This attachment is only necessary if the IRWM region receives water supplied from the Sacramento-San Joaquin Delta and answered "yes" to Q16 and/or Q17. Attachment 15 must summarize the portions of the plan that addresses how implementation of the IRWM Plan will reduce dependence on the Sacramento-San Joaquin Delta for water supply, and include relevant plan excerpts to support the summary.
The summary text must be no more than 5 pages in length using a minimum 10-point type font. Excerpts from the plan must not exceed 15 pages. Attachment 15 must:
1) Identify and include portions of the IRWM Plan that demonstrate it reduces dependence on the Sacramento-San Joaquin Delta for water supply. This can be but is not limited to plan objectives and an explanation of how the types of projects that help meet that objective reduce dependence on the delta for water supply.
2) Provide assurances that revisions to the plan, as required by DWR pursuant to a grant agreement for funding awarded during this solicitation, will continue to help reduce dependence on the Sacramento-San Joaquin Delta for water supply. This can be but is not limited to an explanation of how the objective(s) identified in item 1 above, will remain intact in the revision.

The Watersheds Coalition of Ventura County (WCVC), as part of the development of its Integrated Regional Water Management (IRWM) Plan, has clearly demonstrated its commitment to undertake local projects that help reduce Southern California's dependence on imported water from the Sacramento – San Joaquin Delta (Delta). This discussion:

- Provides an introduction and overview to WCVC and describes local and imported water demands within Ventura County.
- Summarizes the WCVC IRWM Plan objectives relevant to imported water.
- Describes general water and resource management strategies and specific WCVC projects to reduce imported water demands.
- Describes future IRWM Plan efforts to continue to reduce dependence on imported water.

I. Introduction and Overview

The WCVC, established in 2006, built upon over 35 years of cooperative efforts to manage both local and imported water supplies and maintain and improve water quality within Ventura County.

The WCVC Region: The WCVC Region (Region) includes the land within Ventura County, with the exception of areas within the Malibu Creek Watershed that lie within the County, and encompasses three major watersheds (Calleguas Creek, Santa Clara River, and Ventura River), six smaller watersheds, and twenty-six groundwater basins. One of the major watersheds, the Santa Clara River, originates in Los Angeles County. The Region includes ten cities, three wholesale water agencies, more than 170 retail water purveyors, two groundwater management agencies, and five sanitary districts. Ventura County has a population of more than 817,000 people. The County has a total area of 1,199,748 acres (1,843 square miles), of which some 550,211 acres lie within the Los Padres National Forest. Residential, agricultural and business uses are located predominantly in the southern portion of the Region, while the national forest comprises most of the northern portion of the WCVC Region. There are 42 miles of coastline where much of the population resides (IRWMP p.6).

Agriculture is a $1.5 billion/year industry within Ventura County. Of the estimated 330,000 acres of agricultural land in the Region, there are approximately 125,000 acres of irrigated land. The Calleguas Creek Watershed contains the highest number of irrigated acres (roughly 60,000), followed by the Santa Clara River Watershed (approximately 50,000) and Ventura River Watershed (approximately 15,000) (IRWMP p.6).

Water Demand and Imported Water Needs in WCVC: Of the total County water demand of approximately 430,500 acre feet-year (AFY), about 279,800 AFY is supplied from local groundwater sources (IRWMP p.24). In recent years, imported water, which is exclusively State Water Project (SWP) water from the Delta (Ventura County receives no Colorado River water), amounted to about 25 percent of the water utilized in the County. The balance of the water is from local surface water and recycled water (RW). Conservation efforts and development of alternative water supplies, when combined with economic circumstances, have already reduced imported water demand from a

high of about 130,000 AFY in 2007 to approximately 110,000 AFY in 2009. However, because water quality challenges require imported water to blend with local groundwater supplies, more than 75 percent of the County's population continues to rely on imported water for all or part of its supply (IRWMP p.28).

SWP water is obtained locally by Calleguas Municipal Water District (Calleguas) from the Metropolitan Water District of Southern California (Metropolitan) for delivery to retail purveyors primarily serving the southern and eastern portions of the County, including the Cities of Thousand Oaks, Simi Valley, Moorpark, Camarillo, Port Hueneme, and Oxnard and agricultural entities in the Region (IRWMP p.28).

