



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

February 29, 2016

Bureau of Reclamation
Acquisition and Assistance Management Office
Attn: Ms. Diana Blake, LC-10104
P O Box 61470
Boulder City NV 89006

Dear Ms. Blake:

Final Performance Report for:
Agreement No. R13AP35371 "High Efficiency Clothes Washer Incentive Program"

The Metropolitan Water District of Southern California (Metropolitan) is pleased to submit the enclosed Final Performance Report for the High Efficiency Clothes Washer Incentive Program for the period ending November 30, 2015.

All twenty-six of Metropolitan's member agencies participated in this program. Over the program period, 13,292 high efficiency clothes washer rebates were provided. This provided an estimated savings of 6,100 acre-feet in lifetime water savings.

We appreciate Reclamation's continued support for water use efficiency programs. If you have any questions, please contact me at (213) 217-7693 or via email at bcmcdonnell@mwdh2o.com.

Sincerely,

A handwritten signature in black ink, appearing to read "William R. McDonnell".

Bill McDonnell
Water Use Efficiency Team Manager

AWC:vsm

Enclosures (1) – Final Report
 SF425
 Release of Claims
 Project Benefits

cc: Ms. Debra Whitney
 Bureau of Reclamation
 Grants Officer Technical Representative
 27708 Jefferson Avenue, Suite 202
 Temecula, CA 92590

FEDERAL FINANCIAL REPORT

(Follow form instructions)

1. Federal Agency and Organizational Element to Which Report is Submitted Bureau of Reclamation	2. Federal Grant or Other Identifying Number Assigned by Federal Agency (To report multiple grants, use FFR Attachment) R13AP35371	Page 1 of 1 pages
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3. Recipient Organization (Name and complete address including Zip code) Metropolitan Water District of Southern California
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4a. DUNS Number 06-384-2975	4b. EIN 95-6002071	5. Recipient Account Number or Identifying Number (To report multiple grants, use FFR Attachment) 1462	6. Report Type <input type="checkbox"/> Quarterly <input type="checkbox"/> Semi-Annual <input type="checkbox"/> Annual <input checked="" type="checkbox"/> Final	7. Basis of Accounting <input checked="" type="checkbox"/> Cash <input type="checkbox"/> Accrual
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8. Project/Grant Period (Month, Day, Year) From: 9/16/2013 To: 11/30/2015	9. Reporting Period End Date (Month, Day, Year) 11/30/2015
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10. Transactions (Use lines a-c for single or combined multiple grant reporting)	Cumulative
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Federal Cash (To report multiple grants separately, also use FFR Attachment):	
a. Cash Receipts	\$ 332,300.00
b. Cash Disbursements	\$ 332,300.00
c. Cash on Hand (line a minus b)	

(Use lines d-o for single grant reporting)	
Federal Expenditures and Unobligated Balance:	
d. Total Federal funds authorized	\$ 498,600.00
e. Federal share of expenditures	\$ 332,300.00
f. Federal share of unliquidated obligations	
g. Total Federal share (sum of lines e and f)	\$ 332,300.00
h. Unobligated balance of Federal funds (line d minus g)	\$ 166,300.00


Recipient Share:	
i. Total recipient share required	\$ 1,701,400.00
j. Recipient share of expenditures	\$ 1,129,905.00
k. Remaining recipient share to be provided (line i minus j)	\$ 571,495.00

Program Income:	
l. Total Federal share of program income earned	
m. Program income expended in accordance with the deduction alternative	
n. Program income expended in accordance with the addition alternative	
o. Unexpended program income (line l minus line m or line n)	

11.	a. Type	b. Rate	c. Period From	Period To	d. Base	e. Amount Charged	f. Federal Share
Indirect Expense							
g. Totals:					0	0	0

12. Remarks: Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation:
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13. Certification: By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and intent set forth in the award documents. I am aware that any false, fictitious, or fraudulent information may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)

a. Typed or Printed Name and Title of Authorized Certifying Official Deven N. Upadhyay	c. Telephone (Area code, number, and extension) (213) 217-6686 d. Email Address Dupadhyay@mwdh2o.com
b. Signature of Authorized Certifying Official 	e. Date Report Submitted (Month, Day, Year) 2/28/2016
14. Agency use only:	

Standard Form 425 - Revised 10/11/2011
 OMB Approval Number: 0348-0061
 Expiration Date: 2/28/2015

Paperwork Burden Statement According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is 0348-0061. Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0061), Washington, DC 20503.
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Southern California Area Office

Agreement Number
R13AP35371

Agreement Date

September 16, 2013
through
November 30, 2015

RELEASE OF CLAIMS

WHEREAS, by the terms of the above-identified agreement for

High Efficiency Clothes Washer Incentive Program

entered into by the United States of America, hereinafter also referred to as the United States, and the grant recipient whose name appears on the agreement as

