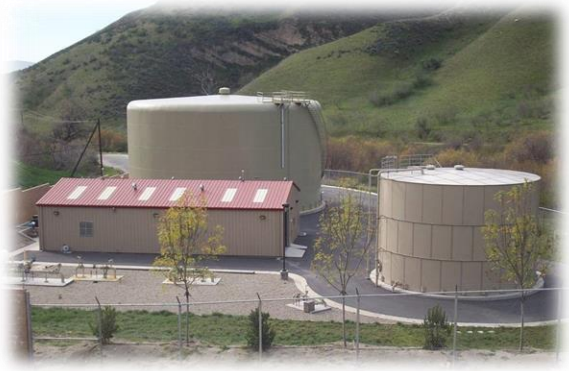

SECTION 7.0 - PROJECT REVIEW PROCESS AND INTEGRATION

7.1 Overview

The purpose of this section is to address the process for how projects and programs are identified and selected for inclusion in the IRWM Plan and for specific grant solicitations. Since the inception of the WCVC IRWM Program and adoption of the first WCVC IRWM Plan in 2006, stakeholders in the Region have been implementing projects and programs that address the Plan's goals and objectives and help implement Resource Management Strategies and Statewide Priorities. Some of these projects and programs have been funded with a combination of grants from Propositions 50, 84, and 1 as well as local match, while others have received grants from federal grant and other sources including local revenues. Please see Section 2 of the WCVC IRWM Plan for more details about project implementation since 2007.

The integration within and between projects is an important consideration. The Region's review and selection process is systematic but also flexible. The WCVC'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 Soliciting Projects and Programs for Inclusion in the IRWM Plan

Summary
The WCVC IRWM Plan's goals and objectives are met through implementation of integrated, multi-benefit projects and programs at both the regional, watershed and local scale. The WCVC IRWM Region has identified critical priorities and greatest needs (see Section 5, page 5-3) which also drive the selection of projects for implementation. These priorities – as evidenced in the six (6) goals in the Plan – are determined based on research, stakeholder input, and technical studies.

The IRWM Plan includes an inventory of the *types* of projects and programs that address the Plan's goals and objectives, as well as including specific projects. The types of projects included were developed by WCVC stakeholders. Table 7-1 includes the types of projects and programs which help guide development of project concepts. To identify and select specific projects for inclusion in the IRWM Plan, and for specific grant solicitations, the WCVC periodically issues a call for projects. Project proponents are also allowed to submit project concepts and specific projects at any time.

Since it can be time consuming for project proponents to develop detailed project proposals, and those proposals can quickly become out of date, full project proposals are typically only developed at the time funding becomes available. Priority projects, and the ability of the project proponents to implement them, fluctuate over time. See Table 7-2 for a list of priority *types* of projects identified for each watershed in the WCVC Region. Specific projects 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. When an IRWM grant solicitation issued by the state coincides with updating or amending the IRWM Plan, those projects are included in that document. Otherwise, those projects are included in an IRWM Plan *Addendum*. This has been the past practice of the WCVC IRWM Region since the first addendum was prepared in 2010. Please see Appendix M for a list of these projects.

The process to identify the types of regional and watershed-level projects considered for the WCVC IRWM Plan includes review and recommendations - first by the watershed committees and Steering Committee, followed by final approval by the WCVC General Membership. For further details, see the information below.

The most recent call-for-projects was conducted in the fall of 2018 as part of the development of this 2019 IRWM Plan Amendment. As a result, seventy-five new projects and programs were accepted by the WCVC General Membership for inclusion in the 2019 IRWM Plan Amendment. Please see Appendix N for a list of these projects.

An important and valuable part of the process is the discussion among stakeholders and potential project sponsors within each watershed regarding how to address our goals and greatest needs, and which conceptual projects and programs would have the most impact. At this state stakeholders have the opportunity to brainstorm together and develop project/program concepts which are truly integrated and provide multiple benefits. This dialogue is essential to developing the best projects.

