



SECTION 7.0 - PROJECT REVIEW PROCESS AND INTEGRATION

7.1 Overview

The purpose of this section is to address the process for how projects are identified and selected for inclusion in the IRWM Plan and specific grant applications. During the years since adoption of the WVCV IRWM Plan in 2006, stakeholders in the Region have been actively implementing projects and programs that address the Plan's goals and objectives, the resource management strategies and Statewide Priorities. Some of these projects and programs have been funded with grants from Propositions 50 and 84, while others have received grants from other sources including local revenues. Please see Section 2 of the WVCV IRWM Plan for more details about project implementation since 2007.

WVCV stakeholders believe that the synergy between and among projects is as important as the individual projects selected. The Regional review and selection process is systematic but also flexible. The WVCV's consensus-based process for project selection, and other IRWM Plan-related decisions, meets the unique needs of the Region's stakeholders while advancing the goals of the IRWM Plan.

7.2 Identifying Projects for Inclusion in the IRWM Plan

The WVCV IRWM Plan's goals and objectives are met by implementing projects and programs at both the regional and watershed level. The WVCV IRWM Region identified critical priorities which drives



the selection of projects to implement. These priorities – as evidenced in the 6 goals in the Plan – are determined based on research, stakeholder input and technical studies.

To select projects, the WCVC IRWM Region uses a broad, ongoing approach to identify projects and programs that implement the IRWM Plan. The IRWM Planning process is dynamic – project concepts and specific projects can be introduced at any time. The Plan includes a list of the *types* of projects that will address the Plan’s goals and objectives, rather than a list of specific projects. For the purposes of seeking a particular grant, specific projects and programs, or groups (suites) of projects are considered at the time a funding solicitation is released.

Since it is very time consuming for project proponents to develop detailed project proposals, and those proposals can quickly become out of date, full project proposals are only developed at the time funding becomes available. Priority projects, and the ability of the project proponents to implement them, fluctuate over time. Therefore, for the purposes of this IRWM Plan Update - a long-term planning document - a list of priority *types* of projects is provided in Table 7-1. Specific project proposals are identified at the time a funding solicitation is released, and projects are selected based on a variety of criteria including their applicability to the funding requirements, whether or not they meet multiple goals, their contribution to regional climate change adaptation, readiness to proceed, status of CEQA review and engineering design, availability of matching funds, and other factors discussed in Section 7.3. Subsequently an IRWM Plan Addendum is prepared that includes the specific projects. This has been the past practice of the WCVC IRWM Region since the first addendum was prepared in 2010.

The process to identify the types of regional and watershed-level projects considered for the WCVC IRWM Region includes review and recommendations first by the watershed committees and Steering Committee, and then final adoption by the WCVC General Members.

7.2.1 Process for Submitting Projects

Ongoing Project Submittal: WCVC has created a data portal that will serve as an ongoing mechanism for submitting projects, sharing information and posting progress on projects and programs. Project proponents will be able to submit projects at any time, with any level of detail, and edit them as needed. The lead representative for each watershed group (i.e. the watershed coordinator) collects and reviews the projects submitted and can “accept” them into the database. This serves as the initial mechanism for submitting projects for consideration in the IRWM Plan.

As described in Section 4 (Governance and Stakeholder Involvement), decisions by the WCVC originate in the watershed committees. Topics and issues related to implementation of the IRWM Plan are discussed in the watershed committees prior to being addressed by the Steering Committee or the General Membership. As a first step, committee members consider the types of projects and programs that could meet the priority needs and goals of the Region or one or more watersheds (see Table 7-1). This serves as a reference and a starting point for designing integrated, multi-benefit projects, and “suites” of projects, that will achieve the goals of the IRWM Plan.

Projects Submitted for Funding Solicitations: When the 2006 WCVC IRWM Plan was prepared, which occurred simultaneously with the development of an application for Proposition 50 IRWM Implementation Grant funds, stakeholders were invited to submit potential projects, in a broad “call for projects” process. Specific projects were included in the IRWM Plan. Since 2006, watershed-level priorities have been re-visited and re-affirmed.



In subsequent cycles of IRWM Implementation Grant funding (Proposition 84) the WVCV has issued a “call for projects” to solicit potential projects to be included in a suite of projects and those projects were included in an IRWM Plan Addendum. Two IRWM Plan addenda were developed, in 2010 and 2013 respectively.

7.2.2 Process for Reviewing and Selecting Projects

Implementation projects are developed and prioritized through a collaborative effort at the watershed level and the regional level. Stakeholders consider the priority needs in the watershed and work together to identify the best projects to put forward for a grant solicitation. Project proponents submit project proposals for consideration which are then ranked by the watershed committee. These decisions are made by a consensus of the participants. Projects are selected based on their ability to: meet and/or integrate multiple IRWM Plan objectives and resource management strategies; provide multiple benefits; demonstrate technical feasibility and; address statewide preferences and priorities and address other aspects of the IRWM Plan. The stakeholder process is described below.

Selection of projects in the Region is based on consensus of the stakeholders. For each round of IRWM Implementation Grant funds the emphasis is on developing a geographically balanced and integrated suite of projects that best meet the needs of the Region and address the IRWM Plan Goals, and best fit the resource management strategies.

Prior to each grant solicitation stakeholders are asked to submit a call for projects through the WVCV web portal described in further detail in Section 9 – Data Management and Technical Analysis.

WVCV Stakeholder Committee Review Process:

Watershed Committees

- Review individual projects already included in the adopted WVCV IRWM Plan (2006) or subsequent Addendums (2010, 2013).
- Determine which of these projects rate as high priority for implementation of the IRWM Plan.
- Solicit new project ideas that meet the eligibility requirements of the specific grant program and which are high priority for implementation in the watershed.
- Determine if any of these high priority projects qualify for funding under funding Guidelines and Proposal Solicitation Package and meet eligibility criteria for funding.
- Determine if those high priority projects that qualify are ready for implementation within the grant schedule.
- Determine if there will be sufficient local match (generally at least 25%) for projects selected.
- Determine if there are any projects *NOT* in the IRWMP that meet the criteria listed above that should be considered for funding.
- Review applicable projects and rank them in priority order.
- Prepare and approve a short list of projects to be considered by the WVCV Steering Committee as part of a suite of projects for WVCV to put forth in a proposal for a regional grant application.