The Calleguas Creek Watershed is largely dependent upon imported water from the SWP. Many retail purveyors in the Calleguas Creek Watershed have no source of potable water other than the SWP, while others use imported water to blend with local groundwater to meet water quality standards. The projects in the IRWM Plan and this IRWM Implementation Grant Proposal (Proposal), summarized in the section that follows, will help the Calleguas Creek Watershed to reduce its dependence on SWP water.

The Santa Clara River Watershed is partially dependent upon imported water from the SWP from Calleguas. The Cities of Oxnard and Port Hueneme receive about 50 percent of their water from Calleguas, and the imported water is blended with local groundwater to meet water quality standards. The United Water Conservation District (UWCD) has been using up to 5,000 AFY of SWP water to recharge groundwater within the Santa Clara River Watershed. The projects in the IRWM Plan and Proposal will help agencies in the Santa Clara River Watershed reduce dependence on SWP water.

The Ventura River Watershed does not currently receive any SWP water. However, several agencies hold an entitlement for SWP water that they are not currently utilizing. The projects in the IRWM Plan and Proposal will help prevent agencies in the Ventura River that are not currently using SWP from calling upon their entitlement.

With the projects in the IRWM Plan and Proposal, agencies in Ventura County may be able to reduce their current SWP usage (in the Calleguas Creek and Santa Clara River Watersheds) or defer or avoid completely the need to begin importing water through the SWP (in the Ventura River Watershed). By decreasing SWP demand, the water quality, ecosystem quality, and water supply of the Delta can be maintained and improved. Therefore, these projects contribute to the reduction of SWP demand and thereby to preventing adverse impacts to the Delta.

II. WCVC IRWM Plan Objectives

The WCVC IRWM Plan includes specific objectives to reduce the Region's dependence on imported water.

Overview: As described on p. 66 of the IRWM Plan, WCVC through a collaborative process, has identified the following objectives, described in greater detail in the IRWM Plan:

- Reduce dependence on imported water.
- 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 our watersheds.
- Provide water-related public access, recreational, and educational opportunities.

The first objective to reduce dependence on imported water is foundational to the WCVC's IRWM Plan because:

- Local water agencies, especially those who are exclusively served by Calleguas, understand that local water supplies will expand their water portfolios for increased reliability. Reliable water is a basic need.
- The SWP Delivery Reliability Report, 2009 indicates that environmental water needs and climate change will result in a range of deliveries from 7 percent to 81 percent of the maximum contract amount over an 82-year simulation period under current conditions. Deliveries are expected average 60 percent of maximum contract amount

under current conditions, but decrease to approximately 35 percent of maximum contract amount over multiple dry years and increase to approximately 70 percent during multiple wet years. Deliveries under future conditions are similar. Therefore, SWP contractors such as Metropolitan cannot rely on the SWP for delivery of maximum contract amounts, now or in the future, which compels agencies to pursue local water supply projects.

- Metropolitan's water rates continue to rise; the 2009-2010 overall rate increase was 19.7 percent. Metropolitan is projecting an average rate increase of 5 to 6 percent peryear for the next ten years. This translates to an average water rate of about $950/AF in 2015 and about $1,200/AF in 2020. Implementation of local programs may ultimately result in lower costs for ratepayers as compared to Metropolitan's water rates.

Therefore, for the reasons described above, the goal of the IRWM Program to reduce dependence on Delta water is also WCVC's objective.

Detailed Objective to Reduce Dependence on Imported Water: The specific narrative for the IRWM Plan objective to reduce dependence on imported water is as follows:

1. Reduce dependence on imported water and protect, conserve and augment water supplies.

- Identify and evaluate the opportunities to increase and enhance the beneficial uses of local water supplies and implement appropriate projects or take appropriate actions to realize those opportunities. Such projects and actions could include increased water use efficiency, wastewater recycling, land use policies, construction of facilities and other water management techniques.
- Improve water supply reliability.
- Better understand local watersheds by gathering more data and information regarding water supply (capacity, safe yield, flows) and water demand.
- Ensure secure water supplies by helping local water purveying districts address the impacts of future droughts and other water shortages.
- Document and update the efforts being made by local water districts, environmental interest groups and other agencies to improve the management of local water supplies and to identify ways to build on these efforts for greater future success.
- Protect current and future groundwater supplies through groundwater recharge projects and protection of recharge areas.
- Development of watershed management plans, where applicable, to enhance understanding of watershed characteristics and appropriate actions.

