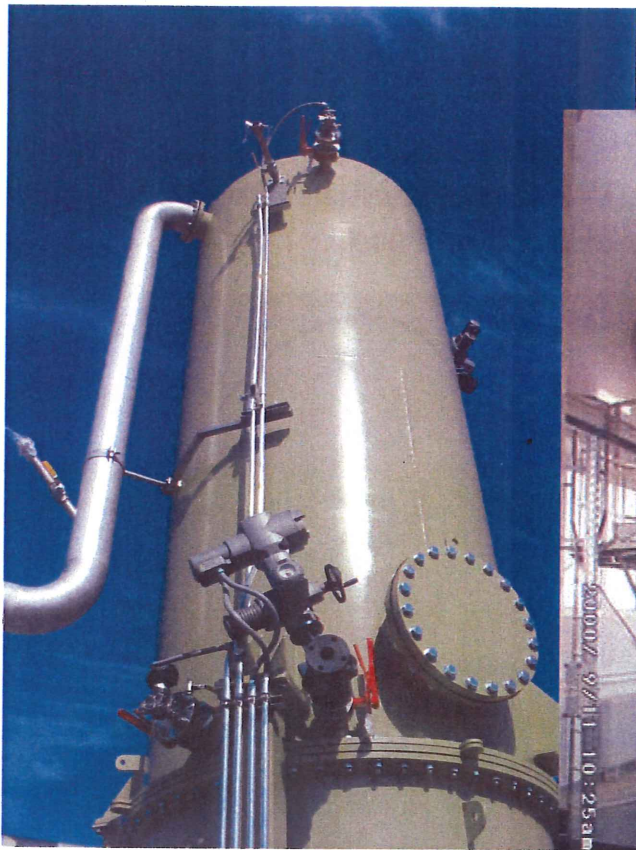


Readiness to Proceed – (Current Status)

1. Local Cost Share – NCWD will budget for the shared portion
2. Phase 1 will provide a feasibility report, conceptual design, and cost estimates
3. Consistent with Land Use Plans

IRWMP Objectives Addressed – Phase 1 (Feasibility, Conceptual Design, and Cost Estimates)

1. *Reduce Potable Water Demand* – hard water contributes to the inefficiency of appliances and the increased use of detergents and soaps resulting in additional water use
2. *Improve Water Quality* – improves the aesthetic quality of water improving customer satisfaction and longer lasting appliances. In addition, reduction in the number of POU softeners.
3. *Promote Resource Stewardship* – eliminates the need for water softeners and would help remove the remaining SRWS currently in use
4. *Reductions in GHG* – reduce the number of exchange canister water softeners therefore reducing the number of vehicles on the road exchanging these devices



BENEFITS:

- Softer water
- Less detergent and soap use
- Reusable by-product
- Eliminates need for POU Softeners
- More efficient than POU Softeners
- Cost Effective

SCWD Water Use Efficiency Strategic Plan

IRWMP Proposition 84 Round 2
Implementation Funding

SCWD Water Use Efficiency Strategic Plan

- ▶ Completed July 2012
- ▶ Strategy to provide tools, incentives and education needed to promote WUE and affect behavioral changes
- ▶ Targeted a suite of programs to achieve 20% by 2020 goal
- ▶ Designed to be implemented immediately
- ▶ All programs were vetted for cost effectiveness

Project Need

- ▶ Valleywide WUE SP was completed in 2008
- ▶ Acts as “umbrella” of projects for all areas of the Valley where all purveyors are involved
- ▶ The SCWD WUE Plan focuses on additional conservation programs needed to fill gaps
- ▶ Together, both plans work toward achieving SBX7-7 goal of reducing water demand by 20% by 2020 and promoting stewardship of our water resources

Project Description

- ▶ Create incentives and develop outreach programs to encourage behavioral changes
- ▶ Ten programs that after implementation will save over 4400 AF by 2020:
 - Residential Audits
 - Low-Flow Showerhead Distribution
 - Ultra-High Efficiency Toilet Distribution
 - MF/Institutional HE Toilets (and direct install)
 - Turf Removal
 - High Efficiency Nozzles Distribution
 - Large Landscape WBIC Direct Install
 - Residential/Commercial Rebate Program
 - Large Landscape Water Budgets

IRWMP Objectives Addressed

- ▶ Reduce Potable Water Demand
- ▶ Increase Water Supply
- ▶ Improve Water Quality
- ▶ Promote Resource Stewardship
- ▶ Promote Projects and Actions That Reduce Greenhouse Gas (GHG) Emissions

Project Readiness

- ▶ Project is ready to implement
- ▶ Currently implementing 3 of 10 programs:
 - Low-flow showerheads
 - HE irrigation sprinkler nozzles
 - HET and HEW rebates

Project Ranking

- ▶ Eligibility – Yes
- ▶ Readiness to proceed – 100 of 200 possible points
- ▶ Multiple Objectives – 75 of 100 points
- ▶ Multiple Resource Mgmt Strategies – 8 total; 40 points
- ▶ DACs, Native Americans and Environmental Justice Concerns – NA
- ▶ Consistent with Land Use Plans – Yes, 100 points
- ▶ Improves Interregional Coordination – No



SANITATION DISTRICTS OF LOS ANGELES COUNTY

USCR IRWMP Stakeholder Meeting

SCVSD Project Presentations

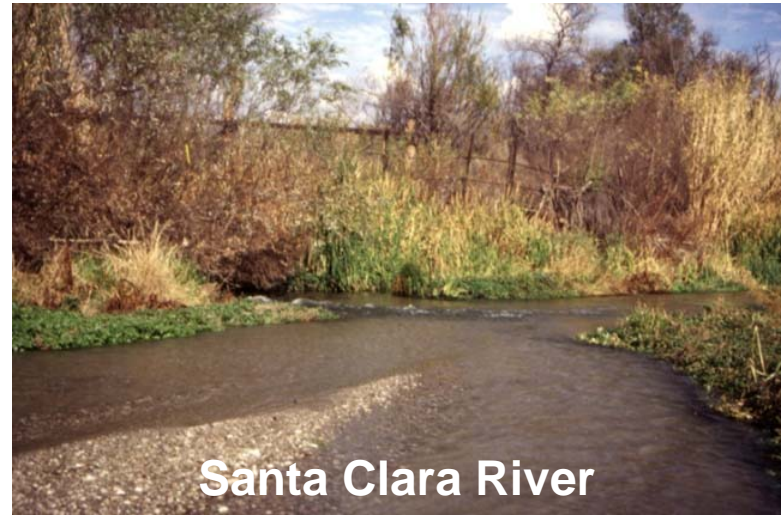
Santa Clarita Valley Sanitation District

-
-
-
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Upper Santa Clara River Total Maximum Daily Load

-
-
-
-



Santa Clara River

SCVSD-1

**Automatic Water Softener
Rebate and
Public Outreach Program**

Automatic Water Softener Rebate Program – Phase II

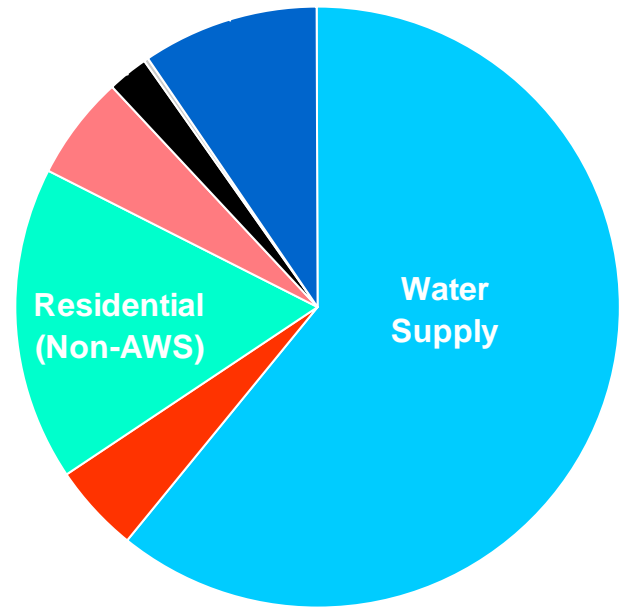
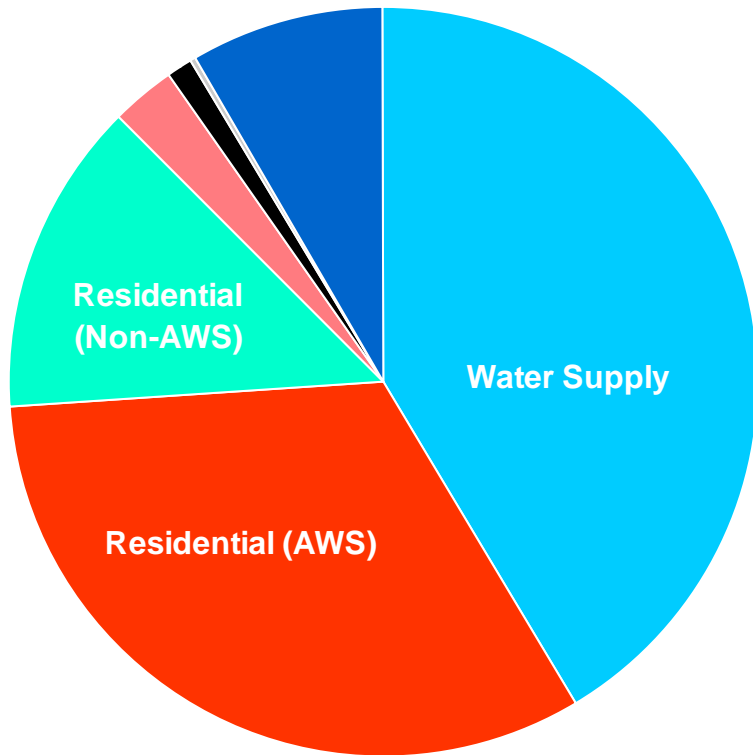


Results To Date

Public Outreach Element (through September 15, 2012)	AWS Removed
Phase I & II Rebate Program Removals	7,070
Rental AWS Removals	835
TOTAL REMOVALS	7,905
ESTIMATED REMAINING AWS in OPERATION	500

Water Softener Ban Success

Percent Chloride Contribution Reduced from 33% to 5%



SCVSD-1 Project



SCVSD-1 Project (Cont)

-
- -
 -
-
-

IRWMP Objectives Addressed by Project



IRWMP Resource Management Strategies



SCVSD-2

**Saugus Water Reclamation
Plant**

**Ultraviolet Light Disinfection
Facility**

Ultraviolet Light (UV) Disinfection



Saugus WRP Layout



Proposed UV Facility Location



Replacing Chlorination with UV light disinfection



IRWMP Objectives Addressed by Project

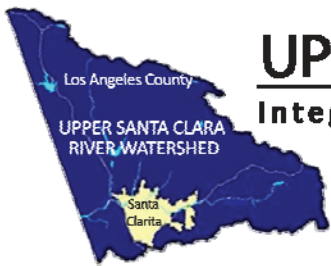


IRWMP Resource Management Strategies



Stakeholder Meeting, October 25, 2012

- Agenda
- Stakeholder Project Presentations:
 - o Bouquet Canyon Network
 - o City of Santa Clarita
 - o CLWA



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Stakeholder Meeting

Thursday, October 25, 2012, 2:30 pm – 4:30 pm

Newhall County Water District Headquarters

23780 North Pine Street, Newhall, CA 91321

Meeting Objectives:

- Consultant Progress & Funding Updates
- Stakeholder Project Presentations

AGENDA

2:30 I. Welcome

Lauren Everett, Castaic Lake Water Agency (CLWA)

2:35 II. Consultant Progress Updates

A. IRWMP Update and Climate Change Technical Study

B. Salt and Nutrient Management Plan

Meredith Clement, Kennedy/Jenks (KJ), Lauren Everett, CLWA

2:45 III. General Updates

A. Planning Grant R1 & R2

B. Implementation Grant R1 & R2

C. DWR IRWMP interactive workshop – November 1, 2012

D. Next joint meeting with lower Santa Clara River watershed stakeholder group – November 8, 2012

Lauren Everett, CLWA

3:00 IV. Stakeholder Presentations

A. Recap of September Presentations

B. New Presentations

Agricultural Access/Bouquet Canyon Network, City of Santa Clarita, Castaic Lake Water Agency

