Appendix J: Project Submittal Form

Page Intentionally Left Blank

Antelope Valley Integrated Regional Water Management Plan
Call for Projects
Project Identification Form

Note: Please refer to the *Department of Water Resources, Integrated Regional Water Management, Proposition 84 and 1E Guidelines, November 2012* for additional information about the items requested below (http://www.water.ca.gov/irwm/grants/docs/Guidelines/GL_2012_FINAL.pdf).

General Information

Project Name:

Project Sponsor:

Has Project Sponsor Adopted or will adopt the AV IRWMP?

If joint Project, Other Partners:

Project Contact Person:

Phone: FAX: Email:

Project Description

Project Description (1-2 Sentences):

Project Integration (Describe how the project does or could integrate with other projects in the Region by describing synergies or linkages between projects that result in added value or require coordinated implementation or operation):

Project Source (Cite plan(s) that describe or develop the Project (e.g., Watershed Master Plan, Recycled Water Master Plan, etc.)):

Project Location

Description of Project Location:

Latitude/Longitude - info available at: http://geocoder.us Lat: Long:

Project Benefits (please provide a brief description and quantified benefits, if available)

Water Supply: New Supply Created = _____ AFY or Check One: ☐ 1-100 AF ☐ 100-1,000 AF ☐ 1,000+ AF

Water Quality improved: Area Drained and/or: Volume Treated:

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Does the Project Offset Water Supply from the Sacramento-San Joaquin Delta:

Does the Project provide flood management/protection?

Does the Project reduce energy consumption?

Does the Project reduce greenhouse gas (GHG) emissions?

Other (Describe "x" Amount of Benefit):

A. Indicate how the Project contributes to the IRWM Plan objectives

Select the IRWM Plan objectives the project will help to achieve in the table below.

Objectives	Select
Water Supply	
Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035	
Establish a contingency plan to meet water supply needs of the Antelope Valley Region during a plausible disruption of SWP deliveries	
Stabilize groundwater levels	
Water Quality	
Provide drinking water that meets regulatory requirements and customer expectations	
Protect and maintain aquifers	
Protect and maintain natural streams and recharge areas	
Maximize beneficial use of recycled water	

Flood Management	
Reduce negative impacts of stormwater, urban runoff, and nuisance water	
Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses	
Environmental Resources Management	
Preserve open space and natural habitats that protect and enhance water resources and species in the Antelope Valley Region	
Land Use Planning/Management	
Maintain agricultural land use within the Antelope Valley Region	
Meet growing demand for recreational space	
Improve integrated land use planning to support water management	
Climate Change	
Mitigate against climate change	

B. How the Project is related to Resource Management Strategies (as defined by the California Water Plan Update 2009)

Select the Resource Management Strategies the Project will employ to help meet the IRWM Plan objectives.

Resource Management Strategies	Select
Reduce Water Demand	
Agricultural water use efficiency	
Urban water use efficiency	
Improve Operational Efficiency and Transfers	
Conveyance-delta	
Conveyance-regional/local	
System reoperation	
Water transfers	
Increase Water Supply	
Conjunctive management & groundwater	
Desalination	
Precipitation enhancement	
Recycled municipal water	
Surface storage – CALFED	
Surface storage – regional/local	
Improve Water Quality	
Drinking water treatment and distribution	
Groundwater and aquifer remediation	
Matching water quality to use	
Pollution prevention	
Salt and salinity management	
Urban runoff management	
Practice Resources Stewardship	
Agricultural lands stewardship	
Economic incentives (Loans, grants, and water pricing)	
Ecosystem restoration	
Forest management	
Land use planning and management	
Recharge areas protection	
Water-dependent recreation	
Watershed management	
Improve Flood Management	
Flood risk management	
Other	
Crop idling for water transfers	
Dewvaporation or atmospheric pressure desalination	

Resource Management Strategies	Select
Fog collection	
Irrigated land retirement	
Rainfed agriculture	
Waterbag transport/storage technology	

C. Technical Feasibility of the Project

Provide a list of studies/reports/documents that have been prepared for the Project:

Explain why there is sufficient technical documentation to support each of the benefits claimed above:

Describe the level of information known about the geologic conditions, hydrology, ecology or other aspects of the system where the project is located:

Explain data gaps that require additional studies to be developed for the project:

D. Specific Benefits to Critical DAC Water Issues

Describe how the Project addresses water supply and water quality needs of Disadvantaged Communities (DACs)[1]:

E. Specific Benefits to Critical Water Issues for Native American Tribal Communities

Describe how the Project addresses water supply and water quality needs of Native American tribal communities:

F. Environmental Justice Considerations[2]

Explain any environmental justice issues related to implementation of the Project:

G. Project Costs and Financing

Estimated capital costs: $_____ or check rough estimate: ☐ <$100K ☐ $100K -$1M ☐ $1M -$10M ☐ >$10M

Estimated Project annual operations and maintenance costs: $_____

Estimated year of construction and year of Project startup:

Provide a copy of (or link to) the cost estimate, if available:

Explain funding sources/financing for the Project (e.g., State funding, regional assessments, CIP, etc.):

H. Economic Feasibility

Has a cost-effectiveness or benefit-cost analysis been performed for the Project?

Provide a copy of (or link to) the economic analysis, if available:

I. Project Status (i.e., readiness to proceed)

Project Status (Check one): ☐ Conceptual ☐ Design ☐ Ready for Construction ☐ CEQA Compliance

J. Strategic Considerations for IRWM Plan Implementation

Can the Project be integrated with other regional projects?

K. Contribution of the Project in Adapting to the effects of Climate Change

Explain how the Project addresses climate change:

Has any kind of climate change analysis been completed? If so, please provide a copy of (or link to) the analysis:

L. Contribution of the Project in Reducing GHG Emissions as Compared to Project Alternatives

Explain how the Project will aid the IRWM region in reducing GHG emissions:

[1] Disadvantaged Communities are defined as communities with an annual mean household income that is less than 80 percent of the Statewide annual median household income.

[2] Environmental justice seeks to redress inequitable distribution of environmental burdens (i.e., pollution, industrial facilities) and access to environmental good (i.e., clean water and air, parks, recreation, etc.).

Page Intentionally Left Blank

Appendix K: Project List

Page Intentionally Left Blank

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	Antelope Valley Conservancy	**Project Name: Antelope-Fremont Watershed Assessment Plan** Sponsor: Antelope Valley Conservancy Contact: Wendy Reed Phone: (661) 943-9000 Email: avconservancy@yahoo.com	Antelope-Fremont Valleys Watershed and upper Santa Clara River Watershed.	**Study/Report**	**Y**	**Y**	**Y**	This completed project created a GIS tool for Antelope Valley Conservancy's assessment and planning for the preservation and restoration of sensitive natural systems of the Antelope-Fremont Valleys Watershed and upper Santa Clara River Watershed.	3 - 2,000 acres open space/habitat/conservation lands. This has proven unrealistic to fulfill because lead agencies are not fulfilling (a) their mitigation responsibilities (Sanitation District of LA County	3	ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the Antelope Valley Region.	1
I	Antelope Valley Water Storage	**Project Name: Antelope Valley Water Bank** Sponsor: Antelope Valley Water Storage Contact: Mark Beuhler, General Manager, Antelope Valley Water Bank Phone: 323-860-4829 Email: MBeuhler@avwaterbank.com Partners: Rosamond CSD, Valley Mutual Water Co., Semitropic Water Storage District		**Implementation**	**Y**	**Y**	**Y**	The Antelope Valley Water Bank will provide 500,000 AFY of storage in the Neenach Subbasin of the Antelope Valley Basin and the ability to recharge and recover 100,000 AFY. This storage could be used to regulate supplies on a seasonal and year-to-year basis by storing water when it is plentiful for later use when needed. The project is strategically located near imported water supply wheeling infrastructure (1 mile from AVEK West Feeder and 8 miles from East Branch of the SWP California Aqueduct) providing a geographically logical means to store and regulate supplies. Phase 2 planned for new two-way pipeline to east branch wells and booster station; recharge 350 cfs, recovery 250 cfs.	3 - Recharge and recover 100,000 AFY 3 - About 1,700 acres of open space 3 - Water Quality from soil aquifer storage 2 - Future offset of water supply from Sacramento-San Joaquin Delta 1 - Reduce energy of transporting delta water	12	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. A plan to meet supply needs of AV during a disruption of SWP deliveries. WQ: Provide drinking water that meets regulatory requirements and customer expectations. WQ: Protect and maintain aquifers LU: Maintain agricultural land use within the AV Region LU: Improve integrated land use planning to support water management CC: Mitigate against climate change	7

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Ecosystem Restoration Forest Management Watershed Management	3	3	10	Y	n/a	n/a	Yes	Complete	n/a	n/a			Yes		
Conveyance - Regional/local Conjunctive Management & Groundwater Drinking Water Treatment and Distribution Land Use Planning and Management	4	3	26	Y			Yes	Complete			Project could be integrated with other water banks such as Amargosa, Littlerock and WSSP-2.		Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	AVEK	**Project Name: Water Supply Stabilization Project – Westside Project (WSSP-2)** Sponsor: AVEK Contact: Dwayne Chisam Phone: 661-943-3201 Email: dchisam@avek.org		**Implementation**	Y	Y	Y	The project is an imported water stabilization program that utilizes SWP water delivered to the Antelope Valley Region's Westside for groundwater recharge and supplemental supply required for the Antelope Valley Region during summer peaking demand and anticipated dry years. This project includes additional facilities necessary for the delivery of untreated water for direct recharge (percolation basins) or indirect (in-lieu) recharge and for wells and pipeline for treated water conveyance.	3 - Supply 5,000 AFY to 10,000 AFY 3 - 15 acres open space 2 - 20 acres flood management. 2 - Future offset of water supply from Sacramento-San Joaquin Delta 1 - Reduce energy of transporting delta water	11	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. A plan to meet supply needs of AV during a disruption of SWP deliveries. WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations. WQ: Protect and maintain aquifers FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. LU: Maintain agricultural land use within the AV Region LU: Improve integrated land use planning to support water management CC: Mitigate against climate change	9
I	LACDPW	**Project Name: Solar Power System at K-8 Division** Sponsor: LACWD 40 Contact: Iwen Tseng Phone: (626) 300-4688 Email: itseng@dpw.lacounty.gov	Avenue K-8 and Division Street in Lancaster	**Implementation**	Y	Y	Y	The system is a 350-kilowatt, ground mounted single-axis tracker solar photovoltaic system, expected to produce 760,000 kilowatt-hours per year. The panels will power the three groundwater wells and four booster pumps on that site. The solar photovoltaic panels will be installed at a 2.5 acre Waterworks facility at Avenue K-8 and Division Street in Lancaster	1 - Reduce long-term energy costs at the site and reduce green house gas emissions.	1	CC: Mitigate against climate change.	1
I	LACDPW	**Project Name: Quartz Hill Storm Drain** Sponsor: LADPW Contact: Russ Bryden Phone: (626) 458-4334 Email: rbryden@dpw.lacounty.gov	50th Street, from Avenue M-8 to Avenue K-8	**Implementation**	Y	Y	Y	As such, the project proposes construction of a storm drain, including several lateral connections and catch basins, to provide stormwater collection and conveyance. The project would connect to existing and new drainage facilities, with the improvements located mainly along 50th Street, from Avenue M-8 to Avenue K-8.	1 - Flood protection of 95 acres of County street right-of-way, and 1,108 acres of private property.	1	FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water.	1
I	LACSD	**Project Name: Lancaster WRP Effluent Management Sites** Sponsor: LACSD Contact: Phone: Email:		**Implementation**	Y	Y	Y	This project includes the following series of activities at proposed new effluent management sites: land acquisition, purchase and installation of irrigation equipment, development of an area wide farm management plan, site development, completion of associated studies and permits, soil sampling, and well investigation of proposed effluent management sites.	3 - Reduces further elevation of nitrate levels at management sites	3	WQ: Protect and maintain aquifers WQ: Maximize beneficial use of recycled water	2

