

Presented to: *Bureau of Reclamation*

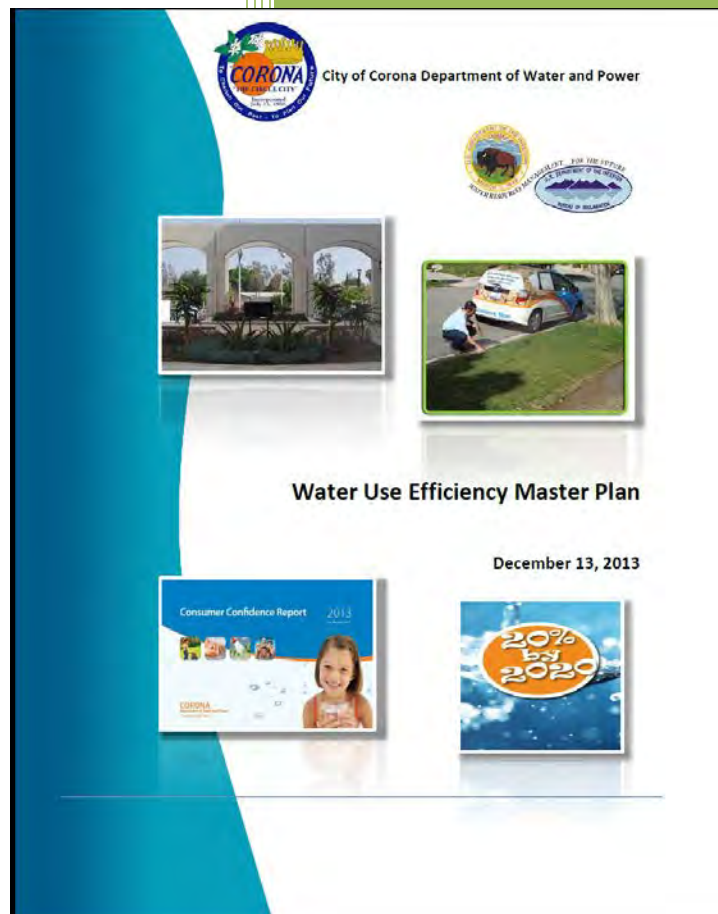


**City of Corona –  
Department of Water & Power**

**2014**

# Water Use Efficiency Master Plan Final Project Report

**Agreement# R11AP35309**



*Presented by:*

**City of Corona  
Department of Water & Power  
755 Public Safety Way  
Corona, CA 92880**

**September 29, 2014**

# Final Progress Report

---

## Table of Contents

	Page
Cover Letter and Report Approvals.....	3
1. Recipient Number.....	4
2. Final Funding Information.....	4
3. One Paragraph Project Summary.....	5
4. Final Project Description.....	5
5. Accomplishment of Project Goals.....	12
6. Discussion of Amount of Water Conserved, Marketed or Better Managed.....	13
7. Discussion of Amount of Renewable Energy Added.....	16
8. Description of any Collaboration, Stakeholder Involvement or the Formation of Partnerships.....	16
9. Pertinent Issues Regarding the Project.....	16
10. Feedback to Reclamation regarding the WaterSMART Program.....	16
11. Attachments: .....	17
A – Map of Project Area	
B – Total Expenditures (Budget to Actual)	
C – SF425 Federal Financial Report	
D – County of Riverside Notice of Exemption Filing for Project	
E – Project Schedule, Original/Revised/Actual	
F – Corona City Council and Corona Utility Authority Action	
G – Resolution No. 2014-021	
H – Release of Claims	
I – Water Use Efficiency Master Plan	

# Final Progress Report

---



City of Corona  
Department of Water and Power  
*"Protecting Public Health"*

Office: 951.736.2234  
Fax: 951.735.3786

755 Public Safety Way  
Corona, CA 92880 – [www.discovercorona.com](http://www.discovercorona.com)

September 29, 2014

U.S. Department of the Interior Bureau of Reclamation  
Attn: Debra Whitney  
27708 Jefferson Avenue, Suite 202  
Temecula CA 92590

Subject: Final Project Report (Closeout) for Agreement# R11AP35309, Water Use Efficiency Master Plan

Dear Ms. Whitney:

The City of Corona Department of Water & Power ("DWP") is proud to present the final project report (closeout) for Agreement# R11AP35309, Water Use Efficiency Master Plan (Plan). The official Plan was adopted by the Corona City Council on April 16, 2014. An extension for the final contract end date was approved, making the new end date June 30, 2014.

The remaining eligible reimbursement from the project in the amount of \$8,086.81 will be withdrawn from the ASAP system. We will not be using the available funding balance of \$342.55 remaining on the project.

Should you have any questions about this project, please contact Tracy Martin at (951) 817-5880 or by e-mail at [tracy.martin@ci.corona.ca.us](mailto:tracy.martin@ci.corona.ca.us).