4:30 VIII. Close



Bouquet Canyon Creek Restoration Project

Upper Santa Clara River Integrated Regional Water Management Plan

Who, What, Why, Where, & How

Bouquet Canyon Network

Fall 2012

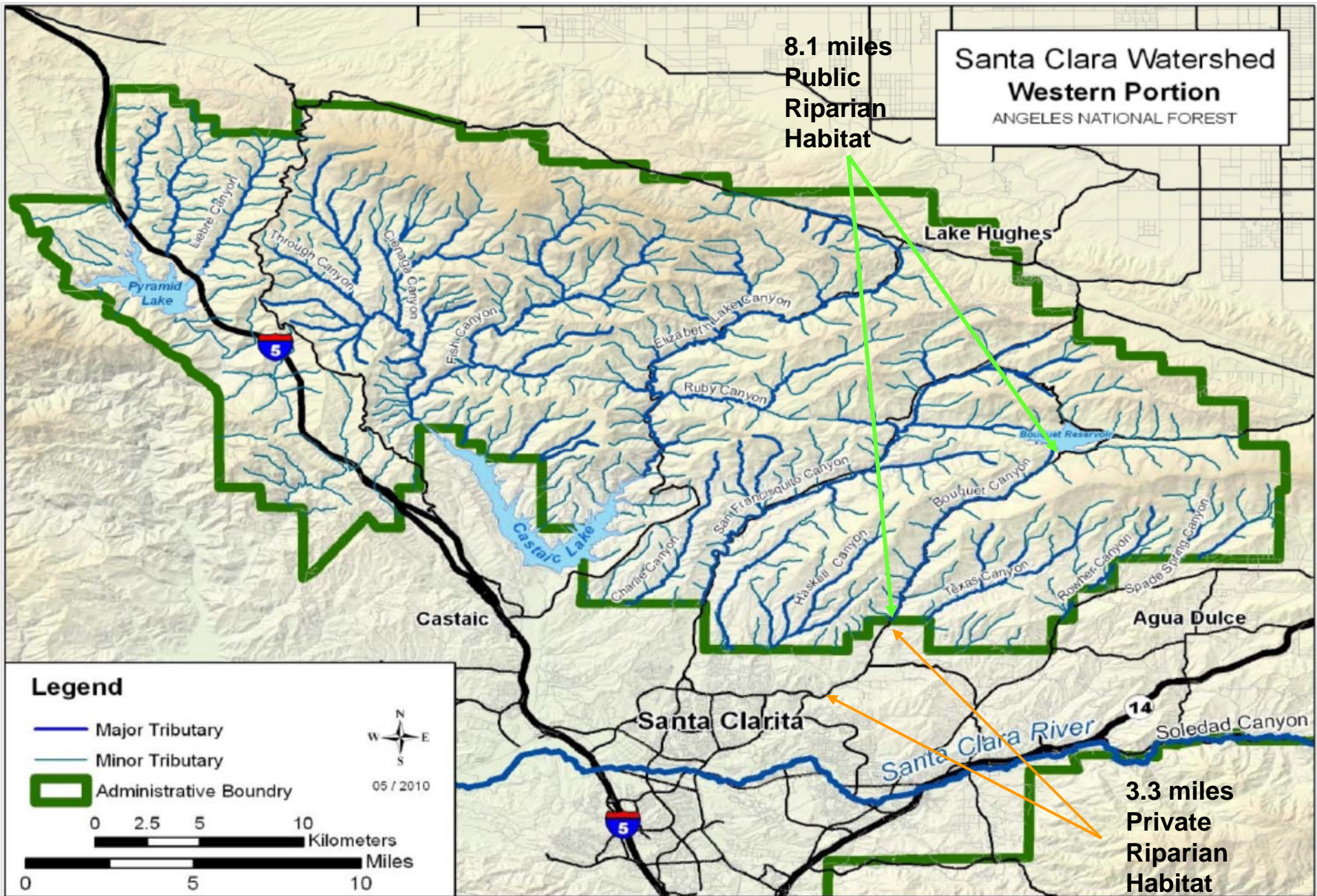
Who is concerned?

- Bouquet Canyon Private Property Owners (BCN)
- Natural Resources Conservation Service(NRCS)
 - LA County Fire (Bouquet Canyon Unit)
- AV Resource Conservation District (RCD)
 - US Forest Service (USFS)

What is the concern?



Protect Critical Watersheds



Why is it a concern ?

“ Bureau of Land Management estimates that the United States is losing 6,000 acres of public land every day to invasive non-native plants, rendering land economically useless and biologically impoverished ”

-The Role of Herbicides in Preserving Biodiversity

Sigg, J. October 1998, Fremontia 26:4

Historical Guidance

- **Spanish Explores** brought *Arundo donax* to construct missions between 1600-1800s.
- **Farms** exploited *Arundo donax* to delineate agricultural lands, reduce soil erosion, and create wind- breaks in the 1800-1900s.
- **Musical reeds** were created from *Arundo donax* between the 1900-1970s by the Rico Reed Company and Forrest Music Company in California.
- **Phytoremediation traits** of *Arundo donax* is currently being researched by Universities.
- **Future bioenergy crop.**
- **San Francisquito Canyon**


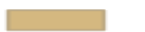




DO
NOT
PASS

Where is it a concern?



LOS ANGELES COUNTY
BOUQUET CANYON PARCELS
 UNINCORPORATED SANTA CLARITA VALLEY

LEGEND

-  STREAMS
-  PARCELS INTERSECTING BOUQUET CANYON STREAM BED
-  OTHER PARCELS
-  NATIONAL FOREST
-  CITY OF SANTA CLARITA
-  UNINCORPORATED SANTA CLARITA VALLEY



COUNTY OF LOS ANGELES
 DEPT. OF REGIONAL PLANNING
 320 W. TEMPLE ST.
 LOS ANGELES, CA 90012

PRINTED: _____

MAP PREPARED BY DRP GIS SECTION, NOVEMBER 2010.

Forestry Boundary

ANGELES NATIONAL FOREST



Approximately 40 contiguous private and county properties interface with Bouquet Canyon Creek.

City Limits

How much concern is there?

I. Do we anticipate the control of invasive weeds prior to their establishment ?

II. Do we desire to conserve the biological resources of our local ecology; specifically native flora, fauna, and especially water ?

III. Do we want restore our local tributories in order to preserve and secure our watershed for the future ?

Five Majors Steps

First Task

Secure proper permits and funding for the project.

Biological Assessment / RCD



Initial Funds of WRP

Project Task	WRP	BCN	NRCS	CEI	CCC	SUBTOTAL TASK
I. Map & Biological Monitoring	\$2,700.00	\$1,000.00	\$1,500.00	\$2,400.00		\$10,700.00
II. Remove & Dispose	\$8,300.00	\$1,600.00			\$4,500.00	\$14,400.00
III. Prevent Reemergence	\$800.00	\$300.00				\$1,100.00
IV. Restore, Revegetate, & Educate	\$5,600.00		\$1,500.00			\$4,000.00
AVRCD Administration	\$1,840.00					\$1,840.00
Fuel (Diesel, Gas, Propane)	\$1000.00					\$1000.00
TOTAL	\$20,240.00	\$2,900.00	\$3,000.00	\$2,400.00	\$4,500.00	TOTAL: \$33,040.00

Budget Notes

BCN = Bouquet Canyon Network (Private Property owners of 3.5 mile stretch of Bouquet Canyon)

NRCS = Natural Resources Conservation Service and Earth Team Volunteer

CEI = Cooper Ecological Monitoring, Inc.

CCC = California Conservation Corps

AVRCD = Antelope Valley Resource Conservation District (Grant Administration 10%)

Note: Contributions by BCN, NRCS, CEI, and CCC are “in-kind” or donated hours of labor, equipment, or expertise provided to the project.

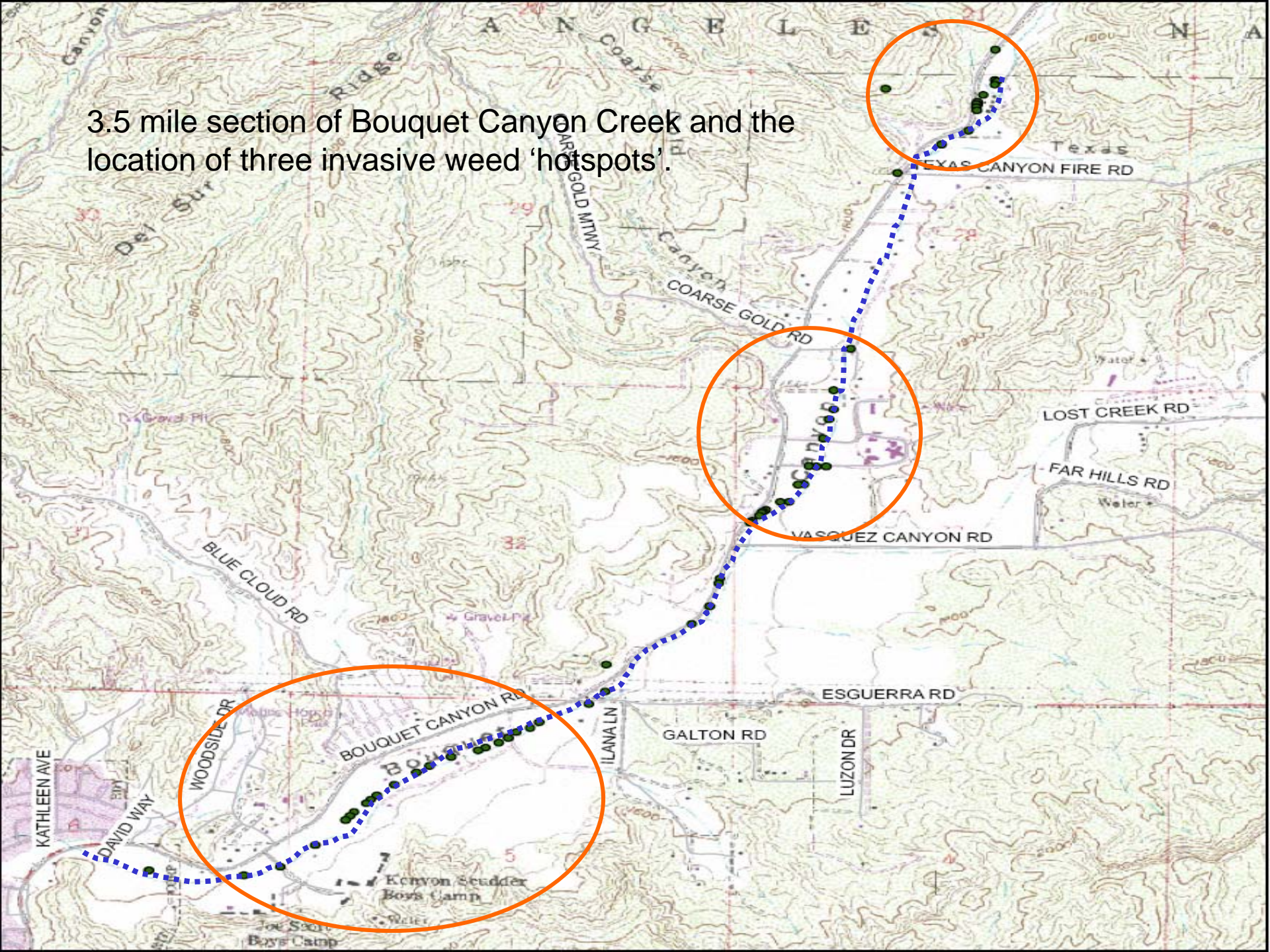
Second Task

Create a site-specific map of *Arundo donax* sites.

NRCS



3.5 mile section of Bouquet Canyon Creek and the location of three invasive weed 'hotspots'.



Third Task

To remove and dispose of *Arundo donax* sites.

Volunteers

(LA County Fire, Bible Tabernacle, CCC)



Fourth Task

To prevent the reemergence of *Arundo donax* sites.