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater Drinking Water Treatment and Distribution Land Use Planning and Management	3	3	26	Y			Yes	Complete					Yes		
System Reoperation	1	0	3	Y	$2 Million		Yes	Complete							
Flood Risk Management	1	0	3	Y	$9,670,000		Yes	Complete							
Surface Storage - Regional/Local Matching Water Quality to Use	2	3	10	Y			Yes	Complete					Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	LACSD	**Project Name: Palmdale WRP Effluent Management Sites** Sponsor: LACSD Contact: Phone: Email:		**Implementation**	**Y**	**Y**	**Y**	This project includes the following series of activities at proposed new effluent management sites: land acquisition, purchase and installation of irrigation equipment, development of an area wide farm management plan, site development, completion of associated studies and permits, groundwater monitoring, and well abandonment.	3 - Reduces further elevation of nitrate levels at management sites	3	WQ: Protect and maintain aquifers WQ: Maximize beneficial use of recycled water	2
I	LACSD	**Project Name: Lancaster WRP Stage V** Sponsor: LACSD Contact: Phone: Email:		**Implementation**	**Y**	**Y**	**Y**	The project involves construction and design of a new pump station, storage reservoirs, and other ancillary facilities needed to increase effluent storage capacity to 21 mgd. The project also includes land acquisition needed for site development.	3 - Providing approx. 14.1mgd of nitrified, tertiary recycled water 3 - Water Quality benefits	6	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WQ: Protect and maintain aquifers WQ: Maximize beneficial use of recycled water	4
I	LACSD	**Project Name: Palmdale WRP Stage V** Sponsor: LACSD Contact: Phone: Email:		**Implementation**	**Y**	**Y**	**Y**	This phase of the upgrade project includes the following series of activities: construction of an effluent pump station, force main, agricultural recycled water pump station, and an agricultural recycled water storage tank and reservoir; development of the new reservoir site and installation of monitoring wells; and design and construction of secondary/tertiary treatment facilities.	3 - Providing approx. 9.04 mgd of nitrified, tertiary recycled water 3 - Water Quality benefits	6	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WQ: Protect and maintain aquifers WQ: Maximize beneficial use of recycled water	4
I	LACWD 40	**Project Name: Aquifer Storage and Recovery Project: Injection Well Development** Sponsor: LACWD 40 Contact: Aracely Jaramillo Phone: (626) 300-3353 Email: ajaramillo@dpw.lacounty.gov		**Implementation**	**Y**	**Y**	**N**	The project involves the construction of ten new well sites in a groundwater depression area of the Antelope Valley Region to improve water supply reliability. The additional wells would be available for water injection during wet years and for water extraction during dry years.	3 - 12,000 AFY of supply	3	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Est. a contingency plan to meet water supply needs of the AV Region during a plausible disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations. WQ: Protect and maintain aquifers	5

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Surface Storage - Regional/Local Matching Water Quality to Use	2	3	10	Y			Yes	Complete					Yes		
Recycled Municipal Water Surface Storage - Regional/Local Groundwater and Aquifer Remediation Matching Water Quality to Use	4	3	17	Y			Yes	Complete					Yes		
Recycled Municipal Water Surface Storage - Regional/Local Groundwater and Aquifer Remediation Matching Water Quality to Use	4	3	17	Y			Yes	Complete					Yes		
Conjunctive Management & Groundwater Drinking Water Treatment and Distribution	2	3	13	Y			Yes	Complete					Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	LACWD 40	**Project Name: Aquifer Storage and Recovery Project: Additional Storage Capacity** Sponsor: LACWD 40 Contact: Aracely Jaramillo Phone: (626) 300-3353 Email: ajaramillo@dpw.lacounty.gov		**Implementation**	**Y**	**Y**	**N**	This project would increase the District's turnout capacity from AVEK through improvements made to existing infrastructure. Four older, smaller turnout pipelines would be replaced with larger ones to supply water to ASR wells.	3 - Water supply	3	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Est. a contingency plan to meet water supply needs of the AV Region during a plausible disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations.	4
I	LACWD 40	**Project Name: North Los Angeles/Kern County Regional Recycled Water Project - Phase 2** Sponsor: LACWD 40; City of Palmdale Contact: Carolina Hernandez Phone: (626) 300-3318 Email: chernandez@dpw.lacounty.gov		**Implementation**	**Y**	**Y**	**Y**	The Los Angeles/Kern County Regional Recycled Water Project outlines the foundation of a regional recycled water system in the Antelope Valley Region. The proposed system would distribute recycled water throughout the service area and provide a backbone system that could accommodate minimum and maximum demands and allow significant deliveries of recycled water to recharge areas. The recommended plans placement of the system components is based on an analysis of the service area demands, topography, and desired operating pressures. Specifically, the proposed system components of the recommended plan consist of: recycled water supply, a main pump station, booster pump stations, storage reservoirs, and distribution system. The construction of the recycled water supply system would be phased overtime and it is anticipated that all phases of construction would be completed by 2011. Recycled water users would include municipal medians, agriculture, commercial, golf courses, school yards, and parks as allowed by California Department of Health Services, Division 4, Title 22 (Title 22).	3 - Water supply conveyed 3 - Offset Delta Water 3 - Reduce energy consumption/GHG	9	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Establish a contingency plan to meet water supply needs of the AV region during a plausible distruption of SWP deliveries WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	5
I	LACWD 40	**Project Name: Partial Well Abandonment of Groundwater Wells for Arsenic Mitigation** Sponsor: LACWD 40 Contact: Aracely Jaramillo Phone: (626) 300-3353 Email: ajaramillo@dpw.lacounty.gov		**Implementation**	**Y**	**Y**	**N**	This project proposed arsenic mitigation of five groundwater wells using a proven and cost-effective non-treatment alternative to expensive treatment methods. Water Well Nos. 4-43, 4-54, 4-55, 4-58, and 4-59 were modified. Work included replacement of pumps and motors; grout sealing to the lower aquifer layers within the wells; development of foreshortened well columns, aquifer pump testing, water quality sampling; and other incidental and appurtenant work.	3 - Prevents loss of groundwater pumping and existing supply 3 - Ensures water quality that meets MCL requirements.	6	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WQ: Provide drinking water that meets regulatory requirements and customer expectations. WQ: Protect and maintain aquifers CC: Mitigate against climate change	4

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater Drinking Water Treatment and Distribution	2	3	12	Y			Yes	Complete					Yes		
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use	3	3	20	Y			Yes	Complete					Yes		
Drinking Water Treatment and Distribution Pollution Prevention	2	0	12	Y	$642,082		Yes	Complete							

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	LACWD 40	**Project Name: North Los Angeles/Kern County Regional Recycled Water Project - Division Street Corridor** Sponsor: LACWD 40 Contact: Jamshed Yazdani Phone: (661) 945-6880 Email: jyazdani@cityoflancaster.org		**Implementation**	**Y**	**Y**	**Y**	The Los Angeles/Kern County Regional Recycled Water Project outlines the foundation of a regional recycled water system in the Antelope Valley Region. The proposed system would distribute recycled water throughout the service area and provide a backbone system that could accommodate minimum and maximum demands and allow significant deliveries of recycled water to recharge areas. The recommended plans placement of the system components is based on an analysis of the service area demands, topography, and desired operating pressures. Specifically, the proposed system components of the recommended plan consist of: recycled water supply, a main pump station, booster pump stations, storage reservoirs, and distribution system. The construction of the recycled water supply system would be phased overtime and it is anticipated that all phases of construction would be completed by 2011. Recycled water users would include municipal medians, agriculture, commercial, golf courses, school yards, and parks as allowed by California Department of Health Services, Division 4, Title 22 (Title 22).	3 - Water supply conveyed 3 - Offset Delta Water 3 - Reduce energy consumption/GHG	9	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Establish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	5
I	LACWD 40	**Project Name: North Los Angeles/Kern County Regional Recycled Water Project - Phase 1b** Sponsor: LACWD 40; City of Lancaster Contact: Jamshed Yazdani Phone: (661) 945-6880 Email: jyazdani@cityoflancaster.org		**Implementation**	**Y**	**Y**	**Y**	The Los Angeles/Kern County Regional Recycled Water Project outlines the foundation of a regional recycled water system in the Antelope Valley Region. The proposed system would distribute recycled water throughout the service area and provide a backbone system that could accommodate minimum and maximum demands and allow significant deliveries of recycled water to recharge areas. The recommended plans placement of the system components is based on an analysis of the service area demands, topography, and desired operating pressures. Specifically, the proposed system components of the recommended plan consist of: recycled water supply, a main pump station, booster pump stations, storage reservoirs, and distribution system. The construction of the recycled water supply system would be phased overtime and it is anticipated that all phases of construction would be completed by 2011. Recycled water users would include municipal medians, agriculture, commercial, golf courses, school yards, and parks as allowed by California Department of Health Services, Division 4, Title 22 (Title 22).	3 - Water supply conveyed 3 - Offset Delta Water 3 - Reduce energy consumption/GHG	9	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Establish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	5

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use	3	3	20	Y			Yes	Complete					Yes		
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use	3	3	20	Y			Yes	Complete					Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	Antelope Valley Resource Conservation District	**Project Name: Antelope Valley Regional Conservation Project** Sponsor: Antelope Valley Resource Conservation District Contact: Debra Gillis, AVRCD Phone: (661) 945-2604 Email: debragillis@sbcglobal.net	10143 West Avenue I. Lancaster, Ca. 93536 Lat: 34,703853° ,N34° 42' 13.9" 34° 42..2312' Long: 118.309141° W118° 18' 32.9" -118° 18..55485'	Implementation	Y	Y	Y	The AV Regional Conservation Project will provide education, conservation programs and rebates, and resource protection throughout the Antelope Valley. It will provide conservation resources to all water districts small and large, within the Antelope Valley, by providing resources for rebates on SFR, MFR, and CII customers to reduce water use. The project will provide workshops on water conservation, sustainable landscaping, efficient irrigation, flood control, soil preparation, wildlife habitation and other related topics to provide resource protection and water conservation. The project will provide conservation outreach to Antelope Valley residences and students to reduce water supply demand. The project will provide a conservation garden for Antelope Valley allowing the public and agencies to learn about sustainable plantings, and efficient irrigation to reduce demand. The AVRCD is proposing to use 2.0 acres of the 5.00 acres that the District has allocated to start the conservation garden facility that will benefit the surrounding communities at large. The goals and objectives of the water conservation garden are: 1) Reduce residential and large landscape water use to outreach customers by 20%, 2) Provide educational programs on landscape design and maintenance to reduce water use to the general public 3) Provide school educational programs on landscaping for future water saving 4) Provide beneficial uses to the Bay-Delta by providing water quality and water use reduction through conservation over a 15 year period. 5) Reduce fugitive dust in the Antelope Valley 6) Provide water conservation rebate incentives	3 - Water demand reduction through rebate programs 3 - 2.0 acres of recreational/open space creation 2 - water conservation, dust control, and flood management (through education) 1 - Use of solar to offset energy use 1 - GHG reduction through planting trees	10	WS: Provide a reliable water supply to meet the AV Region's expected demand between now and 2035; and adapt to climate change ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the AV. LU: Meet growing demand for recreational space LU: Improve integrated land use planning to support water management CC: Mitigate against climate change.	5

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Agricultural Water Use Efficiency Urban Water Use Efficiency Pollution Prevention Economic Incentives Ecosystem Restoration Watershed Management	6	3	24		985,776.00	20K-30K	Yes	2014-2016	State funding, local sponsors, Southern CA Edison and AVRCD	Demand Management Measures (DMM's) and the Best Management Practices (BMPs) are listed in the California Water Code and the California Urban Water Conservation Council's (CUWCC') BMP's. The project area is described in the AV IRWMP- SECTION 2-10 Conservation Garden design plans providedand cost benefit anaylsis	Yes, the conservation project will become "The Regional Conservation Plan for the Antelope Valley."	The conservation project will provide conservation planning for future water demand, but no climate change analysis has been completed.	YES Will benefit whole AV Region	None	

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	AVEK	**Project Name: Eastside Banking & Blending Project** Sponsor: AVEK Contact: Dwayne Chisam Phone: 661-943-3201 Email: dchisam@avek.org	**Lat: 34°31'42.25"N** **Long: 117°56'25.45"W** Two potential construction staging areas are located west of 116th Street East within the Eastside WTP property. Construction of the proposed project is anticipated to begin in December 2012 and would take approximately 21 months to complete.	**Implementation**	Y	Y	Y	The Eastside Water Banking and Blending Project is an operational water recharge and recovery project providing a supplemental potable source of water for AVEK's existing Eastside Water Treatment Plant. The Project, located in the eastern portion of the Antelope Valley, would involve the spreading of State Water Project water coming from the California Aqueduct being delivered in to local recharge basins, storing water for future recovery. This alternative potable water supply will be used for periodic substitution or supplementation to the Agency's treatment plant. Up to 3 miles of recharge pipeline, three recharge basins, four recovery wells connected to 1.5 miles of treated water recovery pipeline will be constructed on the project site. All pipelines will be installed underground between AVEK's Eastside plant and the recharge basins and recovery wells. This project is currently being designed with specific benefits to AVEK's customers being addressed with each element of the project. Benefits include the banking of surface water for future recovery and use during dry or drought years. This will also reduce the need to purchase special "Dry Year Water" at a higher cost. This project will also increase water quality with the control of Trihalomethane (THM), a disinfection by-product (DBP), as part of the Agency's compliance with new Stage 2 DBP Rules for treated water. The project will provide high-quality recovered groundwater for blending with treated surface water.	3 - Supply - more than 1,000 AFY 3 - Water Quality - lower THM formation 2 - Future offset of water supply expected 1 - Reduce energy/GHG from reduction in delta water use	9	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. A plan to meet supply needs of AV during a disruption of SWP deliveries. WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations. WQ: Protect and maintain aquifers LU: Improve integrated land use planning to support water management CC: Mitigate against climate change	7