Metropolitan Water District of Southern California

it is provided that after completion of all work, the grant recipient will furnish the United States with a release of all claims;

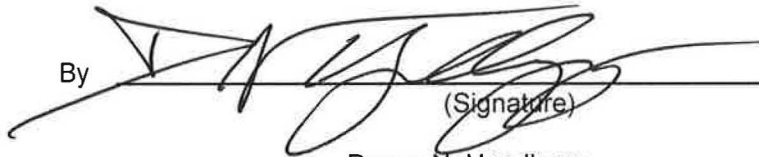
NOW, THEREFORE, in consideration of the above premises and the payment by the United States to the recipient the total amount of

\$332,300

the grant recipient hereby remises, releases, and forever discharges the United States, its officers, agents, and employees, of and from all manner of debts, dues, liabilities, obligations, accounts, claims, and demands whatsoever, in law and equity, under or by virtue of the said agreement except: \$0

IN WITNESS WHEREOF, the agreement recipient has executed this release this 25 day of February, 2016.

By



(Signature)

Deven N. Upadhyay

(Name -- Type or Print)

Manager, Water Resource Management

(Title)

Metropolitan Water District of Southern California

(Agreement Recipient)

WATER CONSERVATION FIELD SERVICES PROGRAM PROJECT BENEFITS

Please check the appropriate water management benefits for agricultural or urban measures that you anticipate addressing in your proposal. Where available, please provide an estimate of the benefit to units (i.e. Acre Feet, Dollars, Percentages)

It is essential to establish benefits of the Program. Please help us with your best estimate.

Reduces Leaks and Seepage	_____ Acre Feet/Year
Reduces System Spills	_____ Acre Feet/Year
Makes More Water Available	<u>436</u> Acre Feet/Year
Reduces Operation Costs	_____ \$ /Year
Reduces Energy Costs	_____ \$ /Year
Reduces Waste Treatment Costs	_____ \$ /Year
Improves Crop Yield	_____ Percent/Year
Reduces On-Farm Costs	_____ \$ /Year
Reduces Per Capita Use	_____ Gallons/Capita/Day
Provides Technical Training	_____ # of People
Provides Water Conservation Education	_____ # of People
Improves Water Supply Reliability	_____ Frequency (Years)*
* Estimate of how often the improvement will occur (i.e. 1 = each year)	
Delays Construction of New Supplies	_____ Years
Reduces Drainage/Erosion	_____ Tons
Improves Water Quality	_____ % reduction of _____
Enhances Aquatic/Riparian Habitat	_____ Years

High Efficiency Clothes Washer Incentive Program



Final Project Report

**Agreement # R13AP35371
The Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012-3352
February 25, 2016**

1. Recipient Information:	
Recipient Name: (Name, contact person, address and phone number)	The Metropolitan Water District of Southern California Ms. Diane Harrelson 700 North Alameda Street, Los Angeles 90012-3352 Phone: 213-217-6568; email: dharrelson@mwdh2o.com
Project Name:	High Efficiency Clothes Washer Incentive Program
Assistance Agreement	R13AP35371
Date of Award: (Month, Year)	September 16, 2013
Estimated Completion Date	November 30, 2015
Actual Completion Date: (Month, Year)	November 30, 2015
2. Final Funding Information	
Non-Federal Entities	Funding Amount
1. Metropolitan Water District of Southern California	\$1,129,905
2.	
3.	
<i>Non-Federal Subtotal:</i>	\$1,129,905
Other Federal Entities	
1.	
2.	
3.	
<i>Other Federal Subtotal:</i>	
<i>Requested Reclamation Funding:</i>	\$332,300
<i>Total Project Funding:</i>	\$1,462,205

a. One Paragraph Project Summary:

The High Efficiency Clothes Washer Incentive Program (Program) influenced 13,292 residential customers to purchase high-efficiency clothes washers. The Program increased Metropolitan's incentive from \$85 to \$110 per unit, which reduces the cost barrier for customers between traditional washers and more efficient washers. The Program only funding high-efficiency clothes washers with a water factor of 4.0 or less. Incentives were provided through Metropolitan's regional rebate program, SoCal Water\$mart. Based on studies of water savings for high-efficiency clothes washers, the Program provided 6,100 acre-feet in lifetime water savings. The Program also provided direct energy savings from the high-efficiency clothes washers. In addition, because a significant portion of Metropolitan's water supplies are imported from the Colorado River and Bay-Delta, this program also provided benefits for energy efficiency, critical habitat for threatened and endangered species, and water markets.

- b. **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 Program's scope of work involved encouraging customers to replace less efficient clothes washers with high efficiency clothes washers. The Program was successful.