Because reduced dependence on imported water is a critical objective within the Region, most of the projects included in this Proposal have been selected to directly or indirectly meet the specific and general objectives described above.

III. WCVC Water and Resource Management Strategies to Reduce Dependence on Imported Water

Because the WCVC IRWM Plan was adopted in 2006, it was subject to the Water Management Strategies (WMS) described in Proposition 50.[1] Within WCVC, all of the WMS are being implemented. Since that time, Proposition 84 broadened the water management strategies to resource management strategies (RMS).[2] Exhibit 15-1 is an excerpt from the IRWM Plan that describes the WMS (water supply reliability, desalination, water conservation, water recycling, conjunctive use) that reduce dependence on imported water. Table 1 identifies the general project types and specific projects that are currently in planning or implementation by WCVC stakeholders that meet specific WMS and/or RMS relevant to reduced usage of imported water. Each project type is briefly described as to how it reduces dependence on imported water which also provides protection against the impacts of climate change.

[1] http://www.water.ca.gov/irwm/docs/Archives/Prop50/Guidelines_PSPs/Round_2_Guidelines_060107_Final.pdf

[2] (http://www.water.ca.gov/irwm/guidelines.cfm)

Table 1: Table 1: Types of WCVC Projects that Reduce Dependence on Imported Water

Project Type	IRWM Plan Project Number/Names	Applicable Water/Resource Management Strategy(ies) that Reduce Dependence on Imported Water
Water Use Efficiency	R-1 – Ventura County Regional Urban Landscape Efficiency (VC-RULE) City of Port Hueneme – Meter Retrofit Program	• Water supply reliability (WMS) • Reduce water demand (RMS)
Salinity Management/ Desalination	C-1/C-12/C-14 – Calleguas Regional Salinity Management Project (SMP) – Hueneme Outfall Rehabilitation, Phase 2A, and Phase 1E C-2 – Renewable Water Resource Management Program (RWRMP) for the Southern Reaches of Calleguas Creek Watershed C-4, C-5, C-6 – South Las Posas, Somis, West Simi Desalters C-13 – Camrosa Round Mountain Desalter (element of RWRMP) C-15 – CamSan/Camrosa RW Interconnection (element of RWRMP)	• Water supply reliability (WMS) • Groundwater management (WMS) • Conjunctive use (WMS) • Desalination (WMS) • Water and wastewater treatment (WMS) • Increase water supply (RMS)
Recycled Water	C-2 – Renewable Water Resource Management Program (RWRMP) for the Southern Reaches of Calleguas Creek Watershed C-7 – VCWWD No.1 RW System, Phase II C-8 – Simi Valley Regional RW System C-15 – CamSan/Camrosa RW Interconnection SC-1 – El Rio Forebay Groundwater Contaminant Elimination Project, Phase 7 SC-2 – Oxnard Forebay Groundwater Contaminant Elimination Project, College Park Phase	• Water supply reliability (WMS) • Groundwater management (WMS) • Conjunctive use (WMS) • Water and wastewater treatment (WMS) • Increase water supply (RMS) • Reduce water demand (RMS)
Groundwater Recharge and/or Quality Improvement	SC-1 – El Rio Forebay Groundwater Contaminant Elimination Project, Phase 7 SC-2 – Oxnard Forebay Groundwater Contaminant Elimination Project, College Park Phase SC-9 – UWCD Seawater Barrier Pilot Well V-2 – San Antonio Spreading Grounds Rehabilitation	• Water supply reliability (WMS) • Groundwater management (WMS)

Note: These are only example projects from the IRWM Plan, focused on projects funded under Proposition 50 and proposed for funding under Proposition 84. Space limitations prevent a full listing of the relevant projects.