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater Drinking Water Treatment and Distribution Land Use Planning and Management	3	3	22		$8,990,000	$115,400	Yes	2014	Undetermined but comination of CIP and State funding	WSSP-2 in western region Studies include the evaluation of alternative methods for the reduction of disinfection by-products (DBPs), the review of historical SWP water quality as to the formation of THM's within the project, the development of a groundwater model studying recharge potential, water levels, and quality. In addition, sufficient documentation has been prepared in regarding the feasibility of banking water in the eastside portion of the Valley including studies provided by U.S. Geological Studies and Stetson Engineers (Study of Potential Groundwater Recharge Sites in the Antelope Valley, 2002).			Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	AVEK	**Project Name: Water Supply Stabilization Project (WSSP) – Westside Expansion** **Sponsor: AVEK** **Contact: Dwayne Chisam** **Phone: 661-943-3201** **Email: dchisam@avek.org**	http://geocoder.us	Implementation	Y	Y	Y	The Water Supply Stabilization Program (WSSP) – Westside Expansion would add additional water banking capacity for the Antelope Valley by increasing the delivery of AVEK's State Water Project (SWP) water into the region's western area for groundwater recharge and supplemental supply required during summer peaking demand and anticipated dry years. The project would include sufficient land and facilities necessary for up to an additional 500,000 Acre-Feet of water storage used in order to firm up AVEK's annual Table A imported supplies from the State. The project can be integrated with other regional water supply projects for increased reliability.	3 - Water Supply - ~6,000 AFY 2 - Water Quality - Soil aquifer treatment. Avoided expansion of Rosamond Treatment Plant 2 - Future offset of water supply from Sacramento-San Joaquin Delta 1 - Reduce energy of transporting delta water	8	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. A plan to meet supply needs of AV during a disruption of SWP deliveries. WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations WQ: Protect and maintain aquifers LU: Maintain agricultural land use within the AV Region LU: Improve integrated land use planning to support water management CC: Mitigate against climate change	8

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Water Transfers Conjunctive Management & Groundwater Drinking Water Treatment and Distribution Land Use Planning and Management	4	3	23		>$10M	To Be Determined	Yes	2016	State Funding, CIP Funds	The expansion of water banking within the Antelope Valley (e.g. the Water Supply Stabilization Program (WSSP)) are identified in AVEK's current Capacity Charge Evaluation report and are currently in the CIP for the Agency. Additional technical studies or reports will be developed as required. AVEK currently operates the Water Supply Stabilization Program – Westside Project (WSSP-2) in the western region of the Antelope Valley. At the present time, sufficient documentation prepared in regard to the feasibility of the WSSP-2 Water Banking Project has been provided by U.S. Geological Studies and AECOM Engineering which provides a basis for the project. The proposed Western Expansion project would extend the development of the WSSP to include additional facilities.	The project can be integrated with other regional projects	None	As a regional project, the WSSP – Western Expansion will benefit the economic development of the whole of the Antelope Valley including the Disadvantage Communities as indicated in the Antelope Valley IRWM Plan.	None	No

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	AVEK	**Project Name: South Antelope Valley Intertie Project** Sponsor: AVEK Contact: Dwayne Chisam Phone: 661-943-3201 Email: dchisam@avek.org Potential regional partners include Los Angeles County Waterworks Districts, Palmdale Water District, and Littlerock Creek Irrigation District.	Quartz Hill / Lancaster / Palmdale area between South feeder and East feeder Lat: 34°38'45.66"N Long: 118° 0'18.74"W	**Implementation**	Y	Y	Y	The Southern Antelope Valley Intertie Project will connect the two existing treated water pipelines, AVEK's South Feeder with their East Feeder to allow for the balancing of imported water supplies in the southern portion of the Antelope Valley. In addition, this intertie pipeline project could provide the transmission of recovered water from proposed Eastside Banking Project. At the present time there is an imbalance in the supply of groundwater being extracted relative to that amount being recharged in the populated areas of the cities of Palmdale and Lancaster. To correct this imbalance, some groundwater pumping can be moved further west where groundwater levels are more favorable and the impact of extractions less harmful. The Southern Antelope Valley Intertie Project would provide the mechanism to transport that water from those preferred areas to the areas of greatest need. The project is further enhanced by its ability to provide the recovery of water previously stored in the Valley's eastside recharge projects. The region's overall treated water distribution system will benefit from greater reliability, giving two points of supply: AVEK's Quartz Hill Water Treatment Plant and Eastside Water Treatment Plant. The Southern Antelope Valley Intertie Project is currently part of the AVEK Capital Improvement Plan (CIP), a planning document that list the Agency's significant capital improvements for construction and determines specific customer benefit with each improvement. The project can be integrated with other regional water supplier's projects for increased reliability. To help with further project collaboration, this intertie would provide the mechanism to transport recovered water from the Valley's banking sites such as AVEK's Water Supply Stabilization Project No. 2 (WSSP-2) and other eastside recharge sites.	2 - Water Quality improved: Better distribution for lower THM formation. 3 - Water Supply	5	WS: Provide a reliable water supply to meet the AV Region's expected demand between now and 2035; and adapt to climate change WS: Establish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations WQ: Protect and maintain aquifers LU: Improve integrated land use planning to support water management	6
I	AVEK	**Project Name: AVEK Strategic Plan** Sponsor: AVEK Contact: Dwayne Chisam Phone: 661-943-3201 Email: dchisam@avek.org	info available at http://geocoder.us western side of AV	**Study/Report**	Y	Y	Y	The project contains a number of components, including supply. The plan identifies the Water Resources necessary to meet the long-term needs of the greater Antelope Valley Region. The Plan will specify the potential sources of water, their quantities, and the required scheduling in order to facilitate an orderly pace to local development; as is also consistent with current land use planning. The Plan will integrate with other regional planning documents by helping to guide future development in identifying the most beneficial projects and incorporating them into a long-term water resource plan for the greater Antelope Valley. Each of these projects will be of greater value as they are linked to the Plan's strategy for greater water supply and reliability. Various regional plans developed from local agencies along with expert reports generated from the current Antelope Valley Groundwater Adjudication process help to support the need for the Antelope Valley Water Resource Strategic Plan.	3 - Identify Water Supply 3 - Plan for offsetting Delta water supply	6	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. a plan to meet supply needs of AV during a disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Maximize beneficial use of recycled water LU: Improve integrated land use planning to support water management CC: Mitigate against climate change	6

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conveyance - Regional/local System Reoperation Water Transfers Drinking water treatment and distribution	7	3	21		$17.25 M	Nominal	Yes	2016	Project financing is still undetermined at this time, combination of CIP funds and State funding	The historical imbalance of the region's groundwater extraction relative to recharge has been documented in expert reports provided as part of the phase III trial of the Antelope Valley Groundwater Cases for basin adjudication. Information on the Project site geology, soils, and hydrogeology have been provided through AVEK studies of their existing water pipeline alignments, the 2002 Study of Potential Recharge sites completed by Stetson Engineers, and previous studies performed in the area by U.S. Geological Studies. Further information is provided with the expert reports mentioned above. Specific design criteria (e.g. pipeline sizing) would need to be studied and established based on the local water supply demand, hydrology, and geography.	Project could be integrated with other supply projects.	Project would not address climate change	The Project can benefit local Disadvantaged Communities including Lake Los Angeles and Edgemont Acres.	None	None.
Urban Water Use Efficiency Agricultural Lands Stewardship Watershed Management Recycled Municipal Water Conjunctive Management & Groundwater Surface Storage - Local/Regional Land Use Planning & Management	7	3	22		$100K-$1M	None			IRWMP State Funding, Regional Support	Benefits demonstrated in various technical documents including export reports provided as part of the phase III trial of the Antelope Valley groundwater adjudication. Support for geology, soils, and hydrogeology provided by various participating agencies' expert reports including the 2002 Study of Potential Recharge sites completed by Stetson Engineers, past studies performed in the area by U.S. Geological Studies, and through expert reports as mentioned above.	YES	Not at this time	Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	Boron CSD	**Project Name: BCSD Arsenic Management Feasibility Study and Well Design** Sponsor: Boron CSD Contact: Natalie Dadey Phone: (760) 762-6127 Email:		**Study/Report**	**Y**	**Y**	**Y**	The Boron Community Services District (BCSD) Arsenic Management Feasibility Study and Well Design Project consists of developing a hydrology study, preliminary engineering report, pilot well, and production well design to provide a recommended project to BCSD for arsenic management in their groundwater supply. The hydrogeology study will be completed to determine the best site, depth, and testing programs for a pilot test well. The pilot test well will be constructed to determine a recommended depth, screen interval, zone isolation and construction method for a new production well, assumed to be part of the eventual recommended construction project. Arsenic removal treatment may also be identified as part of the Construction Project.	3 - Water Quality o Ensure Compliance with arsenic MCL for BCSD customers o Reduction in arsenic concentrations in local groundwater supply 3 - Water Supply - Local o Improve Reliability - Replacement of aging wells with new wells o Improve Reliability - Development of new local groundwater supplies o Increase in availability of AVEK supplies for other uses 3 - Water Supply - Regional o Regional Reliability - Offset of imported water demands from the State Water Project (SWP) o Reduced Delta demands to help address CALFED Bay-Delta Program objectives o Reduction in total dissolved solids (TDS) imported from outside the Region o Energy Conservation o Avoided greenhouse gas (GHG) emissions	9	WS: Provide a reliable water supply to meet the AV Region's expected demand between now and 2035; and adapt to climate change WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WQ: Provide drinking water that meets regulatory requirements and customer expectations WQ: Protect and maintain aquifers CC: Mitigate against climate change	5
I	City of Lancaster	**Project Name: Lancaster National Soccer Center Recycled Water Conversion** Sponsor: City of Lancaster Contact: Carlyle S. Workman Phone: 661-723-6079 Email: cworkman@cityoflancaster.com	City of Lancaster Recycled Water Facilities and Operations Master Plan, RMC January 2006. Lat: 34.664242 degrees Long: -118.077196 degrees	**Implementation**	**Y**	**Y**	**Y**	Project consists of constructing a recycled water main from the existing regional backbone in Division Street to Lancaster National Soccer Center located on the northwest and northeast corners of Avenue L and 30th Street East and convert the irrigation system to use recycled water. This main extension could also make recycled water available to the Skytower Park and Eastside High School. Providing recycled water to the National Soccer Center and reducing the groundwater pumped by 500 Acre-feet per year has been identified in the on-going Groundwater Adjudication settlement proposal.	3 - Water Supply: 100-1,000 AF 3 - Offsets Delta water supply 3 - Reduces energy consumption	9	WS: Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035 WS: Stabilize groundwater levels WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	5
I	City of Lancaster	**Project Name: Pierre Bain Park Recycled Water Conversion** Sponsor: City of Lancaster Contact: Carlyle S. Workman Phone: 661-723-6079 Email: cworkman@cityoflancaster.com	Pierre Bain Park is located on approximately 15 acres on the southwest corner of Avenue I and 5th Street East. Lat: 34.70392 degrees Long: -118.121817 degrees	**Implementation**	**Y**	**Y**	**Y**	Construction of a recycled water main from the existing regional backbone in Division Street to Pierre Bain Park located at the southwest corner of Avenue I and 5th Street East and convert the irrigation system to use recycled water. This main extension will also make recycled Water available to the County Medical Center currently under construction on the northeast corner of Avenue I and 3rd Street East.	3 - Water Supply: Offset 75 acre-feet of irrigation per year 3 - Offsets Delta water supply 3 - Reduces energy consumption	9	WS: Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035 WS: Stabilize groundwater levels WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	5

