

## Executive Summary

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This Integrated Regional Water Management Plan (IRWMP) is a document that identifies and plans for the water resource-related needs of the Upper Santa Clara River Watershed. This IRWMP examines current and future water-related needs, identifies regional objectives for water-related resource management, develops strategies to address identified needs and then evaluates and offers various projects to meet the regional objectives. The purpose of this IRWMP is to integrate planning and implementation efforts and facilitate regional cooperation, with the goals of reducing water demands, improving operational efficiency, increasing water supply, improving water quality, and promoting resource stewardship over the long term. A collaborative stakeholder-driven process was used to develop this IRWMP. This IRWMP effort was funded entirely by local participating agencies. This IRWMP will be periodically updated to reflect future regional water-related resource needs.

### The Region

The Region included in this IRWMP is the Upper Santa Clara River Watershed (see Figure ES-1). The Upper Basin of the Santa Clara River, as defined for the purposes of this IRWMP, is bounded by the San Gabriel Mountains to the south and southeast, the Santa Susana Mountains to the southwest, the Liebre Mountains and Transverse Ranges to the northeast and northwest, and westward to the Ventura County Line.

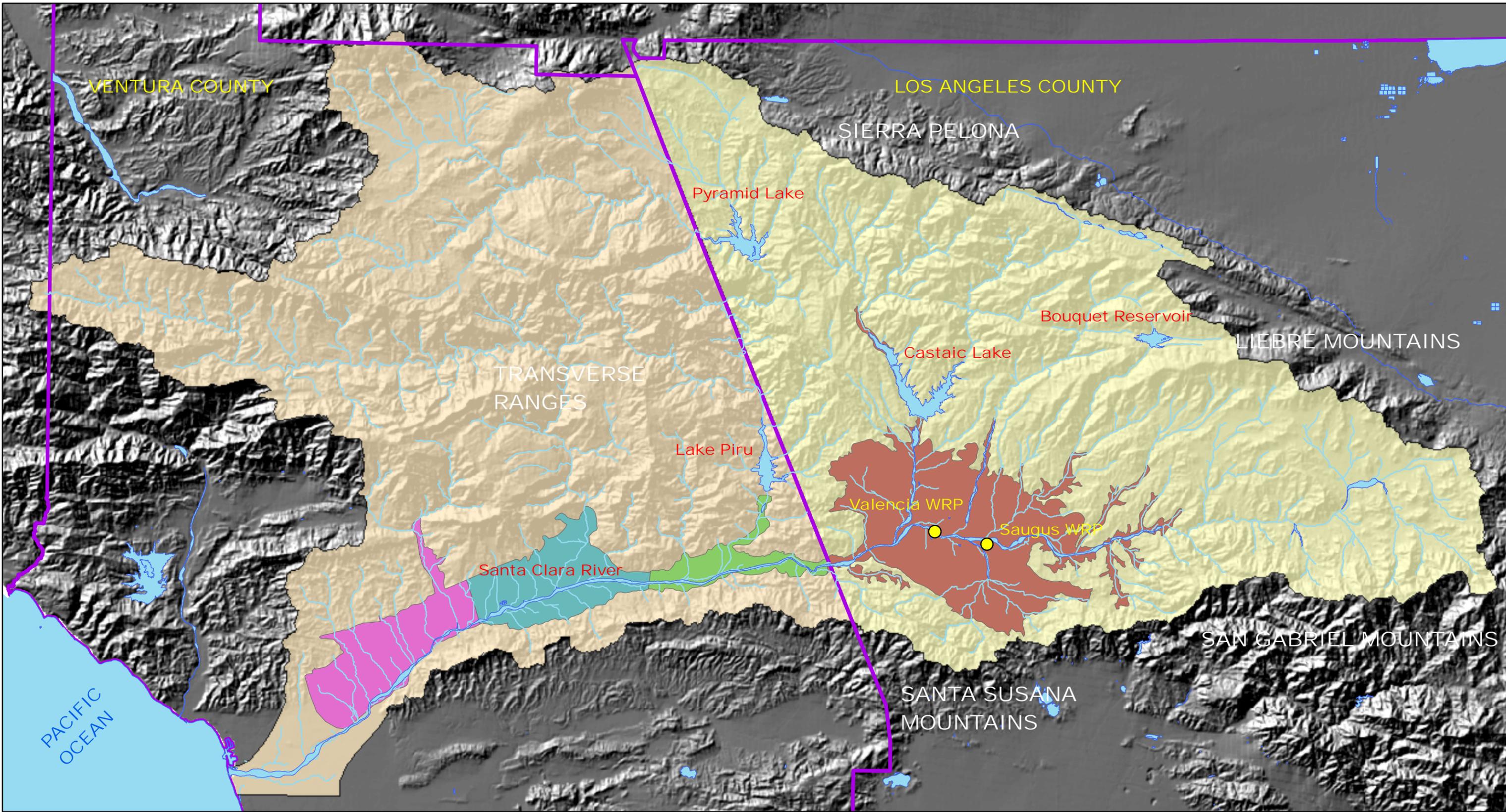
The Region is diverse, with both urban and rural areas as well as National Forest land. The Region encompasses the City of Santa Clarita, the towns of Castaic, Stevenson Ranch, West Ranch, Agua Dulce and Acton in unincorporated Los Angeles County, various other unincorporated community areas in Los Angeles County, open space areas of the Santa Monica Mountains Recreation and Conservation Authority and Los Angeles County Department of Parks and Recreation, and portions of the Angeles National Forest. As of the 2000 Census, the Watershed is home to more than 220,000 people.