Best regards,

(See Original)

Jonathan Daly  
DWP General Manager

# Final Progress Report

## 1. Recipient Information

<b>Agreement Number:</b>	R11AP35309
<b>Project Name:</b>	Water Use Efficiency Master Plan
<b>Grant Administrator/Contact:</b>	Debra Whitney
	Bureau of Reclamation
	27708 Jefferson Avenue
	Suite 202
	Temecula, CA 92590
	or (951) 695-5310
	<a href="mailto:dwhitney@usbr.gov">dwhitney@usbr.gov</a>
<b>Grantee/Recipient:</b>	City of Corona – Department of Water & Power
<b>Grant Recipient Project Manager:</b>	Jacqueline Zukeran
<b>Phone:</b>	(951) 739-4983
<b>Email:</b>	Jacqueline.Zukeran@ci.corona.ca.us
<b>Date of Award:</b>	September 22, 2011
<b>Estimated Completion Date:</b>	June 30, 2014 <i>(per last approved modification)</i>
<b>Actual Completion Date:</b>	April 16, 2014
<b>Date Submitted:</b>	August 26, 2014
	Corona Tracking# 47260000

## 2. Final Funding Information

	Funding Amount
<b>Non-Federal Entities</b>	
1) City of Corona	46,840.11
<b>Non-Federal Subtotal:</b>	<b>46,840.11</b>
<b>Other Federal Entities</b>	
1)	N/A
<b>Other Federal Subtotal:</b>	<b>\$0.00</b>
<b>Reclamation Funding</b>	
<b>Requested Reclamation Funding:</b>	<b>41,537.45</b>
<b>Total Project Funding:</b>	<b>\$88,377.56</b>

# Final Progress Report

### 3. One Paragraph Project Summary:

The City of Corona Department of Water & Power (DWP) proposed to develop a Water Use Efficiency Master Plan (Plan) to identify the largest water consumers in the City and create strategies to improve their efficiency (Project). This Project would also identify cost-effective and innovative capital improvement projects that would help conserve water including increasing reclaimed water use, groundwater recharge, and updating inefficient and outdated infrastructure. One of the most important objectives of the Project was to pave the way to identify and prioritize water conservation projects that, when implemented in full, would help the City achieve their 20% by 2020 State mandated target. The completed Plan document will be used as a planning tool and illustrates that water conservation efforts by the City are a feasible and cost-effective means of assuring adequate future water supplies.

### 4. Final Project Description

*Briefly describe components of the project and the work completed, including each element of the scope of work and the work completed at each stage of the project. Please include maps, sketches, and/or drawing of the features of the completed project, as appropriate. In addition, please describe any changes in the project scope.*

The following tasks were completed during the project:

Task No.	High Level Activities/Milestones	Work Completed at each Stage of the Project
<b>Grant Administration</b>		
1	Grant Award and Fully Executed Grant Agreement	Obtain executed grant agreement in September of 2011.
2	Grant Administration	Monitor administration has occurred on an on-going basis, with regular semi-annual progress reports prepared and filed as well as Federal Financial Reports.
<b>Consultant Contracting</b>		
3	Develop Request for Proposals (RFP) to Develop Water Use Efficiency Master Plan (Plan)	The preparation of RFP for development of Plan took longer than expected because of the complexity of subject matter and goals.
4	Issue RFP, review proposals, make selection, obtain City Council approval	RFP was issued February 2012. A detailed review was performed on the three (3) proposals received and of their qualifications. Contractor Maddaus Water Management was selected in April 2012. Council approval was not required as the amount of the contract was only necessary at Department level, per City of Corona's

# Final Progress Report

		Purchasing Policy & Procedures Manual.
5	Contract authorization, Notice to Proceed issued. Kick-off meeting with Consultant.	Contract was signed and executed on April 19, 2012, with the purchase order issued May 2012. A Kick-off meeting was held May 2012.
<b>Consultant Preparatory Work and Research</b>		
6	Prepare Draft Work Plan including a project timeline including background research, a detailed schedule of meeting dates and times, document and plan delivery dates, review periods, public meeting dates, and an expected adoption date.	A Draft Work Plan and other required items were completed during the RFP process as part of consultant Maddaus' proposal in February 2012.
7	Literature review and research including City's CUWCC BMP reports, status of compliance with BMPs, Corona General Plan, Corona Master Plan for Development, The City's Urban Water Management Plan (UWMP), State mandate to reduce 20% water use reduction by 2020, Corona's Reclaimed Water Master Plan, SCAG Sustainable Communities Strategy, SCAG Compass Blueprint, AQMD strategies, and other regional GHG reduction plans and goals. Conduct a literature review of the current legislation to ensure that the goals of the Water Use Efficiency Master Plan are in line with other legislation that has been or is in the process of being placed. Create an overall goals/objectives document that aligns all applicable documents.	Consultant provided a document with a summary of a literature review, research of City's UWMP and creation of appropriate goals and objectives to create the overall goals/objectives document that successfully met the requirements of this task.
<b>Public Outreach and Stakeholder Involvement</b>		
8	Meet with Water Use Efficiency staff from Western Municipal Water District, Eastern Municipal Water District, and SAWPA to discuss the City's participation in regional programs. Coordinate efforts with utilities such as Edison and the Gas Company.	In November 2012, City staff met with Western Municipal Water District (WMWD) and discussed possible partnership measures. For example, WMWD is interested in partnering on mobile home park sub-metering. Post-meeting notes were used for further consideration of proposed partnerships.  City staff and Maddaus have also reviewed other available rebate programs.
9	Survey largest water consumers in the City and categorize as residential, commercial/institutional/industrial (CII), and landscape. Create list with pertinent details	DWP provided a list of top 100 users to Maddaus in June 2012. Between June and October 2012, Consultant Maddaus conducted the literature review and reviewed consumption and

