



CITIZENS' WATER ADVISORY COMMITTEE CONSERVATION & EDUCATION SUBCOMMITTEE

1:00 p.m., Tuesday, May 10, 2016
Director's Conference Room
Tucson Water, 3rd Floor
310 W. Alameda Street, Tucson, Arizona

Legal Action Report

1. Call to Order/Roll Call

The meeting was called to order by Chairperson Catlow Shipek at 1:00 p.m. Those present and absent were:

Members Present:

Catlow Shipek (Chair)	Representative, City Manager
Jean McLain	Representative, City Manager
Michelle Crow	Representative, Ward 2
Mark Lewis	Representative, Ward 5

Members Absent:

Placido dos Santos	Representative, City Manager
Mark Murphy	Representative, Mayor
Ryan Lee	Representative, Ward 1

Tucson Water Staff Members:

Fernando Molina	Public Information Supervisor
Daniel Ransom	Water Conservation Supervisor
Tom Arnold	Lead Management Analyst
Joaquim Delgado	Public Information Specialist
Candice Rupprecht	Public Information Specialist
Valerie Herman	Public Information Specialist
Kris LaFleur	Staff Assistant

Others Present

Betsy Wilkening	Arizona Project WET
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2. **Announcements** – There were no announcements.

3. **Call to Audience** – There were no audience comments.

4. **Review of April 13, 2016, Legal Action Report and Meeting Minutes** – Member Lewis moved to approve the Legal Action Report and Meeting Minutes of April 13, 2016. The motion was seconded by Member McLain and carried by a vote of 4-0.

5. **Bi-Monthly Report & Workplan** – Mr. Ransom provided an update on the FY16 Conservation Program. He indicated that the Rainwater Harvesting section of the bi-monthly report was updated to show potential potable offset, based on the capacity of installed active rainwater harvesting systems to fill five times per year. He indicated that these figures will be estimates, due to limited information about catchment areas, rainfall variability, etc. He explained that, in the event that installation of rainwater harvesting systems cause increased water use due to establishment of new landscaping, a potable offset would still be

Citizen's Water Advisory Committee, Conservation & Education Subcommittee

Legal Action Report

May 10, 2016

measured. Members and staff discussed methodology for measuring RWH system capacity and potential potable offset.

Additional discussion topics included year-to-date spending within the Conservation Program budget, length of time to process rebates, and a request for an update on staff efforts to revise the Water Conservation Plan. Mr. Molino indicated that Plan development had fallen behind because staff was occupied with processing rebates.

Members requested a discussion of the FY17 workplan and a staff update on Conservation Plan development at the June C&E meeting.

6. **C2E Challenge update** – Member Shipek polled members and staff about their C2E membership status. He indicated that help would be available to sign up for the program after the meeting.
7. **Discussion: Conservation definitions and evaluation metrics** – Members and staff provided feedback on the proposed conservation framework/definition and measurement metrics which were distributed prior to the meeting. Extensive discussion ensued.

Members and staff proposed various metric ideas corresponding to water efficiency categories defined by the C&E Framework, such as:

- Demand Reduction metrics included: turf reduction; estimated landscape water use vs actual amount of potable water supplied; indoor/outdoor usage breakdown; demand reduction metrics used by AWWA; reduction in usage compared to other communities
- Education metrics included: metrics used by Arizona Project WET