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. 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 by stakeholders in the watershed committees prior to being addressed by the Steering Committee and then by the General Membership. As a first step, committee members consider the types of projects and programs that would meet the priority needs and goals of the Region or one or more watersheds (see Tables 7-1 and 7-2 for project types and priority project types). This serves as a reference and a starting point for designing integrated, multi-benefit projects and programs, and "suites" of projects, that will achieve the goals of the IRWM Plan. This is accomplished through sharing project ideas and brainstorming opportunities for collaboration in developing the right "portfolio" of actions and projects.

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 WCVC 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.

In 2014, WCVC updated the IRWM Plan in compliance with the Proposition 84 IRWM Plan Standards, and additional projects were added, including all projects that were previously included in IRWM Plan Addendums, and all those projects being considered for implementation in the 2014 IRWM Implementation Grant – Drought Round. Subsequently, another IRWM Addendum was prepared in 2015 to add projects being considered for the Final Round of the Proposition 84, IRWM Implementation Grant Program.

7.2.2 Process for Reviewing and Selecting Projects for IRWM Plan

Implementation projects are developed and prioritized through a collaborative effort at the watershed and regional level. Stakeholders consider the priority needs in the watershed and work together to identify the best projects to put include in the IRWM Plan and subsequently 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 goals and 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, best fit the Resource Management Strategies, and help the region adapt to climate change.

WCVC Stakeholder Committee Review Process:

Watershed Committees

- Review individual projects already included in the adopted WCVC IRWM Plan (2006) or subsequent Addendums (2010, 2013, 2015).
- Determine which of these projects rate as high priority for implementation of the IRWM Plan.
- Solicit new project ideas that further the goals of the IRWM Plan and/or 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 (50% in Proposition 1) for projects selected.
- Determine if there are any projects *NOT* in the IRWM Plan 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 WCVC Steering Committee as part of a suite of projects for WCVC to put forth in a proposal for the WCVC grant application.

WCVC Steering Committee

- Review proposed projects from each watershed committee as well as any regional projects.
- Evaluate the benefits (including climate change mitigation and adaptation), 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 WCVC General Membership approval.

WCVC General Membership

- Consider and approve suite of projects for specific grant solicitation. If the General Membership does not concur, the Steering Committee will reconvene to revise the suite of projects.
- Authorize an entity to apply for an Implementation grant on behalf of WCVC.
- Authorize preparation of an IRWM Plan 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 WCVC 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 evaluated by the watershed committees and the WCVC and met the criteria for inclusion in the IRWM Plan.

7.2.3 Process for Communicating with Stakeholders Regarding Selected Projects

Projects and programs selected for inclusion in the IRWM Plan, or for a particular funding solicitation are approved by the WCVC General Membership, and the decision is memorialized in the minutes which are sent to the WCVC Stakeholder e-mail list. If the IRWM Plan is not currently being updated, the approved project list is published in an IRWM Plan Addendum. They are then are posted on the WCVC website, in the web portal, and communicated to stakeholders through e-mail notifications.

7.3 Evaluating Projects

Projects and programs included in the IRWM Plan are evaluated using the follow considerations:

1. How well the project addresses one or more IRWM Plan goals.
2. How well the project meets a critical need or urgent priority.
3. How well the project addresses regional needs or is part of a regional effort.
4. Which Resource Management Strategies are addressed by the project.
5. How well the project benefits a Disadvantaged Community and/or Environmental Justice Community or increases Disadvantaged Community or Environmental Justice Community participation.
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:
    - Identifies potential effects of climate change on the Region and considers adaptations to water management system.
    - Adapts to climate change vulnerabilities.
    - Considers change in amount, timing, intensity, quality and variability of runoff and recharge.
    - Considers effects of sea level rise on water supply conditions.
8. How the project reduces greenhouse gas emissions through energy savings or sequestration.
    a. Quantifies GHG emissions
    b. Ability to help the IRWM region reduce GHG emissions
    c. Reduces energy consumption (especially embedded energy in water use)
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 are 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 criterion. The watershed committees, WCVC Steering Committee, and General Membership make decisions based on careful consideration 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 particular 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 Reduce Greenhouse Gas Emissions and Adapt to Climate Change

Many projects being implemented, or considered for future implementation in the Region, help to reduce Greenhouse Gas (GHG) emissions and/or help 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, and Section 13 – Climate Change.