# Final Progress Report

	<p>to make effective program and project recommendations for conservation.</p>	<p>production data to get an idea of Corona’s water use trends by customer category prior to preparing the list of measures for screening. Once the list of measures was prepared it was sent to DWP for review and approval.</p> <p>In October 2012, City staff and Maddaus then conducted a Measure Screening Workshop (“MS Workshop”) with members of the public, local businesses, residents and a student. A survey was conducted with the participants to rate different Water Use Efficiency measures. DWP received inputs about programs participants were both of interested and not interested in. Survey notes were completed and a detailed recommendation list was created for evaluation use.</p>
10	<p>Distribute meeting notices via City’s web site, e-newsletter capability to over 15,000 residents, post at City Hall, public library, and schools. Participate in all working group meetings and make presentations when appropriate.</p>	<p>Copies of collateral material, meetings notes from Stakeholder involvement and survey were kept for project file, as well as electronic copy of the presentation of MS Workshop held October 2012. The MS Workshop met the working group meetings task requisite.</p>

## Identification and Prioritization of Water Use Efficiency Projects and Programs

11	<p>Identify and prioritize <b><u>water use efficiency capital improvement projects</u></b> addressed in the 2006 Recycled Water Master Plan (e.g. smart irrigation controllers, customer connections to reclaimed water system, sub-metering for mobile home parks and multi-family, California-friendly landscaping, Weather-Based Irrigation Controllers, artificial turf, smart fire hydrants, stormwater capture/groundwater recharge, use of permeable pavements, and direct install programs). A cost-benefit analysis will be included.</p>	<p>Projects referenced in the outdated draft 2006 Recycled Water Master Plan, not previously issued, were included in the measure list for the MS Workshop October 2012. A list was also finalized that identified and prioritized Water Use Efficiency Projects.</p> <p>Due to the original delay of RFP process, Consultant Contracting, and Outreach Scheduling, the extensive evaluation of all 19 programs moved out the timeline significantly and subsequent associated tasks related to the Identification and Prioritization of Water Use Efficiency Projects and Programs. Programs that were evaluated included:</p> <ol style="list-style-type: none"> <li>1) CII rebates to replace inefficient equipment</li> <li>2) Top CII users survey program</li> <li>3) Customized CII incentive program</li> <li>4) New Development Plan Review for New CII</li> <li>5) CII Irrigation Water Surveys</li> <li>6) Single Family Outdoor Water Surveys</li> <li>7) Residential turf removal program</li> </ol>
----	--	---

# Final Progress Report

		<p>8) CII turf removal program            9) Mobile home park sub-metering            10) Require new development multi-family sub-metering            11) Existing multi-family sub-meter incentive            12) Public information program including school grants            13) Efficient outdoor use education and training programs for residents            14) Efficient outdoor use education and training programs for professionals            15) High efficiency toilet rebates            16) High efficiency washer rebates            17) Plumber-initiated High Efficiency Toilet and or urinal retrofit program            18) Water loss audit            19) Install Advanced Metering Infrastructure at new developments</p> <p>Once this evaluation was complete the cost-benefit analysis was finalized.</p>
12	Identify and prioritize <b><u>water use efficiency programs</u></b> . Efficiency programs will include residential/commercial indoor and outdoor water audits, demonstration gardens, creation of financing mechanisms that allow customers to extend and make regular payments to purchasing water saving devices, price breaks for extended water conservation (e.g. lower than average water use over an extended period of time), and an expanded tiered-rate structure to include equitable rates for sewer customers. A cost-benefit analysis will be included.	A document summarizing the prioritization of water use efficiency programs and the development and preparation of a cost-benefit analysis of water use efficiency programs was finalized by Maddaus. The cost-benefit analysis of the water use efficiency measures were based on those that ranked highest during the MS Workshop.
13	Review and incorporate new innovations and technologies into the final list of capital project and program recommendations, when cost-effective.	At the MS Workshop held in October 2012, several cutting-edge technologies were included on the list of measures presented. Some of which new technologies could be incorporated into capital projects if cost effective.
14	Develop tracking methods to measure the effectiveness of water use efficiency efforts and develop an annual report format that incorporates BMP reporting requirements. Develop standards to be used for sources of information.	Development of tracking methods to measure the effectiveness of water use efficiency efforts and an annual report format that incorporates BMP reporting requirements, as well as standards for reference and information were completed by Consultant in October 2013.
15	Expand tiered-rate structure to include	Arcadis supplied Corona with a first draft in July