WVCV Steering Committee

- Review proposed projects from each watershed committee as well as any regional projects.



- Evaluate the benefits, project elements, technical feasibility, cost, eligibility, readiness to proceed, project proponent capacity and related information to determine which projects to include in a suite of projects.
- Select the best suite of projects based on the criteria that will become the grant proposal for WVCV General Membership approval.

WVCV General Membership

- Consider and approve suite of projects for specific grant application. If the General Membership does not approve of the suite, the Steering Committee will reconvene to revise the suite of projects.
- Authorize an entity to apply for an Implementation grant on behalf of WVCV.
- Authorize preparation of an IRWMP addendum to include any projects not already included in the IRWM Plan or addendums.

IRWM Plan Administrative Addendums

In the years since adoption of the 2006 WVCV IRWM Plan, new projects have been identified and added to the Plan in the form of administrative addendums. These addendums were developed following a project solicitation process, consistent with the description above. The addendums have included those newly identified projects that were assessed by the watershed committees and the WVCV and met the criteria for inclusion in the IRWM Plan.

7.2.3 Process for Communicating With Stakeholders Regarding Selected Projects

Project concepts and specific projects entered into the WVCV IRWM web portal can be viewed by stakeholders, once accepted by the lead person for each watershed. Projects selected for a particular funding solicitation are approved by the WVCV General Members and the decision is memorialized in the minutes which are sent to the WVCV Stakeholder e-mail list. The approved project list is also published in an IRWM Plan Addendum. These are posted on the website, in the web portal and communicated to stakeholders through e-mail notifications.

The IRWM Plan is part of a dynamic and ongoing planning process. Through the data portal, as needed before major grant applications, as conditions change, funding is identified, projects are implemented and objectives revised.

7.3 Criteria for Evaluating Projects for Inclusion in IRWM Plan

Projects and programs are selected for implementation based on the criteria listed below.

1. How well the project addresses one or more IRWM Plan goals.
2. How well the project addresses regional needs or is part of a regional effort.
3. Which Resource Management Strategies are addressed by the project.



4. How well the project benefits a Disadvantaged Community and/or Environmental Justice Community or increases Disadvantaged Community or Environmental Justice Community participation.
5. How well the project meets a critical need or urgent priority.
6. The project's consistency with local land use and/or water plans and the IRWM Plan.
7. How well the project mitigates or adapts to climate change.
8. How the project reduces greenhouse gas emissions through energy savings or other means.
9. How well the project improves coordination with neighboring IRWM Regions.
10. If the project addresses critical water issues for Native American Tribal Communities.
11. Technical justification of the project with respect to related physical benefits.
12. The overall cost of the project and if it's financially feasible with available sources for matching funds.
13. Does successful implementation of the project depend on completion of other projects or project phases?
14. Ability of the project to help reduce dependence on the Delta water supply.
15. Is the project integrated resulting in a more cost effective approach than multiple projects?
16. The project's ability to improve water supply reliability during droughts.
17. Does the project address linkages between groundwater and surface water; improve conjunctive management?

Additional criteria is developed as needed based on the requirements of the specific grant. These criteria serve as the basis for decisions regarding the suite of projects selected for grant funding solicitations. The criteria are not weighted, and there are no "points" assigned to each criteria. There is no decision matrix or methodology. The watershed committees, WVCV Steering Committee and General Membership make decisions based on careful consideration of all of the criteria and knowledge about each project, and how well a particular group – suite - of projects selected cover the criteria as a whole. The synergy between and among projects is as important as the individual projects selected.

Projects being considered for a funding solicitation are asked to demonstrate readiness to proceed:

1. Local cost share has been identified or secured.
2. CEQA and/or NEPA have been initiated or completed.

3. Technical feasibility or engineering studies have been completed.
4. Applicable permits have been obtained.
5. Water rights have been secured - if applicable.
6. Construction drawings have been completed.
7. Project costs and benefits have been defined in detail.
8. Preliminary cost estimates and design have been completed.
9. Necessary agreements been secured from project partners.
10. Funding for ongoing maintenance has been secured.

7.3.1 Assessing How Projects Can Reduce Greenhouse Gas Emissions and Help Adapt to Climate Change

Many projects that have already been implemented, or are considered for future implementation in the Region, are helping to reduce Greenhouse Gas (GHG) emissions and/or helping the Region adapt to climate change impacts. Projects that enhance local water supplies, decrease dependence on imported State Water, improve drought resiliency, reduce wildfire risk, provide integrated flood management and modify land use development patterns and infrastructure in floodplains and areas along the coast will all contribute to reducing the impacts of climate change on the Region, which were identified in Section 3 – Region Description.

During the project review and evaluation process, a high level analysis of potential GHG emissions reductions and climate change adaptation is conducted for individual projects. Please see Tables 7-3 and 7-4 for general analysis of whether specific projects included in this Plan help adapt to climate change or reduce GHG. Tables 6-2 and 6-3 in Section 6 – Resource Management Strategies – also includes an assessment of the ability of each RMS to reduce GHG and adapt to climate change.

When projects move forward for implementation, a CEQA project-level analyses will be conducted which will include a more detailed project-level GHG emissions analysis including estimated GHG emissions and also consider establishment of significance criteria, identification of project components that may support carbon sequestration; and an explanation of how the project may help in adapting to effects of Climate Change.

7.3.2 Conducting Project Specific Analysis

Projects selected for inclusion in the IRWM Plan for future implementation are reviewed and evaluated based on the criteria outlined above. Once projects move forward with implementation, they undergo comprehensive economic analysis, detailed review of climate change, GHG and environmental impacts, and further technical and engineering analysis.