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 is conducted which includes a more detailed project-level GHG emissions analysis including estimated GHG emissions and also considers 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 are reviewed and evaluated based on the considerations outlined above. Once projects move forward with implementation, they undergo 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 a summary of the conditions impacting the Region, the types of projects considered for implementation, the priority types of projects emphasized in the Region, and the actual projects selected to further Plan goals and help meet statewide priorities.

7.4.1 Summary of Conditions Impacting WCVC 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 many 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.

Several 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 WCVC 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 WCVC 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.

Developing and implementing 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 will continue to be a priority. 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 and programs selected for implementation must provide multiple benefits addressing habitat through targeted ecosystem restoration efforts and improved recreational access and opportunities.

Climate Change

As required in the 2016 Prop. 1 IRWM Program Guidelines (Planning Standards) the following must be included in the discussion regarding the region's project review process:

- Include potential effects of climate change on the region and consider if adaptations to the water management system are necessary.
- Consider the contribution of the project to adapting to identified system vulnerabilities to climate change effects on the region.
- Consider changes in the amount, intensity, timing, quality and variability of runoff and recharge.
- Consider the effects of sea level rise on water supply conditions and identify suitable adaptation measures.
- Consider the contribution of the project in reducing GHG emissions as compared to project alternatives
- Consider a project's ability to help the IRWM region reduce GHG emissions as new projects are implemented over the 20-year planning horizon.
- Reducing energy consumption, especially the energy embedded in water use, and ultimately reducing GHG emissions.

7.4.2 Types of Projects - General

The IRWM Plan can be implemented through a wide variety of projects and programs which 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

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: *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.*

	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 that work best to address those needs 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 addressing 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 higher-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 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.

Table 7-2
Priority Program and Project Types

Priority Types of Integrated Projects and Programs	Calleguas Creek	Lower Santa Clara River	Ventura River	Regional
Water Supply Enhancement Through Inter-Agency Cooperation	Emergency inter-tie projects	Emergency inter-tie projects	Emergency inter-tie projects	Emergency inter-tie projects
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

Priority Types of Integrated Projects and Programs	Calleguas Creek	Lower Santa Clara River	Ventura River	Regional
	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 demand management measures – emphasis on urban landscape irrigation	Implementation of urban demand management measures– emphasis on urban landscape irrigation	Implementation of urban demand management measures – emphasis on urban landscapes	Implementation of 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	

Priority Types of Integrated Projects and Programs	Calleguas Creek	Lower Santa Clara River	Ventura River	Regional
Recreation and Access	Trails and access – Santa Monica Mountains Conservancy Area	Santa Clara River Parkway Project	Lower Ventura River Parkway Project	

7.4.4 Projects Added to WCVC IRWM Plan Since 2010

As stated previously, new projects are added to the WCVC IRWM Plan as needed. In particular, new projects are added at the time of a grant solicitation and are included in a special IRWM Plan Addendum. All the projects added by Addendum as well as those added to the 2014 IRWM Plan, are shown in Appendix M.

7.4.5 Projects and Programs Added to IRWM Plan in 2019

As stated previously, seventy-five new IRWM projects and programs were approved by WCVC stakeholders for inclusion in the 2019 IRWM Plan Amendment. These projects, listed in Appendix N, would address several of the goals and objectives of the IRWM Plan and help the region adapt to climate change impacts.

7.4.6 Projects Selected for 2019 Round One Proposition 1 IRWM Implementation Grant Application

Information regarding specific projects to be considered for the first round of Prop. 1 IRWM Implementation Grant funding are included in Table 7-3. These projects were vetted by the watershed committees and approved by the WCVC General Membership. Table 7-4 addresses which goals are met by the projects accepted for Round One.

