



## Section 7 | Project Evaluation and Prioritization

*This section presents the process used by the Region to submit, review, and prioritize projects. In general, the Region seeks to include projects in the IRWM Plan that support the Regional Objectives and Planning Targets described in Section 4. Section 7.1 provides a discussion of the Project Submittal Process, including the types of projects encouraged, how projects can be submitted, and the information required. Section 7.2 discusses the Project Review Process for the acceptance of projects into the IRWM Plan, and Section 7.3 discusses how the project list will be communicated to the public. Section 7.4 discusses the criteria and methodology used to prioritize the project list.*

### 7.1 IRWM Project Submittal Process

The Antelope Valley IRWM Region allows proponents to submit projects and project updates for consideration on an ongoing basis, and it has a process in place to review submittals on a semi-regular basis utilizing the A-Team and Stakeholder Group. In addition, the Region periodically conducts open “calls for projects”. These calls for projects are intended to encourage updates to existing projects and to solicit information about new projects that could be accepted into the IRWM Plan. They primarily occur prior to IRWM Plan Updates and/or grant funding opportunities. Whenever new or revised projects are being considered for acceptance into the IRWM Plan, notices are posted on the Region’s website ([www.avwaterplan.org](http://www.avwaterplan.org)), and email notifications are sent to the Region’s stakeholders.

Generally speaking, projects that have already been accepted into the IRWMP are considered “grandfathered” in and may be updated by project proponents as appropriate. Revisions to these existing projects will be reviewed by the A-Team as needed, and questions may be presented to the Stakeholder Group for discussion if needed.

New projects must go through the submittal process. New projects selected for inclusion in the 2013 IRWM Plan Update were submitted in three ways: (1) by email using an electronic or scanned form, (2) on the [www.avwaterplan.org](http://www.avwaterplan.org) website using an electronic form, and (3) with in-person meetings between project proponents and consultants during the Plan Updates. After submittal, the website information was updated with the assistance of LACDPW. The master list of IRWM projects (i.e., accepted into the IRWMP) is maintained on the [www.avwaterplan.org](http://www.avwaterplan.org) website. Before projects are considered to be accepted into the IRWM Plan, they must go through the review process described below. A database of submitted projects that have not yet been accepted into the IRWM Plan is maintained separately from the master projects list on the website. Once projects go through the review process, they may be included in the master projects list. After the 2013 IRWM Plan Updates are complete, all project proponents will be encouraged to submit new projects and updates by logging in to the website and entering project information directly.



The Stakeholders are presented with the projects proposed for inclusion in the Plan

#### What types of projects are encouraged?

Projects eligible for inclusion in the plan include implementation projects, plans and studies, and conceptual projects. Projects at all levels of development are encouraged so that a thorough inventory of ideas can be made available on the website.

IRWM Plan projects that support the following Antelope Valley Regional Objectives are encouraged:

- Provide reliable water supply to meet Antelope Valley's expected demand between now and 2035; and adapt to climate change
- Establish a contingency plan to meet water supply needs of the Antelope Valley Region during a plausible disruption of SWP deliveries
- Stabilize groundwater levels
- Provide drinking water that meets regulatory requirements and customer expectations
- Protect and maintain aquifers
- Protect natural streams and recharge areas from contamination
- Maximize beneficial use of recycled water
- 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
- Preserve open space and natural habitats that protect and enhance water resources and species in the Antelope Valley Region
- Maintain agricultural land use within the Antelope Valley Region
- Meet growing demand for recreational space
- Improve integrated land use planning to support water management
- Mitigate against climate change

### How can projects be submitted and/or updated?

The projects selected for inclusion in the 2013 IRWM Plan Update were submitted in one of three ways: (1) via email using an electronic or scanned form, (2) via online form through [www.avwaterplan.org](http://www.avwaterplan.org), or (3) via in-person interviews. Project proponents were then contacted by the Region to collect additional information on the projects. In the future, all regional stakeholders will be encouraged to submit projects using the web interface project form as follows:

1. Register for an account at [www.avwaterplan.org](http://www.avwaterplan.org) in the “Projects” section of the website or, if the applicant does not have internet access, contact the Los Angeles County Department of Public Works at (626) 300-3353 for a hard copy of the project submittal form.
2. Collect the required project information (described below).
3. Upload the required project information to the website; or, if a hard copy form was requested, submit the form to Los Angeles County Department of Public Works by emailing a scanned copy of the form to [ajaramillo@dpw.lacounty.gov](mailto:ajaramillo@dpw.lacounty.gov), or sending the form to the County of Los Angeles Department of Public Works, Waterworks Districts, 1000 South Fremont Avenue, Building A9-E, 4<sup>th</sup> Floor, Alhambra, CA 91803.

Once a project has been submitted, it will be retained in a list of “submitted projects” for subsequent review by the Region’s A-Team and Stakeholder Group for potential acceptance into the IRWM Plan.

### What information is required?

Projects at all levels of development are eligible for submittal to the IRWM Plan. For grant funding opportunities, well-developed projects are preferred because they are more competitive in terms of satisfying the typical scoring criteria. Projects eligible for inclusion in the plan include implementation projects, plans and studies, and conceptual projects.

#### Implementation Projects

For implementation projects, the basic project information is required:

- Project title
- Project proponent
- Project partners
- Project contact information
- Proponent’s IRWM Plan adoption status
- Project description (2-3 paragraphs)
- Project location (using GeoTracker)
- Project integration information

The following narrative and technical information is also required:

- How the project will contribute to IRWM Plan objectives: The project must help the Region to achieve its IRWM Plan objectives, as discussed in Section 4. To demonstrate this, the project sponsor must indicate which objectives the project will support.
- How the project is related to resource management strategies: The IRWM Plan identifies the RMS selected for use in the Plan with the goal of diversifying the Region’s

water management portfolio, as indicated in Section 5. The project sponsor must indicate which of these RMS that the project aligns with.

- **Technical feasibility of the project:** Technical feasibility is related to the knowledge of the project location; knowledge of the water system at the project location; or with the material, methods, or processes proposed to be employed in the project. The project sponsor must cite supporting documents to demonstrate that there is enough known about existing conditions where the project will be located and that there is sufficient technical data to indicate that the project will result in a successful outcome.
- **Specific benefits to critical DAC water issues:** Identification and consideration of water-related needs of DACs in the area must be addressed by the Region in the IRWM Plan. Therefore, it is required that the project sponsor indicate if and how the project will address such needs.
- **Specific benefits to critical water issues for Native American tribal communities:** Identification and consideration of water-related needs of Native American tribal communities in the area must be addressed by the Region in the IRWM Plan. Therefore, it is required that the project sponsor indicate if and how the project will address such needs.
- **Environmental justice considerations<sup>1</sup>:** As IRWM plans contain multiple projects that will affect stakeholders in the Region, environmental justice concerns must be considered. The Region is required to ensure that project sponsors are aware of the impacts of the project on stakeholders, and therefore the project sponsor is required to indicate whether there are known environmental justice concerns or whether these concerns are unknown.
- **Project costs and financing:** The project's estimated costs and how it will be financed must be indicated by the project sponsor. If a cost estimate has been prepared for the project, a link to that estimate must be provided.
- **Economic feasibility:** The economic feasibility of the project must be discussed by the project sponsor. This can take the form of either a cost-effectiveness or benefit-cost analysis, and should include the types of benefits and the types of costs including capital costs, O&M costs, and potential adverse effects to others from the project.
- **Project status:** The status of the project, also referred to as the project's readiness to proceed, should be indicated by specifying whether the project is conceptual (minimal planning has been completed), in the design phase (design drawings are being prepared, or more detailed planning is underway), or ready for construction. The project sponsor must also indicate whether CEQA is complete. As the planning horizon for the 2013 IRWM Plan Update is 22



<sup>1</sup> Environmental justice is the “fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (California Government Code §65040.12(e)).

years (to 2035), projects at all levels of development will be considered for inclusion in the IRWM plan.