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Drinking Water Treatment and Distribution Groundwater and Aquifer Remediation Salt and Salinity Management	3	3	20		$427,000	None	Yes	n/a	Prop 84, Round 2	Boron CSD Scope of Work and Associated Budget, Attachment 1, Project No. 1510002-001 Prop 1E application Project will assess the technical feasibility of the project.	Integration with other arsenic remediation projects such as the "RCSD Consolidation Project".	Project would offset imported water.	Boron is a DAC.	None	Unknown
Conveyance-Regional/local Recycled Municipal Water Matching Water Quality to Use	3	3	20		$15,000,000	$20,000/year		2018	State Grant Funding and Loan Program – Water Recycling Funding Program (WRFP), Planning Grants, Etc.	Recycled Water Facilities and Operations Master Plan prepared by RMC in January 2006.	Integration with other recycled water projects possible.	Project will diversify water supplies and help to adapt to climate change.	Since this project would offset approximately 500 Acre-feet of groundwater a year and would benefit the entire Antelope Valley ground water basin as a whole, it would benefit the DACs within the Valley positively in regards to water supply.		
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use	3	3	20		$770,000	$10,000/year		2017	State Grant Funding and Loan Program – Water Recycling Funding Program (WRFP), Planning Grants, Etc.	Recycled Water Facilities and Operations Master Plan prepared by RMC in January 2006.	Integration with other recycled water projects possible.	Project will diversify water supplies and help to adapt to climate change.	Since this project would offset approximately 75 Acre-feet of potable a year and would benefit the entire Antelope Valley ground water basin as a whole, it would benefit the DACs within the Valley positively in regards to water supply.		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	City of Lancaster	**Project Name: Whit Carter Park Recycled Water Conversion** Sponsor: City of Lancaster Contact: Carlyle S. Workman Phone: 661-723-6079 Email: cworkman@cityoflancaster.com	Whit Carter Park is located on approximately 20 acres on the west side of Sierra Highway (45635) between Avenue H-6 and Avenue H-8. Lat: 34.712442 degrees Long: -118.139487 degrees	**Implementation**	Y	Y	Y	Construction of a recycled water main from the existing regional backbone in Division Street to Whit Carter Park located west of Sierra Highway at approximately Avenue H-7 and conversion of the irrigation system to recycled water. This main extension will also make recycled water available to the industrial park between Division Street and Sierra Highway, south of Avenue H.	3 - Will offset approximately 50 AF of irrigation per year 3 - Offsets Delta water supply 3 - Reduces energy consumption	9	WS: Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035 WS: Stabilize groundwater levels WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	5
I	City of Lancaster	**Project Name: Antelope Valley Recycled Water Master Plan** Sponsor: City of Lancaster Contact: Carlyle S. Workman Phone: 661-723-6079 Email: cworkman@cityoflancaster.com	Antelope Valley	**Study/Report**	Y	Y	Y	Palmdale, Lancaster, and Los Angeles County Waterworks all have studies regarding recycled water. This project would undertake the effort to prepare a regional master plan to consolidate the existing master plans/studies. The North Valley Regional Recycled Water System is intended to connect the Lancaster and Palmdale Wastewater Reclamation Plants with backbone recycled water line. A regional master plan incorporating the laterals, tanks, pumps, etc. necessary to construct an integrated delivery system for the Antelope Valley would ensure compatibility and efficiency throughout the system	3 - Water Supply: Offset up to 17,000 AFY of potable water use 3 - Offsets Delta water supply 3 - Reduces energy consumption	9	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC WS: Stabilize groundwater levels WS: Maximize beneficial use of recycled water CC: Mitigate against climate change	4
I	City of Lancaster	**Project Name: Division Street and Avenue H-8 Recycled Water Tank** Sponsor: City of Lancaster Contact: Carlyle S. Workman Phone: 661-723-6079 Email: cworkman@cityoflancaster.com	The proposed tank site is behind the existing pump station at 45540 Division Street. Lat: 34.710587 degrees Long: -118.130965 degrees	**Implementation/Conceptual**	Y	Y	Y	Construction a 1 million gallon recycled water tank at the City's existing pump station at 45540 Division Street, just south of Avenue H-8. In order to provide a stable supply of recycled water in the North Valley Regional Recycled Water System, tanks and pumps will need to be installed throughout the system. This tank would take the place of Los Angeles County Waterworks District No. 40's existing tank, on loan to the City. Making recycled water available to more users will free up potable water and improve the groundwater situation within the Antelope Valley.	3 - Water Supply: 1,000+ AF 3 - Offsets Delta water supply 3 - Reduces energy consumption	9	WS: Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035 WS: Stabilize groundwater levels WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WQ: Maximize beneficial use of recycled water CC: Mitigate against climate change	5

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use	3	3	20		$815,417	$10,000/year		2016	State Grant Funding and Loan Program – Water Recycling Funding Program (WRFP), Planning Grants, Etc.	City of Lancaster Recycled Water Facilities and Operations Master Plan, RMC January 2006.	Integration with other recycled water projects possible.	Project will diversify water supplies and help to adapt to climate change.	Since this project would offset approximately 50 Acre-feet of potable a year and would benefit the entire Antelope Valley ground water basin as a whole, it would benefit the DACs within the Valley positively in regards to water supply.		
Conveyance - Regional/local Conjunctive Management & Groundwater Recycled Municipal Water Matching Water Quality to Use Economic incentives	5	3	21		$100K -$1M	$0		2014, 2015	State Grant Funding and Loan Program – Water Recycling Funding Program (WRFP), Planning Grants, Etc.	City of Lancaster Recycled Water Facilities and Operations Master Plan, RMC January 2006; Final Facilities Planning Report, Antelope Valley Recycled Water Project, Kennedy/Jenks 2005; Antelope Valley Recycled Water Product, Phase 2 Design Concept Report, LACWW District No. 40, January 2009	This project can be integrated with other regional projects.	Project will diversify water supplies and help to adapt to climate change.	Since this Master Plan would benefit the entire Antelope Valley ground water basin as a whole, it would benefit the DACs within the Valley positively in regards to water supply.		
Conveyance-regional/local Recycled municipal water Matching Water Quality to Use	3	3	20		$1M -$10M	$25,000/year		2015, 2016	State Grant funding, Federal Funding, CIP.	Recycled Water Facilities and Operations Master Plan prepared by RMC in January 2006.	The North Valley Regional Recycled Water System, when completed, will link the Lancaster Water Reclamation Plant and the Palmdale Water Reclamation Plant and provide recycled water distribution to both cities and Los Angeles County unincorporated areas. There are several projects in the current IRWMP that comprise portions of the regional system that will integrate with this project.	Project will diversify water supplies and help to adapt to climate change.	Since the increased use of recycled water can offset potable water use, the groundwater table can be stabilized throughout the Antelope Valley. This will affect the DACs water situation beneficially.		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	City of Palmdale	**Project Name: Upper Amargosa Creek Flood Control, Recharge, and Habitat Restoration Project** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org Partners: AVEK, PWD, LACWW	Site is approx. 600-acre city-owned property that is bounded by Sierra Highway to the west, East Ave M (Columbia Way) to the north, and U.S. Air Force Plant 42 on the south and east	Implementation	Y	Y	Y	Proposed project improvements include: expanding the size and capacity of the spreading ground of the natural recharge area; developing and preserving an ephemeral stream habitat; and channelization of Amargosa Creek (soft bottom) and providing a grade separation of 20th street west over Amargosa Creek.	3 - capture approx. 400 AFY stormwater and recharge with SWP water (14,600-53,600 AFY) 1 - Water Quality Improved, reduced Arsenic 3 - 15 acres open space/habitat 3 - Offset water supply from the Delta (during dry years) 3 - 20 acres flood protection	13	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. a plan to meet supply needs of AV during a disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations WQ: Protect and maintain aquifers WQ: Protect and maintain natural streams and recharge areas FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. FLD: Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the AV. LU: Meet growing demand for recreational space CC: Mitigate against climate change	11
I	City of Palmdale	**Project Name: Palmdale Power Plant Project** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org		Implementation	Y	Y	Y	Construction of a 570 Mega-Watt (MW) electricity generating facility. The Palmdale Power Project will be a hybrid design, utilizing natural gas combined cycle technology and solar thermal technology. The Palmdale Power Project would be a customer and end user of 3,400 AFY of reclaimed water.	3 - Identified user of approximately 3,400 AFY of recycled water.	3	WQ: Maximize beneficial use of recycled water LU: Improve integrated land use planning to support water management CC: Mitigate against climate change.	3

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater Groundwater and Aquifer Remediation Pollution Prevention Flood Risk Management Ecosystem Restoration Recharge Areas Protection Water-dependent Recreation Watershed Management	8	3	35							Grant application			Yes		
Recycled Municipal Water Matching Water Quality to Use Land Use Planning and Management	3	3	12										Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C= Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	Palmdale Recycled Water Authority	**Project Name: Palmdale Recycled Water Authority – Phase 2 Distribution System** Sponsor: Palmdale Recycled Water Authority (JPA between the City of Palmdale and Palmdale Water District) Contact: Gordon Phair and Matt Knudson Phone: (661) 267-5310 and (661) 456-1018 Email: gphair@cityofpalmdale.org and mknudson@palmdalewater.org	The installation of a recycled water line from the intersection of Avenue R and 30th Street East, south to Avenue R-8, east to 65th Street East. Distribution laterals will be installed to feed Domenic Massari, Yellen, and Palmdale Oasis Parks. Laterals will also be installed to feed Palmdale and Knight High Schools.	**Implementation**	Y	Y	Y	The installation of a recycled water line from the intersection of Avenue R and 30th Street East, south to Avenue R-8, east to 65th Street East. Distribution laterals will be installed to feed Domenic Massari, Yellen, and Palmdale Oasis Parks. Laterals will also be installed to feed Palmdale and Knight High Schools. The installation of a recycled water line from the existing LACSD effluent recycled water line for in-lieu agricultural water exchange will also be part of this project. This project will be extended in the future to supply recycled water to proposed recharge facilities in Littlerock Wash. This project is part of the Recycled Water Master Facilities Plan being prepared by the Palmdale Recycled Water Authority.	3 - New Water supply (1,000+ AF). 3 - Offset Delta Water 3 - Reduce Energy Consumption	9	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change.	6
I	Palmdale Water District	**Project Name: Littlerock Creek Groundwater Recharge and Recovery Project** Sponsor: Palmdale Water District Contact: Matt Knudson Phone: (661) 456-1018 Email: mknudson@palmdalewater.org Partners: AVEK, City of Palmdale, LCID	Latitude: 34.5675 Longitude: -117.9839	**Implementation**	Y	Y	Y	This project involves groundwater recharge using recycled water from the Palmdale WRP. This project is anticipated to be similar to the Lancaster groundwater recharge project described below and have similar blending and extraction numbers (e.g., a blend of 10,000 AFY of recycled water and 40,000 AFY of SWP water). In order to have 40,000 AFY of SWP water to blend, this project would most likely end up being an AVSWCA project (or at least a joint venture type project with AVEK and/or LCID).	3 - 43,090 AFY supply 1 - Improve Water Quality (soil aquifer treatment) 3 - Offset Delta Water 1 - Flood Management 3 - Reduce energy consumption	11	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Est. a contingency plan to meet water supply needs of the AV Region during a plausible disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations WQ: Protect and maintain aquifers	9

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conveyance - Regional/local Conjunctive Management & Groundwater Recycled Municipal Water Matching water quality to use	4	3	22		$10 Million					Palmdale Water District Recycled Water Facilities Plan (2010)		No Climate Change Analysis	Yes		None.
Conjunctive Management & Groundwater Recycled Municipal Water Matching Water Quality to Use Pollution Prevention Flood Risk Management	5	3	28		$1,897,969		Yes	2013, 2015	Prop 1e, PWD funds	Palmdale Water District Strategic Water Resources Plan, 2010 Technical studies examining water supply for recharge, alternatives, environmental issues and constraints, groundwater modeling, and project feasibility is anticipated for 2015.	This project can be integrated with other groundwater recharge projects, as well as other recycled water projects.	This project would help the region to adapt to changes in supply availability through the storage of imported and recycled water.	The project would provide supplies regionally, including to DACs.	None	