## Final Progress Report

	<p>equitable rates for sewer customers. Examine City’s conservation ordinance for alignment with the tiered-rate structure to provide savings and short/long term cost-effective water conservation measures.</p>	<p>2013 for a tiered-rate structure expansion to include equitable rates for sewer customers in alignment with the City’s conservation ordinance. Corona provided comments back to the Arcadis requesting more information. Final comments were incorporated and task finalized.</p>
16	<p>Develop creative financing mechanisms and funding opportunities for assisting customers with conversions and retrofits.</p>	<p>The development of creative financing mechanisms and funding opportunities for assisting customers with conversions and retrofits were completed in December 2013.</p>
17	<p>Develop a recognition/reward program for businesses and residents who are continually under budget or for businesses that implement practices that result in water savings. Provide water savings programs and incentives for both the short and long term water conservation efforts.</p>	<p>Arcadis submitted their completed Recognition/Reward Program in December 2013 for businesses and residents who are continually under budget or for businesses that implement practices that result in water savings. Maddaus included this in their final report for DWP.</p>
18	<p>Suggest targeted marketing programs/outreach for specific segments of the community using community based marketing. Review success of targeted marketing programs/outreach to the community that have already been conducted to evaluate the most efficient mediums to incorporate the program. Enhance education programs with areas such as a demonstration garden, a “Drops and Watts” water conservation education program, and more. Suggest ways to build partnerships within the community to enhance outreach, such as partnerships with landscape companies, materials suppliers, etc.</p>	<p>Sub-contractor for Consultant named Arcadis developed ideas for targeted marketing programs and partnership building programs completed in December 2013.</p>
19	<p>Review potential grant funding to possibly offset implementation costs of proposed projects and programs, including programs offered by the Metropolitan Water District, Western Municipal Water District, and others.</p>	<p>List of prospective and available grant programs were compiled for potential grant funding to possibly offset implementation costs of proposed projects and programs, including those programs offered by Metropolitan Water District (“MWD”) and Western Municipal Water District (“WMWD”).</p> <p>This task was completed by Maddaus in December 2013 and was included in final Plan report to DWP.</p>

# Final Progress Report

Water Use Efficiency Plan Development, Review, Revision, and Adoption		
20	<p>Prepare a draft Water Use Efficiency Master Plan based on input from the City of Corona and all stakeholders. The Plan shall include, but not be limited to:</p> <p>Comprehensive strategies to improve efficiency of the City of Corona’s largest water consumers, water use efficiency capital improvement projects new/proposed water use efficiency programs, including revisions to existing programs, tracking methods to measure effectiveness, standards for consistent sources of reliable and valid information/data, expanded tiered-rates including equitable rates for sewer customers, recognition/reward program for businesses and residents who are continually under budget, suggested targeted marketing programs/outreach for specific communities and new innovations and technologies.</p>	<p>First preliminary draft of Water Use Efficiency Master Plan, based on input received from the City of Corona and all stakeholders, was completed by Maddaus in September 2013. This was provided to City of Corona staff for a preliminary review and comment. A subsequent Plan draft was presented by Maddaus for edit/review comment in December 2013.</p>
21	<p>Review Draft Water Use Efficiency Master Plan and provide feedback to Consultant</p>	<p>An extensive review of Plan drafts was performed by DWP. Feedback was initially given to Consultant on first preliminary draft of Plan. Subsequent comments, an extensive review, and edits were made by DWP and provided to consultant during editing/review process. Due to detailed review process, this task extended into early 2014, with final revisions incorporated into Plan document.</p>
22	<p>Prepare and provide a final Water Use Efficiency Master Plan based on the information and recommendations received throughout the planning process. The final plan must be clear and concise. Provide one (1) copy ready, paper copy of the document and one (1) digital copy of the Master Plan.</p>	<p>The Plan internal review process by DWP was completed by March 2013. The final Plan file document and digital copy was provided by Maddaus to DWP.</p>
23	<p>Adopt Water Use Efficiency Master Plan after appropriate public meeting process</p>	<p>Consultant Maddaus created a PowerPoint presentation for presentation by DWP to the City Council for their approval, presented in April 2014.</p> <p>The final task of Plan Adoption of subject Plan by City Council occurred at a council meeting on April 16, 2014. A Notice of Exemption was subsequently filed April 18, 2014 with the County of Riverside.</p>