Table 7-3
Projects Selected for Proposition 1 – Round One – Implementation Grant

Project Number	Proponent	Project Name	Project Type	Primary Benefit	Secondary Benefit	Description and Benefit	DAC ?	Cost
1	Calleguas MWD	Calleguas-LVMWD Interconnection	Conveyance	Supply Reliability	Supply Reliability	This project will result in 21 CFS delivery capacity from LVMWD to Calleguas; 30 CFS from Calleguas to LVMWD; project will facilitate winter filling of LVMWD's Westlake Reservoir, enable LVMWD to deliver water from its Pure Water plant, improve water supply reliability for Calleguas's 660,000 customers and LVMWD's 70,000 customers, and intereconnect two IRWM regions, opening possibilities for future regional collaboration.	N	$ 15,300,000
2	City of Camarillo	Reclaimed Water Storage Reservoir	Water recycling	Water Supply - Recycled Water	Environmental - Energy / Greenhouse	This project to add storage capacity to the City's existing recycled water project will result in 2,583-AFY in potable water savings; 5.6 million kWh/year energy savings and 3,880 metric tons per year of carbon dioxide emissions savings.	N	$ 4,500,000

Project Number	Proponent	Project Name	Project Type	Primary Benefit	Secondary Benefit	Description and Benefit	DAC ?	Cost
3	City of Thousand Oaks	Los Robles Groundwater Utilization Project	Water desalination	Water Quality - Groundwater	Supply Reliability	930-AFY of local groundwater will help reduce vulnerability to imported water supply uncertainties. Local groundwater requires less energy than imported water and reduces greenhouse gas emissions. Educational opportunities also exist.	N	$ 17,749,734
4	Casitas Municipal Water District	Matilija Formation Pilot Bore	Other: Water Supply	New Local Water Supply	Diversify Water Source	This project entails a test bore to determine the potential annual yield of groundwater from the Matilija Formation. There is a potential for production of 8,000-AFY of local water supply, which benefits a service area population of approximately 70,000.	N	$ 3,300,000
5	City of Ventura	Eastside to Westside Waterline Interconnection Project	[None Listed]	Water Supply Reliability	[None Listed]	This interconnect project will allow delivery of eastside water supplies to westside customers when westside supplies are limited, providing added flexibility to the system for improved efficiency and emergency response capacity.	N	$ 8,809,000

Project Number	Proponent	Project Name	Project Type	Primary Benefit	Secondary Benefit	Description and Benefit	DAC ?	Cost
6	The Nature Conservancy	Hanson Public Access and Riparian Restoration Project	Watershed Project	Habitat Restoration	Public Access	The Hanson public access and riparian restoration project seeks to continue and expand current riparian habitat restoration efforts at The Nature Conservancy's Hanson property in Santa Paula. This project will also implement features to enhance visitor experience such as trail systems, parking and picnic areas, wildlife viewing areas, and interpretive and educational signage. This project public access component of the project serves a DAC community that has limited access to such experiences.	Y	$ 1,462,642
7	Ventura County Watershed Protection District, City of Oxnard	Southwinds Neighborhood Multi-Benefit Flood Protection Project	Stormwater Management	Flood Damage Reduction	Public Access, Linear Park	Protect DAC residences from flooding. Protect J Street and intersecting side streets from flooding, preserving street access during high flows. Unifies a DAC community currently bisected by a fenced open concrete flood control channel. Linear park adds green space in a DAC community, helping	Y	$ 8,935,684

Project Number	Proponent	Project Name	Project Type	Primary Benefit	Secondary Benefit	Description and Benefit	DAC ?	Cost
						offset carbon. Trail could lead to local beaches in an area where many disadvantaged residents have not accessed them. Opportunity for family recreation and environmental education for a DAC community.		
8	Ventura County Waterworks District No. 16	Piru WWTP Solar Thermal Flash Desalination and Solar Photovoltaic System	Water Quality	Water Quality	Groundwater Recharge	The project entails installing a thermal desalination facility using Innovative Flash Evaporation Technology at the Piru Wastewater Treatment Plan. This system will recover most of the water from the brine, leaving only dry salts and solids to be hauled off for either disposal or recycling. Only the salts themselves would need to be trucked off; 9 truckloads versus 1,350 truckloads for wet brine. The Piru Treatment Plant Upgrade entails construction of a flash evaporation system using solar energy to remove salts from the effluent	Y	$ 4,947,000