- **Contribution of the project in adapting to or mitigating against the effects of climate change:** The Region is dedicated to adapting to and mitigating against future climate change impacts. Project sponsors should indicate whether the project may help the Region to adapt to the predicted impacts of climate change (see Section 2), or will mitigate against climate change by reducing GHG emissions or providing greater energy efficiency as compared to project alternatives.

Once the project is submitted, it will be considered for inclusion in the IRWM Plan by the A-Team and Stakeholder Group. A copy of the Project Submittal Form is included in Appendix J.

### Plans and Studies

The above discussion applies to implementation projects. Plans and studies may also be submitted as projects, but the level of detail discussed above may not be applicable.

For plans and studies, the basic project information is required:

- Project title
- Project proponent
- Project partners
- Project contact information
- Proponent's IRWM Plan adoption status
- Project description (2-3 paragraphs)
- Project location (if applicable, using GeoTracker)
- Project integration information

The following narrative and technical information is also required (see above for descriptions of these items):

- How the project will contribute to IRWM Plan objectives
- How the project is related to RMS
- Specific benefits to critical DAC water issues
- Specific benefits to critical water issues for Native American tribal communities
- Project costs and financing
- Contribution of the project in adapting to or mitigating against the effects of climate change

### Conceptual Projects

Projects that do not meet the basic review criteria for implementation projects may still be admitted as "conceptual" projects. These are projects that the A-Team and Stakeholder Group determine could contribute to meeting the Region's IRWM objectives, but may not yet be developed enough to include in the IRWM Plan as an implementation project. For the purposes of this Plan, the Stakeholder Group has determined that if a preliminary economic analysis has not been conducted the project will be considered conceptual. For conceptual projects, the following basic information is required:

- Project title
- Project proponent
- Project partners
- Project contact information
- Proponent's IRWM Plan adoption status
- Project description (1 paragraph) – should indicate how the project could provide the Region with at least one benefit, address at least one regional IRWMP objective, and utilize at least one of the RMS
- Project location (using GeoTracker, if appropriate)
- Project integration information

Conceptual projects will be revisited should additional information be provided.

## **7.2 IRWM Project Review for Inclusion in the Plan**

As with project submittal, project review is intended to be an ongoing process. The A-Team is responsible for reviewing new projects and project updates and for making recommendations to the Stakeholder Group about acceptance into the IRWM Plan. This is done on an ongoing basis as projects are submitted.

Projects are reviewed by the A-Team using the process shown in Figure 7-1 and based on the required criteria listed below in Table 7-1. Those projects that meet the minimum requirements may be recommended for inclusion in the Plan as conceptual projects. If a preliminary economic analysis has been conducted, the A-Team may recommend a project to be accepted as an implementation project. The list of projects recommended by the A-Team for acceptance in the Plan is then approved by the Stakeholder Group at regular stakeholder meetings.