## Final Progress Report

Grant Administration and Close Out		
24	Submit Request for Reimbursements	Regular requests for reimbursement were completed generally on a semi-annual basis; however, once Reclamation system for reimbursements changed to ASAP, eligible reimbursement claims have not yet been accessed. These remaining amounts for reimbursement have been included in this report and in the Release of Claims.
25	Submit two progress reports per year until project completion	Regular semi-annual progress reports were submitted and provided throughout the life of the project.
26	Complete proposal completion packet, including final report and final payment	Packet of project completion documents and attachments are included in this report, including SF425 report and release form to satisfy final report.
27	Project Close-out/Final Payment	Project Close-out was completed in September 2014, with request for final payment release of claims filed September 2014 for eligible remaining funds to be reimbursed through ASAP system as per SF425 form.
28	Records Retention (at least 3 years after final payment is made)	Records will be retained for a minimum of three (3) years after the final payment has been made.
29	Implementation of Plan. The City will implement the projects and programs established in the Plan on an ongoing basis and as funds become available. The Plan will be reviewed annually by DWP staff and updated as appropriate. Presentations will be made to City Council as requested by the City Manager and DWP Manager.	<p>The completed Plan will be used as a planning tool. The City will implement the projects and programs established in the Plan on an ongoing basis and as funds become available.</p> <p>City staff will review Plan annually and update as appropriate.</p>

# Final Progress Report

## 5. Accomplishment of Project Goals:

*Describe the goals and objectives of the project and whether each of these was met. Where appropriate, state the reasons why goals and objectives were not met, and describe any problems or delays encountered in completing the project. Please include whether or not the project was completed within cost.*

### Goals and objectives of the Project:

- 1) Develop a Water Use Efficiency Master Plan for use as a planning tool;
- 2) Identify the largest water consumers in the City;
- 3) Create strategies to improve Corona's largest water consumers efficiency;
- 4) Identify cost-effective and innovative capital improvement projects that would help conserve water, including increasing reclaimed water use, groundwater recharge, and updating inefficient and outdated infrastructure;
- 5) Identify and prioritize water conservation projects that, when implemented in full, would help the City achieve their 20% by 2020 State mandated target;
- 6) Focus on specific sectors including multi-family, hotels/motels, restaurants, Laundromats, manufacturing (cooling tower retrofits), beauty shops, industrial processes, golf courses, and municipal operations (parks and public landscaping);
- 7) Identify several cost-effective water use efficiency projects and programs that businesses, residents, and the City of Corona can implement over the short-term and long-term (2020 and beyond).

The final version of the Water Use Efficiency Master Plan (Plan) will be used as a planning tool to aid in the future of Corona's water conservation efforts. The Plan provided the following contents: Analysis of historical water demand and rates; Alternative Water Conservation Measures; Comparison of Individual Conservation Measures; Results of Conservation Program Evaluation; Staffing, Budgeting, and Data Monitoring; an Introduction and References; Appendixes of Key Assumptions for the DSS Model, Water Conservation Measures Considered for Evaluation, Tiered Rate Structure for Sewer Customers, Community Outreach Program Approach and Funding Methods; and associated Figures and Tables. It also identified and measured the top 19 most important local City objectives for water conservation.

Key benchmarks used in the Plan for proposed strategies included: 1) cost-effectiveness, 2) the ability to help the City comply with the California Urban Water Conservation Council's Best Management Practices, and 3) the ability to help the City meet its obligation in a larger statewide mandate to reduce per capita water use by 20% by 2020.

Based upon the final Plan, the completed document met the criteria and project goals established by the City of Corona; however, the original estimated GPCD savings and AFY calculation in the benefits and performance measures resulting from the final Plan were less than anticipated, even if all Plan program measures (A-C) were implemented. This is due to conservative preliminary data being used to calculate the original estimate. In working with the consultant, we determined to be more conservative in our estimates for water savings. Also, we intend to meet our GPCD target reduction with other programs, including our reclaimed water system. This will make up the balance of the potable water savings needed to meet our goal as identified in the Plan.

# Final Progress Report

Using the 2009 GPCD of 228 from the City's 2010 Urban Water Management Plan and the 9.81 estimated annual GPCD savings from Plan if all of Program B options were in place (City's top 16 water conservation objectives), by 2020 the City's performance measure target baseline of 212 GPCD could be met, in conjunction with reclaimed water conversions, which were not part of this plan.

The City plans to use a combination of conservation and reclaimed water to help meet the per capita consumption water use targets set forth in the City's 2010 Urban Water Management Plan (UWMP) of 212 GPCD in 2020. A subsequent annual review of Plan goals in the DSS Model, actual measure participation, projected water savings, and expected per capita water use reductions will be necessary to ensure the Plan is on schedule to meet 2020 conservation goals and update the Plan as needed. Other input from the City, budget, project prioritization, program data management and the annual work planning process, as discussed in the Plan, should be included to keep this planning document current.