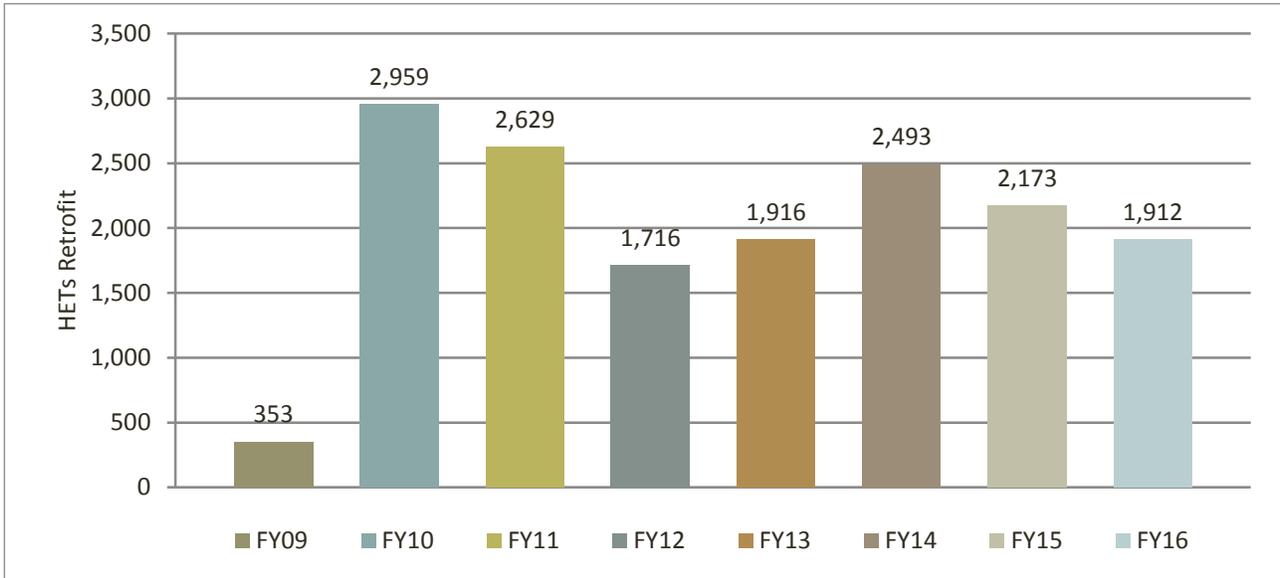
Chair Shipek asked members to collect their ideas for measurement metrics, and to pass them to staff for future discussion.

8. **Future meetings and agenda items** – The next C&E subcommittee meeting will be held on June 8, 2016. Items proposed for discussion at future meetings included:
 - A discussion of the FY17 workplan
 - A staff update on Conservation Plan development
 - A full review & summary of current Conservation Programs
 - An update on SERI's low-income loan program
9. **Adjournment** – The meeting was adjourned at 2:24 p.m.

Tucson Water
Incentive Program Implementation
FY 2015-16 Through April

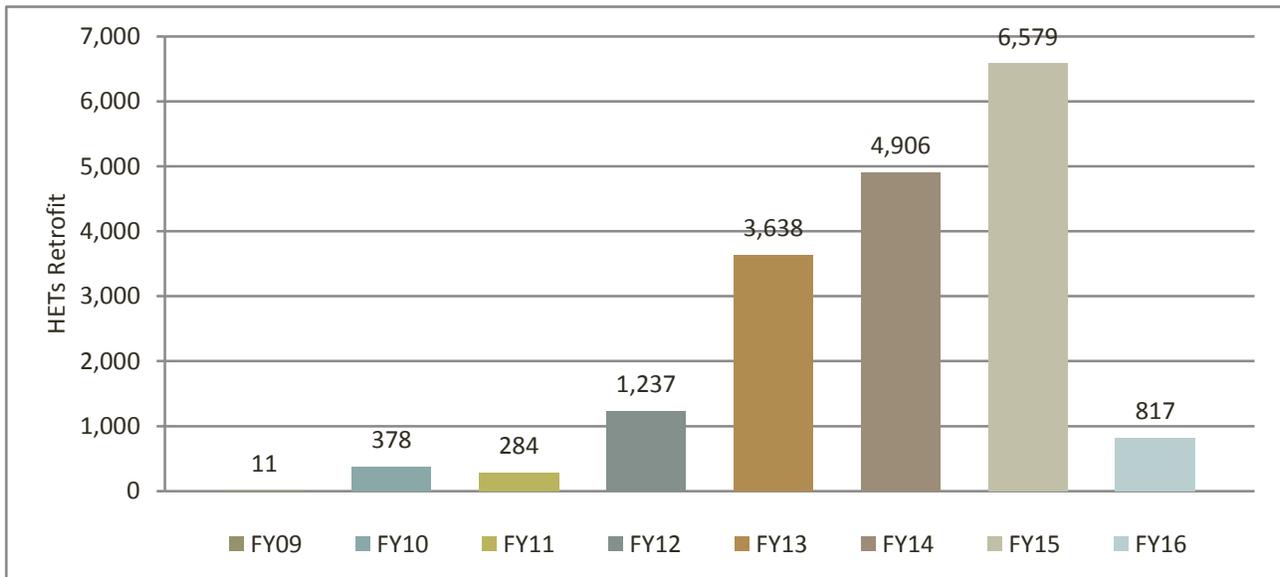
Single-Family HET Rebate

	FY 15/16	Cumulative		Start Date: Jul-08
HETs Retrofit:	1,912	16,151	Staff Labor Hours:	1,656
Expenditure: ¹	\$ 141,051	\$ 1,315,860	Budget:	\$ 200,000
Estimated Gallons Saved:	14,306,540	397,627,533	Percent of Budget:	71%
Estimated Acre-Feet Saved:	44	1,220		