7.4 Projects and Programs Identified for Implementation

This section includes the types of projects to be emphasized in the Region to further Plan goals, and help meet Statewide Priorities.



7.4.1 Summary of Conditions Impacting WVCV Region and Local Watersheds

A variety of conditions drive the types of projects chosen to address water supply, water quality, ecosystem health, provision of water-related public access and adaptation to climate change. These are highlighted below.

Water Supply

Of the total Ventura County water demand, approximately 65 percent is supplied from local groundwater sources. Imported water, primarily from the State Water Project (SWP) water from the Sacramento – San Joaquin Delta, makes up about 20 percent of the water utilized in the County. The balance of the water is from local surface and recycled water.

The Calleguas Creek Watershed is largely dependent upon imported water from the SWP, obtained locally by Calleguas Municipal Water District (Calleguas). Many retail purveyors in the Calleguas Creek Watershed have no source of potable water other than Calleguas, while others use both imported water and local groundwater. Some communities within the Santa Clara River Watershed are also partially dependent upon imported water from the SWP from Calleguas. The Ventura River Watershed uses both groundwater and local surface water but does not currently import SWP water.

The availability of imported water from the SWP is subject to a number of natural and human factors and has become increasingly vulnerable to drought, catastrophic levee failures from flood and/or seismic events, and regulatory restrictions on pumping facilities to protect endangered species.

Groundwater availability and quality vary greatly throughout the Region. In some areas, for example the northern part of the Pleasant Valley (PV) Basin, groundwater is available, but the resource is underutilized because it is too brackish. In areas such as this, de-salters are necessary to fully develop the groundwater resource. In other areas, for example the Santa Paula Basin and the main part of the PV Basin, water quality is less of an issue and groundwater overdraft is the primary concern.

Invasive plant species have spread throughout the Region's watersheds, including along the Ventura and Santa Clara Rivers. *Arundo* (*Arundo donax*) is a dominant invasive plant species that can use more than four times as much water as native riparian species. In areas threatened by groundwater overdraft, it is critical to ensure that water resources are used efficiently and not lost to invasive plant species or otherwise wasted. Similarly it is important to maximize the reuse of treated wastewater that would otherwise flow to the ocean because it can be used in lieu of groundwater and/or imported water for non-potable purposes. With the ongoing threats to both imported SWP and local water resources, there is a need for projects that augment local water supplies, improve local water supply reliability, and reduce dependence on imported supplies.

A number of recently proposed or implemented projects within the Region will help augment and conserve local water supplies through brackish groundwater desalting, recycled water production, and invasive species removal.

Water Quality

One of the objectives of the WVCV IRWM Plan is to protect and improve water quality. Primary water quality challenges faced by Ventura County include the accumulation of salts in groundwater and surface water, disturbance of natural riparian systems, and various point and non-point source



discharges. In the Calleguas Creek Watershed, historic and ongoing urbanization and agricultural activities have resulted in accumulation of salts in soils, surface water, and groundwater. Over time, the salts have become increasingly concentrated in some areas to the point that the groundwater can no longer be used without treatment or blending with imported water. The salts have become a serious enough problem for the Regional Water Quality Control Board (RWQCB) to list Calleguas Creek and its tributaries as “impaired” necessitating the development of total maximum daily loads (TMDLs) for numerous constituents. Several projects being implemented or proposed in the watershed will enable use of degraded water supplies while protecting the basin from further salinity impairment by exporting salts and reducing salt imports.

The water quality impacts of stormwater runoff, urban runoff and other non-point sources are a concern throughout all three watersheds. Discharges from these sources can contain harmful levels of nutrients, bacteria, metals, toxic compounds and trash. Developing methods to address these contaminants and prevent them from reaching receiving waters is of paramount importance to Ventura County.

Current and future projects must effectively address these water quality challenges by reducing salt imports to, and increasing salt exports from, the watershed, preventing pollution from entering and being conveyed by flood channels, and targeting invasive species for removal.

Flood Management

One of the goals of the WVCV IRWM Plan is to protect people, property, and the environment from adverse flooding impacts. Addressing this goal involves maintaining and improving existing engineered flood control structures and reducing flood risks through improved management of the natural riparian systems impacted by invasive species. In some parts of Ventura County the floodplain is relatively undeveloped, while in other parts undersized flood control facilities serve dense urban areas. In some urban areas flood control channels serve as targets for graffiti, divide neighborhoods, and collect and convey trash to sensitive downstream habitat. Invasive species, particularly Arundo and Tamarisk (*Tamarix ramosissima*) that have spread along the riparian systems in Ventura County exacerbate flood risk. Large stands of these species obstruct and divert stream flows. Additionally, wildfires can be exacerbated by invasive species. Unlike native California riparian plants, Arundo is highly flammable and increases the probability, extent, and intensity of wildfires and the associated erosion and debris flows that enter streams for years following fires.

It will continue to be priority in the Region to develop and implement innovative strategies to address flood management that include targeted improvement of small-scale systems and large-scale efforts to enhance efficacy of the natural conveyance systems. A priority of these projects will be to reduce flood risk and lessen the adverse impacts associated with flooding.

Habitat Quality and Public Access

Protecting and restoring habitat quality and ecosystems and providing public access to enjoy the local watersheds are important components of the IRWM Plan. Creating and enhancing both habitat and recreational opportunities remains crucial to preservation of the quality of life in Ventura County, where open space, agriculture, wildlife, and outdoor recreation are highly valued by both residents and visitors. This is particularly the case in Ventura County, which is home to the longest (84 miles) un-channelized river remaining in Southern California - the Santa Clara River. Natural habitat in Ventura County, as elsewhere, is continually under pressure from development, invasive species,



climate change, water quality threats, and competing water needs. Projects that integrate habitat preservation and improvement with water supply, water quality, and flood control benefits are particularly desirable. These approaches to resource management will help retain the natural state of Ventura County’s watersheds.