Metropolitan has an existing regional residential rebate program, called SoCal Water\$mart. The SoCal Water\$mart Program has been in operation for a number of years and has significant customer awareness of rebates. All residential homeowners in Metropolitan's service area were eligible for the rebate as long as they purchased a qualifying model and had not previously received a rebate from a water agency.

Customers apply to SoCal Water\$mart through an online application, which checks to make sure the customer is in Metropolitan's service area and also checks to make sure they have not received similar incentive in the past. Applicants are required to submit a paid invoice for the clothes washer and a copy of the water bill. The applicant's name must match the name on the water bill.

Metropolitan created contract addendums to member agency agreements to include grant funds in their service area. As incentives were provided, grant expenditures were tracked per invoice.

Through the Program, all twenty six of Metropolitan's member agencies had customers that received funding.

- c. **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.*

The goals and objectives for this project were to achieve water savings within Metropolitan's service area and to continue market transformation.

The initial goal was to incentivize 20,000 high efficiency clothes washers. Of the 20,000 incentives for washers, 13,292 were provided through this Program. The 13,292 washer are estimated to save approximately 6,100 acre-feet of water over a projected lifetime of 14 years. Achieving these water savings contributes to the state's goal of achieving a reduction in per capita potable water use. In addition, the Program provided benefits for energy efficiency, critical habitat for threatened and endangered species, and the Colorado River and Bay-Delta systems.

By offering an incentive of \$110, this exceeds the rebate threshold of \$100 per unit which Metropolitan believes has an immediate impact on the rate of washer retrofits.

During 2014 and 2015, Metropolitan's service area implemented a significant turf removal program in response to the drought. Because of the emphasis on turf removal, staff was not able to completely use the grant funds authorized for clothes washers .

- d. **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):

Metropolitan has two sources of water supply: Colorado River, delivered through the Colorado River Aqueduct, and the Bay-Delta, delivered through the State Water Project. Deliveries from each source for the 2006-2010 are shown below. Supply numbers for 2010-2013 are not yet available.

Year	Colorado River Aqueduct (AF)	State Water Project (AF)	Total (AF)
2010	1,150,000	1,500,000	2,650,000
2009	1,043,000	908,000	1,951,000
2008	896,000	1,037,000	1,933,000
2007	696,000	1,648,000	2,344,000
2006	535,000	1,695,000	2,230,000
Total	4,320,000	6,788,000	11,108,000
Average Annual Supply (total / 5 years)			2,221,600

- B. Amount of water conserved, marketed or better managed as a result of the project

Four hundred and thirty six acre feet per year. This is based on water savings of 0.0328 acre-feet per washer per year. The estimated lifetime per clothes washer is 14 years. Total water savings is approximately 6,100 acre-feet over the expected 14 year life.

- 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.

Estimated water savings are supported by the following programs, reports and studies:

- *California Urban Water Conservation Council's paper prepared by M. Cubed, dated March 20, 2001*: provided as a conservative estimate of 5,250 gallons per year in water savings for HECW's.
- *Appliance Standards Awareness Project, National Clothes Washer Standard, FAQ no date*: provided as a conservative estimate of 7,000 gallons per year in water savings for HECW's.
- *Primer on Laundry Efficiency, A P.O.W.E.R. Staff Report, 1993*: provided a conservative estimate of 8,550 gallons per year in water savings for HECW's.
- *Enhanced incentives*: Metropolitan's HECW Program implemented from March 2001 to the present. Customer demand for HECW incentives has quadrupled when enhanced incentives were offered.

- *California Public Utilities Commission. Embedded Energy in Water Studies Study 2: Water Agency and Function Component Study and Embedded Energy – Water Load Profiles. Prepared by GEI Consultants/Navigant Consulting, Inc. August 31, 2010.*

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

No concerns.

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.

Reports are referenced above.

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.*

The water conserved through this Project could support existing water markets for Colorado River, State Water Project, and Central Valley Project contractors. This region is dependent on imported water to meet their municipal and industrial demand. In addition, reduced demand will provide flexibility for participating in water markets when transfer and storage opportunities are advantageous to the region and improve the management of water across the state.

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.*

Metropolitan may review the water savings at some point to verify other studies referenced above. If this is done, actual field measurements for a sample of participants would be available.

e. **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.*

This Program did not include the installation of a renewable component.

f. **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 provide support*

Collaboration and stakeholder involvement

The Program successfully encouraged collaboration and involvement among Metropolitan's twenty-six member agencies, associated retail agencies, and other stakeholders. Through monthly meetings convened by Metropolitan, water agencies regularly shared information to increase the programmatic and technical capacity and water conservation within the region.