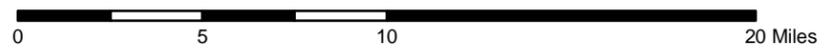
*South Fork Santa Clara River*

The Upper Santa Clara River Watershed is a logical region for integrated regional water management due to its history of cooperative water management, the topography and geography of the Region and the similarity of water issues facing agencies in the Region. There is no overlap of this Region with any other integrated water management planning region.

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Legend			
<span style="color: yellow;">●</span>	Water Reclamation Plants		
<b>Groundwater Basin</b>	<b>Watershed</b>		
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<span style="background-color: green; width: 15px; height: 10px; display: inline-block;"></span>	PIRU	<span style="background-color: #fff9c4; width: 15px; height: 10px; display: inline-block;"></span>	Upper Santa Clara River
<span style="background-color: teal; width: 15px; height: 10px; display: inline-block;"></span>	FILLMORE		
<span style="background-color: magenta; width: 15px; height: 10px; display: inline-block;"></span>	SANTA PAULA		



**Figure ES-1**  
**Upper Santa Clara River Watershed**  
**Hydrologic Features**

## The Regional Water Management Group

The Regional Water Management Group (RWMG), is comprised of the Castaic Lake Water Agency (CLWA), City of Santa Clarita, Los Angeles County Flood Control District (LACFCD), San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC), Newhall County Water District (NCWD), Santa Clarita Valley Sanitation District of Los Angeles County (SCVSD), Santa Clarita Water Division of CLWA, and Valencia Water Company (VWC). The RWMG:

- Initiated development of IRWMP
- Coordinates meetings
- Provides funding for IRWMP preparation
- Provides guidance related to data and information presented in IRWMP
- Proposes and sponsors projects
- Will adopt the IRWMP

## Stakeholder Involvement

A broad stakeholder outreach process was crucial to ensure that this IRWMP identifies local issues, reflects local needs, promotes the formation of partnerships, and encourages coordination with State and Federal agencies. One of the benefits of this planning process is that it brings together a broad array of groups into a forum to discuss and better understand shared needs and opportunities. Members of the RWMG and other Stakeholders have participated in periodic Stakeholder meetings, reviewed draft document materials, and provided extensive collaborative input to shape the formation of this IRWMP. By participating in Stakeholder meetings to develop this IRWMP, participants have created opportunities for establishing and developing mutually beneficial partnerships. Participating Stakeholders include land use agencies, town councils, recreation and open space entities, municipal and county government agencies, water suppliers, a wastewater management district, business organizations, non-profit organizations, and regulatory and resource agencies. Stakeholders:

- Develop regional objectives
- Develop water management strategies
- Propose and sponsor projects
- Provide input to project prioritization criteria
- Provide input to proposed project ranking
- Identify opportunities for integration
- Review and comment on administrative and public drafts of the IRWMP document

## Regional Water Issues and Problems

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

- 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 those areas and areas downstream
- Runoff and drainage issues related to urbanizing areas in the floodplain