Overall, the IRWM Plan objectives are met by creating multi-faceted solutions for the many water-related challenges faced by the Region. Projects selected for implementation provide multiple benefits addressing habitat through targeted ecosystem restoration efforts and improved recreational access and opportunities.

7.4.2 Types of Projects - General

The WCVV reviewed a wide variety of types of projects and programs for possible implementation in the Region. These types of projects/programs are listed in the Table 7-1 below. This list is a reference for stakeholders in the Region and illustrates the types of projects considered for implementation of IRWM Plan goals and resource management strategies.

**Table 7-1
Program/Project Types
To help accomplish IRWM Plan Goals and Objectives**

Water Supply Enhancement	
	Potable Water Distribution, Treatment and Storage
	New facilities or rehabilitation, replacement or removal of existing facilities to store, treat or distribute potable water
	Surface Water
	Projects that include diversion and/or storage of surface water
	Groundwater
	Installation of injection wells to augment groundwater basins storage and/or prevent seawater intrusion
	Construction of groundwater extraction facilities (wells)
	Projects that enhance aquifer storage and recovery
	Development of monitoring wells
	Development of programs for ongoing groundwater modeling, management and planning
	Groundwater replenishment facilities
	Wellhead protection projects (e.g., proper well abandonment, development restrictions)
	Surface and Groundwater
	Projects that enable conjunctive management of surface and groundwater supplies
	Non-Potable Water
	Implementation of projects that result in development and delivery of recycled wastewater for irrigation or other beneficial uses
	Projects which result in development of non-potable surface and groundwater for irrigation or other beneficial uses
	Facilities to enable the pumping and treatment of poor quality water for beneficial uses
	Potable (Drinking) Water



	Facilities to remove pollutants or contaminants from drinking water supplies
Other Sources and Options	
	Projects that include desalination and transport of brackish water or seawater
	Rainwater collection systems (cisterns)
	Greywater systems
	Water banking, exchange and transfer
	Emergency inter-tie facilities
Water Demand Management (Efficiency)	
	Implementation of Urban Water Use Efficiency Measures: <i>Residential Survey Programs, Residential Plumbing Retrofit, System Water Audits, Metering w/Commodity Rates, Large Landscape Conservation, High Efficiency Clothes Washers, Public Information Programs, School Education Programs, Commercial Industrial Institutional, Wholesaler Agency Assistance Programs, Conservation Pricing, Conservation Coordinator, Water Waste Prohibitions, Residential Ultra Low Flush Toilet Replacement Programs</i>
	Development of drought contingency and emergency plans
	Implementation of agricultural water-use efficiency measures
Water Quality Improvement	
Sewer Treatment and Discharge Facilities	
	Rehabilitated or upgraded sewer treatment, collection and discharge systems
	Relocated and/or enhanced protection of sewer collection, treatment and discharge systems
Contaminants and Salts Management	
	Control and/or enforcement of prohibitions on illegal discharge of controlled or toxic substances
	Projects that remediate contaminated water
	Removal of on-site water softening devices and other measures to reduce salt loading
	Projects that remove and dispose of salts from local water sources; includes large scale projects such as the Salinity Management Pipeline Project
	Replacement of problematic septic tank systems with sewer connections, fertilizer application reduction and other measures to reduce nutrient loading
TMDL Development and Implementation	
	Development of TMDLs
	TMDL Monitoring
	TMDL Implementation
Stormwater Management and Treatment	
	Low flow stormwater treatment and other methods to remove contaminants from stormwater
Other Water Quality Programs/Projects	
	Facilities to control nonpoint source pollution
	Facilities to control point-source pollution
	Water quality monitoring
	Brownfields remediation
Flood Management	
Flood Protection Facilities and Monitoring	

	Levee construction or remediation
	Channel improvement (e.g., erosion control/bank stabilization and protection)
	Removal of hazards or facilities from floodways
	Storm monitoring and modeling
	Land or easement acquisition for watercourse preservation, restoration and flood management
	Ecosystem Protection and Restoration Strategies - Stewardship
	Projects that control and remove invasive species and/or prevent their reoccurrence
	Projects or programs which protect existing habitats from degradation
	Projects that create, protect, restore or enhance wetlands and other water related ecosystems
	Land acquisition and/or easements for protection and restoration of habitat areas landscape linkages/wildlife movement
	Protection and restoration of fish and wildlife migration corridors and landscape linkages
	Projects which restore the natural hydrograph and sediment transport in local watercourses
	Development of mitigation banks to offset new impacts
	Collection and management of biological resources data in coordinated, comprehensive database with related overlay zones or map layers
	Recreation and Public Access
	Development of active and passive recreation areas related to water resources
	Projects that provide for appropriate public access to water related recreation
	Land Use Planning and Regulation
	Development of or updates to land use plans, policies and ordinances that result in improved water management, habitat protection and/or flood protection (e.g., floodplain development restrictions, riparian corridor buffers, sensitive habitat overlays)
	Creation of land use development standards and conditions that reduce impervious surface areas in new construction and retrofits of existing development (Low Impact Development practices – LID)
	Development of incentives related to land use permitting for land owners to protect and restore habitats and ecosystems on their property
	Climate Change Mitigation and Adaptation
	Projects that achieve or facilitate greenhouse gas reduction
	Adaptation strategies to minimize impacts of climate change

7.4.3 Priority Types of Projects in the Region

Each watershed has somewhat unique needs and conditions, therefore the types of projects needed vary by watershed. In recent years significant progress has been made toward resolving local water conflicts, implementing projects that meet the IRWM Plan goals and address the Regions water challenges. See Section 2 for more information regarding projects and programs accomplished in the Region since 2007. Table 7-2 below includes the high priority projects and programs being pursued for future implementation in each watershed and at the regional level, which were identified by the watershed committees based on current and future needs and challenges and their ability to adapt to



climate change impacts. These were determined based on a water planning documents (water master plans, urban water management plans), feasibility studies, recreational and land use planning documents, flood management plans, regulatory requirements, ongoing monitoring and stakeholder input.