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
I	Palmdale Water District	**Project Name: Littlerock Dam Sediment Removal** Sponsor: Palmdale Water District Contact: Matt Knudson Phone: (661) 456-1018 Email: mknudson@palmdalewater.org Partners: USFS	Littlerock Dam Latitude: 34.4814 Longitude: -118.0236	**Implementation**	Y	Y	Y	This project will remove up to 900,000 cubic yards of sediment that has been accumulated from runoff into Littlerock Reservoir, and up to 40,000 cubic yards on an annual basis after the initial sediment is removed. The project may include a grade control structure that will protect the identified habitat of the arroyo toad.	3 - 560 AFY supply 1 - Improve Water Quality 3 - Offset water supply from the Delta 3 - Provide flood management/protection 2 - Preserve habitat (for the endangered Arroyo Toad) 3 - Reduce energy consumption/GHGs	15	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. A plan to meet supply needs of AV during a disruption of SWP deliveries. WQ: Provide drinking water that meets regulatory requirements and customer expectations. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the AV. CC: Mitigate against climate change	6
I	Rosamond CSD	**Project Name: RCSD Arsenic Consolidation Project** Sponsor: RCSD Contact: Phone: Email: Partners: 10 mutuals		**Implementation**	Y	Y	Y	Project will extend waterline from Lands of Promise N. to Willaim Fisher and connect all 10 small water companies to the RCSD system. The water delivered to the WFM customers would be below the arsenic MCL level of 10 ppb. Land of Promise storage system would provide water volume and pressures to William Fisher that would be adequate to provide fire flows and meet RCSD, Kern County, and CDPH standards.	2 - Water Quality Improvement 3 - Improve reliability of drinking water system 3 - reduce energy consumption by improving system efficiency	8	WS: Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035; and adapt to climate change WS: Stabilize groundwater levels WQ: Provide drinking water that meets regulatory requirements and customer expectations. CC: Mitigate against climate change.	4
C	Antelope Valley Duck Hunting	**Project Name: Multi-use/Wildlife Habitat Restoration Project** Sponsor: Antelope Valley Duck Hunting Club (Co-sponsor: Waterworks), Wagas Land Company Contact: Ed Renwick; Aracely Jaramillo Phone: (626) 300-3353 Email: AJaramillo@dpw.lacounty.gov		**Conceptual**	Y	Y	N	Duck Hunting Club in both Kern and LA County, started in 1925. The AV Region is a flyway zone for many migratory birds flying south and the Wagas Land Co. has been preserving habitat. It has been coordinating with District 40 and would like replace their potable water use with recycled water. The Club would allow District 40 to use a portion of the property for spreading, creating a potential banking opportunity for the region. The project would continue to preserve open space/habitat and would "free up" potable water for other uses. The habitat area's highest water need is during the winter time (approx. 80%). Permeability tests need to be performed to verify percolation.	Offset potable water use with recycled water Potential to bank water Continue to preserve open space and habitat		WS: Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035; and adapt to climate change. WQ: Maximize beneficial use of recycled water ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the Antelope Valley Region. LU: Meet growing demand for recreational space CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Surface Storage - Regional/local Flood Risk Management Ecosystem Restoration Pollution Prevention	4	3	28		$11,963,233	$810,000/year	Yes	2012, 2020	PWD funds	Palmdale Water District Strategic Water Resources Plan, 2010 Littlerock Reservoir Hydrologic and Sediemtn Transport Analysis Technical Report, June 2005 Technical justification for the project was established in the Prop 1E grant application submitted in January 2013.	This project can be integrated with downstream groundwater recharge projects.	This project would help the region to adapt to changes in flow in Littlerock Creek, and allow for additional seasonal storage.	The project would provide supplies regionally, including to DACs.	None	
Conveyance - Regional/local System Reoperation Drinking Water Treatment and Distribution Matching Water Quality to Use Conjunctive Management & Groundwater	5	3	20				Yes			RCSD Regional CDPH Arsenic Compliance Project Preliminary Engineering Report (PER 3A and 3B)			Yes		
Urban Water Use Efficiency Conveyance - Regional/local Matching Water Quality to Use Ecosystem Restoration Land Use Planning and Management Water-dependent Recreation Watershed Management		0	0								Project could be integrated with other wetland habitat projects that attract migratory birds. Could also integrate with other recycled water projects in the Valley.	Project would offset imported water.			

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C= Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	Boron CSD	**Project Name: BCSD Arsenic Removal Treatment Plant (Construction)** Sponsor: Boron CSD Contact: Natalie Dadey Phone: (760) 762-6127 Email: boroncsd@yahoo.com	The Well No. 15 site is located five miles west of the town of Boron, off of Highway 58 to the North on Gephart Rd. to the west side of Gephart Rd. New plant will be constructed at this location or possibly at a new well site that will contain lower arsenic concentrations TBD based on future studies	**Conceptual**	**Y**	**Y**	**Y**	The goal of the project is to construct an arsenic removal treatment plant to treat the local groundwater supply to remove the arsenic contaminant; thereby achieving the state and federal compliance guidelines and enabling safe drinking water to be delivered to customers.	Offset Delta Water Supply Drinking water Quality improved		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WQ: Provide drinking water that meets regulatory requirements and customer expectations. CC: Mitigate against climate change	
C	City of Lancaster	**Project Name: Lancaster Cemetery Recycled Water Conversion** Sponsor: City of Lancaster Contact: Carlyle S. Workman Phone: 661-723-6079 Email: cworkman@cityoflancaster.com	Northeast corner of East Lancaster Blvd and Division St Lat. 34.696593 Long. -118.130795	**Conceptual**	**Y**	**Y**	**Y**	Install a purple pipe irrigation system throughout the cemetery and connect to the existing recycled water main in Division St	3 - Offset approx. 40 AFY of groundwater that is currently pumped 3 - Reduce energy consumption	6	WS: Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035 WS: Stabilize groundwater levels WS: Maximize beneficial use of recycled water CC: Mitigate against climate change	4
C	City of Lancaster	**Project Name: Tertiary Treated Water Conveyance and Incidental Groundwater Recharge of Amargosa Creek Avenue M to Avenue H** Sponsor: City of Lancaster Contact: Carlyle Workman Phone: (661) 723-6079 Email: cworkman@cityoflancasterca.org		**Conceptual**	**Y**	**Y**	**Y**	This project involves the construction of a 12-inch lateral pipeline off the Regional Backbone at/ near Ave M conveying tertiary treated water to a point approximately one mile west and designed to deliver recycled water into the Amargosa Creek channel. Tertiary treated water would travel northerly within the Amargosa Creek roughly 4.7 miles, creating incidental recharge en route until collecting at Lake Lancaster (retention basin north of Ave H). Here, it would be available for irrigation and dust control at the Antelope Valley Fair Grounds and extended use to the west side of Lancaster and surrounding Antelope Valley Region.	100 to 1,000 AFY additional supply		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. a plan to meet supply needs of AV during a disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Maximize beneficial use of recycled water CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Drinking Water Treatment and Distribution		3	3										Yes		
Conveyance-regional/local Recycled municipal water Matching Water Quality to Use	3	3	16		$100,000	$1,500	No	2014, 2015	Funding would likely come from grants and/or City and County CIP funds	Water usage records for the Cemetery indicate the amount of groundwater use to be offset by recycled water			YES Since the GW levels of the valley would be stabilized and water supply improved		
Conveyance - Regional/local Conjunctive Management & Groundwater Recycled Municipal Water Matching Water Quality to Use		3	3				No	2 to 3					Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C= Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	City of Lancaster	**Project Name: Amargosa Creek Pathways Project** Sponsor: City of Lancaster Contact: Carlyle Workman Phone: (661) 723-6079 Email: cworkman@cityoflancasterca.org		Conceptual	Y	Y	Y	This project includes development of a top of bank trail or paseo along the eastern side of Lake Lancaster, and construction of a foot-bridge structure crossing the lake and connecting under Hwy 14 to link to the existing trailhead at the Antelope Valley Fairgrounds. The project integrates stormwater/flood control with natural riparian habitat enhancement and preservation, open/ recreational space and land use management. The goal is to construct a pathway in hamrony with established riparian habitat, within a flood management basin which captures stormwater and nuisance water runoff that, in turn, sustains riparian habitat. This project will additionally increase the amount of rotected natural habitat and provide improved flood control within the Amargosa Creek watershed.	Open space 1-100 AFY Water Supply (from percolating water)		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. FLD: Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses ENV: Preserve open space and natural habitats that protect and enhance water resoures and species in the Antelope Valley Region LU: Meet growing demand for recreational space LU: Improve integrated land use planning to support water mgmt.	
C	City of Lancaster	**Project Name: Ecosystem and Riparian Habitat Restoration of Amargosa Creek Ave J to Ave H** Sponsor: City of Lancaster Contact: Carlyle Workman Phone: (661) 723-6079		Conceptual	Y	Y	Y	This project establishes riparian habitat along the eastern edge of the Amargosa Creek in elongated segments and sections resulting in a "Riparian Curtain": extending from Ave J north to Ave H. This project requires site reconnaissance, coordination with California Department of Fish and Game (CDFG), various bio assessments and planting plans prior to implementation and creation. Restoration projects such as this are holistic and enhance the environment, providing physical buffers and off-sets to impacts on the overall ecosystem of ephemeral and riparian habitat associated with Amargosa Creek.	100 to 1,000 AF of open space created Water Supply (from percolating water) Provide buffers to protect water quality in stream		WQ: Protect and maintain natural streams and recharge areas FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. ENV: Preserve open space and natural habitats that protect and enhance water resoures and species in the Antelope Valley Region LU: Meet growing demand for recreational space CC: Mitigate against climate change	
C	City of Palmdale	**Project Name: 45th Street East Groundwater Recharge and Flood Control Basin** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org		Conceptual	Y	Y	Y	The project includes the construction of a new basin, an approximately 2,083 AF drainage basin near 45th Street East and Avenue P-8, on property currently owned by the City of Los Angeles' Department of Airports.	Approximately 208 acres of new wildlife habitat would be created by this project. Water quality would also be expected to improve as a result of reduced contaminated stormwater runoff and capture of up to 2,083 AF. Water supply would be created through recharge Provide flood management/protection		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Establish a contingency plan to meet water supply needs of the Antelope Valley Regino during a plausible disruption of SWP deliveries. WS: Stabilize groundwater levels WQ: Protect natural streams and recharge areas from contamination FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water.	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Pollution Prevention Ecosystem Restoration Land Use Planning & Mgmt Flood Risk Management Watershed Management		0	0				Yes	3 to 5							
Pollution Prevention Ecosystem Restoration Urban Runoff Management Watershed Management		0	0				No	3 to 5							
Conjunctive Management & Groundwater Ecosystem Restoration Recharge Areas Protection Flood Risk Management		0	0												

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	City of Palmdale	**Project Name: Avenue Q and 20th Street East Groundwater and Flood Control Basin (Q-West Basin)** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org		Conceptual	Y	Y	Y	The project entails the acquisition and construction of an approximately 1,612 AF detention basin located between Avenue P-12 and Avenue Q, from 20th Street East to 30th Street East.	Approximately 161 acres of new wildlife habitat would be created by this project. Water quality would also be expected to improve as a result of reduced contaminated stormwater runoff Capture of up to 1,612 AF. Flood management/protection		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Stabilize groundwater levels WS: Establish a contingency plan to meet water supply needs of the Antelope Valley Regino during a plausible disruption of SWP deliveries. WQ: Protect natural streams and recharge areas from contamination. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. FLD: Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the AV. CC: Mitigate against climate change	
C	City of Palmdale	**Project Name: Avenue R and Division Street Groundwater Recharge and Flood Control Basin** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org		Conceptual	Y	Y	Y	The City proposes to construct a 950 acre-foot basin on 93 acres located at the northeast corner of Avenue R and Division St., including all necessary and associated grading, inlet/outlet structures, spillway, and storm drain piping as part of its stormwater collection and conveyance system.	Provide for wildlife habitat Provide conservation Provide stormwater capture. Provide flood management/protection		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Stabilize groundwater levels WS: Establish a contingency plan to meet water supply needs of the Antelope Valley Regino during a plausible disruption of SWP deliveries. WQ: Protect natural streams and recharge areas from contamination. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. FLD: Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the AV. CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater Ecosystem Restoration Recharge Areas Protection Flood Risk Management		0	0												
Conjunctive Management & Groundwater Ecosystem Restoration Recharge Areas Protection Flood Risk Management		0	0												

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C= Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	City of Palmdale	**Project Name: Barrel Springs Groundwater Recharge and Flood Control Basin** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org		Conceptual	Y	Y	Y	Construction of an 878 AF detention basin in the Barrell Springs area upstream of Old Harold Road and 25th Street East, on a 40-acre, City-owned property.	Flood control for the City of Palmdale Provide approximately 40 acres of habitat Capture of stormwater for groundwater recharge Water quality would also be expected to improve as a result of reduced contaminated stormwater runoff		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Stabilize groundwater levels WS: Establish a contingency plan to meet water supply needs of the Antelope Valley Regino during a plausible disruption of SWP deliveries. WQ: Protect natural streams and recharge areas from contamination. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. FLD: Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the AV. CC: Mitigate against climate change	
C	City of Palmdale	**Project Name: Hunt Canyon Groundwater Recharge and Flood Control Basin** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org		Conceptual	Y	Y	Y	The project entails construction of a new 3,000 AF detention/ recharge basin, located south of Pearblossom Highway at 57th Street East. The basin would be used to store aqueduct water to allow recharge into the aquifer, and would act as a detention basin during severe storms.	Approximately 300 acres of new wildlife habitat would be created by construction of this project. Water quality would be expected to improve as a result of reduced contaminated stormwater runoff Capture of up to 3,000 AF. Flood management/protection		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Stabilize groundwater levels WS: Establish a contingency plan to meet water supply needs of the Antelope Valley Regino during a plausible disruption of SWP deliveries. WQ: Protect natural streams and recharge areas from contamination. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. FLD: Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the AV. CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater Ecosystem Restoration Recharge Areas Protection Flood Risk Management		0	0												
Conjunctive Management & Groundwater Ecosystem Restoration Recharge Areas Protection Flood Risk Management			0												