## Plan Objectives

Objectives link issues identified in the Region and what the Stakeholders and the RWMG have determined they would like the IRWMP to accomplish when implemented. Four Stakeholder meetings focused on the development of objectives for the Upper Santa Clara River IRWMP Region. After the topic and concept of “objectives” was introduced to the group, various goals and objectives were presented and reviewed, and the Stakeholders held brainstorming sessions on issues, goals, and objectives that would be appropriate for the Region. Once a draft list of objectives was prepared and presented to the Stakeholders, the wording and definition of the draft list of objectives was discussed and refined. In developing objectives, Stakeholders determined that it was important that they be measurable, in order to gauge successful implementation of the IRWMP.

The resulting objectives generally apply to the Region as a whole and are meant to focus attention on the primary needs of the Region. Table ES-1 presents the objectives for the Region, the definition of each objective, and proposed means for measuring progress toward achieving each objective as the IRWMP is implemented.

### OBJECTIVES OF UPPER SANTA CLARA RIVER IRWMP

**Reduce Water Demand:** Implement technological, legislative and behavioral changes that will reduce user demands for water.

**Improve Operational Efficiency:** Maximize water system operational flexibility and efficiency, including energy efficiency.

**Increase Water Supply:** Understand future regional demands and obtain necessary water supply sources.

**Improve Water Quality:** Supply drinking water with appropriate quality; improve groundwater quality; and attain water quality standards.

**Promote Resource Stewardship:** Preserve and improve ecosystem health; improve flood management; and preserve and enhance water-dependent recreation.

**TABLE ES-1  
UPPER SANTA CLARA RIVER IRWMP OBJECTIVES, DEFINITIONS AND  
MEASUREMENTS**

<b>Objective</b>	<b>Measurement</b>
<b><i>Reduce Water Demand:</i></b> 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.
<b><i>Improve Operational Efficiency:</i></b> 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.
<b><i>Increase Water Supply:</i></b> Understand future regional demands and obtain necessary water supply sources.	Increase use of recycled water by up to 17,400 acre-feet per year (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 Los Angeles County Waterworks District (LACWWD) No. 37 service area (~0.74 million gallons per day [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.
<b><i>Improve Water Quality:</i></b> 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 Total Maximum Daily Load (TMDLs).
<b><i>Promote Resource Stewardship:</i></b> 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% or less cover of the understory and canopy in years 1 through 5. Every five years reduce by half the percentage of invasive species. In years 20 and beyond, keep invasive species to 2% or less. Keep invasive species to 2% 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.

## Water Management Strategies and Projects

Water management strategies are the general means by which the Plan objectives will be realized. Within the *California Water Plan*, the State has identified 24 different water management strategies that can be used to improve water resource management. Stakeholders built upon the water management strategies in the *California Water Plan* as well as water management strategies already implemented in the Region. The same Stakeholder process used to identify regional needs and objectives was used to develop strategies to meet the IRWMP objectives. While brainstorming issues, goals, and objectives for the Upper Santa Clara River Region, Stakeholders discussed and developed potential strategies to address these issues.

Projects are the specific means for implementing strategies and the way objectives are ultimately achieved. To identify the many potential projects in the Region and to assess the collective contribution of these projects towards meeting the IRWMP objectives, development of this IRWMP included a “Call for Projects” which gave Stakeholders the opportunity to directly submit their projects and project concepts for consideration. The Call for Projects provided a mechanism to engage Stakeholders in the process of sharing project information and discussing the issues related to the integration of projects.

The Stakeholders developed a process to prioritize projects, with the intent that highest-ranked projects be put forth in applications for funding. The prioritization of projects is based upon a detailed screening process. The process is three-fold: Initial Project Sorting; Project Development and Refinement; and Secondary Project Evaluation (please see Figure ES-2 for a graphical overview of the process). All projects submitted will be maintained on the Candidate Project list, and the list will be updated on a regular basis as new projects are submitted and as projects are developed through time and re-prioritized.