Integrated Pest Management

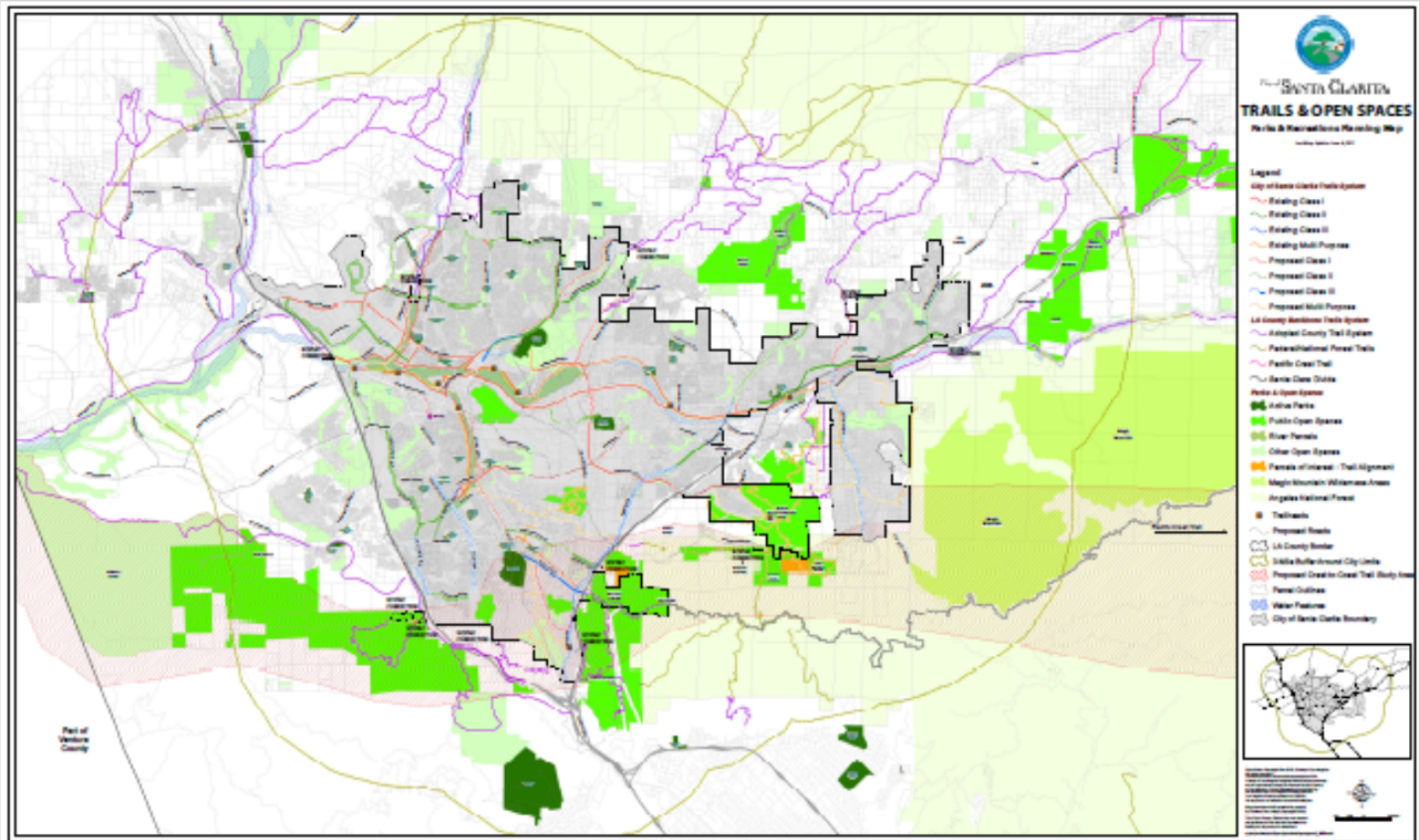


Fifth Task

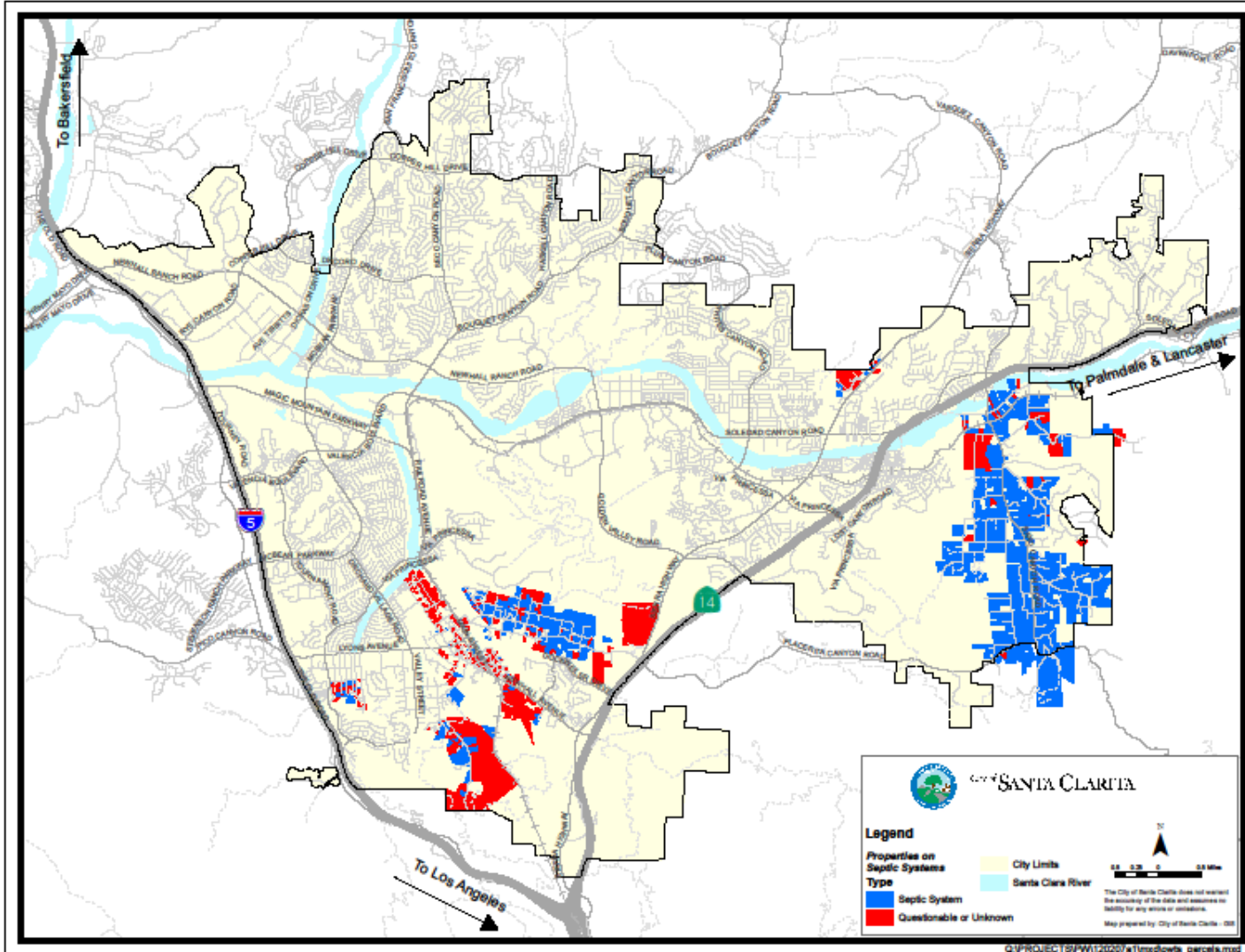
To restore native vegetation within Bouquet Canyon

Private Property Owners
LA County Fire Department











UPPER SANTA CLARA RIVER WATERSHED
ARUNDO AND TAMARISK REMOVAL PROGRAM
LONG-TERM IMPLEMENTATION PLAN



VENTURA COUNTY RESOURCE CONSERVATION DISTRICT

JUNE 2006









Project	Request	Match	Total
Low Impact Development	\$4,000,000 to \$6,000,000	50%	\$8,000,000 to \$12,000,000
Voluntary Septic Tank Retirement	\$1,000,000	25%	\$1,250,000
Santa Clara River Arundo Removal Project	\$2,000,000	25%	\$2,500,000
Total	\$7,000,000 to \$9,000,000	40%	\$11,750,000 to 15,750,000



Santa Clarita Valley Water Use Efficiency Strategic Plan



Background

- Santa Clarita Valley Water Use Efficiency Strategic Plan (SCV WUE) adopted in 2008
- SCV WUE Strategic Plan included (\$1,000,000 budget)
 - High-Efficiency Toilet Rebates (single and multi-family)
 - Large Landscape Audits with incentives
 - CII Audits with incentives
 - Residential Landscape Contractor Certification (with wbic)
 - High-Efficiency Washing Machine Rebates
 - New Construction Building Codes
 - Social Marketing Program

Project Description

- Programs in SCV WUE Strategic Plan update
- Ready to implement
- 2.5 million dollars over 2 years



Program Development

The screenshot shows a web browser window displaying the SCV H2O Programs website. The browser's address bar shows the URL www.scvh2oprograms.com. The website features a blue and white color scheme with a water-themed background. The main navigation bar includes links for "Current SCV Family Programs", "Helpful Tips & Support", "Agency Information", and "User Discussion Forum". A search bar is located on the left side. The main content area is titled "Welcome to SCV H2O Programs" and provides instructions for getting started, including validating an account, entering account details, and logging in. A "Validated User Login" section includes fields for "Username" and "Password" and a "Log in" button. The footer contains a description of the SCV Family of Water Suppliers and logos for the member agencies: Castaic Lake Water Agency, Los Angeles County Waterworks District #36, Newhall County Water District, Santa Clarita Water Division, and Valencia Water Company.

SCV H2O Programs

Current SCV Family Programs | Helpful Tips & Support | Agency Information | User Discussion Forum

Search
Search this site:

Validated User Login
Once you have validated your account, please login below. If you have not validated your account, please do so on our agency validation page.

Username: *

Password: *

[Request new password](#)

Welcome to SCV H2O Programs
To get started, simply follow these three steps. It's fast and it's easy!

1. Validate your account by selecting the icon of your agency below.*
2. Enter your account number, zip code and email address.
3. The system will create your account and **will automatically log you in**. You can now sign up for classes, participate in our user forums, and get access to great water saving resources.**

* You only need to validate your account on your first visit. On subsequent visits all you need to do is log in with the username and password you created at validation.

** You need to write down your username and password for future access to the site.

Navigation

The SCV Family of Water Suppliers (Family) is comprised of Castaic Lake Water Agency, Los Angeles County Waterworks District #36, Newhall County Water District, Santa Clarita Water Division, Valencia Water Company and the City of Santa Clarita. Together, they work to promote the efficient use of water and fund programs to reduce the per capita water use in our Valley.