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	City of Palmdale	**Project Name: 42nd Street East, Sewer Installation** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org		**Conceptual**	**Y**	**Y**	**N**	The City proposes to construct new sewer lines, and will require homes in the vicinity of 42nd Street East to connect to the system, thereby eliminating the use of septic tanks and the potential for groundwater pollution due to leaks and spills.	Groundwater quality would be improved and future contamination reduced through elimination of septic systems		WQ: Protect and maintain aquifers WQ: Protect natural streams and recharge areas from contamination.	
C	City of Palmdale	**Project Name: Lower Amargosa Creek Recharge Project** Sponsor: City of Palmdale Contact: Gordon Phair Phone: (661) 267-5310 Email: gphair@cityofpalmdale.org and		**Conceptual**	**Y**	**Y**	**N**	Development of in-stream recharge of water from the State Water Project blended with recycled water. Integration with the Upper Amargosa Creek Recharge Project, Amargosa Water Banking and Stormwater Retention Project, and the North Los Angeles/Kern County Regional Recycled Water Project.	New Water supply (1,000+ AF).	1	WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WS: Stabilize groundwater levels WQ: Protect natural streams and recharge areas from contamination. WQ: Maximize beneficial use of recycled water. CC: Mitigate against climate change.	6
C	EAFB	**Project Name: Antelope Valley Watershed Surface Flow Study** Sponsor: EAFB Contact: Wanda Deal Phone: 661-810-9622 Email: wanda.deal@us.af.mil	Antelope Valley	**Study/Report**	**Y**	**Y**	**Y**	The project would characterize the Antelope Valley surface water flow from the San Gabriel and Tehachapi Mountains to Rosamond and Rogers Lake. It would aim to determine the amount of flow and tributaries, the health of the lakebeds, and how much water is required to either keep them healthy or make them healthy. The project would determine the impacts of implementing current and future proposed water diversion/removal projects and impacts of continued retention basin development. It would quantify potential effects of future flood management projects.	Determine necessary flow to maintain habitat Quantify impacts of future water projects and management		WQ: Protect and maintain natural streams and recharge areas FLD: Optimize balance between existing beneficial uses of stormwater and capturing stormwater for new uses ENV: Preserve open space and natural habitats that protect and enhance water resources and species in the AV Region LU: Improve integrated land use planning to support water management	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Pollution Prevention		0	0												
Conjunctive Management & Groundwater Recycled Municipal Water Ecosystem Restoration Matching water quality to use	4	0	11									No			No
Ecosystem Restoration Forest Management Land Use Planning and Management Recharge Area Protection Water-dependent Recreation Watershed Management Flood Risk Management		0	0							NSR Surface Flow Study, EAFB, 2011					

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	LACDPW	**Project Name: Big Rock Creek In-River Spreading Grounds** Sponsor: LACDPW Contact: Ken Zimmer Phone: (626) 458-6188 Email: kzimmer@dpw.lacounty.gov		**Conceptual**	**Y**	**Y**	**N**	Big Rock Creek drainage area is 23 square miles. The creek runs from the San Gabriel Mountains north into the Antelope Valley. The Los Angeles County Flood Control District proposes to develop a spreading ground facility near the San Gabriel Mountain foothills in order to increase groundwater recharge. The facility will include earthen levees in and adjacent to the creek to capture and recharge stormwater from the creek into the groundwater basin. The Antelope Valley Watershed Region's continued and projected population growth will lead to increased water demand. Future estimates of the region's water budget predict an increasing shortfall in water supply. Developing in-stream groundwater recharge facility will increase groundwater recharge by an estimated 5,500 acre-feet per wet-year. This proposed project will improve the health and long-term sustainability of the basin, increase local groundwater supplies, and	Increase groundwater recharge by an estimated 5,500 acre-feet per wet-year Water supply (New Supply Created): 1,000+ AFY Water Quality – Area drained: 23 Sq. Mi.		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WS: Stabilize groundwater levels FLD: Optimize balance between existing beneficial uses of stormwater and capturing stormwater for new uses	
C	LACDPW	**Project Name: Little Rock Creek In-River Spreading Grounds** Sponsor: LACDPW Contact: Ken Zimmer Phone: (626) 458-6188 Email: kzimmer@dpw.lacounty.gov		**Conceptual**	**Y**	**Y**	**N**	Little Rock Creek drainage area is 49 square miles. The creek runs from the San Gabriel Mountains north into the Antelope Valley. The Los Angeles County Flood Control District proposes to develop a spreading ground facility near the San Gabriel Mountain foothills in order to increase groundwater recharge. The facility will include earthen levees in and adjacent to the creek to capture and recharge stormwater from the creek into the groundwater basin. The Antelope Valley Watershed Region's continued and projected population growth will lead to increased water demand. Future estimates of the region's water budget predict an increasing shortfall in water supply. Developing in-stream groundwater recharge facility will increase groundwater recharge by an estimated 7,600 acre-feet per wet-year. This proposed project will improve the health and long-term sustainability of the basin, increase local groundwater supplies, and reduce the region's reliance on water imports.	increase groundwater recharge by an estimated 7,600 acre-feet per wet-year Water supply (New Supply Created): 1,000+ AFY Water Quality – Area drained: 49 Sq. Mi.		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WS: Stabilize groundwater levels FLD: Optimize balance between existing beneficial uses of stormwater and capturing stormwater for new uses CC: Mitigate against climate change.	
C	LACWD 40	**Project Name: Implement ET Controller Program** Sponsor: LACWD 40 Contact: Rea Joseph-Gonzalez Phone: 626-300-3338 Email:		**Conceptual**	**Y**	**Y**	**N**	Develop and implement an ET controller pilot program in the Antelope Valley Region that can be used as a model to a future mandatory program for new development. The pilot program will include the purchase and installation of (estimated) two weather stations in a selected residential development and replace (approximately) 300 manually adjusted irrigation controllers with weather-sensitive irrigation controllers for the District's qualified customers.	100 to 1,000 AFY conserved supply		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. CC: Mitigate against climate change	
C	LACWD 40	**Project Name: Ultra-Low Flush Toilet Change-out Program** Sponsor: LACWD 40 Contact: Rea Joseph-Gonzalez Phone: 626-300-3338 Email:		**Conceptual**	**Y**	**Y**	**N**	The ULFT Change Out Program would distribute ULFTs to customers through one-day Saturday toilet distributions. The one-day distributions provide single-family residents with up to two free ULFTs. This proposal provides one annual one-day distribution events over a three-year duration. Each one-day event will include up to 1,500 ULFTs for District No. 40 per year. This proposal is consistent with BMP No. 14, Residential ULFT Replacement Programs to replace existing highwater- using toilets with ultra-low flush (1.6 gallons or less) toilets for residential customers.	100 to 1,000 AFY conserved supply		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater Flood Risk Management		0	0		$9,000,000							No			No
Conjunctive Management & Groundwater Flood Risk Management		0	0		$4,000,000							No			No
Urban Water Use Efficiency Urban Runoff Management Pollution Prevention		0	0												
Urban Water Use Efficiency		0	0												

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	LACWD 40	**Project Name: Waste Water Ordinance** Sponsor: LACWD 40 Contact: Rea Joseph-Gonzalez Phone: 626-300-3338 Email:		Conceptual	Y	Y	N	Develop a year-round conservation program as an enforceable ordinance to reduce the impacts of water demand during drought years. May include watering schedule ordinance, water waste ordinance, and landscape ordinance for new development.	Conserving supply, but more information required to quantify benefit.		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. CC: Mitigate against climate change	
C	LACWD 40	**Project Name: Water Conservation School Education Program** Sponsor: LACWD 40 Contact: Rea Joseph-Gonzalez Phone: 626-300-3338 Email:		Conceptual	Y	Y	N	Develop and implement a school education program to promote water conservation awareness and encourage stewardship among school-age children (fourth grade). This program is consistent with BMP No. 8, School Education Program to promote water conservation and water conservation related benefits, including working with school districts and private schools with within the District's service area to provide instructional assistance, educational materials, and classroom presentations that identify urban, agricultural, and environmental issues and conditions in the local watershed.	Conserving supply, but more information required to quantify benefit.		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. CC: Mitigate against climate change	
C	LACWD 40	**Project Name: Avenue K Transmission Main, Phases I-IV** Sponsor: LACWD 40 Contact: Sami Kabar Phone: (626) 300-3339 Email: skabar@dpw.lacounty.gov	Phase I: 10th St West to 5th St East Phase II: 5th St East to 20th St East Phase III: 20th St East to 30th St East Phase IV: 10th St West to 60th St West	Conceptual	Y	Y	Y	The project consists of four phases for a total of approximately 32,000 linear feet of 30-inch and 36-inch diameter steel transmission main. The proposed transmission main will have interconnections to the existing distribution system and will increase the capacity of the water system to meet the existing domestic and fire protection requirements.	Firms up existing supply		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC.	
C	LACWD 40	**Project Name: North Los Angeles/Kern County Regional Recycled Water Project - Phase 3** Sponsor: LACWD 40; City of Palmdale Contact: Carolina Hernandez Phone: (626) 300-3318 Email: chernandez@dpw.lacounty.gov		Conceptual	Y	Y	Y	The Los Angeles/Kern County Regional Recycled Water Project outlines the foundation of a regional recycled water system in the Antelope Valley Region. The proposed system would distribute recycled water throughout the service area and provide a backbone system that could accommodate minimum and maximum demands and allow significant deliveries of recycled water to recharge areas.	Water supply conveyed Offset Delta Water Reduce energy consumption/GHG		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Establish a contingency plan to meet water supply needs of the AV region during a plausible distruption of SWP deliveries WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Urban Water Use Efficiency		0	0												
Urban Water Use Efficiency		3	3										Yes		
Drinking water treatment and distribution Conveyance - Regional/local		0	0		Phase I: $3.66M Phase II: $3.65M										
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use		3	3										Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	LACWD 40	**Project Name: North Los Angeles/Kern County Regional Recycled Water Project - Phase 4** Sponsor: LACWD 40 Contact: Carolina Hernandez Phone: (626) 300-3318 Email: chernandez@dpw.lacounty.gov		Conceptual	Y	Y	Y	The Los Angeles/Kern County Regional Recycled Water Project outlines the foundation of a regional recycled water system in the Antelope Valley Region. The proposed system would distribute recycled water throughout the service area and provide a backbone system that could accommodate minimum and maximum demands and allow significant deliveries of recycled water to recharge areas.	Water supply conveyed Offset Delta Water Reduce energy consumption/GHG		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Exablish a contingency plan to meet water supply needs of the AV region during a plausible disruption of SWP deliveries WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	
C	LACWD 40	**Project Name: Avenue M and 62th Street West Tanks** Sponsor: LACWD 40 Contact: Julian Juarez Phone: 626-300-4693 Email:		Conceptual	Y	y	Y	This project would include the design and construction of four (4) 3 mgd water storage tanks.	Water supply, but more information required to quantify benefit.		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC.	
C	Leona Valley Town Council	**Project Name: Precision Irrigation Control System** Sponsor: Leona Valley Town Council Contact: Peggy Fuller Phone: 661-270-0771 Email: pfuller@leonavalleytc.org		Conceptual	Y	Y	N	The project is a proposed irrigation control system using electronic sensor probes at root level. Sensors relay data to a computer which controls irrigation valves, delivering a precise amount of water and effectively eliminating over-irrigation.	More than 150 AFY of conserved supply		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use		3	3										Yes		
Drinking water treatment and distribution Conveyance - regional/local		0	0		$4 M										
Urban Water Use Efficiency Urban Runoff Management Pollution Prevention		0	0												