7.5 Specific Projects Included in WCVC IRWM Plan Addendums and Considered for 2014 Drought Solicitation

Information regarding specific projects added to the IRWM Plan since 2010 are included in Table 7-3. These projects were vetted by the watershed committees and approved by the WCVC General Membership for inclusion in subsequent IRWM Plan Addendums. Table 7-4 includes all the projects considered for the Prop. 84 2014 Drought Solicitation – Implementation Grant. Table 7-5 includes those projects selected as part of the project proposal for the Drought Solicitation.

**Table 7-2
Priority Program and Project Types**

Priority Types of Integrated Projects and Programs	Calleguas Creek	Lower Santa Clara River	Ventura River	Regional
Integrated Flood Management	Natural floodplain management projects	Natural floodplain management projects	Natural floodplain management projects	
	Flood management infrastructure improvements	Implementation of Feasibility Study with Army Corps and LA County – sediment transport studies and ongoing modeling and monitoring	Improved flood protection facilities combined with recreational access	
Water Quality Enhancement	Salinity Management Pipeline and related desalter facilities	Seawater intrusion abatement		Stormwater Permit Implementation
	TMDL implementation	TMDL implementation	TMDL Implementation	
	Stormwater capture and treatment	Stormwater capture and treatment	Stormwater capture and treatment	
	Agricultural runoff reductions - VCAILG	Agricultural runoff reductions - VCAILG	Agricultural runoff reductions - VCAILG	
	Low impact development and retrofit projects	Low impact development and retrofit projects	Low impact development and retrofit projects	
Groundwater Management	Groundwater recharge and replenishment projects – i.e. aquifer storage and recovery	Groundwater recharge and replenishment projects – i.e. aquifer storage and recovery	Enhanced conjunctive use of surface and groundwater	Enhanced groundwater monitoring and modeling
	Las Posas Basin Groundwater Management Plan	Implementation of Fox Canyon Groundwater Management Agency Ordinances and monitoring		
Water Use Efficiency	Enhanced outreach and education	Enhanced outreach and education	Enhanced outreach and education	Enhanced regional outreach and education projects
	Implementation of urban	Implementation of urban demand	Implementation of urban	Implementation of

Priority Types of Integrated Projects and Programs	Calleguas Creek	Lower Santa Clara River	Ventura River	Regional
	demand management measures – emphasis on urban landscape irrigation	management measures– emphasis on urban landscape irrigation	demand management measures – emphasis on urban landscapes	regional urban demand management measures – emphasis on urban landscapes
	Implementation of agricultural water use efficiency evaluations and irrigation improvements	Implementation of agricultural water use efficiency evaluations and irrigation improvements	Implementation of agricultural water use efficiency evaluations and irrigation improvements	Implementation of regional agricultural water use efficiency evaluations and irrigation improvements
Recycled Wastewater and Non-Potable Water	Expanded distribution of recycled wastewater and non-potable water for agricultural uses and groundwater recharge	Expanded distribution of recycled wastewater and non-potable water for agricultural uses	Expanded distribution of recycled wastewater and non-potable water - including possible direct potable reuse	
Ecosystem Restoration	Conejo Creek and Wildwood Park Enhancement Project	Freeman Diversion Fish Passage	Matilija Dam Ecosystem Restoration project elements	
	Invasive species removal	Invasive species removal	Invasive species removal	
Recreation and Access	Trails and access – Santa Monica Mountains Conservancy Area	Santa Clara River Parkway Project	Lower Ventura River Parkway Project	

**Table 7-3
Projects approved for Inclusion in the IRWM PLAN By Addendum Since 2010**

WCVIC IRWM Plan Project	Project Summary	Potential for Climate Change Adaptation	Potential for Greenhouse Gas Reduction
City of Oxnard (Oxnard) Ventura County Regional Urban Landscape Efficiency (VC-RULE) (R-1)	VC-RULE is a partnership of nine agencies seeking to optimize irrigation practices and systems in the region by implementing landscape water use efficiency audits and improvements. This will translate to water savings and increased water supply reliability for Ventura County.	√	√
Ventura County Farm Bureau Agricultural Water Efficiency Surveys - BMP Implementation (R-2)	This project involves conducting surveys of irrigation systems to assess distribution uniformity followed by irrigation improvements which will lead to more efficient water use and reduced irrigation runoff. Reducing agricultural runoff is a key component of the Regional Board’s implementation of Total Maximum Daily Loads (TMDLs) and compliance with conditional waiver for irrigated agricultural production.	√	√
Camrosa Water District (Camrosa) Round Mountain Desalter (C-13)	Round Mountain Desalter will treat local brackish groundwater using reverse osmosis technology to provide up to 1 million gallons per day (MGD) of a new source of potable water, improve local supply reliability, and reduce Camrosa’s purchases of imported water by approximately 10 percent.	√	
Calleguas Municipal Water District (Calleguas) Salinity Management Pipeline (SMP) Phase 2A (C-14)	Phase 2A of the SMP will extend the existing regional pipeline for collection and transfer of salty water by an additional 12,000 linear feet, allowing for concentrate discharge from potential future agricultural desalters and wet season discharge from the CamSan Recycled Water Interconnection.	√	
Camarillo Sanitary District (CamSan)/Camrosa Recycled Water (RW) Interconnection (C-15)	The Recycled Water Interconnection will be 9,600 feet of 24-inch pipeline to link CamSan’s water reclamation plant to the Camrosa storage ponds and the Calleguas SMP. This will allow up to 6.75 MGD of recycled water to be distributed to CamSan and Camrosa’s customers from both the pipeline and the storage ponds.	√	