Site by: Droplet Technologies

IRWMP Objectives Addressed

- Reduce Potable Water Demand
- Improve Water Quality
- Promote Resource Stewardship
- Promote Projects and Actions That Reduce Greenhouse Gas (GHG) Emissions

Project Ranking

- Eligibility – Yes
- Readiness to proceed – 175 of 200 possible points
- Multiple Objectives – 60 of 100 points
- Multiple Resource Mgmt Strategies – 9 total; 45 points
- DACs, Native Americans and Environmental Justice Concerns – N/A
- Consistent with Land Use Plans – Yes, 100 points
- Improves Interregional Coordination - No

Castaic Lake Water Agency

Castaic Conduit

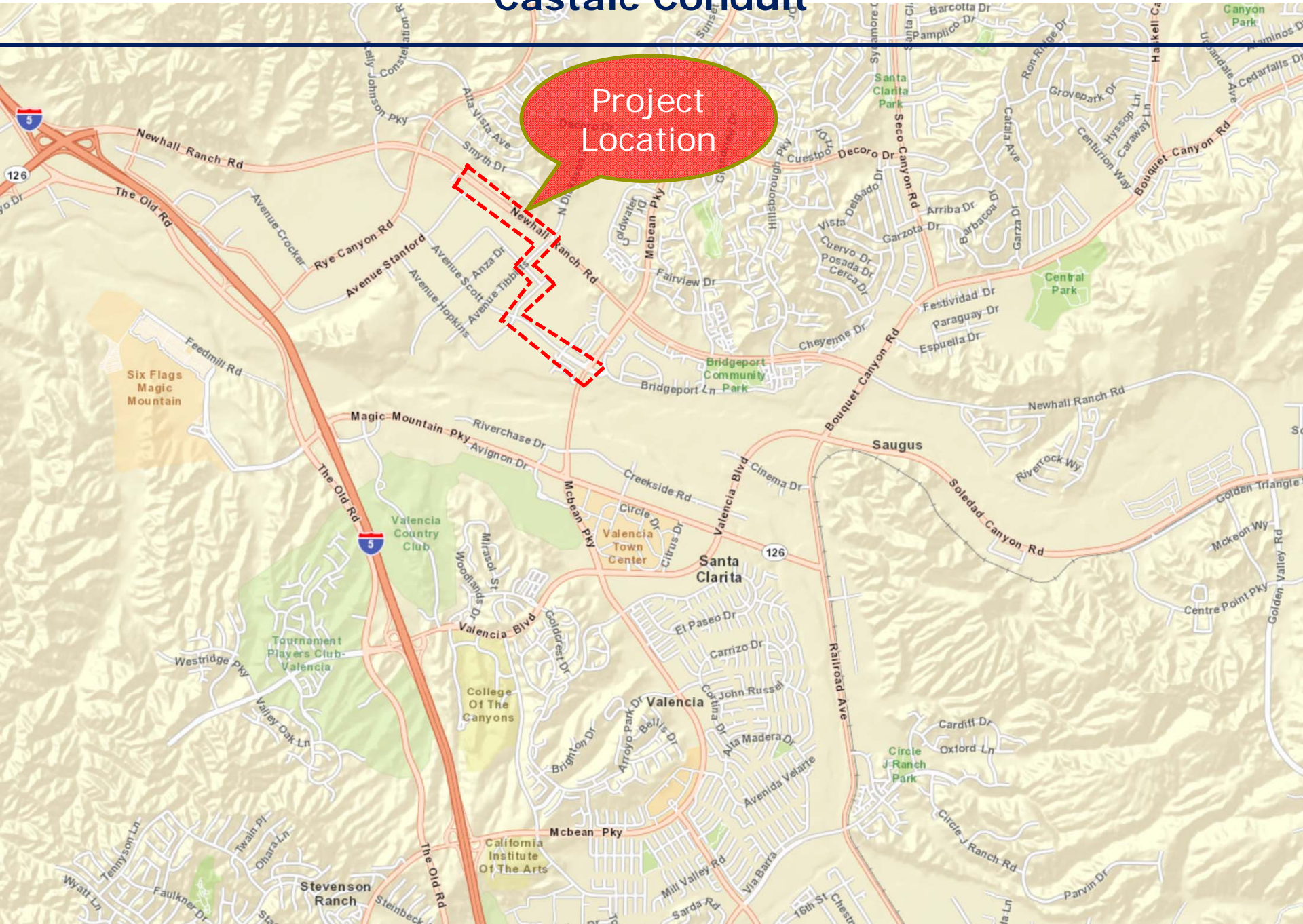
IRWMP Proposition 84 Round 2 Implementation Funding

IRWMP Stakeholder Meeting

October 25, 2012



Castaic Conduit



Project Location

Project Need & Description

Need

- Removes an existing pipeline constriction.
- Improves operational flexibility, system reliability, and system pressure.

Description

- Installation of 7,960 feet of 54-inch diameter pipeline and appurtenances



Castaic Conduit Project Readiness

- 💧 Project is ready to implement**
 - 💧 Preliminary design complete**
 - 💧 CEQA complete**
 - 💧 Permits in process**
 - 💧 Construction drawings in process**
 - 💧 Design funded in FY 2012/13 capital budget**
 - 💧 Anticipate Construction: FY 2013/14**
 - 💧 Estimated Total Project Cost**
 - 💧 Capital: \$14,910,000 to \$16,000,000**
 - 💧 O&M: \$5,000 per year**

IRWMP Objectives and Water Management Strategies

IRWMP Objective

- Increase Water Supply reliability by improving the system's operational efficiency

Water Management Strategies

- Improve Operational Efficiency and Transfers
 - ✓ Conveyance

Castaic Conduit Project Ranking

- 💧 Eligibility – Yes**
- 💧 Readiness to proceed – 150 of 200 possible points**
- 💧 Multiple Objectives – 15 of 100 points**
- 💧 Multiple Resource Mgmt Strategies – 1 total; 5 points**
- 💧 DACs, Native Americans and Environmental Justice Concerns – NA**
- 💧 Consistent with Land Use Plans – Yes, 100 points**
- 💧 Improves Interregional Coordination - No**

Foothill Feeder Connection Project

IRWMP Proposition 84 Round 2
Implementation Funding

Foothill Feeder Connection Project

- ▶ Since RVWTP start-up in 1996, CLWA has received SWP water through a “temporary” connection, which now has 60 MGD capacity
- ▶ Raw SWP water from Castaic Lake is wheeled to RVIPS and RVWTP via MWDSC’s Foothill Feeder pipeline
- ▶ Permanent connection design completed 10/2012
- ▶ Can be implemented immediately

Project Need

- ▶ Capacity is needed
 - Current RVWTP permitted capacity is 66 MGD
 - Ultimate RVWTP capacity could be up to 90 MGD
 - Permanent connection will allow for 90 MGD
 - Allow RVWTP to operate at full current rated capacity of 66 MG
- ▶ “Permanent” connection is required
- ▶ Project will provide additional tie-in from Foothill Feeder to CLWA raw water line to serve as a back-up when primary feeder is out for maintenance

Project Description

- ▶ Construct and install new vaults, pipelines, valves, electrical equipment and control systems to increase capacity of line that feeds RVIP Station from 60 MGD to 90 MGD.

IRWMP Objectives Addressed

- ▶ Increase Water Supply

Project Readiness

- ▶ Design is complete
- ▶ Project is ready to implement

Project Ranking

- ▶ Eligibility – Yes
- ▶ Readiness to proceed – 175 of 200 possible points
- ▶ Multiple Objectives – 15 of 100 points
- ▶ Multiple Resource Mgmt Strategies – 1 total; 5 points
- ▶ DACs, Native Americans and Environmental Justice Concerns – NA
- ▶ Consistent with Land Use Plans – Yes, 100 points
- ▶ Improves Interregional Coordination – No

Castaic Lake Water Agency

Distribution System – Rio Vista Valve No. 2 (RV-2) Modifications

IRWMP Proposition 84 Round 2 Implementation Funding

IRWMP Stakeholder Meeting

October 25, 2012



Distribution System – RV-2 Modifications



Project Location

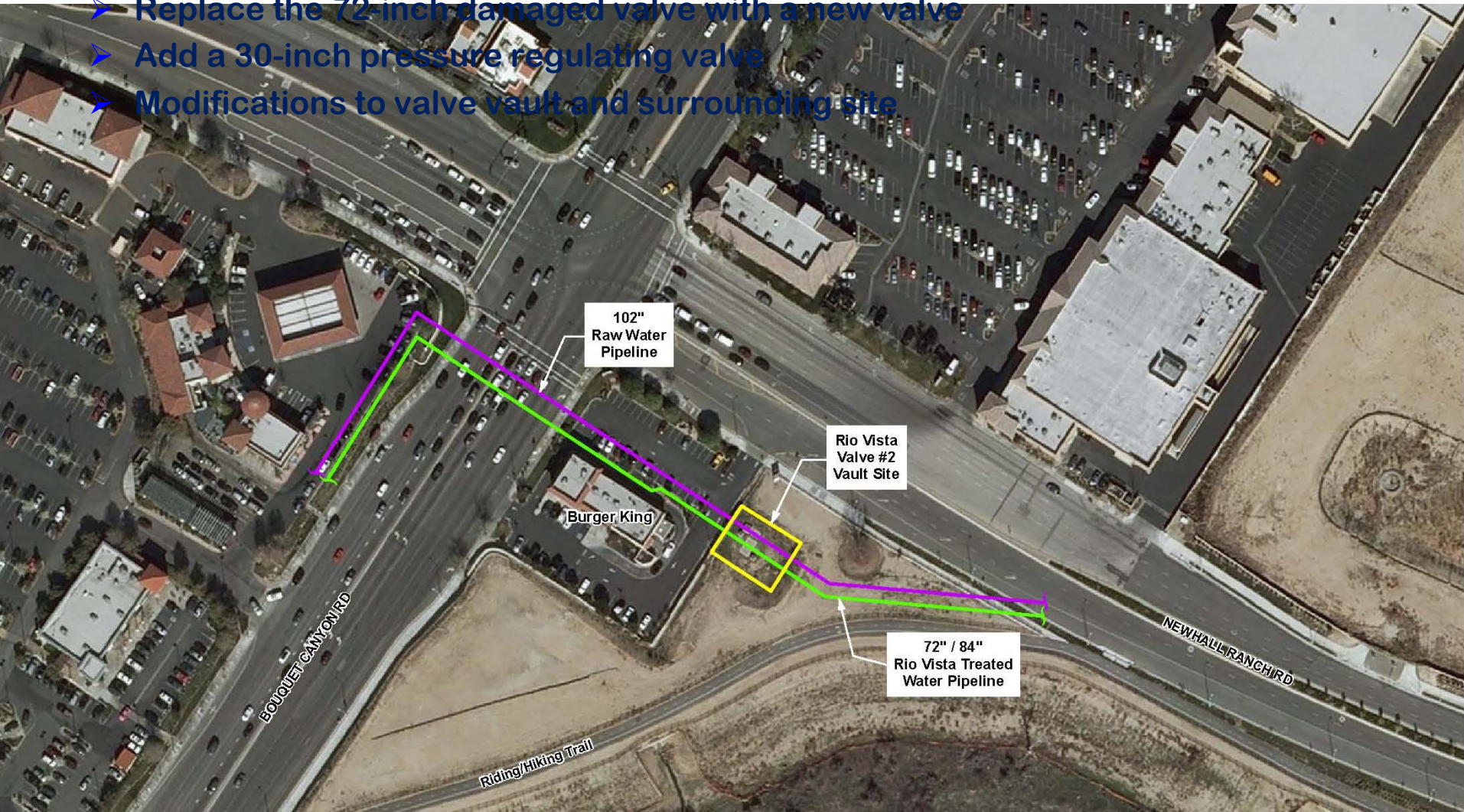
Project Need & Description

Need

- Improves operational flexibility and system reliability

Description

- Replace the 72-inch damaged valve with a new valve
- Add a 30-inch pressure regulating valve
- Modifications to valve vault and surrounding site



Distribution System – RV-2 Modifications

Project Readiness

- 💧 **Project is ready to implement**
 - 💧 **Preliminary design complete**
 - 💧 **CEQA complete**
 - 💧 **Permits in process**
 - 💧 **Construction drawings in process**
 - 💧 **Design funded in FY 2012/13 capital budget**
 - 💧 **Anticipate Construction: FY 2013/14**
 - 💧 **Estimated Total Project Cost**
 - 💧 **Capital: \$2,880,000 to \$3,200,000**
 - 💧 **O&M: \$5,000 per year**

IRWMP Objectives and Water Management Strategies

IRWMP Objective

- Increase Water Supply reliability by improving the system's operational efficiency

Water Management Strategies

- Improve Operational Efficiency and Transfers
 - ✓ Conveyance
 - ✓ System Reoperation

Distribution System – RV-2 Modifications

Project Ranking

- 💧 **Eligibility – Yes**
- 💧 **Readiness to proceed – 150 of 200 possible points**
- 💧 **Multiple Objectives – 15 of 100 points**
- 💧 **Multiple Resource Mgmt Strategies – 2 total; 10 points**
- 💧 **DACs, Native Americans and Environmental Justice Concerns – NA**
- 💧 **Consistent with Land Use Plans – Yes, 100 points**
- 💧 **Improves Interregional Coordination - No**