Partnerships and Cost-Share

This Program successfully implemented cost-share partnerships Metropolitan's member agencies by allowing the agencies to contribute additional funding within their service area.

g. **Describe any other pertinent issues regarding the project:**

Grant funding has encouraged customers who might not have otherwise switched out their less efficient clothes washers to high efficiency clothes washers. This has helped accelerate the development of more and more efficient washers in the marketplace.

h. **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.*

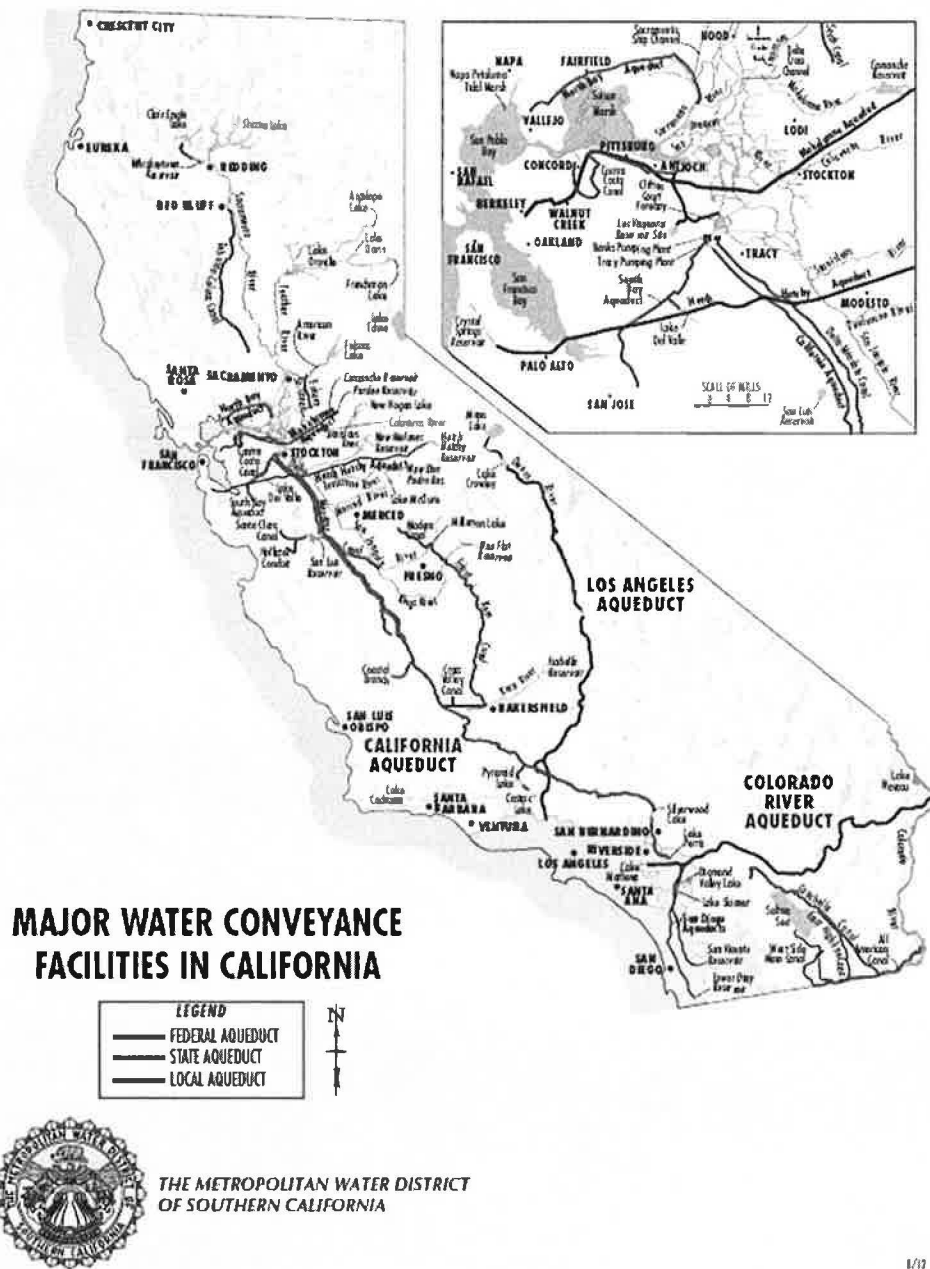
Metropolitan does not have any recommendations regarding the WaterSMART Program at this time.

i. **Attachments:** *Please attach the following*

- a. Any available data or information relied on in responding to paragraph 7, above;

Not Applicable

- b. A map or illustration showing the location of the recipient's facilities (see paragraph 4, above);



- c. Maps, sketches, and/or drawings of the features of the completed project, as appropriate (see paragraph 5, above);

Not applicable

- d. Representative before and after photographs, if available

Not applicable

- e. A table showing the total expenditures for the completed project (please see Sample Final Project Costs Table, below).

Project Cost	Metropolitan	Reclamation	Total
Incentives	\$1,129,905	\$332,300	\$1,462,205
Total	\$1,129,905	\$332,300	\$1,462,205
Cost Share	77%	23%	100%