WCVV IRWM Plan Project	Project Summary	Potential for Climate Change Adaptation	Potential for Greenhouse Gas Reduction
Camrosa Expansion of Non-Potable Water System (C-16)	Expansion of Camrosa’s existing non-potable distribution system easterly into Santa Rosa Valley and westerly above Potrero Road will reduce dependence on imported water supplies and associated salt imports. The proposed expansion is phased with an ultimate substitution of 1,000 acre-feet of potable water with non-potable supplies.	√	
Ventura County Waterworks District No. 1 Moorpark Desalter (C-17) Previously C-4	The Moorpark Desalter would reclaim brackish groundwater in the South Las Posas Basin to help comply with Salts TMDLs, reduce dependence on imported water supplies, reduce groundwater quality degradation threatening groundwater storage credits in the Calleguas aquifer storage and recovery facility, and as part of a coordinated water resource management plan could facilitate the capture higher quality stormwater inflows by creating groundwater storage space in the shallow unconfined aquifers recharged by the Arroyo Las Posas.	√	
Ventura County Waterworks District No. 8 West Simi Water Recycling Project (C-18)	The West Simi Water Recycling Project includes construction of operational storage, distribution pipelines and a pump station to extend recycled water service to large irrigation and industrial users in Simi Valley.	√	√
Mountains Recreation and Conservation Authority Borchard Wetlands Acquisition (C-19)	Acquisition of Borchard Wetlands property would facilitate permanent habitat protection and public educational access, water quality improvement and groundwater recharge.	√	
The Nature Conservancy (TNC) Natural Floodplain Protection Program (NFPP) (SC-7)	Implementation of the NFPP will preserve a critical section of the remaining undeveloped 500-year floodplain in the Santa Clara River Watershed by acquiring property easements to preclude development. Acquisition of these easements will provide downstream flood benefits by allowing flooding to occur upstream in the watershed.	√	
United Water Conservation District (UWCD) Seawater Barrier Pilot Well (SC-9)	The approximately 1,200 feet deep Seawater Barrier Pilot Well will be installed to gain valuable information regarding aquifer effects and benefits through injection of up to 1,000 gallons per minute of potable water for up to 5 years. Additional wells may be added in the future to provide	√	√



WCVV IRWM Plan Project	Project Summary	Potential for Climate Change Adaptation	Potential for Greenhouse Gas Reduction
	additional barriers to seawater intrusion through injection of potable and/or recycled water treated with reverse osmosis.		
Ventura County Waterworks District No. 16 (VCWWD No. 16) Piru Treatment Plant Tertiary Upgrade (SC-10)	The Piru Treatment Plant Tertiary Upgrade will provide additional tertiary treatment such that the recycled water is suitable for reuse for irrigation. The new system will eliminate the existing percolation ponds, eliminating a concentrated source of groundwater salinity.	√	√
Oxnard Recycled Water Backbone-Hueneme Transmission East, Phase 1 (SC-11)	The project includes construction of a recycled water transmission line from the Oxnard's Advanced Water Purification Facility, to deliver up to 5,000 acre-feet of non-potable water for agricultural use, potential seawater barrier injection, or industrial uses on the Oxnard plain. The recycled water will offset pumping from overdrafted groundwater aquifers and help address seawater intrusion into the groundwater aquifers underlying the Oxnard Plain.	√	√
Ojai Valley Land Conservancy (OVLC) Ojai Meadows Ecosystem Restoration Final Phase (V-5)	Ojai Meadows Ecosystem Restoration will remove non-native species and revegetate 41 acres of upland and transitional habitats in the Ojai Meadows Preserve for improved wildlife habitat. The restoration will also stabilize lands that drain to the wetlands that were developed in the prior phase of the project.	√	
Ventura Hillside Conservancy Lower Ventura River Habitat Restoration and Enhancement (V-7)	The Lower Ventura River Habitat Restoration project involves acquiring land and conservation easements in the 100-year floodplain along lower reaches of the river. This project will also include habitat restoration and enhancement along the lower five miles of the Ventura River up to and including the estuary.	√	
Casitas Municipal Water District Seismic Retrofit of Reservoir Tank (V-9)	This project involves retrofitting two reservoir tanks so they are earthquake safe, thus averting possible water losses and/or loss of service to customers in the event of an earthquake that damages or destroys the tanks.		
OVLC Rice Creek Realignment and Enhancement (V-10)	This project on the OVLC's Ventura River Preserve would return Rice Creek to its approximate historical location from its current channelized location. The project will add over 1,500 feet of new riparian habitat on the site and reestablish	√	



WVCV IRWM Plan Project	Project Summary	Potential for Climate Change Adaptation	Potential for Greenhouse Gas Reduction
	floodplain connections and buffer habitats. This project will help shade the water to keep it cool and reduce algal blooms, reduce sedimentation in the Rice Creek and the Ventura River via erosion control, increase the numbers and variety of wildlife, and act as infiltration areas to support water storage for the Ventura River.		

**Table 7-4
Projects Considered for Proposition 84 IRWM Implementation Grant - 2014 Drought Solicitation and Now Included in the IRWM Plan**

Project Name	Project Proponent (s)	Total Project Cost	Project Description
Efficiency Metering - Westside Ventura	City of Ventura	\$1,700,000	The City of Ventura would replace meters in the Westside Community, which is a Disadvantaged Community, with automated meter Infrastructure (AMI) installation. The area has very old pipes and meters with many leaks. AMI systems allow for continuous monitoring of leaks so the leaks can be detected and repaired more quickly. The current bi-monthly billing cycle means that many leaks go undetected for several months, therefore wasting water.
Lake Casitas Aeration Project	Casitas Municipal Water District	\$1,187,029	Lack of inflow to Lake Casitas has resulted in lowered dissolved oxygen levels, may result in algal blooms and threatens potable water quality, fish, and aquatic habitat. This project consists of installing an oxygenation system in Lake Casitas to help assure that low lake levels will not pose a risk to the delivery of water supplies for the 70,000 persons and 5,600 acres of planted agriculture in the Casitas Municipal Water District service area.
Stormwater Capture Drying Bed Capacity Improvement	Ojai Valley Sanitary District	\$2,225,000	The Ojai Valley Sanitary District proposes to develop a “Stormwater Capture and Recharge” project which will divert and temporarily store stormwater from the nearby Weldon Canyon drainage channel for reuse by others offsite or to delay a portion of stormwater peak flows in the Ventura River Watershed by using proposed expanded drying beds for capture.
San Antonio Creek Arundo Removal Project	Ojai Valley Land Conservancy	\$1,480,000	The Project will complete the ongoing effort to remove Arundo donax from the San Antonio Creek basin of the greater Ventura River Watershed, focusing on the lower 5 miles of Creek. The project will make approximately 320 acre feet per year of additional water available for fish, wildlife and municipal uses by reducing water loss from this invasive weed.