Figure 7-1: IRWM Project Review Process

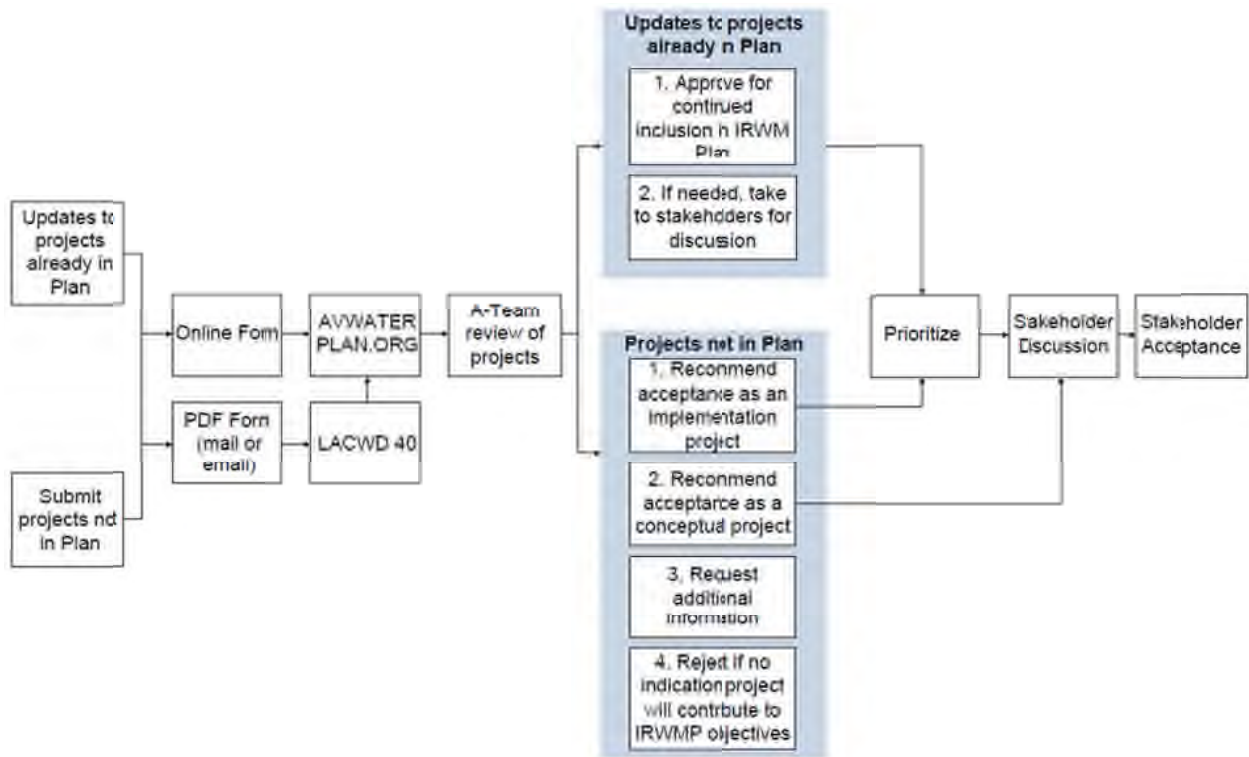


Table 7-1: Project Review Factors for Acceptance into the IRWM Plan

Review Factor <sup>2</sup>	Criteria and Comments
General Information	Has general information been provided? This includes project title, proponent, partners, contact information, and proponent's IRWM Plan adoption status.
Project Description	Has a complete project description been provided? This includes a project description, project integration information, and project document sources.
Project Location	Has the project location been provided?
Project Benefits	Is a minimum of one quantifiable benefit identified?
IRWMP Objectives <sup>3</sup>	Will at least one Antelope Valley IRWMP objective be addressed?
Resource Management Strategies <sup>4</sup>	Will at least one Resource Management Strategy be addressed?
Technically Feasible	Is at least one study/report/document identified that justifies technical feasibility?
DAC Benefits	If the project will benefit a DAC, has the proponent described how the project addresses the needs of the DAC?
Native American Tribal Community Benefits	If the project will benefit a Native American tribal community, has the proponent described how the project addresses the needs of the Native American tribal community?
Environmental Justice Considerations	If the project has environmental justice issues, have they been described?
Project Costs and Financing	Have the project capital cost, operations and maintenance costs, and funding/financing sources been provided? If a cost estimate has been completed, has it been provided?
Economic Feasibility	If a cost-effectiveness or benefit-cost analysis has been performed, has it been provided?
Readiness to Proceed	Is the project status identified (i.e., conceptual, design, ready for construction, CEQA Compliance)?
Benefits to Multiple Stakeholders	Will the project benefit more than one stakeholder or are there multiple project benefits?
Climate Change Adaptation/GHG Mitigation	Has the proponent indicated how the project will help the Region adapt to climate change and/or aid the Region in reducing GHG emissions?

<sup>2</sup> Shaded review factors indicate those criteria that are required to be accepted into the plan as a conceptual project.

<sup>3</sup> See 2013 Antelope Valley IRWMP, Section 4 Objectives for more information.