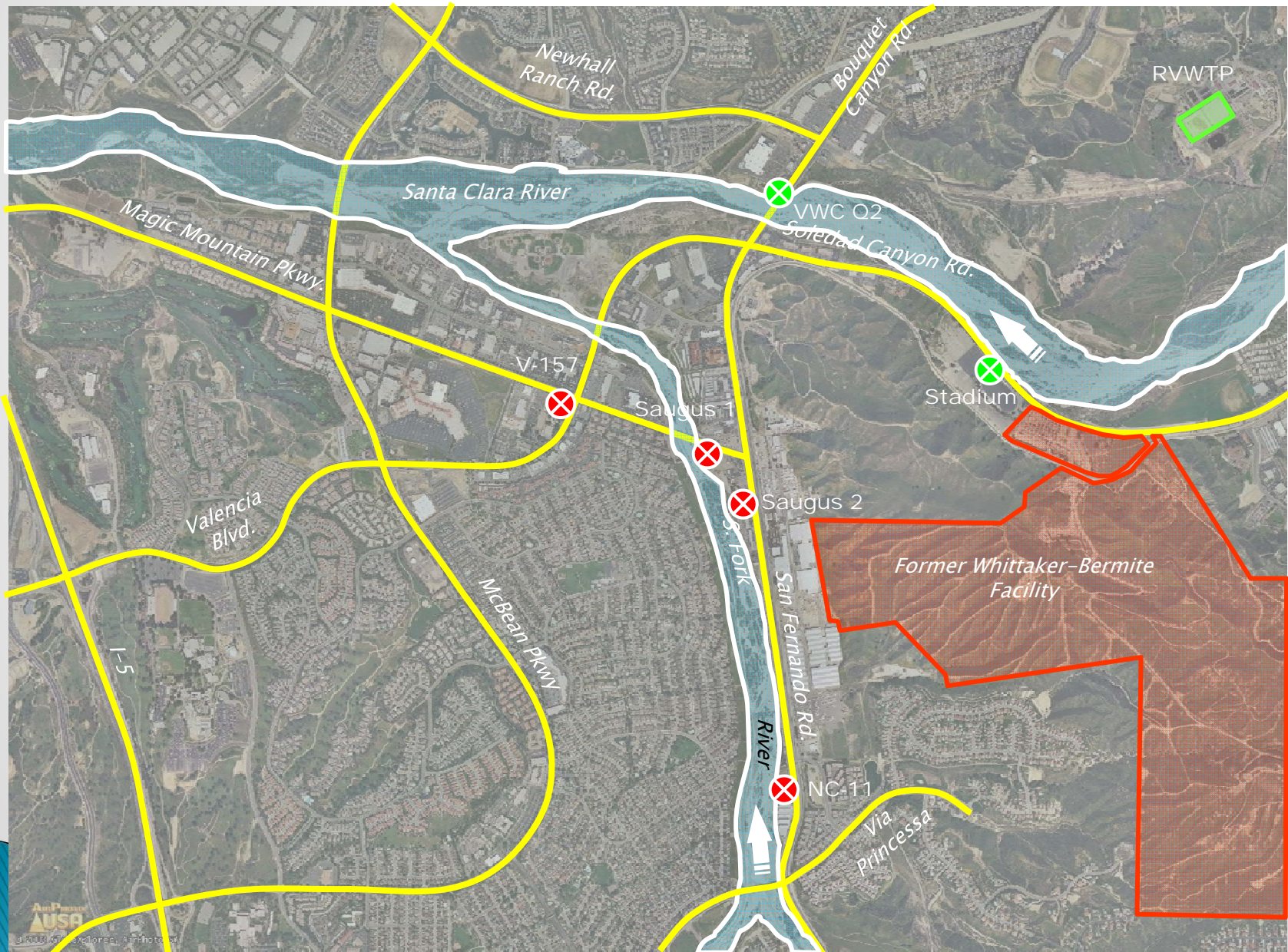
West Saugus Groundwater Resources Monitoring Project

IRWMP Proposition 84 Round 2
Implementation Funding

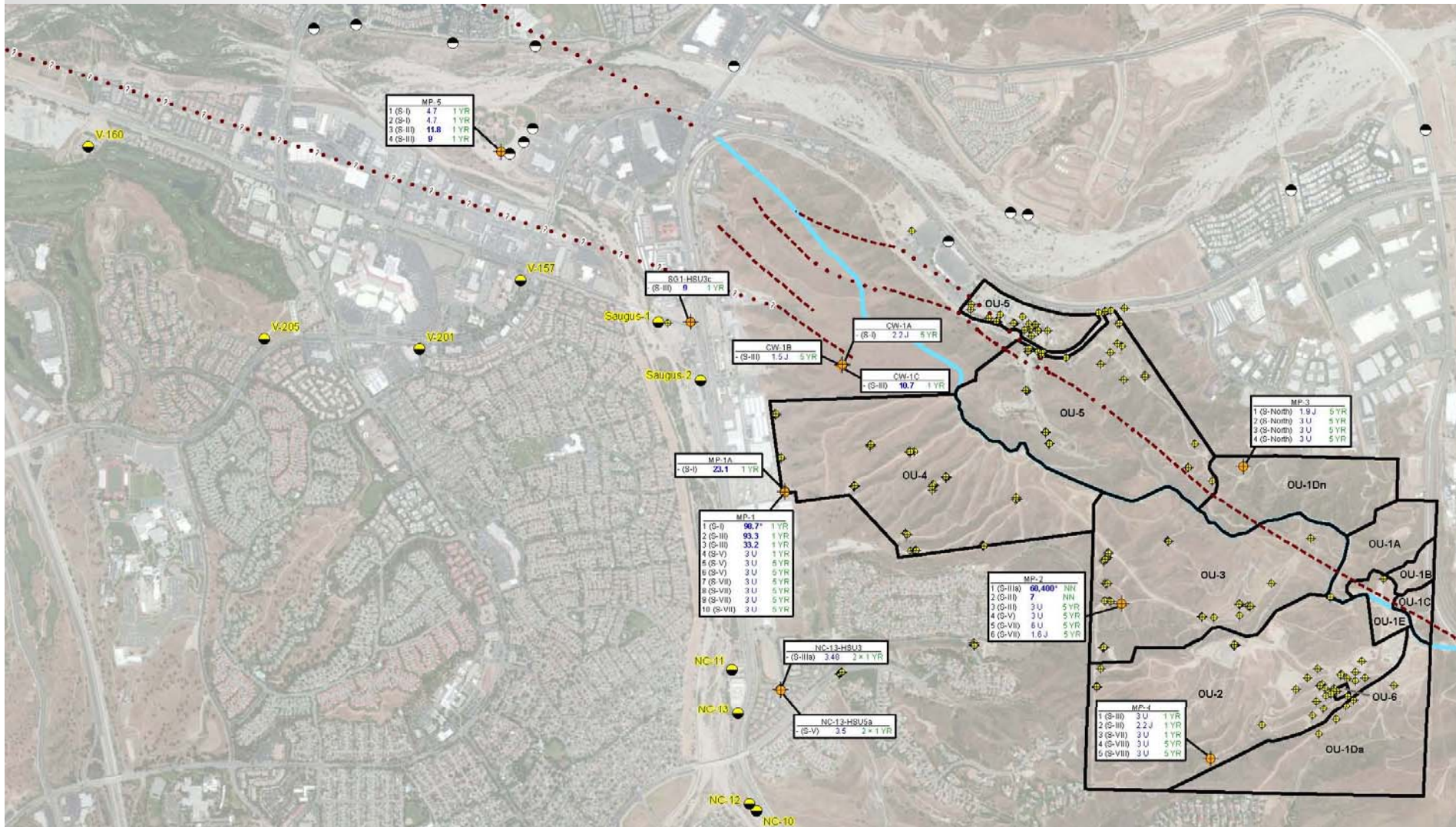
West Saugus Groundwater Resources Monitoring Project

- ▶ Several Saugus Formation (groundwater bearing unit) in the SCV are vulnerable to groundwater contamination beyond those already affected
- ▶ Strategically placed monitoring wells can provide chemical and water level data for GW flow and transport models
- ▶ Horizontal and vertical extent of groundwater contamination is not fully understood
- ▶ GW Models predict groundwater flow and the transport of contaminants

Wells with Perchlorate Detected



SCV Production and Monitoring Wells



Project Need

- ▶ More data are required to:
 - Measure horizontal and vertical extent of contamination
 - Serve as a warning to currently functioning wells
 - Provide appropriate basin management

Project Description

- ▶ Construct and install monitoring wells in west portion Saugus Formation

IRWMP Objectives Addressed

- ▶ Improve Water Quality
- ▶ Promote Water Stewardship

Project Readiness

- ▶ Conceptual plans
- ▶ Need/Feasibility identified and verified
- ▶ Preliminary design/cost estimates
- ▶ CEQA readily obtained as no detrimental impacts foreseen.

Project Ranking

- ▶ Eligibility – Yes
- ▶ Readiness to proceed – 75 of 200 possible points
- ▶ Multiple Objectives – 30 of 100 points
- ▶ Multiple Resource Mgmt Strategies – 3 total; 15 points
- ▶ DACs, Native Americans and Environmental Justice Concerns – NA
- ▶ Consistent with Land Use Plans – Yes, 100 points
- ▶ Improves Interregional Coordination – No

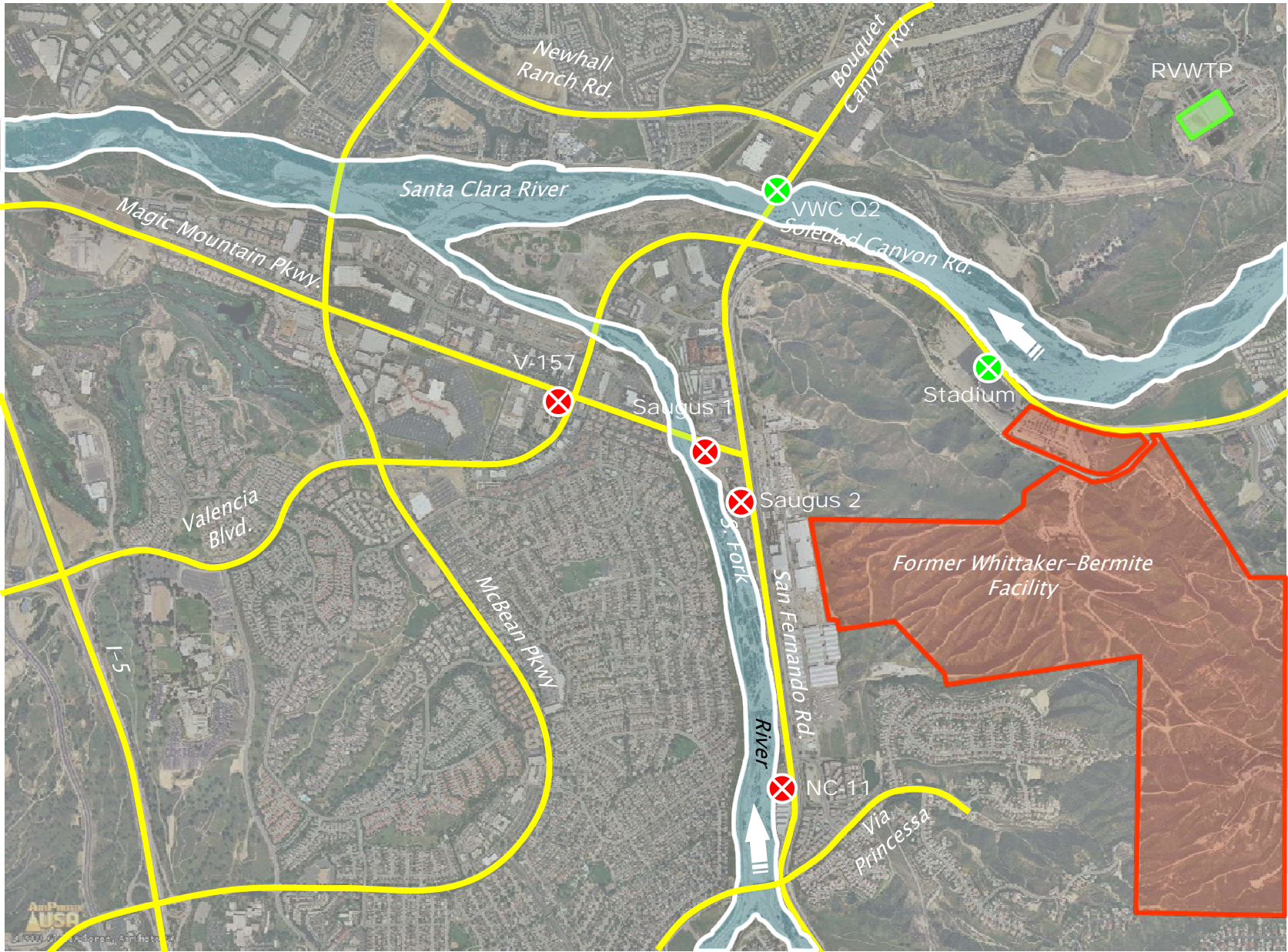
Santa Clarita Valley Volatile Organic Compound Groundwater Investigation