Project Name	Project Proponent (s)	Total Project Cost	Project Description
Ventura County Agricultural Water Use Efficiency Program	1. Ventura Co. Watershed Protection District 2. Ventura County Resource Conservation District 3. Farm Bureau of Ventura County 4. Fox Canyon Groundwater Management Agency	\$2,737,850	This program is a county-wide effort to work with growers to analyze irrigation methods then implement system improvements for increased agricultural water use efficiencies. The project will result in savings of up to 10,000 acre feet per year, will help bring groundwater basins into balance, and will reduce agricultural runoff.
County Stormwater Retrofits for Groundwater Recharge – El Rio	County of Ventura	\$1,282,668	This project will implement groundwater infiltration improvements along the County’s road Right-of-Way in the unincorporated area of El Rio. Dry-weather runoff and stormwater from 64 acres of residential area will be captured, treated, and infiltrated for groundwater recharge using pervious concrete gutters. Besides long-term and sustainable groundwater recharge, this retrofit project will contribute to improvement of surface water and groundwater quality and floodplain mitigation.
Pilot ASR Well for Groundwater Reuse Replenishment	City of Oxnard	\$1,500,000	This project consists of the construction of an aquifer storage and recovery (ASR) well and monitoring wells to replenish groundwater with recycled water from Oxnard’s Advanced Water Purification Facility. In the near term the project will result in indirect potable reuse of 1,500 acre-feet per year; in the long-term the project will result in reuse of 7,000 acre-feet per year.



Project Name	Project Proponent (s)	Total Project Cost	Project Description
Salinity Management Pipeline, Phase 2D	Calleguas Municipal Water District	\$7,500,000	The Calleguas Regional Salinity Management Project (SMP) is a regional pipeline that provides a disposal mechanism for brine, thereby enabling operation of groundwater desalting facilities in the Calleguas Creek Watershed. Phase 2D facilitates groundwater desalting in the Pleasant Valley and East Las Posas groundwater basins and is anticipated to allow up to 3,400 acre-feet per year of high-quality agricultural irrigation water supplies to be brought online.
PV Well Project	Camrosa Water District	\$ 1,200,000	This project consists of drilling a new well in the northern portion of the Pleasant Valley Basin where water levels are high and no water quality impairments exist. The new well will provide 1,000 acre feet of water annually. Water extracted from the new well will be in-lieu of pumping from the southern portion of the Pleasant Valley Basin where groundwater levels are in severe decline and there is a threat of seawater intrusion.
West Simi Valley Recycled Water Project, Phase 3	(Ventura County Waterworks District No. 8)	\$ 3,900,000	The West Simi Valley Water Recycling Project (Phase 3) will extend the recycled water distribution system operated by the Ventura County Waterworks District No. 8 to deliver an estimated 320 acre-feet per year of recycled water to the Sunset Hills Golf Course and other nearby customers with large irrigation demands in the City of Thousand Oaks



Project Name	Project Proponent (s)	Total Project Cost	Project Description
Meter Station No. 7 and Penny Well	(Camrosa Water District) Projects combined	\$1,000,000	Distribution infrastructure modifications in both the potable and non-potable systems to allow Camrosa Water District to increase its use of local resource water and decrease its dependence on SWP water by 350 acre-feet per year.
Moorpark Wastewater Treatment Plant Tertiary Facility Optimization (Ventura County Waterworks District No. 1) and Pancho Road Reclaimed Water Pipeline	(Ventura County Waterworks District No. 1 and City of Camarillo) Projects tied in ranking.	\$1,800,000	The project will consist of optimizing the sand filters at the Moorpark Wastewater Treatment Plant by converting the backwash process from continuous to intermittent backwashing, thereby reducing the reject/backwash rate and increase reclaimed water production up to 15% while improving filtration quality.

**Table 7- 5
Summary of Projects Selected for the Proposition 84 IRWM 2014 Drought Solicitation**

Project Title	Project Proponent	Project Cost	Project Summary	IRWMP Goals Met					
				Reduce dependence on imported water and protect, conserve and augment water supplies	Protect and improve water quality	Protect people, property and the environment from adverse flooding impacts	Protect and restore habitat and ecosystems in watersheds	Provide water-related recreational, public access, stewardship, engagement and educational opportunities	Prepare for and adapt to climate change
Ventura County Agricultural Water Use Efficiency Program	Ventura County Watershed Protection District	\$2,737,850; <i>grant request of \$1,737,850</i>	This program is a county-wide effort to work with growers to analyze irrigation methods then implement system improvements for increased agricultural water use efficiencies. The project will result in savings of up to 10,000 acre feet per year, will help bring groundwater basins into balance, and will reduce agricultural runoff.	✓	✓				✓
Salinity Management Pipeline Phase 2D	Calleguas Municipal Water District	\$7,500,000; <i>grant request of \$1,875,000</i>	The Calleguas Regional Salinity Management Project (SMP) is a regional pipeline that provides a disposal mechanism for brine, thereby enabling operation of groundwater desalting facilities in the Calleguas Creek Watershed. Phase 2D facilitates groundwater desalting in the Pleasant Valley and East Las Posas groundwater basins and is anticipated to allow up to 3,400 acre-feet per year of high-quality agricultural irrigation water supplies to be brought online..	✓	✓		✓		✓