<sup>4</sup> See California Water Plan Update 2009, <http://www.waterplan.water.ca.gov/cwpu2009/index.cfm>



### 7.3 Procedures for Communicating the Project List of Selected Projects

The project list in the original 2007 IRWM Plan was included in that document as an appendix. However, the updated project list is meant to be a “living document” and will therefore be maintained on the [www.avwaterplan.org](http://www.avwaterplan.org) website as both a database of “submitted” projects and a listing of “accepted” projects. The Region’s A-Team will evaluate submitted projects based on the previously discussed information. After review of a given project, the A-Team may take one of three actions: (1) recommend the project to the Stakeholder Group for acceptance into the IRWM Plan, (2) hold the project and request additional information, or (3) maintain the project within the database as a “submitted” project.

As the AV IRWM Plan is updated, the opportunity exists to reevaluate the projects included in this IRWM Plan as their project scopes are refined, and a continual assessment of whether this IRWM Plan is meeting the issues and needs of the Antelope Valley Region will be conducted. Additionally, this IRWM Plan provides a mechanism for identifying new projects designed in accordance with the regional objectives, priorities, and management strategies.

### 7.4 IRWM Project Prioritization

The projects included in the IRWM Plan are projects that will implement the Plan and help to achieve the Plan objectives. The intent of the project prioritization process is to identify those projects and management actions the Region’s stakeholders would like to pursue first to address the Region’s issues and needs. Projects should embody the priorities of the planning effort and are intended to represent a prudent investment for sources of grant funding. For the purposes of this plan, only implementation projects were prioritized. The general process and criteria used to determine the priority level of implementation projects are described below. These criteria could be superseded by specific grant criteria as grant opportunities become available.

#### 7.4.1 Project Prioritization Criteria

Each project is assessed using the project review criteria described below. The methodology for applying the criteria is also described. Studies and reports are considered “implementation” projects since for some grant programs certain studies/reports are eligible for implementation funding. If a project or plan is not far enough along to have a preliminary economic analysis available, then it is considered conceptual and not scored with the implementation projects. Table 7-2 summarizes the criteria and scoring used to categorize and prioritize the projects.

**Project Benefits:** Each project is evaluated on the number of quantifiable water-related benefits it could produce that would help the Region meet its objectives. There is no limit to the number of quantifiable benefits as long as adequate justification is provided. Each benefit is assessed as having “good”, “fair”, or “poor” justification. Projects that could contribute more benefits and/or that have more substantial technical justification are favored over projects that have less. Recharge projects with spreading basins are assumed to have water quality benefits because of soil aquifer treatment. This benefit is not assumed for projects that inject water into the basin (ASR). Projects that increase local supply are assumed to also offset water supply from the Sacramento-San Joaquin Delta and thereby also reduce energy consumption/greenhouse gas emissions by decreasing water conveyance energy requirements.

**IRWM Plan Objectives:** Each project is evaluated on the number of IRWM Plan Objectives it would help the Region meet. Projects with more IRWM Objectives are preferred over projects with fewer. Recharge projects are assumed to support the objective of “protect and maintain aquifers” when they recharge groundwater with water from high quality sources, such as imported water. Projects that offset water supply from the Sacramento-San Joaquin Delta are also assumed to mitigate

climate change impacts since they reduce the energy consumption and greenhouse gas emissions associated with pumping and transporting imported water. Projects that increase the transport or storage of recycled water to recreational areas are assumed to support the objective of “meet the growing demand for recreational space”. These types of projects would help recreational areas remain operational during droughts when potable supplies may be rationed.

**Resource Management Strategies:** Each project is evaluated on the number of RMS it would help to implement. These RMS are listed in the 2009 update of the DWR’s California Water Plan. Projects that support more RMS are favored over those that support fewer.

**DAC Benefits:** Projects that provide water supply, quality, and/or flood management benefits to DACs are favored over projects that do not. Projects that produce region-wide benefits were assumed to also benefit DACs if it can be demonstrated that DAC areas lie within the regional influence.