Project Number	Proponent	Project Name	Project Type	Primary Benefit	Secondary Benefit	Description and Benefit	DAC ?	Cost
						stream. The project is also proposing a Solar PV system to power most of the electricity needs of the PTWP and the desalination facility. The customers of Piru, a DAC, pay high monthly sewer rates. The solar PV system will significantly reduce the cost to operate the plant and the advanced desalination treatment facility.		
9	United Water Conservation District	Iron and Manganese Removal Project (Phase 1)	Water Quality			The project intent is to keep the El Rio Wellfield a viable water source. Objectives include building a treatment plant to reduce iron and manganese The goal for the blended water quality is to maintain nitrate concentrations well below the currently levels. Project is to design and construct a treatment plant and associated well upgrades.	N	$ 6,684,232
TOTAL $71,688,292								

Table 7- 4
Summary of Projects Selected for the Proposition 1 IRWM Round One Solicitation

Project Title	Project Proponent	Reduces Vulnerability to Climate Change Impacts	Lowers Greenhouse Gas Emissions and Reduces Contributions to Climate Change	IRWMP Goals Met					
				Protect, conserve, and augment local water supply portfolio to increase local water resilience	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
Calleguas-LVMWD Interconnection	Calleguas MWD	✓		✓					✓
Reclaimed Water Storage Reservoir	City of Camarillo	✓	✓	✓	✓				✓
Los Robles Groundwater Utilization Project	City of Thousand Oaks	✓		✓	✓				✓
Matilija Formation Pilot Bore	Casitas Municipal Water District			✓					
Eastside to Westside Waterline Interconnection Project	City of Ventura	✓		✓					✓

Project Title	Project Proponent	Reduces Vulnerability to Climate Change Impacts	Lowers Greenhouse Gas Emissions and Reduces Contributions to Climate Change	IRWMP Goals Met					
				Protect, conserve, and augment local water supply portfolio to increase local water resilience	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
Hanson Public Access and Riparian Restoration Project	The Nature Conservancy	✓		✓		✓	✓	✓	✓
Southwinds Neighborhood Multi-Benefit Flood Protection Project	Ventura County Watershed Protection District, City of Oxnard	✓				✓		✓	✓
Piru WWTP Solar Thermal Flash Desalination and Solar Photovoltaic System	Ventura County Waterworks District No. 16	✓	✓	✓	✓				✓
Iron and Manganese Removal Project (Phase 1)	United Water Conservation District	✓		✓	✓				✓

7.5 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 WCVC 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 to 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 WCVC Region further the objectives and goals of the WCVC 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 WCVC Region are addressing complementary and mutual goals, amplifying 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 WCVC Region is the Natural Floodplain Management Project which is integrating flood management, environmental stewardship, agricultural sustainability, and economic viability. This project is serving as a model for possible implementation in at least one other watershed in the Region.

7.6 Consideration of Program Preferences and Statewide Priorities

The WCVC 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:

- Leverage Funds – Give priority to projects that leverage private, federal, or local funding or produce the greatest public benefit.
- Employ New and Innovative Technology or Practices – Give special consideration to projects that employ new or innovative technology or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation.
- Implement IRWM Plans with Greater Watershed Coverage – Give priority to projects in IRWM Plans that cover the greater portion of the watershed.

- Multiple Benefits – Give special consideration to projects that achieve multiple benefits.
- In addition to the Program Preferences contained in the Water Code, DWR has compiled various statewide priorities that will be utilized for the Proposition 1 IRWM Grant Program. The Statewide Priorities are based on the 2014 California Water Action Plan, issued by the California Natural Resources Agency, California Department of Food and Agriculture, and the California Environmental Protection Agency (January 2016)

- Address Statewide Priorities

1. Make Conservation a California Way of Life
2. Increase Regional Self Reliance and Integrated Water Management Across All Levels of Government
3. Achieve the Co-Equal Goals for the Delta
4. Protect and Restore Important Ecosystems
5. Manage and Prepare for Dry Periods
6. Expand Water Storage Capacity and Improve Groundwater Management
7. Provide Safe Water for All Communities
8. Increase Flood Protection
9. Increase Operational and Regulatory Efficiency
10. Identify Sustainable and Integrated Financing Opportunities

Projects proposed for implementation by the Watersheds Coalition of Ventura County are selected based on consistency with the Statewide Priorities listed above as well as consistency with the WCVC Region's IRWM Goals.