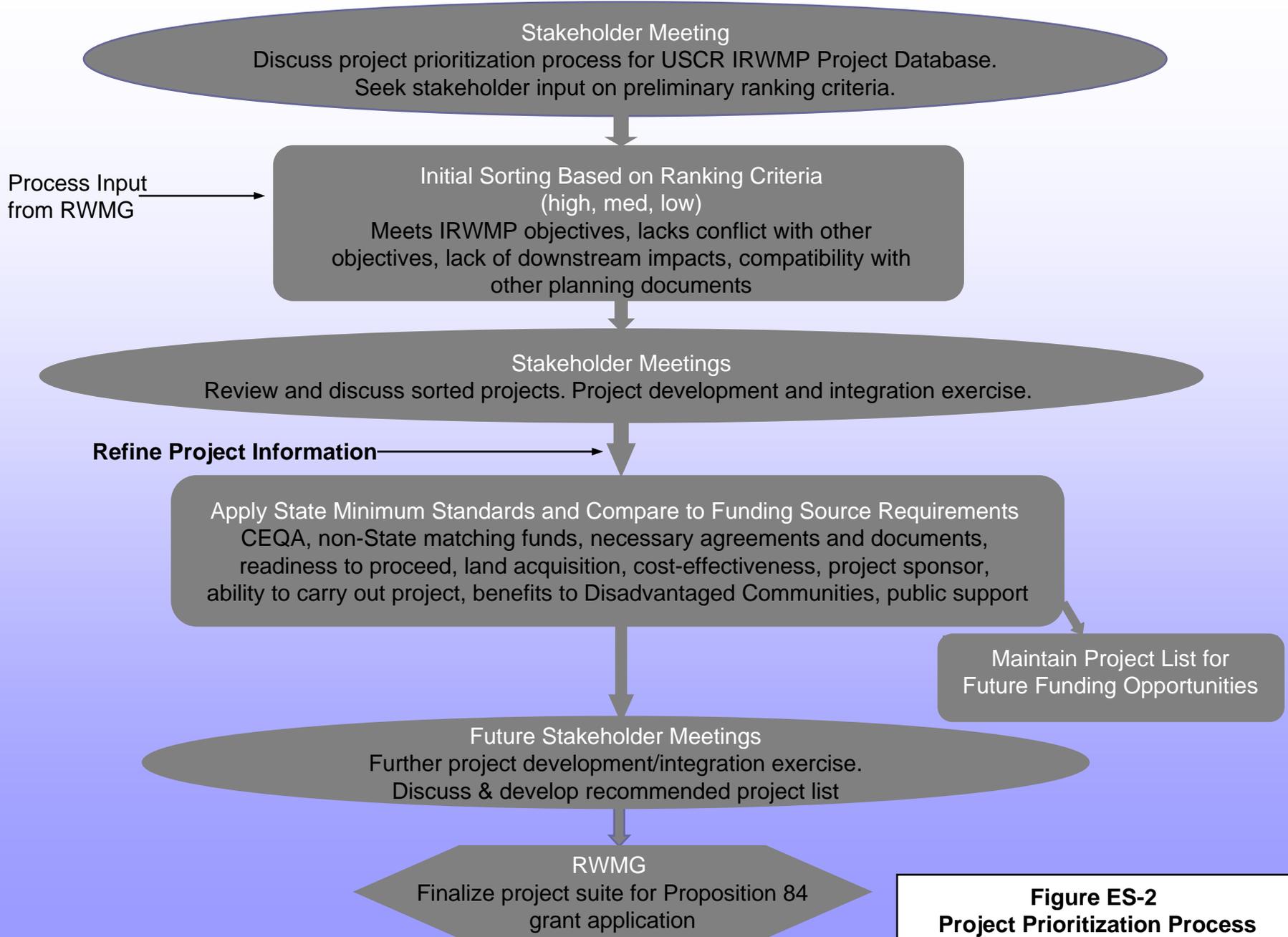
### CANDIDATE PROJECTS

A large number of projects were submitted by Stakeholders. During the Stakeholder meeting process, several project proponents observed commonalities in their projects and decided to form partnerships and combine their individual projects into a single enhanced project. As a result, there are 39 Candidate Projects presented in this IRWMP.