**Native American Tribal Community Benefits:** Projects that provide benefits to Native American tribal communities are favored over projects that do not. No Native American Tribal Communities have been identified in the watershed at this time.

**Environmental Justice Considerations:** Projects that address environmental justice issues are favored over projects that do not.

**Table 7-2: Prioritization Method and Scoring**

Criterion	Conceptual	Implementation	Prioritization Scoring
General Information	Project description, location, and general info	Project description, location, and general info	---
Prelim. Economic Analysis	NO	YES	---
Project Benefits	At least one	At least one	Per Benefit: 3 pts = good justification 2 pts = fair justification 1 pts = poor justification
IRWMP Objectives	At least one	At least one	1 pt per Objective
Resource Mgmt. Strategies	At least one	At least one	1 pt per RMS
DAC/Tribal/Env. Justice	Sufficient information	Sufficient information	For each: Yes = 3 pts No = 0 pts
Project Costs	Sufficient information for level of design	Sufficient information for level of design	---
Technically Feasible	At least one supporting document	At least one supporting document	---
Readiness to Proceed	Status clearly defined	Status clearly defined	---
Climate Change	Sufficient information	Sufficient information	---

Other criteria not directly addressed in the project prioritization include a project's technical feasibility, project costs and financing, benefits to multiple stakeholders and climate change adaptation and greenhouse gas mitigation. These criteria are already captured in the other prioritization criteria. Additionally, a project's economic feasibility is incorporated into the judgment of whether it is considered an implementation or conceptual project through the requirement of a preliminary economic analysis.

#### **7.4.2 Prioritized Projects**

The Antelope Valley IRWMP project list should be considered a "living document" to be continually modified and updated on the IRWMP website. The projects listed below are only a snapshot of the projects as of the development of this IRWMP and should only be considered as such. For more updated project information, please consult the website at [www.avwaterplan.org](http://www.avwaterplan.org).

The projects shown in Table 7-3 are classified as studies or plans and implementation projects and are scored according to the prioritization method. Those projects that received higher scores are shown at the top of the table. Projects that were accepted into the Plan as conceptual projects were not scored but are listed in Table 7-4. For a more detailed table of the projects accepted into the Plan, including completed projects and detailed scoring of the implementation projects, please see Appendix K.

Table 7-3: Prioritized Implementation Projects Accepted into the Antelope Valley IRWM Plan

Sponsor	Project Name		Benefits Score	Objectives Score	RMS Score	DAC	Total Score
City of Palmdale	Upper Amargosa Creek Flood Control, Recharge, and Habitat Restoration Project	Implementation	13	11	8	3	35
Palmdale Water District	Littlerock Creek Groundwater Recharge and Recovery Project	Implementation	11	9	5	3	28
Palmdale Water District	Littlerock Dam Sediment Removal	Implementation	15	6	4	3	28
Antelope Valley Resource Conservation District	Antelope Valley Regional Conservation Project	Implementation	10	5	6	3	24
AVEK	Water Supply Stabilization Project (WSSP) – Westside Expansion	Implementation	8	8	4	3	23
AVEK	Eastside Banking & Blending Project	Implementation	9	7	3	3	22
AVEK	AVEK Strategic Plan	Study/Report	6	6	7	3	22
Palmdale Recycled Water Authority	Palmdale Recycled Water Authority – Phase 2 Distribution System	Implementation	9	6	4	3	22
AVEK	South Antelope Valley Intertie Project	Implementation	5	6	7	3	21
City of Lancaster	Antelope Valley Recycled Water Master Plan	Study/Report	9	4	5	3	21
Boron CSD	BCSD Arsenic Management Feasibility Study and Well Design	Study/Report	9	5	3	3	20
City of Lancaster	Division Street and Avenue H-8 Recycled Water Tank	Implementation	9	5	3	3	20
City of Lancaster	Lancaster National Soccer Center Recycled Water Conversion	Implementation	9	5	3	3	20
City of Lancaster	Pierre Bain Park Recycled Water Conversion	Implementation	9	5	3	3	20
City of Lancaster	Whit Carter Park Recycled Water Conversion	Implementation	9	5	3	3	20
Rosamond CSD	RCSD Arsenic Consolidation Project	Implementation	8	4	5	3	20
City of Palmdale	Palmdale Power Plant Project	Implementation	3	3	3	3	12