Multi-Family HET Rebate

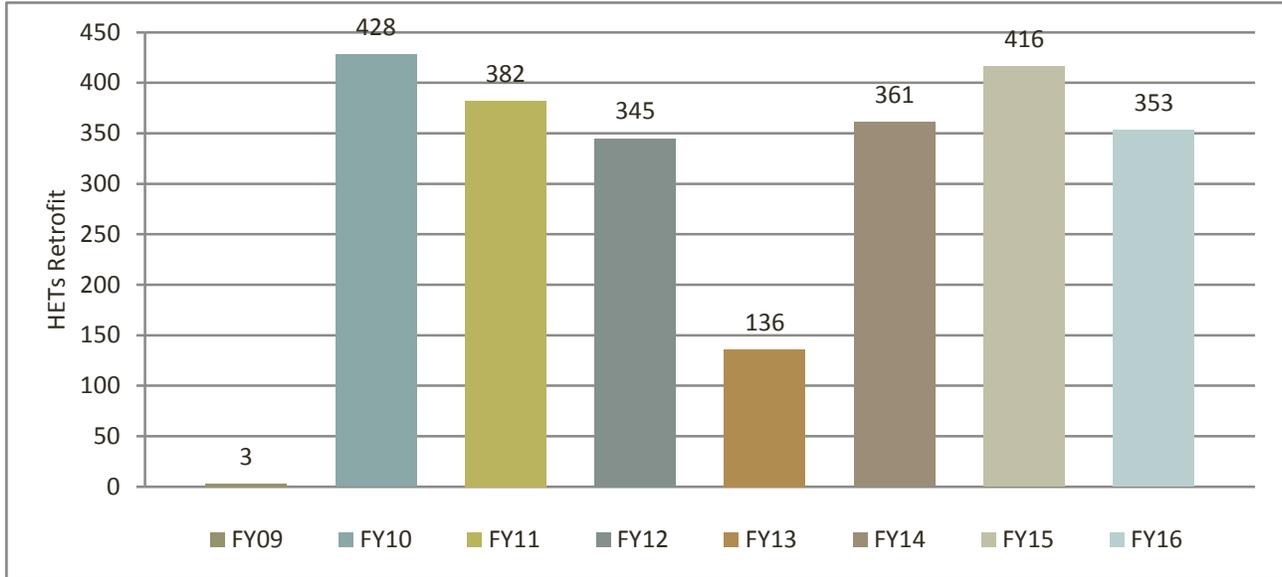
	FY 15/16	Cumulative		Start Date: Jul-08
HETs Retrofit:	817	17,850	Staff Labor Hours:	125
Expenditure: ¹	\$ 61,425	\$ 1,726,520	Budget:	\$ 365,000
Estimated Gallons Saved:	6,113,203	269,504,685	Percent of Budget:	17%
Estimated Acre-Feet Saved:	19	827		