### Initial Project Sorting

Each Candidate Project was assigned points; one point was awarded for each objective that the project would meet (i.e., reduce water demand, improve operational efficiency, increase water supply, improve water quality, and promote resource stewardship). Candidate Projects were sorted so that those projects that met the most objectives appeared at the beginning of the project list. Following this exercise, Candidate Projects were further parsed and sorted based on how well they met a secondary set of criteria:

- Lack of conflict with other objectives
- Lack of downstream impacts
- Compatibility with other planning documents for the Region



**Figure ES-2**  
**Project Prioritization Process**

Using these primary and secondary criteria Candidate Projects were sorted into “high,” “medium,” “low,” and “pending further development” categories. Over time, as particular projects become more refined, it is likely they could be re-categorized (e.g., moved from the “low” category to the “high” category). In addition, over time, new Candidate Projects will be added and ranked according to the established criteria. The list of Candidate Projects is intended to continually grow and change during implementation of this IRWMP, as projects are completed and new project concepts are added. Table ES-2 lists those projects categorized as “high” during the initial sorting process.

### **Secondary Project Evaluation**

It will be necessary to “pare down” the list of Candidate Projects and develop a list of projects specific to IRWMP implementation and funding applications. This second step in the prioritization process will first be applied to projects rated “high” in the project sorting exercise. If no “high” projects remain or are ready to be implemented, then projects rated “medium” will be taken through the second step. This step will be based on how well Candidate Projects meet the following State Minimum Standards and “readiness to proceed” criteria:

- Compliance with CEQA and near-term completion of environmental permitting
- Completion of necessary planning documents (urban water management plans, groundwater management plans)
- A sponsor with authority to implement project and ability to meet funding match
- Readiness to proceed (project concept advanced enough to estimate schedule and costs)

Because the *Integrated Regional Water Management Plan Guidelines* (Guidelines) are undergoing revision following the passage of Proposition 84, there is uncertainty about the specific State requirements that should be considered during project refinement, if Proposition 84 funding is to be pursued. The list of criteria described above may be revised once the Proposition 84 Guidelines (or guidelines for other funding sources) become available. The RWMG has decided that project refinement at this time will not result in useful information as data developed in the present will need to be updated to reflect revised Guidelines. After guidelines for Proposition 84 and other funding sources become available, and based on the requirements of any enacted legislation, the prioritization process will be finalized and a suite of projects (i.e., “Plan Projects”) selected for inclusion in applications to various funding sources (or for local implementation).

Following selection of Plan Projects the IRWMP will be revised as necessary to:

- Describe linkages and the interdependence of Plan Projects
- Identify any coordination of Plan Projects with State and Federal agencies
- Describe the relationship of Plan Projects to local planning, IRWMP program preferences, and *California Water Plan Strategies*

**TABLE ES-2.  
UPPER SANTA CLARA RIVER CANDIDATE PROJECTS RATED “HIGH” IN INITIAL  
SORTING**

<b>Candidate Project Name</b>	<b>Description</b>
VWC-1. Water Quality Improvement Program	A demonstration project that employs a pellet softening technology to reduce the concentration of calcium in water produced from an existing water supply well. Softened water will be delivered to 430 homes. Objectives of the project are to confirm consumer acceptance of a centralized water softening system, measure region-wide environmental protection, evaluate economic benefits to customers and the community and optimize the pellet softening treatment process.
CLWA-4. Large Landscape Efficiency Improvement Program	A project to implement large landscape water efficiency measures, including use of ET controllers, high distribution sprinkler heads, and maintenance staff education.
Santa Clarita-1, USFS-1, LADPW-12 (LACFD). Upper Santa Clara River San Francisco Creek Arundo and Tamarisk Removal Project	Restoration of riparian habitat, increased water quantity, improvement of water quality, and reduction of flood and wildfire hazard through the removal of invasive plant species in the Upper Santa Clara River watershed.
SCVSD-2. Ultraviolet Treatment at the Water Reclamation Plants	Conversion of the Saugus and Valencia water reclamation plants from a chloramine treatment to ultraviolet treatment. Conversion will reduce chlorine loading and facilitate use of recycled water in the Upper Santa Clara River watershed.
SCVSD-3. Self-Regenerating Water Softeners Public Outreach and Rebate Program	A multi-pronged public education campaign and rebate program providing incentives for voluntary removal of residential self-regenerating water softening systems. The project intent is to reduce chloride loading. The rebate program will offer homeowners reasonable value for softening units as well as assistance with removal and disposal of units.
SCVSD-1/NCWD-2/SCWD-1. Feasibility Study for East Santa Clara River Wetlands and Groundwater Recharge Project	A project to investigate potential impacts from the discharge of recycled water in the eastern Santa Clara River and potential for the creation/development of wetland and riparian habitat. Based on these studies, the project would design and construct a recycled water line to discharge recycled water to the eastern Santa Clara River and construct wetlands using recycled water.
Santa Clarita-3. Discovery Park and Nature Center	A project to capture and filter urban runoff prior to entering the Santa Clara River. The conservation area will house an interpretive center dedicated to storm water management, water conservation, and Santa Clara River preservation.
CLWA-5. Customer Recycled Water Incentive Program	A project to fund hook-up costs to the CLWA recycled water system.
LADPW-13/City of Santa Clarita. Acquisition of Land in the Flood Plain of the Upper Santa Clara River	Acquisition of land in the Upper Santa Clara River flood plain from willing sellers so as to restrict future flood plain development and to allow restoration of lands to a natural condition.
RMC-1/City of Santa Clarita. Acquisition of river channel and major tributaries for watershed protection	Acquisition of riparian and flood plain parcels to limit development and preserve habitat function and other watershed benefits.
NCWD-1. Wellhead Treatment for Well NC 10	A project to provide treatment to remove naturally occurring manganese and iron from groundwater.