Water Use Efficiency (WUE): As discussed in Section 5.2.18 of the IRWM Plan, the VC-RULE project continues efforts in WUE that started with the drought of 1976-1977. In 1982, Calleguas, Casitas Municipal Water District, and UWCD implemented the first county-wide regional WUE to address both urban and agricultural efficiency. Since then, most of the urban water suppliers (UWS) in Ventura County have signed the California Urban Water Conservation Council Memorandum of Understanding to implement WUE Best Management Practices. These UWS deliver water to approximately 90 percent of the urbanized users in the County. Efficient water use is foundational to reducing the Region's dependence on imported water use.

Salinity Management/Desalination: As discussed in Section 5.2.2 of the IRWM Plan, much of the local groundwater, especially in the Calleguas Creek and Santa Clara River Watersheds, has total dissolved solids well

above the secondary maximum contaminant level of 500 mg/l, which limits its usage for municipal or agricultural supply without treatment. One of the integrated, long-range, regional solutions that has been developed for the Calleguas Creek Watershed is brackish groundwater desalting using the Salinity Management Pipeline (SMP) to export the reverse osmosis concentrate to the ocean for safe disposal. The Calleguas SMP will allow the increased use of local groundwater resources, further reducing the WCVC Region's reliance on imported water. The SMP can also be used for RW disposal during winter months when RW demands are low. In addition to the projects in the table above, other brackish groundwater desalters are in the planning phase as shown in Table 1.

Recycled Water: As discussed in Section 5.2.13 of the IRWM Plan, many of the wastewater treatment plants in the County recycle a portion of their effluent, while several others are planning to initiate recycling efforts or expand RW delivery. Table 1 lists several of these projects, while the IRWM Plan describes other future water recycling projects that will further reduce the Region's dependence on imported water.

Groundwater Recharge and/or Quality Improvement: As discussed in Section 2.1.8 in the IRWM Plan, groundwater provides about 65 percent of the County's water supply, therefore, using the resource wisely is critical to the well-being of the County and to reducing use of imported water. The County has some of the most extensive conjunctive use facilities in the state that have been in place since the 1950's when salt water intrusion was recognized as a serious concern. UWCD operates many of these facilities on the Santa Clara River and is a leader in groundwater management in the Oxnard Plain, a vital aquifer to the Region. For example, UWCD's approach to groundwater recharge and quality improvement to address seawater intrusion includes construction of facilities to recharge the aquifer, such as UWCD's OH pipeline and Freeman diversion in the Oxnard Forebay area of the Oxnard Plain aquifer. In addition, UWCD also has been moving pumping away from the coast providing groundwater recharge through in-lieu conjunctive use. Conjunctive use also occurs through in-lieu deliveries of RW and interbasin transfers. Furthermore, in addition to the seawater barrier pilot well and other projects listed in Table 1, groundwater banking also occurs, including a Calleguas/Metropolitan joint aquifer storage and recovery project in the Las Posas groundwater basin in the Calleguas Creek Watershed, which is the second largest such facility in the country.

Finally, groundwater quality improvements that maintain and improve the local resource for municipal and agriculture uses are also a key component of the IRWM Plan. Examples include the SC-1 and SC-2 projects, which provided sewer collection systems for areas that were previously on septic tanks. Specific phases of these projects were partially funded with Proposition 50 grant funds. If these areas had remained on septic tanks, significant areas of the Oxnard Forebay portion of the groundwater basin could have become unusable for potable purposes due to nitrate contamination and forced increased usage of imported water.

IV. Future IRWM Plan Efforts to Continue to Reduce Dependence on Imported Water

As indicated previously, the WCVC IRWM Plan was adopted in 2006 and has not yet been updated to reflect changes necessary to conform to the requirements in Proposition 84. WCVC has applied for an IRWM Planning Grant to make the necessary revisions. The WCVC objective to reduce demand on imported water is central to the IRWM Plan and will continue to be incorporated into any future revisions of the IRWM Plan due to the WCVC Region's ongoing dependence on imported water, the increasing cost of that imported water, and its increasingly variable reliability.