Tucson Water
Incentive Program Implementation
FY 2015-16 Through April

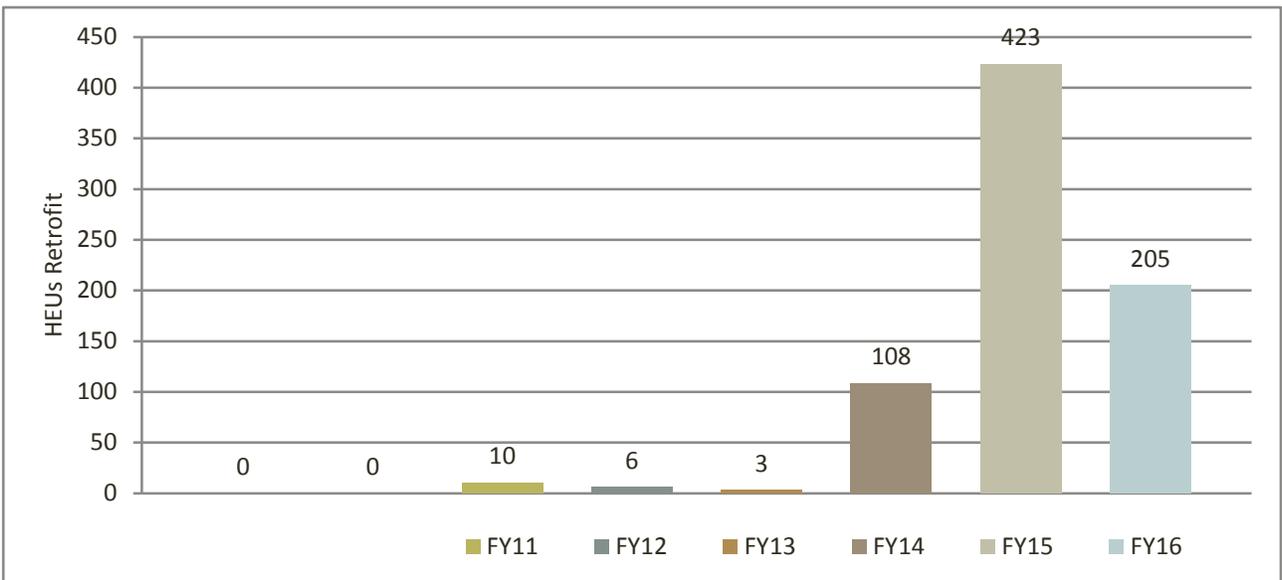
Commercial HET Rebate

	FY 15/16	Cumulative	Start Date: Jul-08
HETs Retrofit:	476	2,547	Staff Labor Hours: 112
Expenditure: ¹	\$ 45,150	\$ 220,596	Budget: \$ 60,000
Estimated Gallons Saved:	2,963,435	75,883,500	Percent of Budget: 75%
Estimated Acre-Feet Saved:	9	233	



High-Efficiency Urinal Rebate

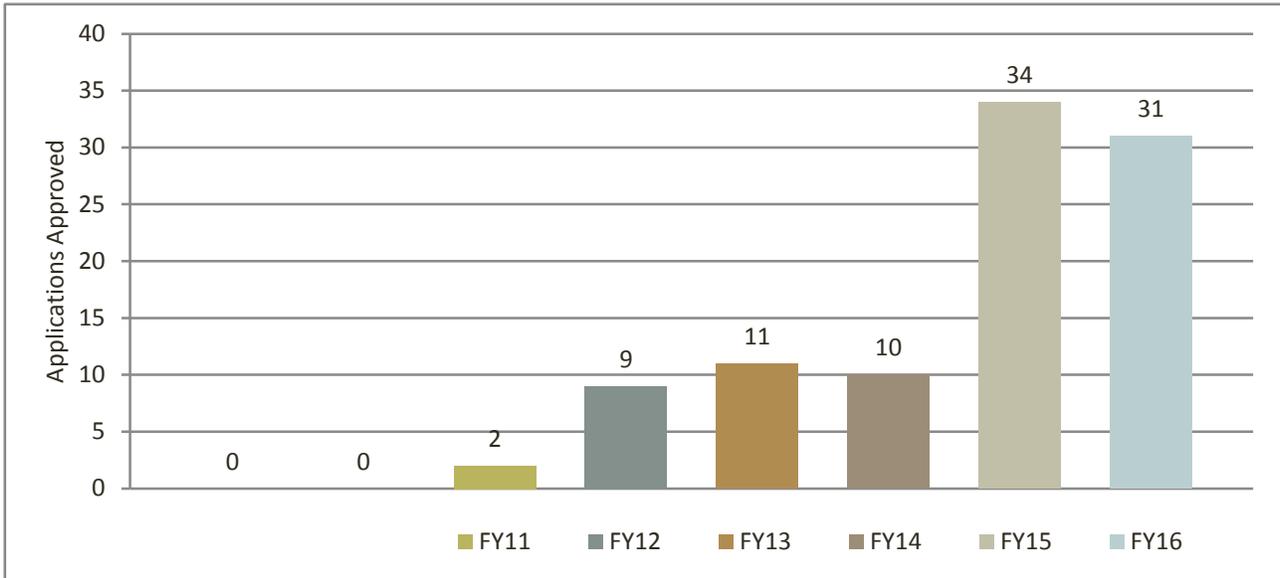
	FY 15/16	Cumulative	Start Date: Jan-11
HEUs Retrofit:	205	755	Staff Labor Hours: 53
Expenditure: ¹	\$ 41,000	\$ 253,800	Budget: \$ 62,500
Estimated Gallons Saved:	1,272,230	4,480,732	Percent of Budget: 66%
Estimated Acre-Feet Saved:	4	14	