IRWMP Proposition 84 Round 2
Implementation Funding

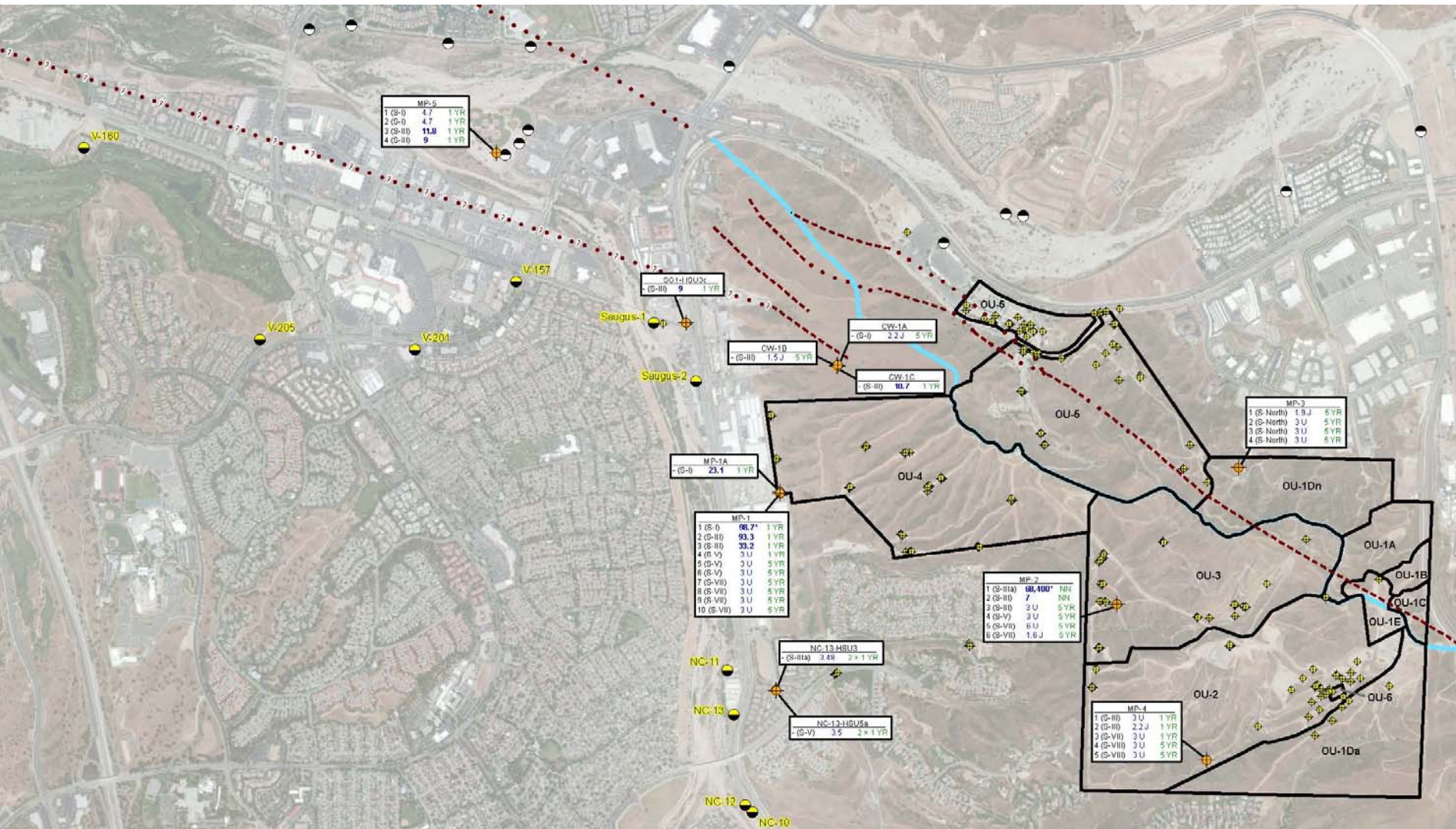
SCV Volatile Organic Compound Groundwater Investigation

- ▶ VOCs have been detected in some SVC municipal wells
- ▶ Two possible sources have been identified
- ▶ Others are possible
- ▶ Possible sources have been somewhat cooperative
- ▶ Comprehensive investigation is necessary
- ▶ Remediation could be required

Wells with Perchlorate Detected



SCV Production and Monitoring Wells



Project Need

- ▶ SCV production wells need to be protected
- ▶ Thorough investigation required to properly determine sources and potential extent of VOC contamination
- ▶ If the results indicate an imminent threat to SCV wells then remediation action must commence
- ▶ Project Management by CLWA best ensures that investigation is thorough enough to identify

Project Description

- ▶ Coordinate with current efforts (SIC and Whittaker–Bermite)
- ▶ Evaluate current data set, including those from production and monitoring wells
- ▶ Identify data gaps; determine need for additional monitoring wells
- ▶ If appropriate, locate, design and construct new monitoring wells.
- ▶ Develop groundwater model to forecast transport of VOCs
- ▶ Identify sources

IRWMP Objectives Addressed

- ▶ Improve Water Quality
- ▶ Promote Water Stewardship

Project Readiness

- ▶ Conceptual plans
- ▶ Need/Feasibility identified and verified
- ▶ CEQA readily obtained as no detrimental impacts foreseen.

Project Ranking

- ▶ Eligibility – Yes
- ▶ Readiness to proceed – 75 of 200 possible points
- ▶ Multiple Objectives – 30 of 100 points
- ▶ Multiple Resource Mgmt Strategies – 3 total; 15 points
- ▶ DACs, Native Americans and Environmental Justice Concerns – NA
- ▶ Consistent with Land Use Plans – Yes, 100 points
- ▶ Improves Interregional Coordination – No

Stakeholder Meeting, December 18,
2012

- Agenda
- Handout: Candidate Projects for IRWM Plan Update
- Handout: Ranking Criteria
- Handout: Matrix of Prioritized Projects and Applied Criteria
- Recommend Suite of Projects, Proposition 84 Round 2 Grant Application



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Stakeholder Meeting

Tuesday, December 18, 2012, 2:00 pm – 4:00 pm

Newhall County Water District Headquarters

23780 North Pine Street, Newhall, CA 91321

Meeting Objectives:

- Consultant Progress & Funding Updates
- Present Project Prioritization & Round 2 Implementation Grant Proposal

AGENDA

2:00 I. Welcome

Lauren Everett, Castaic Lake Water Agency (CLWA)

2:05 II. Consultant Progress Updates

A. IRWMP Update and Climate Change Technical Study

B. Salt and Nutrient Management Plan

Meredith Clement, Kennedy/Jenks (KJ), Lauren Everett, CLWA

2:15 III. General Updates

A. Planning Grant R1 & R2

B. Implementation Grant R1 & R2

Lauren Everett, CLWA

2:25 IV. Present Project Prioritization/Ranking

Meredith Clement, KJ

2:55 V. Present R2 Implementation Grant Projects

Lauren Everett, CLWA

3:35 VI. Implementation Grant Application – Cost Share Allocation

Lauren Everett, CLWA

4:00 VIII. Close

Projects submitted with a Long Form

Long Forms are used for projects that are deemed ready for implementation and for which detailed project information is available. These projects were scored and ranked based on established criteria.

Project ID	Project Name	Sponsor Agency	Coordinating/ Partnering Agency	Estimated Cost	Objectives							Rank
					Reduce Potable Water Demand	Increase Water Supply	Improve Water Quality	Promote Resource Stewardship/ Flooding/ Hydromodification	Climate Change Adaptation	GHG Reduction		
SC-1	Upper Santa Clara River Arundo/Tamarisk Removal Program (SCARP) Implementation	City of Santa Clarita	Santa Clara River Conservancy; Angeles National Forest; Santa Clara Invasive Weeds Task Force	\$0.5M-\$20M (Capital); \$25 - \$100k/yr over 15 years (O&M)	◆	◆	◆	◆	◆	◆	◆	1
SCVSD-1	SCVSD Automatic Water Softener Rebate and Public Outreach Program	Santa Clarita Valley Sanitation District	City of Santa Clarita; County of Los Angeles	\$1.1M/yr over 3 years (O&M)			◆				◆	2
NCWD-2	Pellet Water Softening Treatment Plant - Phase 1	Newhall County Water District	NA	\$250,000 - \$500,000 (Capital)	◆		◆	◆			◆	3
AA/BCN-1	Bouquet Canyon Creek Restoration, Control of Invasive Weeds	Agricultural Access/Bouquet Canyon Network (Currently no eligible applicant as Sponsor Agency)	Antelope Valley Resource Conservation District; Natural Resource Conservation District; Cooper Ecological Monitoring/Leathermann BioConsulting, Inc.; LA County Fire; Angeles National Forest	\$20,240 - \$52,852 (Capital); \$13,052/yr over 5 years (O&M)		◆	◆	◆	◆	◆	◆	4
SCWD-2	July 2012 Santa Clarita Water Division Water Use Efficiency Strategic Plan Water Use	Santa Clarita Water Division	Castaic Lake Water Agency; City of Santa Clarita	\$301,930-\$2,520,469 (Capital); \$62,370-	◆	◆	◆	◆			◆	5
SCVSD-2	Saugus Water Reclamation Plan - Ultraviolet Light Disinfection Facility	Santa Clarita Valley Sanitation District	Castaic Lake Water Agency	\$8M-\$14M (Capital); \$2K/yr for 20 years (O&M)	◆	◆	◆	◆				6
CLWA-3	Santa Clarita Valley Water Use Efficiency Strategic Plan	Castaic Lake Water Agency	LACWD#36; Newhall County Water District; Santa Clarita Water Division; Valencia Water Company	\$1M-\$5M/yr over 8 years (Capital)	◆	◆	◆					7
LADPW-9	SCR South Fork Rubber Dam No. 1 and Spreading Grounds	Los Angeles County Flood Control District	NA	\$5M-\$9M (Capital); \$50K/yr over 50 years (O&M)		◆	◆	◆	◆			8
CLWA-8	Foothill Feeder Connection	Castaic Lake Water Agency	Newhall County Water District; City of Santa Clarita; LACWD#36	\$3M-\$5M (Capital); \$50K/yr over 50 years (O&M)		◆						9
SC-5	Biofiltration and Low Impact Development Retrofits	City of Santa Clarita	Los Angeles County; Castaic Lake Water Agency	\$4M-\$6M (Capital); \$200,000/yr over 15 years (O&M)	◆	◆	◆	◆	◆	◆		10

Upper Santa Clara River Integrated Regional Water Management Plan
 Projects Submitted During 2012 Call for Projects

Project ID	Project Name	Sponsor Agency	Coordinating/ Partnering Agency	Estimated Cost	Objectives							Rank
					Reduce Potable Water Demand	Increase Water Supply	Improve Water Quality	Promote Resource Stewardship	Flooding/ Hydromodification	Climate Change Adaptation	GHG Reduction	
SC-6	Septic to Sewer Retrofit Project	City of Santa Clarita	NA	\$25M-\$35M (Capital); unknown O&M		◆	◆	◆				11
CLWA-7	Castaic Conduit	Castaic Lake Water Agency	NA	\$14,910,000-\$16M (Capital); \$5,000/yr (O&M)		◆						12
CLWA-10	Distribution System - RV-2 Modification	Castaic Lake Water Agency	NA	\$2,880,000-\$3,200,000 (Capital); \$5,000/yr (O&M)		◆						13
CLWA-9	West Saugus Formation Groundwater Resources Monitoring Project	Castaic Lake Water Agency	NA	\$628,675			◆	◆				14
NCWD-1	Santa Clara River – Sewer Trunk Line Relocation Phase II and III	Newhall County Water District	NA	\$2,500,000 - \$4,000,000 (Capital); \$30K/yr over 50 years (O&M)		◆	◆	◆				15
NCWD-3	Santa Clarita Valley Residential Turf Removal Program	Newhall County Water District	Castaic Lake Water Agency; Santa Clarita Water Division; Valencia Water Company; LA County Waterworks #36	625000 (Capital); \$312,500/yr over 2 years (O&M)	◆				◆			16
CLWA-11	Santa Clarita Valley Volatile Organic Carbon Groundwater Investigation	Castaic Lake Water Agency	Newhall County Water District; City of Santa Clarita; LACWD#36	\$250,000-\$5M (Capital)			◆	◆				17

Projects submitted with a Short Form

Short Forms are used for projects that are primarily in a conceptual phase and not deemed ready for implementation. These projects were not scored or ranked.