There were no major problems that occurred while completing this Project. Only minor delays occurred early in the initial RFP process and later during subsequent review of the draft Plan, which resulted in time modifications. Lastly, the project was proudly completed within the total cost budget established with expenses reflecting budget item description actuals.

## **6. Discussion of Amount of Water Conserved, Marketed or Better Managed:**

*In responding to the questions set forth below, Recipients should rely on the best data or information available. Actual field measurements should be used whenever possible (e.g., baseline data or post-project data derived from measuring devices, diversion records, seepage tests, etc.) Where actual field measurements are not available, water savings (or amounts marketed or better managed) may be estimated based on studies, other similar improvement projects, or anecdotal evidence.*

### **A. Recipient's total water supply (average, annual, available water supply in acre-feet per year):**

The 2013 calendar year total water supply was approximately 34,500 acre-feet per year (AFY).

### **B. Amount of water conserved, marketed or better managed as a result of the project (in acre-feet per year):**

Based on conservation measure costs and savings projected by the Consultant in the Plan, using Program B options with Plumbing Code, potential water savings are estimated to achieve 1,712 AFY or 9.81 gallons per capita per day (GPCD) through 2020. These water savings could subsequently result in reduced operation costs estimated at \$481 AFY. As these are only projected results, these estimates could occur only if all of Plan B's measures for combined savings and benefits from programs or related measures were implemented. No actions were taken as a result of the Plan's creation.

The current number of total accounts that DWP provides service to is over 42,000. Estimated existing public outreach efforts reach 10% of DWP customers or

## Final Progress Report

approximately 4,200 accounts. Approximately 16,500 commercial accounts are serviced by the City of Corona. Likewise, the City's Water Conservation Education goal as a result of this Plan tool guide is to reach 20% of the commercial accounts, or 3,300 in total, and increase outreach to residential accounts by at least 10%.

Current outreach to commercial accounts is approximately 1,650 accounts being reached; the performance measure goal would then be to reach the additional 1,650 commercial accounts or persons for quantitative benefit purposes. The residential accounts are currently estimated at 25,500 households or persons. Since current outreach is 10%, there are already an estimated 2,550 persons being reached. The performance measure goal would then be to reach an additional 10% of households or 2,550 persons, for a combined total of 5,100 persons. Should the proposed 3-phase approach to develop, implement, and enhance new and existing community-based outreach programs found in Appendix D of Plan be used, the anticipated performance measurement objectives could be satisfied to reach the 4,200 persons (1,650 commercial, plus 2,550 residential) increased outreach benefits.

**C. Describe how the amounts stated in response to 6.B were calculated or estimated:**

*In responding to this question, please address (1) – (3) below.*

**(1) Describe the information/data being relied on to calculate/estimate the project benefits. State how that data/information was obtained, if appropriate. Provide any other information necessary to explain how the final calculation/estimate of project benefits was made.**

Data being relied on to calculate/estimate the project benefits and explanation can be found in the Water Use Efficiency Master Plan's referenced in Plan Table 5-2: Estimated Conservation Measure Costs and Savings; various Appendices A.1 – A.5 under Key Assumptions for the DSS Model; and Appendix B Water Conservation Measures Considered For Evaluation. These document pages contain relevant supporting reports for data provided. Estimated target of 212 GPCD by 2020 is a standard 20% reduction from the Baseline Water Use of 265. For program benefit performance measures, item number one, Corona's current water use of 228 GPCD is calculated by 2009 water use divided by the population and 365 days per year. These estimates are included in Questions & Answers from the DWP website at: <http://www.discovercoronadwp.com/conservation/20by20.shtml>; whereas, the calculation of the total water supply is performed on a calendar year basis and provided by DWP Operations staff.

The final summarized forecasted total of GPCD savings in 2020 from Plan was taken from Table 1-2: Per Capita Water Savings of Selected Water Use Efficiency Program; while the AFY was found amongst Table 6-1: Comparison of Program Estimated Costs and Water Savings in 2020 and 2040.

According to Water Resources records, the City's current public outreach efforts directly reach only 10% of DWP's current customer base of 42,000 accounts. The number of customer active accounts data was estimated and collected from the DWP Customer Care Division.

# Final Progress Report

**(2) As appropriate, please include an explanation of any concerns or factors affecting the reliability of the data/information relied on.**

Number estimates are based on 2010 baseline usage as referenced in Plan Appendix A Key Assumptions for the DSS Model and existing City size. Refer to Plan and basis of estimated water savings for factors affecting the reliability of data within Appendix B Water Conservation Measures Considered for Evaluation.