Tucson Water
Incentive Program Implementation
FY 2015-16 Through April

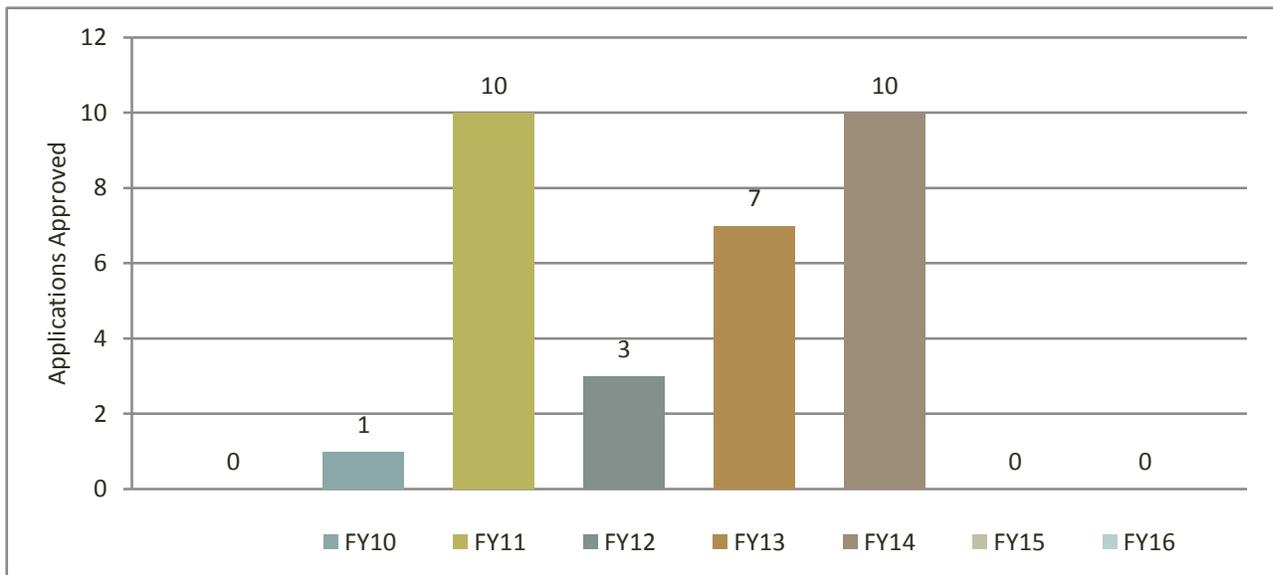
Gray Water Rebate

	FY 15/16	Cumulative		Start Date: Jan-11
Applications Approved:	31	97	Staff Labor Hours:	47
Expenditure: ¹	\$ 15,331	\$ 40,210.03	Budget:	\$ 20,000
Estimated Gallons Saved:	422,065	1,810,795	Percent of Budget:	77%
Estimated Acre-Feet Saved:	1	6		