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	Leona Valley Town Council	**Project Name: Stormwater Harvesting** Sponsor: Leona Valley Town Council Contact: Peggy Fuller Phone: 661-270-0771 Email: pfuller@leonavalleytc.org		**Conceptual**	**Y**	**Y**	**N**	This project includes the construction of stormwater collection of conveyance facilities, water filtration devices, and cisterns and collection tanks. Through advanced filtration methods, this project can also be expanded to create potable water for residential uses.	Once fully implemented, it is estimated that water conservation of up to 25 AFY could be realized. Improve flood management Improve water quality by reducing contaminants going into creeks		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WQ: Protect and maintain natural streams and recharge areas FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. FLD: Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses CC: Mitigate against climate change	
C	North Edwards WD	**Project Name: Arsenic Contamination Project** Sponsor: North Edwards WD Contact: Dollie Kostopoulos Phone: (760) 769-4520 Email: dlcsd@ccis.com		**Conceptual**	**Y**	**N**	**N**					
C	Palmdale Water District	**Project Name: ET Based Controller Program** Sponsor: Palmdale Water District Contact: Matt Knudson Phone: (661) 456-1018 Email: mknudson@palmdalewater.org		**Conceptual**	**Y**	**Y**	**N**	This project involves the installation of ET-based irrigation controllers for landscaped areas. This project can assist water purveyors in the Antelope Valley Region in meeting BMPs for water use efficiency and will reduce runoff from over watering of landscaped areas.	Approximately 240 AFY of supply conserved if used on 14 large landscape users in PWD's service area.		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water. CC: Mitigate against climate change	
C	Palmdale Water District	**Project Name: New PWD Treatment Plant** Sponsor: PWD Sponsor: Palmdale Water District Contact: Matt Knudson Phone: (661) 456-1018 Email: mknudson@palmdalewater.org		**Conceptual**	**Y**	**Y**	**Y**	This project involves the construction of a new water treatment plant at 47th Street East and the California Aqueduct, for the treatment of SWP and Littlerock Reservoir water. The initial capacity of the plant will be 10 mgd.	The new plant would be capable of treating up to 10 mgd of imported water Littlerock water.		WQ: Provide drinking water that meets regulatory requirements and customer expectations.	
C	QHWD	**Project Name: QHWD Partial Well Abandonment** Sponsor: QHWD Contact: Chad Reed Phone: 661-943-3170 Email: creed@qhwd.org		**Conceptual**	**Y**	**Y**	**N**	This project will pull the pump from the well located on West Avenue L in Lancaster and "microgrout" the region of strata that contains higher levels of arsenic. Doing so will localize these regions of strata using a cost-effective, non-treatment method.	Prevents loss of groundwater pumping and existing supply and ensures water quality that meets		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WQ: Provide drinking water that meets regulatory requirements and customer expectations WQ: Protect and maintain aquifers CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Urban Water Use Efficiency Urban Runoff Mgmt Improve Flood Management Matching Water Quality to Use Pollution Prevention Watershed Management		0	0												
			0		$1,100,000										Yes
Urban Water Use Efficiency Urban Runoff Management Pollution Prevention		3	3										Yes		
Drinking Water Treatment and Distribution		3	3		25 million	$2,240,000/year	No	2020	PWD funds, SRF loans	Palmdale Water District Strategic Water Resources Plan, 2010 Palmdale Water District Strategic Water Resources Plan: Alternatives Analysis TM, 2010	This project can be integrated with other projects that acquire additional imported water.	None	The project would provide supplies regionally, including to DACs.	None	
Drinking water treatment and distribution Pollution Prevention		0	0												Yes

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C= Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	Road Maintenance Division (LACDPW)	**Project Name: Build a bridge at the existing dip crossing of Mt. Emma Road @ Littlerock Creek** Sponsor: Road Maintenance Division (LACDPW) Contact: Mark Caddick Phone: (661) 947-7173 Email: mcaddick@dpw.lacounty.gov	Mt. Emma Road @ Littlerock Creek	**Conceptual**				When it floods the Road Division has to close the gates, which creates a substantial detour for Mt. Emma traffic.	Flood Management		FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water.	
C	Road Maintenance Division (LACDPW)	**Project Name: Flooding issues Avenue P-8, between 160th and 170th Street East** Sponsor: Road Maintenance Division (LACDPW) Contact: Mark Caddick Phone: (661) 947-7173 Email: mcaddick@dpw.lacounty.gov	Avenue P-8, between 160th and 170th Street East	**Conceptual**				Road Maintenance Division is in the process of acquiring drainage easements to relieve flooding to multiple private properties.	Flood Management		FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water.	
C	Road Maintenance Division (LACDPW)	**Project Name: Flooding issues Avenue W, near 133rd Street East** Sponsor: Road Maintenance Division (LACDPW) Contact: Mark Caddick Phone: (661) 947-7173 Email: mcaddick@dpw.lacounty.gov	Avenue W, near 133rd Street East	**Conceptual**				There are several unmet drainage needs in Lake LA on private properties, specifically on Avenue W, near 133rd Street East.	Flood Management		FLD: Reduce negative impacts of stormwater, urban runoff, and nuisance water.	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Flood Risk Management			0												
Flood Risk Management			0												
Flood Risk Management			0												

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C= Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	Rosamond CSD	**Project Name: Purchasing Spreading Basin Land** Sponsor: RCSD Contact: Phone: Email:		**Conceptual**	**N**	**Y**	**N**	Purchase water spreading basins land in West Kern County from Avenue A to Rosamond B.	Supply benefit, but more information required to quantify benefit.		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WS: Estab. A plan to meet supply needs of AV during a disruption of SWP deliveries. WS: Stabilize groundwater levels	
C	Rosamond CSD	**Project Name: Gaskell Road Pipeline** Sponsor: RCSD Contact: Phone: Email:		**Conceptual**	**N**	**Y**	**Y**	Construct and operate a 30-inch diameter potable water pipeline on Gaskell Road, in Southeast Kern County, from 60th Street West to 140th Street West, with pumps, valves, meters, telemetry and remote controls from a centralized SCADA control point in Rosamond Community Services District's Operational Center.	100 to 1,000 AF supply		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC.	
C	Rosamond CSD	**Project Name: KC & LAC Interconnection Pipeline** Sponsor: RCSD Contact: Phone: Email:		**Conceptual**	**N**	**Y**	**N**	Place 36-inch piping between RCSD and Los Angeles County at Avenue A at 20th and 60th Streets West. Place piping north and south on 20th Street and 60th Street to existing recycled water pipelines.	Supply benefit, but more information required to quantify benefit.		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WQ: Maximize beneficial use of recycled water CC: Mitigate against climate change	
C	Rosamond CSD	**Project Name: Place Values and Turnouts on Reclaimed Water Pipeline** Sponsor: RCSD Contact: Phone: Email:		**Conceptual**	**Y**	**Y**	**N**	Place various required turnouts, remove controlled valves, treatment stations, other control features to move water around.	100 to 1,000 AFY supply		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WQ: Maximize beneficial use of recycled water CC: Mitigate against climate change	
C	Rosamond CSD	**Project Name: RCSD Wastewater Pipeline** Sponsor: RCSD Contact: Phone: Email:		**Conceptual**	**Y**	**Y**	**N**	This project would include placing a 36-inch wastewater pipeline from LACSD to RCSD's WWTP. The total distance would be approximately 15 miles.	Increases potential users of recycled water		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WQ: Maximize beneficial use of recycled water CC: Mitigate against climate change	
C	Rosamond CSD	**Project Name: Tropico Park Pipeline Project** Sponsor: RCSD Contact: Phone: Email:		**Conceptual**	**N**	**Y**	**Y**	Place 16-inch recycled water pipeline from Gaskell Road north to Tropico regional Park area.	Potable water offset		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC. WQ: Maximize beneficial use of recycled water LU: Meet growing demand for recreational space CC: Mitigate against climate change	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater Recharge Areas Protection		0	0												
Conveyance - Regional/local		0	0												
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use		0	0												
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use		0	0												
Conveyance - Regional/local Recycled Municipal Water Matching Water Quality to Use		0	0												
Conveyance-Regional/local Recycled Municipal Water Matching Water Quality to Use		3	3										Yes		

Status	Sponsor	General Information	Project Location	Scoring Criteria	General Info	Description	Location	Project Description	Project Benefits		IRWMP Objectives	
I = Implementation C = Conceptual			(1) Description of location (2) Lat & Long	Implementation/Conceptual	Y or N	Y or N	Y or N		Benefits (3=good justification; 2=fair justification; 1=poor justification)	Benefits score	Objectives 1 point each	Objs Score
				Study/Report								
C	Rosamond CSD	**Project Name: Deep Wells to Recapture Banked Water** Sponsor: RCSD Contact: Phone: Email:		Conceptual	N	Y	N	Drill and equip 6 deep wells between Avenue A and Rosamond Blvd. 70th to 140th Street West.	Supply benefit, but more information required to quantify benefit		WS: Provide reliable supply to meet AV's expected demand between now and 2035, and help to adapt to CC.	

Resource Management Strategies		DAC Benefits	Total Score	Complete?	Estimated Project Capital Costs	Estimated O&M Costs	Has a cost estimate been prepared?	Estimated years of construction & start-up	Potential funding / financing sources	Technical Feasibility	Additional Project Information				
Strategies (1 per Resource Management Strategy)	RMS Score	Score (0 = no; 3 = yes)		Y = Yes							Strategic Considerations	Climate Change Benefits	DAC Benefits	Tribal Benefits	EJ issues
Conjunctive Management & Groundwater			0		$16,302,100				CDPH Grant						

Appendix L: IRWM Grant Program Guidelines, Appendix H – Plan Review Process Cross-Reference Table

Page Intentionally Left Blank

Antelope Valley IRWM Plan Update
DWR Requirements Tracking

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Governance			
The name of the RWMG responsible for implementation of the Plan.	Executive Summary	Section 1	1-2
A description of the IRWM governance structure	Section 8.2.2	Section 8.2	8-2 to 8-8
• Public outreach and involvement processes	Section 8.2	Section 1.2 Section 8.2.1	1-6 to 1-21 8-4 to 8-5
• Effective decision making	Section 8.2.2	Section 8.2.2	8-5
• Balanced access and opportunity for participation in the IRWM process	Section 8.2.2	Section 8.2.3	8-5
• Effective communication – both internal and external to the IRWM region	Sections 8.2.3 and 8.2.4 (these were recommendations)	Section 1.2.3 Section 8.2.4	1-15 8-7
• Long term implementation of the IRWM Plan	Section 8.2	Section 8.2.5	8-7
• Coordination with neighboring IRWM efforts and State and federal agencies	Section 8.2.4 (recommendations)	Section 8.2.6	8-7 to 8-8
• The collaborative process(es) used to establish plan objectives	Section 8.2.3	Sections 1.2, 1.3 Section 4.1	1-6 to 1-28 4-1 to 4-4
• How interim changes and formal changes to the IRWM Plan will be performed	Section 8.2.4	Section 1.3.2 Section 8.2.7	1-24 to 1-25 8-8
• Updating or amending the IRWM Plan	Section 8.2.4	Section 1.3.2 Section 8.2.7	1-24 to 1-25 8-8
• Publish NOI to prepare/update the plan; adopt the plan in a public meeting	N/A	Section 1.2.3 Section 1.3.2	1-15 1-25
Region Description			

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
If applicable, describe and explain how the plan will help reduce dependence on the Delta supply regionally	Section 6.1.1	Section 6.1 (all water supply measures help to reduce dependence)	6-2 to 6-13
Describe watersheds and water systems	Section 2	Sections 2.3 to 2.5 Section 3.4	See below
• Hydrology	Section 2.4.1	Sections 2.3 to 2.4 Figs. 2-5 to 2-12	2-4 to 2-19
• Groundwater	Section 2.4.2	Section 2.4.2 Figs. 2-11 to 2-13	2-21 to 2-26
• Vegetation	Section 3.4.1	Section 3.4	3-50 to 3-53
• Species	Section 3.4.2	Section 3.4	3-53 to 3-54
• Habitats of special concern	Section 3.4.1	Section 3.4	3-50 to 3-52
• Management issues (e.g. invasive species)	Section 3.4.2	Section 3.4	3-53 to 3-54
• Climate change	Section 3.1.9.6	Section 2.8 Section 3.6	2-41 to 2-43 3-58 to 3-60

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Describe internal boundaries *(includes the boundaries of municipalities, service areas of individual water, wastewater, flood control districts, and land use agencies. The description should also include those not involved in the Plan (i.e. groundwater basin boundaries, watershed boundaries, county, State, and international boundaries)*.	Section 1.2 (water districts) Figure 2-1 (service districts) Figure 2-2 (cities, special districts) Figure 2-7 (watershed boundaries) Section 2.4.2, Figure 2-10 (groundwater) Section 2.5, Figure 2-11 (land use)	Section 2.2 Figure 2-3 Section 2.2 Figure 2-4 Secs. 2.2 and 2.7 Figure 2-4 Section 2.4 Figure 2-9 Section 2.4.2 Figs. 2-11 to 2-13 Section 2.5 Figure 2-14 Section 2.5.1 Figure 2-4 (Flood Control)	2-4 and 2-7 2-4 and 2-8 2-4 and 2-8 2-11 to 2-16 2-21 to 2-26 2-27 to 2-35 2-8 and 2-31
Description of water supplies and demands for a minimum 20-year planning horizon.	Section 3.1	Section 3.1	3-1 to 3-40
Describe water quality conditions	Section 3.2	Section 3.2	3-41 to 3-46