**Table 7-4: Conceptual Projects Accepted into the Antelope Valley IRWM Plan**

Sponsor	Conceptual Projects
Antelope Valley Duck Hunting	<ul style="list-style-type: none"> <li>Multi-use/Wildlife Habitat Restoration Project</li> </ul>
Boron CSD	<ul style="list-style-type: none"> <li>BCSD Arsenic Removal Treatment Plant</li> </ul>
City of Lancaster	<ul style="list-style-type: none"> <li>Amargosa Creek Pathways Project</li> <li>Ecosystem and Riparian Habitat Restoration of Amargosa Creek Ave J to Ave H</li> <li>Lancaster Cemetery Recycled Water Conversion</li> <li>Tertiary Treated Water Conveyance and Incidental Groundwater Recharge of Amargosa Creek Avenue M to Avenue H</li> </ul>
City of Palmdale	<ul style="list-style-type: none"> <li>42nd Street East, Sewer Installation</li> <li>45th Street East Groundwater Recharge and Flood Control Basin</li> <li>Avenue R and Division Street Groundwater Recharge and Flood Control Basin</li> <li>Avenue Q and 20th Street East Groundwater and Flood Control Basin (Q-West Basin)</li> <li>Barrel Springs Groundwater Recharge and Flood Control Basin</li> <li>Hunt Canyon Groundwater Recharge and Flood Control Basin</li> <li>Lower Amargosa Creek Recharge Project</li> </ul>
EAFB	<ul style="list-style-type: none"> <li>Antelope Valley Watershed Surface Flow Study</li> </ul>
LACDPW	<ul style="list-style-type: none"> <li>Big Rock Creek In-River Spreading Grounds</li> <li>Little Rock Creek In-River Spreading Grounds</li> </ul>
LACWD 40	<ul style="list-style-type: none"> <li>Avenue K Transmission Main, Phases I-IV</li> <li>Avenue M and 62th Street West Tanks</li> <li>Implement ET Controller Program</li> <li>North Los Angeles/Kern County Regional Recycled Water Project - Phase 3</li> <li>North Los Angeles/Kern County Regional Recycled Water Project - Phase 4</li> <li>Ultra-Low Flush Toilet Change-out Program</li> <li>Waste Water Ordinance</li> <li>Water Conservation School Education Program</li> </ul>
Leona Valley Town Council	<ul style="list-style-type: none"> <li>Precision Irrigation Control System</li> <li>Stormwater Harvesting</li> </ul>
North Edwards WD	<ul style="list-style-type: none"> <li>Arsenic Contamination Project</li> </ul>
Palmdale Water District	<ul style="list-style-type: none"> <li>ET Based Controller Program</li> <li>New PWD Treatment Plant</li> </ul>
QHWD	<ul style="list-style-type: none"> <li>QHWD Partial Well Abandonment</li> </ul>
Road Maintenance Division (LACDPW)	<ul style="list-style-type: none"> <li>Build a bridge at the existing dip crossing of Mt. Emma Road @ Littlerock Creek</li> <li>Flooding issues Avenue P-8, between 160th and 170th Street East</li> <li>Flooding issues Avenue W, near 133rd Street East</li> </ul>
Rosamond CSD	<ul style="list-style-type: none"> <li>Deep Wells to Recapture Banked Water</li> <li>Gaskell Road Pipeline</li> <li>KC &amp; LAC Interconnection Pipeline</li> <li>Place Values and Turnouts on Reclaimed Water Pipeline</li> <li>Purchasing Spreading Basin Land</li> <li>RCSD Wastewater Pipeline</li> <li>Tropico Park Pipeline Project</li> </ul>