Project Title	Project Proponent	Project Cost	Project Summary	IRWMP Goals Met					
				Reduce dependence on imported water and protect, conserve and augment water supplies	Protect and improve water quality	Protect people, property and the environment from adverse flooding impacts	Protect and restore habitat and ecosystems in watersheds	Provide water-related recreational, public access, stewardship, engagement and educational opportunities	Prepare for and adapt to climate change
Pleasant Valley Well	Camrosa Water District	\$1,200,000; <i>grant request of \$900,000</i>	This project consists of drilling a new well in the northern portion of the Pleasant Valley Basin where water levels are high and no water quality impairments exist. The new well will provide 1,000 acre feet of water annually. Water extracted from the new well will be in-lieu of pumping from the southern portion of the Pleasant Valley Basin where groundwater levels are in severe decline and there is a threat of seawater intrusion.	✓	✓				✓
El Rio Retrofits for Groundwater Recharge	County of Ventura	\$1,282,668; <i>grant request of \$962,001</i>	This project will implement groundwater infiltration improvements along the County's road Right-of-Way in the unincorporated area of El Rio. Dry-weather runoff and stormwater from 64 acres of residential area will be captured, treated, and infiltrated for groundwater recharge using pervious concrete gutters. Besides long-term and sustainable groundwater recharge, this retrofit project will contribute to improvement of surface water and groundwater quality and floodplain mitigation.	✓	✓	✓	✓	✓	✓



Project Title	Project Proponent	Project Cost	Project Summary	IRWMP Goals Met					
				Reduce dependence on imported water and protect, conserve and augment water supplies	Protect and improve water quality	Protect people, property and the environment from adverse flooding impacts	Protect and restore habitat and ecosystems in watersheds	Provide water-related recreational, public access, stewardship, engagement and educational opportunities	Prepare for and adapt to climate change
Groundwater Replenishment Reuse Project	City of Oxnard	\$1,500,000; <i>grant request of \$1,125,000</i>	This project consists of the construction of an aquifer storage and recovery (ASR) well and monitoring wells to replenish groundwater with recycled water from Oxnard’s Advanced Water Purification Facility. In the near term the project will result in indirect potable reuse of 1,500 acre-feet per year; in the long-term the project will result in reuse of 7,000 acre-feet per year.	✓	✓				✓
San Antonio Creek Arundo Removal Program	Ojai Valley Land Conservancy	\$1,480,000; <i>grant request of \$1,110,000</i>	The Project will complete the ongoing effort to remove Arundo donax from the San Antonio Creek basin of the greater Ventura River Watershed, focusing on the lower 5 miles of Creek. The project will make approximately 320 acre feet per year of additional water available for fish, wildlife and municipal uses by reducing water loss from this invasive weed.	✓		✓	✓		✓
Lake Casitas Aeration Project	Casitas Municipal Water District	\$1,187,029; <i>grant request of \$890,272</i>	Lack of inflow to Lake Casitas has resulted in lowered dissolved oxygen levels, may result in algal blooms and threatens potable water quality, fish, and aquatic habitat. This project consists of installing an oxygenation system in Lake Casitas to help assure that low lake levels will not pose a risk to the delivery of water supplies for the 70,000 persons and 5,600 acres of planted agriculture in the Casitas Municipal Water District service area.	✓	✓		✓	✓	✓

7.6 Integration of Projects

Integration – combining separate elements into an efficiently functioning whole – is an essential aspect of IRWM and is an important element of the WVCV IRWM program. In some cases individual projects or programs are integrate multiple objectives and goals. Suites of projects, such as those included in IRWM Implementation Grant proposals, can be collectively integrated. Often, multiple Resource Management Strategies or conflicts are addressed in a single project or group of projects leading to integration. Projects and programs are often geographically integrated, whereby regional projects address the needs of multiple areas in the Region. IRWM Plan goals and objectives are also integrated – there is often overlap between and among them. The concept of integration as it pertains water resource management and the paradigm of IRWM has helped eliminate the separate “silos” of management. Integration results in greater collaboration among entities, geographical areas, and projects, and ultimately results in more cost effective solutions to local water management challenges.

The projects and programs implemented in the WVCV Region further the objectives and goals of the WVCV IRWM Plan and address critical water resource management issues. Individually and collectively, the projects and programs offer multiple integrated benefits relative to water supply, water quality, improvement of flood management, protection of habitat, and provision of public access. Projects being implemented in the WVCV Region are addressing complementary and mutual goals, amplify benefits to the Region (synergy) and minimizing the costs associated with meeting local water needs and solving local water management challenges and conflicts.

A notable example of integration in the WVCV Region is the Natural Floodplain Management Project which is integrating flood management, environmental stewardship, and agricultural sustainability and economic viability. This project is serving as a model for possible implementation in at least one other watershed in the Region.

7.7 Consideration of Program Preferences and Statewide Priorities

The WVCV IRWM Region recognizes the importance of the state’s preferences and priorities for IRWM funding. These are considered in the project selection process as described below.

Program Preferences

The following program preferences are reflected in the evaluation criteria and are taken into consideration during the project review and selection process:

- Include regional projects or programs
- Effectively integrate water management programs and projects within a hydrologic regions identified in the California Water Plan; the Regional Water Quality Control Board or subdivision; or other region or sub-region specifically identified by DWR
- Effectively resolve significant water-related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region

- Effectively integrate water management with land use planning
- For eligible **Stormwater Flood Management projects** that provide multiple benefits, including but not limited to water quality improvements, ecosystem benefits, reduction of in-stream erosion and sedimentation, and groundwater recharge
- Address Statewide Priorities
 1. Drought preparedness.
 2. Use and reuse water more efficiently.
 3. Climate change response actions.
 4. Expand environmental stewardship.
 5. Practice integrated flood management.
 6. Protect surface water and groundwater quality.
 7. Improve tribal water and natural resources.
 8. Ensure equitable distribution of benefits.

Projects proposed for implementation by the Watersheds Coalition of Ventura County are selected based on consistency with the Statewide Priorities listed above.