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Describe social and cultural makeup	Sections 1.2.4 (DAC identification), 2.6 and 2.7	Section 1.2.4 Figure 1-2 Secs. 2.8 to 2.10	1-16 to 1-21 2-32 to 2-40
Describe major water-related objectives and conflicts	Section 3.1.9, 3.2.5, 3.3.1, 3.4.2	Section 3.1.9 Section 3.2.5 Section 3.3.1 Section 3.4.1 Section 3.5.1	3-34 to 3-40 3-44 to 3-45 3-47 to 3-50 3-53 to 3-54 3-55 to 3-58
Explain how the IRWM regional boundary was determined and why the region is an appropriate area for IRWM planning.	Section 2.1	Section 1.1 Figure 1-1 Section 2.1 Figs. 2-1 and 2-2	1-3 to 1-5 2-1 to 2-4
Describe neighboring and/or overlapping IRWM efforts	Section 2.2	Section 2.2 Figs. 2-1 and 2-2 Section 8.2.6	2-2 to 2-4 8-7 to 8-8
Define maximum opportunities for integration of water management activities	Section 6	Section 5.8 Section 6 Section 8	5-17 to 5-26 6-1 to 6-26 8-1 to 8-35
Objectives			

Antelope Valley IRWM Plan Update
DWR Requirements Tracking

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Determine the IRWM Plan objectives: Minimum requirements on p. 41 of Guidelines. All IRWM Plans shall address all of the following:	Section 4	Sections 4.1 to 4.7	
• Protection and improvement of water supply reliability, including identification of feasible agricultural and urban water use efficiency strategies		Table 4-1 Section 4.2	4-3 4-5 to 4-6
• Identification and consideration of the drinking water quality of communities within the area of the Plan.		Table 4-1 Section 4.3	4-3 to 4-4 4-7
• Protection and improvement of water quality within the area of the Plan consistent with relevant Basin Plan.		Table 4-1 Section 4.3	4-3 to 4-4 4-7 to 4-9
• Identification of any significant threats to groundwater resources from overdrafting.		Table 4-1 Section 4.3	4-3 4-6
• Protection, restoration, and improvement of stewardship of aquatic, riparian, and watershed resources within the region.		Table 4-1 Section 4.5	4-4 4-10 to 4-12
• Protection of groundwater resources from contamination.		Table 4-1 Section 4.3 Section 1.2.4.1	4-4 4-8 1-17 to 1-18
• Identification and consideration of water-related needs of disadvantaged communities in the area within the boundaries of the Plan.		Section 2.14 Section 3.7 Appendix D (2.1.2 and 2.1.3 Final Draft TMs)	2-37 3-63

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Describe the collaborative process and tools used to establish objectives: • How the objectives were developed • What information was considered (i.e., water management or local land use plans, etc.) • What groups were involved in the process • How the final decision was made and accepted by the IRWM effort	Section 4.1	Section 4.1	4-1 to 4-3
Identify quantitative or qualitative metrics and measureable objectives: Objectives must be measurable – there must be some metric the IRWM region can use to determine if the objective is being met as the IRWM Plan is implemented. Neither quantitative nor qualitative metrics are considered inherently better.	Section 4.2	Section 4.1 Table 4-1 Sections 4.2 to 4.7	4-1 to 4-4 4-3 4-5 to 4-15
Explain how objectives are prioritized or reason why the objectives are not prioritized.	N/A	Section 4.1	4-2
Reference specific overall goals for the region: RWMGs may choose to use goals as an additional layer for organizing and prioritizing objectives, or they may choose to not use the term at all.	Section 4.1	Section 4.1	4-1 to 4-2
Resource Management Strategies			
Identify RMS incorporated in the IRWM Plan: Consider all RMS criteria (29) listed in Table 3 from the CWP Update 2009	Section 5	Section 5.1 Secs. 5.2 to 5.7 Section 5.8	5-1 to 5-6 5-7 to 5-17 5-17 to 5-26
Consider climate change effects on the IRWM region must be factored into RMS	Section 5	Section 5.7	5-16 to 5-17

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Address which RMS will be implemented in achieving IRWM Plan Objectives	Section 5	Secs. 5.2 to 5.7	5-7 to 5-17
Integration			
Contains structure and processes for developing and fostering integration: • Stakeholder/institutional • Resource • Project implementation	Section 6	Secs. 6.1 to 6.6 Section 8	6-1 to 6-26 8-1 to 8-35
Project Review Process			
Process for projects included in IRWM plan must address 3 components: • Procedures for submitting projects • Procedures for reviewing projects • Procedures for communicating lists of selected projects	 Section 5.1.2 Section 7.3 Section 7.3	 Section 7.1 Section 7.2 Section 7.3	 7-1 to 7-6 7-6 to 7-8 7-9
Address how the project contributes to plan objectives	Section 7.3	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Address how project is related to Resource Management Strategies	Section 7.3	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Address the project technical feasibility	Section 7.3	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Address specific benefits to DAC issues	Section 7.3	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Address Environmental Justice considerations	Section 7.3	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Address project cost and financing	Section 7.3	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Address economic feasibility through economic analysis	Section 7.3	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Address project status	Section 7.3	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Consider strategic implementation of plan and project merit	Section 7	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Consider effects of Climate Change in the region	Section 3.1.9.6	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Contribution of project in reducing GHGs compared to project alternatives	Section 3.1.9.6	Secs. 7.1 to 7.2 Table 7-1 Appendix J	7-1 to 7-8 7-8
Address if project proponents have or will adopt the IRWM plan	N/A	Section 7.1 (Implementation) Section 8.2.5	7-3 8-7

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Address how the projects will reduce dependence on Delta supply	N/A	Section 7.4	7-9 to 7-13
Impact and Benefit			
Discuss potential impacts and benefits of plan implementation within IRWM regions, between regions, with DAC/EJ concerns and Native American Tribal communities.	Section 7	Section 5.8 Tables 5-3 to 5-8	5-17 to 5-26
State when a more detailed project-specific impact and benefit analysis will occur (prior to any implementation activity)	N/A	Section 5.8	5-17
Review and update the impacts and benefits section of the plan as part of the normal plan management activities	Section 8.6	Section 5.8	5-17
Plan Performance and Monitoring			
Contain performance measures and monitoring methods to ensure that IRWM objectives are met.	Section 8.5	Section 8.6	8-20 to 8-35
Describe a method for evaluating and monitoring the RWMG's ability to meet the objectives and implement projects.	Section 8.5	Secs. 8.6 and 8.7	8-20 to 8-35
Data Management			
Describe data needs within region	Section 8.5.2	Section 8.4.2	8-14
Describe typical data collection technique	Section 8.4	Section 8.4.1 Section 8.4.3	8-13 to 8-14 8-14 to 8-15
Describe stakeholders contributions to data	Section 8.4	Section 8.4.1 Section 8.4.3 Section 8.5	8-13 to 8-14 8-14 to 8-15 8-16 to 8-19
Describe entity responsible for maintaining data	Section 8.4.1	Section 8.4.1 (AVSWCA)	8-13
Describe QA/QC measures for data	Section 8.4.1	Section 8.4.4	8-16

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Explain how data collected will be shared	Section 8.4.1	Section 8.4.1	8-13
Explain how the Data Management System supports the efforts to share collected data	Section 8.4	Section 8.4.1	8-13 to 8-14
Outline how data will be compatible with the state systems	Section 8.4.4	Section 8.4.4	8-15 to 8-16
Finance			
Include a plan for implementation and financing of identified projects and programs including the following:	Section 8.3.4 Table 8-5	Section 8.3	8-8 to 8-12
List known, as well as, possible funding sources, programs, and grant opportunities for the development and ongoing funding of the IRWM Plan.	Section 8.3.4 Table 8-4	Section 8.3.1	8-9 to 8-10
List the funding mechanisms, including water enterprise funds, rate structures, and private financing options, for projects that implement the IRWM Plan.	Secs. 8.3.3 & 8.3.4	Section 8.3.1	8-9 to 8-10
An explanation of the certainty and longevity of known or potential funding for the IRWM Plan and projects that implement the Plan.	Secs. 8.3.3 & 8.3.4	Section 8.3.2 Table 8-2	8-10
An explanation of how operation and maintenance (O&M) costs for projects that implement the IRWM Plan would be covered and the certainty of operation and maintenance funding.	N/A	Section 8.3 Table 8-2 Appendix K	8-9 to 8-12
Technical Analysis			
Document the data and technical analyses that were used in the development of the plan.	Section 8.5.1	Section 8.5 Table 8-3 Appendix K	8-16 to 8-19

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Relation to Local Water Planning			
Identify a list of local water plans used in the IRWM plan	Section 8.1.2 Section 8.1.3 Table 8-2	Section 8.1.1 Table 8-1	8-1 to 8-3
Discuss how the plan relates to these other planning documents and programs	Section 8.1.2 Section 8.1.3 Table 8-2	Section 8.1.1 Table 8-1	8-1 to 8-3
Describe the dynamics between the IRWM plan and other planning documents	Section 8.1.2 Section 8.1.3 Table 8-2	Section 8.1.1	8-1 to 8-2
Describe how the RWMG will coordinate its water mgmt planning activities	Section 8.2	Section 8.2	8-2 to 8-8
Relation to Local Land Use Planning			
Document current relationship between local land use planning, regional water issues, and water management objectives.	Section 1	Section 8.1.1 Table 8-1	8-1 to 8-3
Document future plans to further a collaborative, proactive relationship between land use planners and water managers.	Section 1	Section 8.1.1 Table 8-1	8-1 to 8-3
Stakeholder Involvement			
Contain a public process that provides outreach and an opportunity to participate in IRWM plan	Sections 1 and 8	Section 1.2 Section 8.2	1-6 to 1-21 8-2 to 8-8
Identify process to involve and facilitate stakeholders during development and implementation of plan regardless of ability to pay; include barriers to involvement	Section 1.2.3, 1.2.4	Section 1.2 Section 8.2	1-6 to 1-21 8-2 to 8-8
Discuss involvement of DACs and tribal communities	Section 1.2.4	Section 1.2 Section 8.2	1-6 to 1-21 8-2 to 8-8

Antelope Valley IRWM Plan Update
DWR Requirements Tracking

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Describe decision making process and roles that stakeholders can occupy	Section 1.2	Section 1.2 Section 8.2	1-6 to 1-21 8-2 to 8-8
Discuss how stakeholders are necessary to address objectives and RMS	Section 1.2 Section 8	Section 1.2 Section 8.2	1-6 to 1-21 8-2 to 8-8
Discuss how a collaborative process will engage a balance in interest groups	Section 8	Section 1.2 Section 8.2	1-6 to 1-21 8-2 to 8-8
Coordination			
Identify the process to coordinate water management projects and activities of participating local agencies and stakeholders to avoid conflicts and take advantage of efficiencies	Section 1 Section 6	Section 1.2.2	1-12 to 1-15
Identify neighboring IRWM efforts and ways to cooperate	N/A	Section 2.2 Section 8.2.6	2-2 to 2-4 8-7 to 8-8
Identify areas where a State agency can assist in communication or cooperation	N/A	Section 1.2.2.4 Section 1.2.2.5 Section 8.2.6	1-13 1-13 to 1-14 8-7 to 8-8
Climate Change			
Evaluate vulnerabilities to climate change and potential adaptation responses based on vulnerabilities assessment in the DWR Climate Change Handbook for Regional Water Planning	N/A	Section 2.11 Section 3.6 Section 5.2	2-41 to 2-43 3-58 to 3-60 5-7 to 5-8
Provide a process that considers GHG emissions when choosing between project alternatives.	N/A	Section 7.1 Section 7.2 Table 7-1	7-4 to 7-5 7-6 to 7-8
Include a list of prioritized vulnerabilities based on the vulnerability assessment and the IRWM's decision making process.	N/A	Section 3.6.2 Table 3-19	3-59 to 3-60

IRWM Grant Program Guidelines, Appendix H - Plan Review Process Requirement:	Section in 2007 IRWMP	Section in 2013 IRWMP	Page Numbers in 2013 IRWMP
Contain a plan, program, or methodology for further data gathering and analysis of prioritized vulnerabilities.	N/A	Section 3.6.2 Section 8.6.1 Table 8-4 Section 8.7	3-61 to 3-62 8-24 8-32 8-35
Include climate change as part of the project review process	N/A	Section 7.1 Section 7.2 Table 7-1	7-4 to 7-5 7-6 to 7-8

Page Intentionally Left Blank