Project ID	Project Name	Sponsor Agency	Coordinating/ Partnering Agency	Estimated Cost	Objectives						
					Reduce Potable Water Demand	Increase Water Supply	Improve Water Quality	Promote Resource Stewardship	Flooding/ Hydromodification	Climate Change Adaptation	GHG Reduction
AA/BCN-2	Feasibility of Arundo Stem Cutting Ram (ASCR)	Agricultural Access/Bouquet Canyon	NA	<\$100K		◆		◆	◆		◆
CLWA-1	Irrigation Efficiency Program	Castaic Lake Water Agency	NA	\$100K-\$1M	◆					◆	
CLWA-2	Water Use Efficiency Certification	Castaic Lake Water Agency	NA	\$100K-\$1M	◆					◆	
CLWA-4	ESFP Sludge Collection System	Castaic Lake Water Agency	NA	\$1M-\$1M		◆	◆				
CLWA-5	Saugus Formation Replacement Wells	Castaic Lake Water Agency	NA	\$1M-\$10M		◆		◆			
CLWA-6	Santa Clarita Valley Drought Relief Wells	Castaic Lake Water Agency	NA	\$1M-\$1M		◆					
CLWA-12	Update Rio Vista WTP Education Model	Castaic Lake Water Agency	NA	<\$100,000	◆			◆		◆	
LACWD36-1	Advanced Meter Infrastructure	LACWD#36	NA	<\$100,000	◆						
LACWD36-2	Cash for Grass Rebate Program	LACWD#36	NA	<\$100,000	◆						
LACWD36-3	Landscape Irrigation Efficiency Program	LACWD#36	NA	<\$100,000	◆						
LACWD36-4	Apam and Bayfield Water Main	LACWD#36	NA	\$100K-\$1M		◆					

Upper Santa Clara River Integrated Regional Water Management Plan
 Projects Submitted During 2012 Call for Projects

Project ID	Project Name	Sponsor Agency	Coordinating/ Partnering Agency	Estimated Cost	Objectives							
					Reduce Potable Water Demand	Increase Water Supply	Improve Water Quality	Promote Resource Stewardship	Flooding/ Hydromodification	Climate Change Adaptation	GHG Reduction	
LACWD36-5	Hasley Canyon Road Water Main, Turnout Connection, and Pump Station Project	LACWD#36	NA	\$1M-\$10M		◆						
LACWD36-6	Replacement of 8-inch Water Main along Del Valle Road	LACWD#36	NA	\$100K-\$1M		◆						
LADPW-1	Lower San Francisquito Spreading Grounds	Los Angeles County Flood Control District	NA	\$3M-\$6M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-2	Newhall Creek In-River Spreading Grounds	Los Angeles County Flood Control District	NA	\$2M-\$5M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-3	Placerita Creek Off-River Spreading Grounds	Los Angeles County Flood Control District	NA	\$3M-\$7M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			

Upper Santa Clara River Integrated Regional Water Management Plan
 Projects Submitted During 2012 Call for Projects

Project ID	Project Name	Sponsor Agency	Coordinating/ Partnering Agency	Estimated Cost	Objectives							
					Reduce Potable Water Demand	Increase Water Supply	Improve Water Quality	Promote Resource Stewardship	Flooding/ Hydromodification	Climate Change Adaptation	GHG Reduction	
LADPW-4	Santa Clara In-River Spreading Grounds No. 1	Los Angeles County Flood Control District	NA	\$4M-\$7M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-5	Santa Clara In-River Spreading Grounds No. 2	Los Angeles County Flood Control District	NA	\$2M-\$5M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-6	Santa Clara Off-River Spreading Grounds	Los Angeles County Flood Control District	NA	\$4M-\$7M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-7	Santa Clara River Rubber Dam No.1	Los Angeles County Flood Control District	NA	\$5M-\$7M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-8	Santa Clara River Spreading Grounds	Los Angeles County Flood Control District	NA	\$7M-\$10M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-10	SCR South Fork Rubber Dam No. 2	Los Angeles County Flood Control District	NA	\$5M-\$7M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			

Upper Santa Clara River Integrated Regional Water Management Plan
 Projects Submitted During 2012 Call for Projects

Project ID	Project Name	Sponsor Agency	Coordinating/ Partnering Agency	Estimated Cost	Objectives							
					Reduce Potable Water Demand	Increase Water Supply	Improve Water Quality	Promote Resource Stewardship	Flooding/ Hydromodification	Climate Change Adaptation	GHG Reduction	
LADPW-11	SCR South Fork Rubber Dam No. 3	Los Angeles County Flood Control District	NA	\$5M-\$7M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-12	SCR South Fork Rubber Dam No. 4	Los Angeles County Flood Control District	NA	\$5M-\$7M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
LADPW-13	Upper San Francisquito Spreading Grounds	Los Angeles County Flood Control District	NA	\$3M-\$6M (Capital); \$25K/yr over 50 years (O&M)		◆	◆	◆	◆			
NCWD-4	Recycled Water Onsite Conversion	Newhall County Water District	NA	\$100K-\$1M	◆						◆	
NCWD-5	Advanced Metering Infrastructure Program	Newhall County Water District	NA	\$1M-\$10M	◆	◆		◆				◆
SC-2	Upper Santa Clara River Arundo/Tamarisk Removal Program (SCARP) Implementation	City of Santa Clarita	Forest Service; Santa Clara River Conservancy	\$1M-\$10M	◆	◆	◆	◆	◆	◆	◆	◆
SC-3	City of Santa Clarita Biofiltration and Low Impact Development Retrofits	City of Santa Clarita	NA	\$1M-\$10M	◆	◆	◆		◆	◆		
SC-4	Septic to Sewer Retrofit Project	City of Santa Clarita	NA	>\$10M		◆	◆	◆				

Upper Santa Clara River Integrated Regional Water Management Plan
 Projects Submitted During 2012 Call for Projects

Project ID	Project Name	Sponsor Agency	Coordinating/ Partnering Agency	Estimated Cost	Objectives						
					Reduce Potable Water Demand	Increase Water Supply	Improve Water Quality	Promote Resource Stewardship	Flooding/ Hydromodification	Climate Change Adaptation	GHG Reduction
SCEEC-1	Linking SCEEC to the Upper Santa Clara River IRWMP	Santa Clarita Environmental Education Consortium	NA	<\$100K	◆		◆	◆	◆	◆	
SCWD-1	Advanced Metering Infrastructure Program	Santa Clarita Water Division	NA	\$1M-\$10M	◆	◆		◆			◆
SCWD-3	GIS Development and Implementation	Santa Clarita Water Division	NA	\$1M-\$10M		◆	◆				◆
VWC-1	Regional High Resolution GIS Mapping	Valencia Water Company	NA	\$100K-\$1M				◆			
VWC-2	Valleywide Conservation Database	Valencia Water Company	NA	<\$100K	◆			◆		◆	
VWC-3	Advanced Metering Infrastructure Program	Valencia Water Company	NA	\$1M-\$10M	◆	◆		◆			◆
VWC-4	CII Consevation Plan	Valencia Water Company	NA	<\$100K	◆					◆	

Upper Santa Clara River IRWMP Update Stakeholder Meeting

Upper Santa Clara River Integrated Regional Water Management Plan
Proposed Project Scoring and Ranking Methodology

Criterion	Possible Points
Project and Project Applicant Eligible	<p>Pass/Fail Criteria</p> <p>If project affects groundwater:</p> <ol style="list-style-type: none"> (1) There must be a GWMP prepared and implemented in compliance with CWC §10753.7 or applicant consents to be subject to a GWMP or other program that meets the requirements of CWC §10753.7. (2) Or the proposal must include development of a GWMP within 1 year of grant submittal date. (3) Or the project conforms to requirements of an adjudication of water rights in the subject groundwater. <p><i>If no to all 3 = Fail</i></p> <p>If project proponent or project beneficiary is Urban Water Supplier:</p> <ol style="list-style-type: none"> (1) They must have completed and submitted an Urban Water Management Plan (2) And be in compliance with AB1420 (3) And meet water meter requirements (CWC §525) <p><i>If no to any of the three = Fail</i></p> <p>5 points if Project Proponent has adopted or will adopt the Integrated Plan</p>
Readiness to Proceed	<p>25 points for each item below*, up to 200points :</p> <ul style="list-style-type: none"> Local Cost Share Confirmed Construction Drawings completed Permits completed CEQA/NEPA completed Project benefits and costs defined at a level of detail that will allow cost-effectiveness analysis or benefit-cost analysis Preliminary Design and Cost Estimates complete Feasibility complete Conceptual Plans complete <p>*Points were awarded if item was not applicable.</p>
Addresses Multiple Objective	15 points for each objective addressed, up to 100 points
Integrates Multiple Resource Management Strategies	5 points for each applicable Resource Management Strategy, up to 100 points
Benefits a Disadvantaged Community/Increases Disadvantaged Community Participation	<p>Yes = 50 points</p> <p>No = 0 points</p>
Addresses Critical Water Issues for Native American Tribal Communities	<p>Yes = 50 points If Native American Tribal Community Qualifies as DAC, points will be awarded per box above and this box will not apply.</p> <p>No = 0 points</p>
Environmental Justice Concerns	50 points Project redresses inequitable distribution of environmental burdens
Consistent with Local Land Use Plans	<p>Yes = 100 points</p> <p>No = 0 points</p>
Improves Interregional Coordination	<p>Yes = 100 points</p> <p>No = 0 points</p>
Tie – Breaker Points	<p>For any projects ranked in the top 15 with the same score the following points will be awarded:</p> <ul style="list-style-type: none"> 10 pts Project with lower cost per acre-foot of water conserved 10 pts Project with the greatest reduction in electrical/energy use per acre-foot of water 10 pts Project with lower cost per new acre-foot of water supply 10 pts Project with lower cost per acreage of habitat improved 10 pts Project with lower cost for per unit of flood reduction