**(3) Attach any relevant data, reports or other support relied on in the calculation/estimate of project benefits, if available. Please briefly describe the data/information attached, if any.**

Relevant information from Plan included: Estimated Conservation Measure Costs and Savings from Plan Table 5-2, various Appendices A.1–A.5 under Key Assumptions for the DSS Model, and Appendix B Water Conservation Measures Considered For Evaluation. These references were relied on for calculation and estimate of the Project's benefits for each conservation measure and contain relevant supporting reports for data provided in the Plan. The final summarized forecasted total of GPCD savings in 2020 from the Plan was taken from Table 1-2: Per Capita Water Savings of Selected Water Use Efficiency Program which provides a long-term conservation per capita water use savings; while the AFY total was found amongst Table 6-1: Comparison of Program Estimated Costs and Water Savings in 2020 and 2040. This key table provides a comparison of the conservation program costs and potential savings from the three conservation program alternatives A, B, and C. As the Plan is a tool guide, data was retrieved from the Plan using Program B selected by City staff as the best alternative.

For program benefit performance measures, item number one, Corona's current water use of 228 GPCD is calculated by 2009 water use divided by the population and 365 days per year as included in Questions & Answers from the DWP website at: <http://www.discovercoronadwp.com/conservation/20by20.shtml>. Calculation of total water supply is performed on a calendar year basis and was provided by DWP Operations staff. Regarding Water Conservation Education, item number two, reference the Plan's Appendix D Community Outreach Program Approach and Funding Methods for relevant discussion of targeted marketing/public outreach programs. Also, refer to Plan Attachment: Performance Measure/Water Management Benefits for calculation methods used.

**D. Use of Conserved Water:**

*Please explain where the water saved, better managed, or marketed as a result of the project is going (e.g. used by the recipient, in stream flows, available to junior water users, etc.*

Not applicable.

**E. Future tracking of project benefits:** *Please state whether and how the recipient plans to track the benefits of the project (water saved, marketed or better managed) in the future. If no actual field measurements are currently available to support the estimate of project benefits in 6.B., please state whether actual field measurements will become available in the future. If*

## Final Progress Report

*so, please state whether the Recipient is willing to provide such data to Reclamation on a voluntary basis once it is available.*

Some of the conservation measures have already been implemented by the City of Corona, prior to the plan creation and adoption. Twelve of the 19 programs are already ongoing programs of the City of Corona. The remaining programs and modifications to existing programs will be budgeted and planned to begin in Fiscal Year 2015/2016. Savings estimates will be based on the budget allocation for each program. Saving estimates are calculated in the Plan.

As Plan measures are implemented and/or updated, DWP will voluntarily provide the annual total water supply to Reclamation. DWP will also include the measured estimate differences from prior year and include any applicable comments on an annual basis by July 30<sup>th</sup> of each year, for data as of June 30<sup>th</sup> (fiscal year-end). This will be done for a minimum of three years, and if practical up until 2020 to reach the State's goal of a 20% water reduction.

### **7. Discussion of Amount of Renewable Energy Added:**

*If your project included the installation of a renewable component, please describe the amount of energy the system is generating annually. Please provide any data/reports in support of this calculation.*

Not Applicable.

### **8. Describe how the project demonstrates collaboration, stakeholder involvement or the formation of partnerships, if applicable:**

*Please describe the collaboration involved in the project, and the role of any cost-share or other types of partners. If there were any additional entities that provided support (financial or otherwise) please list them.*

City staff met with Western Municipal Water District (WMWD) and reviewed other agency's available programs for proposed partnerships and collaborations initially during the Project. The Plan document was also brought to the public at a City Council meeting for adoption and resident and other stakeholder comments.

Increased collaboration and partnership opportunities can be found in the final Plan, Section 7.7, and Appendix D, for the City's consideration of future implementation.

### **9. Describe any other pertinent issues regarding the project:**

Not Applicable.

### **10. Feedback to Reclamation regarding the WaterSMART Program:**

*Please let us know if there is anything we can do to improve the WaterSMART program in general, including the process for applying for or completing a WaterSMART project. Your feedback is important to us.*

No issues at this time.