<b>Candidate Project Name</b>	<b>Description</b>
CLWA-1. Recycled Water Program, Phase II	The planning, design, and construction of CLWA's next phase of recycled water improvements, including storage and recycled water pipelines.

## Institutional Structure for Plan Implementation

While the structure and approach used to-date have been successful in creating the IRWMP, the RWMG discussed whether the MOU that formed the RWMG and facilitated broad agreement approach would work well to implement and update the IRWMP after it is adopted. A Governance Subcommittee was formed to explore options and prepare a recommendation for how to establish an effective governance structure to implement the IRWMP. The Governance Subcommittee identified the following purposes that a governance structure would be designed to fulfill for the benefit of IRWMP implementation, and subsequently identified which group (e.g., RWMG, Stakeholders, etc.) would best govern each of those efforts:

- Provide focused leadership for implementing and updating the IRWMP (RWMG in lead, with input from Stakeholders)
- Track and report progress in meeting IRWMP goals (RWMG and Stakeholders)
- Identify potential sources of outside funding and assist local entities to compete for those funds (RWMG, Stakeholders, and other sources of information)
- Provide leadership to focus cooperation for broad regional planning and implementation efforts such as (RWMG with input from Stakeholders):
  - regional water recycling
  - regional water quality preservation
  - regional water conservation programs
  - regional data and information management
- Select a contracting agency for any State or Federal grant funds obtained for implementation of the IRWMP (RWMG to select Grantee from among its members in accordance with applicable grant requirements, once the RWMG is formalized).

The Governance Subcommittee next identified the following factors that must be provided within a new governance structure to successfully accomplish these purposes and serve the recommended roles:

- Staff dedicated to provide leadership in the following areas:
  - Initiate actions
  - Collaborate with others
  - Call public/stakeholder meetings, set agendas, and lead meetings
  - Prepare background documents for IRWMP updates

- Identify, select, and apply for appropriate funding opportunities
- Oversee update of the IRWMP
- Capability to gather, compile and manage data and information
- Ability to execute and manage contracts
- Ability to receive and process financial transactions and meet generally accepted accounting principles
- Expertise to make a valuable contribution of services to IRWMP preparation
- Ability to obtain funds to contribute to IRWMP preparation
- Ability and willingness to serve as a point of contact for IRWMP related information
- Willingness to support process facilitation and outreach

The Government Subcommittee recommends that concurrently with the adoption of the IRWMP, the RWMG begin the process to enter into a new MOU to oversee the preparation of a grant submittal package, revise the IRWMP to be consistent with any new requirements and to formalize the membership of a Successor RWMG. This Successor RWMG will perform, at a minimum, the same functions of the Inaugural RWMG for any needed IRWMP updates. The Successor RWMG would have these responsibilities for a term to be determined in the MOU. Total membership of the Successor RWMG may be up to 11 entities and comprised of agencies/organizations whose primary mission is consistent with one or more of the IRWMP three main objectives (i.e., water supply, water quality, and resources stewardship). RWMG members will be recommended by the Stakeholder group to achieve balanced representation across the IRWMP's objectives, as well as geographic diversity across the Region.