Project ID	Project Name	Sponsor Agency	Estimated Cost	Objectives							Project and Project Applicant Eligibility	Addresses Multiple Objectives	Integrates Multiple Resource Management Strategies	Benefits DAC/Increases DAC Participation	Addresses Critical Water Issues for Native American Tribal Communities	Environmental Justice Concerns	Consistent with Local Land Use Plans	Improves Interregional Coordination	Readiness to Proceed	Tie-Breaker Points	Total	Rank
				Reduce Potable Water Demand	Increase Water Supply	Improve Water Quality	Promote Resource Stewardship	Flooding/Hydrmodification	Climate Change Adaptation	GHG Reduction												
SC-1	Upper Santa Clara River Arundo/Tamarisk Removal Program (SCARP) Implementation	City of Santa Clarita	\$0.5M-\$20M (Capital); \$25k - \$100k/yr over 15 years (O&M)	◆		◆	◆	◆	◆	◆											555	1
SCVSD-1	SCVSD Automatic Water Softener Rebate and Public Outreach Program	Santa Clarita Valley Sanitation District	\$1.1M/yr over 3 years (O&M)	◆		◆	◆			◆											470	2
NCWD-2	Pellet Water Softening Treatment Plant - Phase 1	Newhall County Water District	\$250,000 - \$500,000 (Capital)	◆		◆	◆			◆											390	3
AA/BCN-1	Bouquet Canyon Creek Restoration, Control of Invasive Weeds	Agricultural Access/Bouquet Canyon Network (Currently no eligible applicant as Sponsor Agency)	\$20,240 - \$52,852 (Capital); \$13,052/yr over 5 years (O&M)	◆		◆	◆	◆	◆	◆											385	4
SCWD-2	July 2012 Santa Clarita Water Division Water Use Efficiency Strategic Plan Water Use Efficiency Programs	Santa Clarita Water Division	\$301,930-\$2,520,469 (Capital); \$62,370-\$366,223/yr over 8 years (O&M)	◆		◆	◆			◆											365	5
SCVSD-2	Saugus Water Reclamation Plan - Ultraviolet Light Disinfection Facility	Santa Clarita Valley Sanitation District	\$8M-\$14M (Capital); \$2K/yr for 20 years (O&M)		◆	◆	◆														350	6
CLWA-3	Santa Clarita Valley Water Use Efficiency Strategic Plan	Castaic Lake Water Agency	\$1M-\$5M/yr over 8 years (Capital)	◆		◆	◆														325	7
LADPW-9	SCR South Fork Rubber Dam No. 1 and Spreading Grounds	Los Angeles County Flood Control District	\$5M-\$9M (Capital); \$50K/yr over 50 years (O&M)		◆	◆	◆	◆													300	8
CLWA-8	Foothill Feeder Connection	Castaic Lake Water Agency	\$3M-\$5M (Capital); \$50K/yr over 50 years (O&M)		◆																285	9
SC-5	Biofiltration and Low Impact Development Retrofits	City of Santa Clarita	\$4M-\$6M (Capital); \$200,000/yr over 15 years (O&M)	◆	◆	◆	◆	◆	◆												280	10
SC-6	Septic to Sewer Retrofit Project	City of Santa Clarita	\$25M-\$35M (Capital); unknown O&M		◆	◆	◆														270	11
CLWA-7	Castaic Conduit	Castaic Lake Water Agency	\$14,910,000-\$16M (Capital); \$5,000/yr (O&M)		◆																255	12
CLWA-10	Distribution System - RV-2 Modification	Castaic Lake Water Agency	\$2,880,000-\$3,200,000 (Capital); \$5,000/yr (O&M)		◆																235	13
CLWA-9	West Saugus Formation Groundwater Resources Monitoring Project	Castaic Lake Water Agency	\$628,675			◆	◆														230	14
NCWD-1	Santa Clara River – Sewer Trunk Line Relocation Phase II and III	Newhall County Water District	\$2,500,000 - \$4,000,000 (Capital); \$30K/yr over 50 years (O&M)			◆	◆														190	15
NCWD-3	Santa Clarita Valley Residential Turf Removal Program	Newhall County Water District	625000 (Capital); \$312,500/yr over 2 years (O&M)	◆				◆													185	16
CLWA-11	Santa Clarita Valley Volatile Organic Carbon Groundwater Investigation	Castaic Lake Water Agency	\$250,000-\$5M (Capital)			◆	◆														180	17

Upper Santa Clara River Integrated Regional Water Management Plan
Selected Grant Application Projects

Project ID	Project Name	Estimated Cost	Funding Match (\$) (Minimum required is 25%)	Requested Grant Funds (\$)
SC-1	Upper Santa Clara River Arundo/Tamarisk Removal Program (SCARP) Implementation	\$.5M-\$20M (Capital); \$25k-100k/yr over 15 years (O&M)	\$138,000	\$414,000
SCVSD-1	SCVSD Automatic Water Softener Rebate and Public Outreach Program	\$1.1M/yr over 3 years	\$825,000	\$2,475,000
NCWD-2	Pellet Water Softening Treatment Plant - Phase 1	\$200,000	\$50,000	\$150,000
SCWD-2	July 2012 Santa Clarita Water Division Water Use Efficiency Strategic Plan Water Use Efficiency Programs	\$301,930-\$2,520,469 (Capital); \$62,370-\$366,223/yr over 8 years (O&M)	\$75,000	\$225,000
CLWA-3	Santa Clarita Valley Water Use Efficiency Strategic Plan	\$1M-\$5M/yr over 8 years (Capital)	\$625,000	\$1,875,000
CLWA-8	Foothill Feeder Connection	\$3M-\$5M (Capital); \$50K/yr over 50 years (O&M)	\$1,500,000	\$1,500,000
	Grant Administration		\$0	\$175,000
		TOTAL MATCH	\$3,213,000	
		TOTAL GRANT REQUEST		\$6,814,000
		MATCH AS PERCENT TOTAL COST	32%	

Stakeholder Meeting, February 28, 2013

- Agenda
- PowerPoint Presentation: Where are We Now and Where are We Headed?



UPPER SANTA CLARA RIVER

Integrated Regional Water Management

Stakeholder Meeting

Thursday, February 28, 2013, 2:30 pm – 4:30 pm

Newhall County Water District Headquarters

23780 North Pine Street, Newhall, CA 91321

AGENDA

2:30 I. Welcome

Lauren Everett, Castaic Lake Water Agency (CLWA)

2:35 II. General Updates

- A. Planning Grant R1 & R2
- B. Implementation Grant R1 & R2
- C. Local Groundwater Assistance Grants

Lauren Everett, CLWA

2:50 III. Consultant Progress Updates

- A. Salt and Nutrient Management Plan
- B. IRWMP Update and Climate Change Technical Study
 - Public comments on Chapters 1 & 2
 - Updated schedule

Lauren Everett, CLWA, Meredith Clement, Kennedy/Jenks (KJ)

3:20 IV. IRWMP Process – Where are we now and where are we headed?

Meredith Clement, KJ

3:50 V. Upcoming Meeting Notices & Watershed Updates

- A. Joint Meeting of Upper & Lower IRWM Groups/Invasive Weeds Task Force
- B. DWR IRWM Strategic Planning Workshops
- C. DWR/WEF IRWM Conference & IWM Summit
- D. Stakeholder updates

Lauren Everett, CLWA

4:30 VIII. Close

Upper Santa Clara River IRWMP

Where are We Now and Where are We Headed

February 28, 2013 2:30 pm – 4:30 pm



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Why do IRWMP Update?

Lots of New Information!

- Climate Change Technical Study
- Salt and Nutrient Management Plan
- Updated Water Demand Information

Meet New IRWMP Standards

Continue Stakeholder Coordination

Identify Current Regional Issues & Needs

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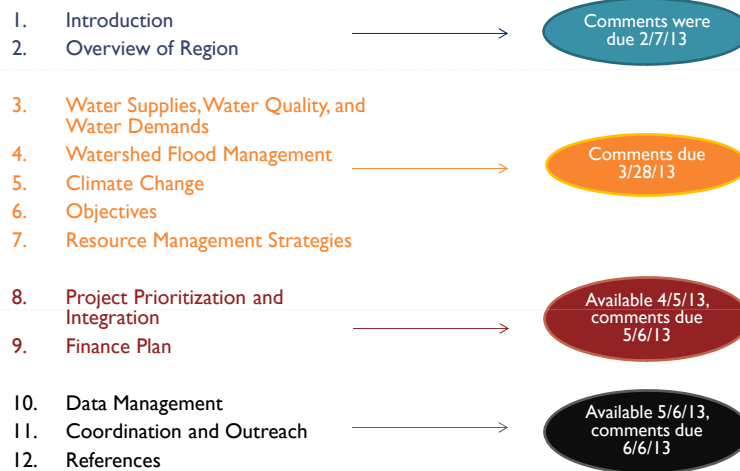
IRWMP Update Content

1. Introduction
2. Overview of Region
3. Water Supplies, Water Quality, and Water Demands
4. Watershed Flood Management
5. Climate Change
6. Objectives
7. Resource Management Strategies
8. Project Prioritization and Integration
9. Finance Plan
10. Data Management
11. Coordination and Outreach
12. References



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IRWMP Update Public Review



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Final Updated IRWMP

Anticipated July 2013!

- Will need to be adopted by Resolution by the governing bodies of each agency that is part of RWMG
- Will need to be adopted by each IRWMP grant project proponent
 - Will need to notice intent to adopt IRWMP per Government Code section 6066
 - Per the Proposition 84 Round 1 Grant Agreement, adoption needs to be complete by April 2014

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Final IRWMP Update

DWR Evaluation

- DWR will review/evaluate IRWMP for consistency with 2012 Standards
 - Exact nature of evaluation not yet known, anticipate checklist
 - To be eligible for Proposition 84 Round 3 funding need IRWMP meeting 2012 Standards
 - **Anticipate DWR will solicit plans for evaluation in Spring 2014**

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Ongoing/Future IRWMP Activities

Technical Studies

- Update Recycled Water Master Plan
- Santa Clarita Valley Water Use Efficiency Update
- Salt and Nutrient Management Plan

Implement Projects!

- Region will compete for Proposition 84 Round 2 funding
 - Application due March 29, 2013
 - Draft Funding Recommendations August 2013

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Ongoing/Future IRWMP Activities

Implement Even More Projects!

- Proposition 84 Round 3 funding coming up!
 - The Round 3 Application will be a two step process:
 - Step 1. Submit IRWMP Plan for Review by DWR (Spring 2014), *if plan deemed adequate you can move on to Step 2*
 - Step 2. Submit implementation grant application (early 2015)
 - Potential call for projects Spring/Summer 2014 – start thinking about your projects

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Questions?



Additional Public Event Materials

- Central and Southern California:
IRWMP Planning and Climate
Change Agenda
- Watershed Awareness Month Flyer

CENTRAL AND SOUTHERN CALIFORNIA: IRWMP PLANNING AND CLIMATE CHANGE

**Watersheds Coalition of Ventura County, Santa Barbara County
and Upper Santa Clara River Watershed
Thursday, March 15, 2012 ~ 9:00 a.m. – 12:30 p.m.**

**Lower Plaza Assembly Room, Hall of Administration
Ventura County Government Center, 800 S. Victoria Avenue, Ventura**

Objective	<ul style="list-style-type: none">To provide an introduction to incorporating climate change into IRWMP planning
Audience	<ul style="list-style-type: none">Members of the WVCV, Santa Barbara and Upper Santa Clara River including water managers, technicians, stakeholders and other interested partiesLocal land use, air quality and climate change managers, planners/ stakeholders
Desired Outcome	<ul style="list-style-type: none">Shared understanding of (a) climate change impacts on California, and (b) IRWMP/climate change planning process

AGENDA

1. Welcome and Introductions

Lynn Rodriguez, Project Manager, WVCV and Ann Hewitt, Anacapa Consulting Services, Inc.

2. Our Watersheds and Climate Change (Facilitated Discussion)

- Where are we most vulnerable to climate change? What are the most significant impacts?
- What strategies can we adopt to mitigate our contributions to climate change?
- What strategies can we adopt to adapt to the impacts of climate change?
- Is climate change a “game changer” for water planning? What are the challenges?

3. State of California: Department of Water Resources, Southern Region Office – 9:40 – 10:30 - 50 minutes

California, Water and Climate Change: Overview of Climate Change and IRWMP Planning Processes

Lauma Jurkevics, Climate Change Specialist, California Department of Water Resources (Southern Region)

Break – 10:30 (Refreshments will be Served)

4. Southern Central California: Climate Change, Water and Adaptation

- Watersheds Coalition of Ventura County - Lynn Rodriguez and Ann Hewitt
- California Coastal Conservancy – Bob Thiel, Project Manager
- Santa Barbara County IRWM Group – Kathy Caldwell, Sr. Project Manager, RMC Water and Environment
- Upper Santa Clara River IRWM Group – Meredith Clement, Water Resources project Manager, Kennedy/Jenks
- Calleguas Municipal Water District – Henry Graumlich, Manager of Strategic Planning
- Questions and Answers

5. Conclusions

- Panel conclusions
- Wrap-up – Lynn Rodriguez and Ann Hewitt

Please note – no pre-registration is required and there is no fee to attend. If you have questions, please contact Lynn Rodriguez at (805) 654-2455





SAVE THE DATES!

Celebrate with us and bring awareness about the
Santa Clara River Watershed

Where: Faulkner Farm, 287 S. Briggs Rd. in Santa Paula

When: **Wednesday, May 2, 2012 - 4:00 – 7:00 p.m.**

Learn from local leaders managing our resources in the Santa Clara River watershed about successful projects and programs that further our knowledge and preserve the health of the watershed. You're also invited to visit several local success stories offered through tours listed below.

Tours of the Watershed

Saturday, May 12, 2012

9 -10 a.m. Nature walk and talk, The Nature Conservancy Property, Santa Paula
11 a.m.– noon Guided tour Agriculture Museum, Santa Paula

Saturday, May 19, 2012

9-10 a.m. Bouquet Creek Restoration Project, Central Park, Santa Clarita
11 a.m. – noon Recycled water system, La Verne Nursery, Piru

Brought to you by the Santa Clara River Watershed Committee, a subcommittee of the Watersheds Coalition of Ventura County, and the Upper Santa Clara River Water Management Group

Stay Tuned for Further Details