# Final Progress Report

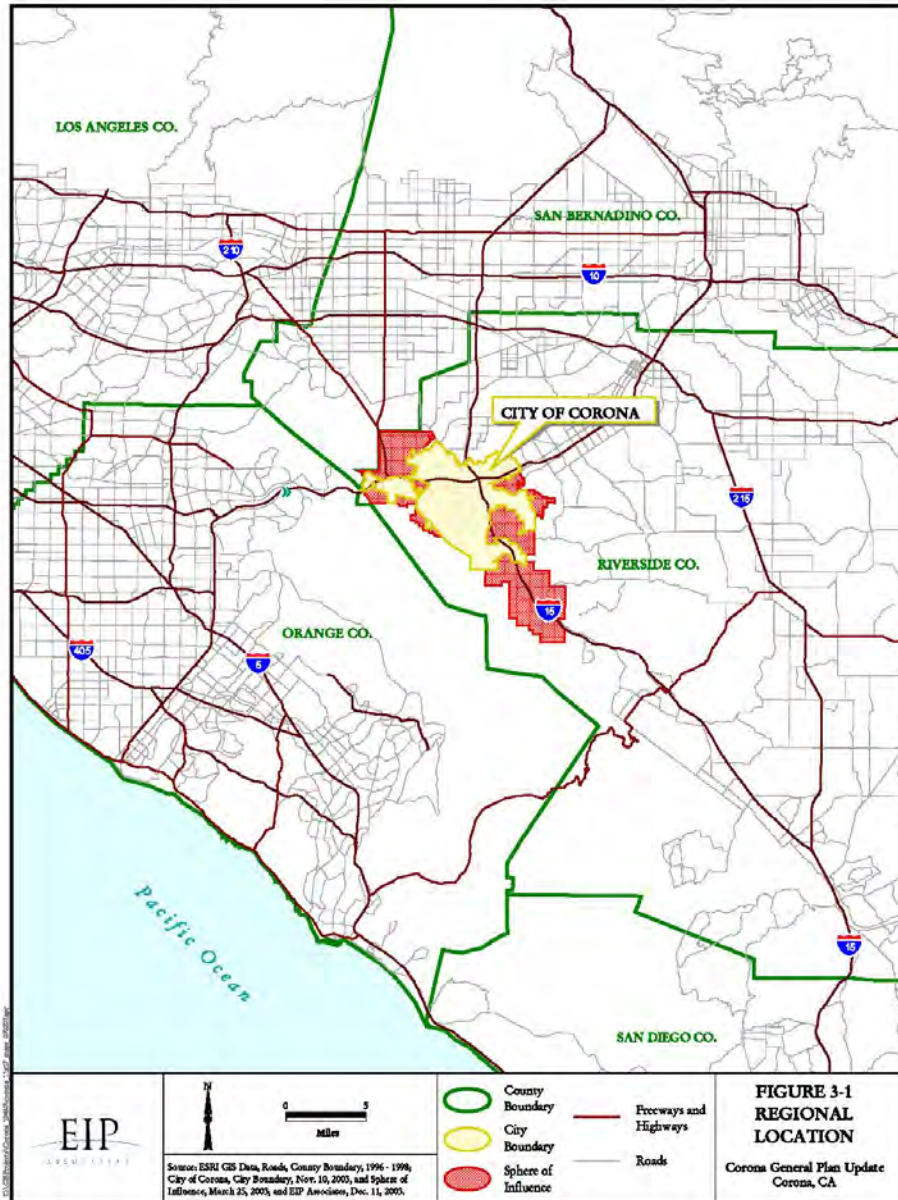
---

## 11. Attachments: Please attach the following

- Any available data or information relied on in responding to paragraph 7, above;
- A map or illustration showing the location of the recipient's facilities (see paragraph 4, above);
- A table showing the total expenditures for the completed project;
- Representative before and after photographs, if available;
- Maps, sketches, and/or drawings of the features of the completed project, as appropriate (see paragraph 5, above);
- Other.

# Final Progress Report

## Attachment A: Map of Project Area



## Final Progress Report

### Attachment B: Total Expenditures (Budget to Actual)

Table: Estimated Budget						
Budget Item Description	Recipient Funding	Reclamation Funding	Total Cost	Actual (Cumulative)	% Used	Balance Available
<i>Salaries and Wages</i>	\$23,628	\$0	<b>\$23,628</b>	<b>\$3,049.66</b>	13%	\$20,578.34
<i>Fringe Benefits</i>	\$17,216	\$0	<b>\$17,216</b>	<b>\$1,206.65</b>	7%	\$16,009.35
<i>Travel</i>	\$0	\$0	<b>\$0</b>	n/a	n/a	n/a
<i>Equipment</i>	\$0	\$0	<b>\$0</b>	n/a	n/a	n/a
<i>Supplies/ Materials</i>	\$175	\$0	<b>\$175</b>	\$0.00	0%	\$175.00
<i>Contractual /Construction</i>	\$5,850	\$41,880	<b>\$47,730</b>	<b>\$84,121.25</b>	176%	(\$36,391.25)
<b>Total Project Costs</b>	<b>\$46,869</b>	<b>\$41,880</b>	<b>\$88,749</b>	<b style="color: red;">\$88,377.56</b>	<b>99.6%</b>	<b>\$371.44</b>
Percentage Contribution	53%	47%	100%			

# Final Progress Report

---

## **Attachment C: SF425 Federal Financial Report**

# Final Progress Report

---

## **Attachment D: County of Riverside Notice of Exemption Filing for Project**

# Final Progress Report

---

## **Attachment E: Project Schedule, Original/Revised/Actual**

# Final Progress Report

---

## **Attachment F: Corona City Council and Corona Utility Authority Action**

# Final Progress Report

---

## **Attachment G: Resolution No. 2014-021**



# Final Progress Report

---

## **Attachment H: Release of Claims**

# Final Progress Report

---

## **Attachment I: Final Water Use Efficiency Master Plan Document**