Irrigation Efficiency Rebate

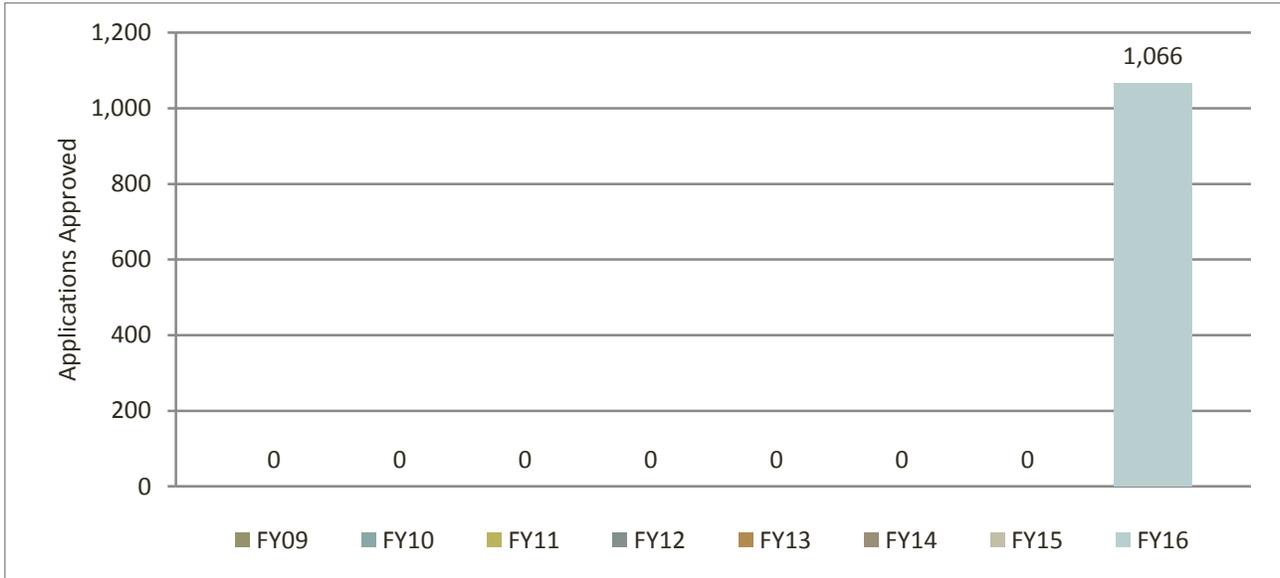
	FY 15/16	Cumulative		Start Date: Jul-08
Applications Approved:	0	31	Staff Labor Hours:	31
Expenditure: ¹	\$ -	\$ 246,890	Budget:	\$ 35,000
Estimated Gallons Saved:	0	25,064,550	Percent of Budget:	
Estimated Acre-Feet Saved:	0	77		



Tucson Water
Incentive Program Implementation
FY 2015-16 Through April

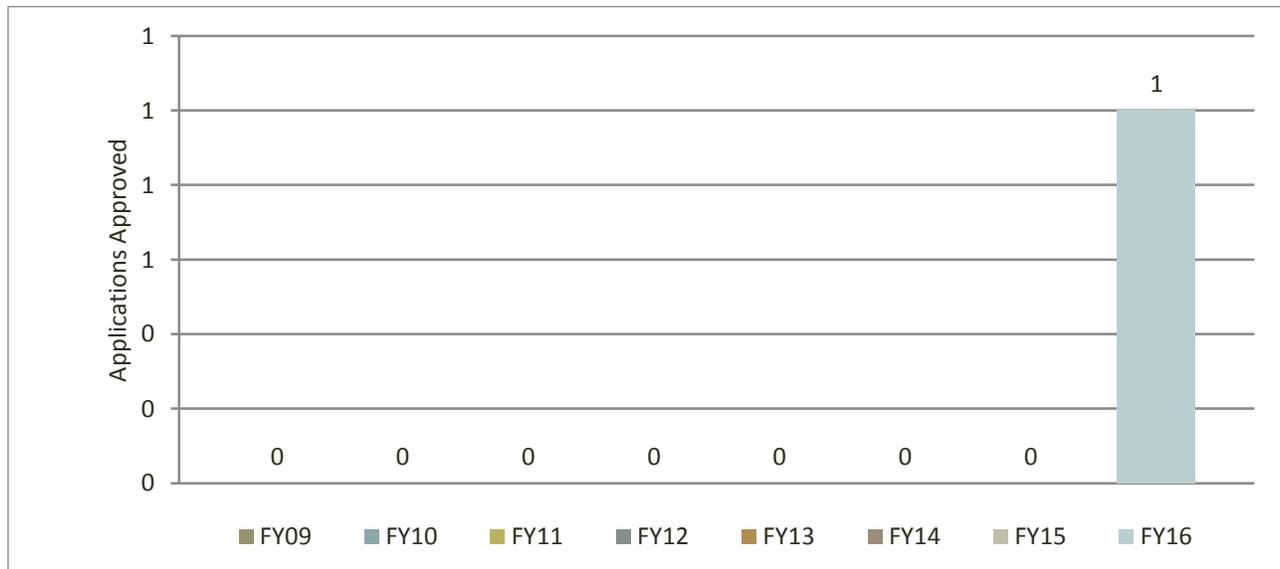
High-Efficiency Clothes Washer Rebate

	FY 15/16	Cumulative		Start Date: Aug-15
Applications Approved:	1,066	1,066	Staff Labor Hours:	810
Expenditure: ¹	\$ 213,200	\$ 213,200	Budget:	\$ 250,000
Estimated Gallons Saved:	7,507,838	7,507,838	Percent of Budget:	85%
Estimated Acre-Feet Saved:	23	23		



Commercial Efficiency Upgrade Rebate

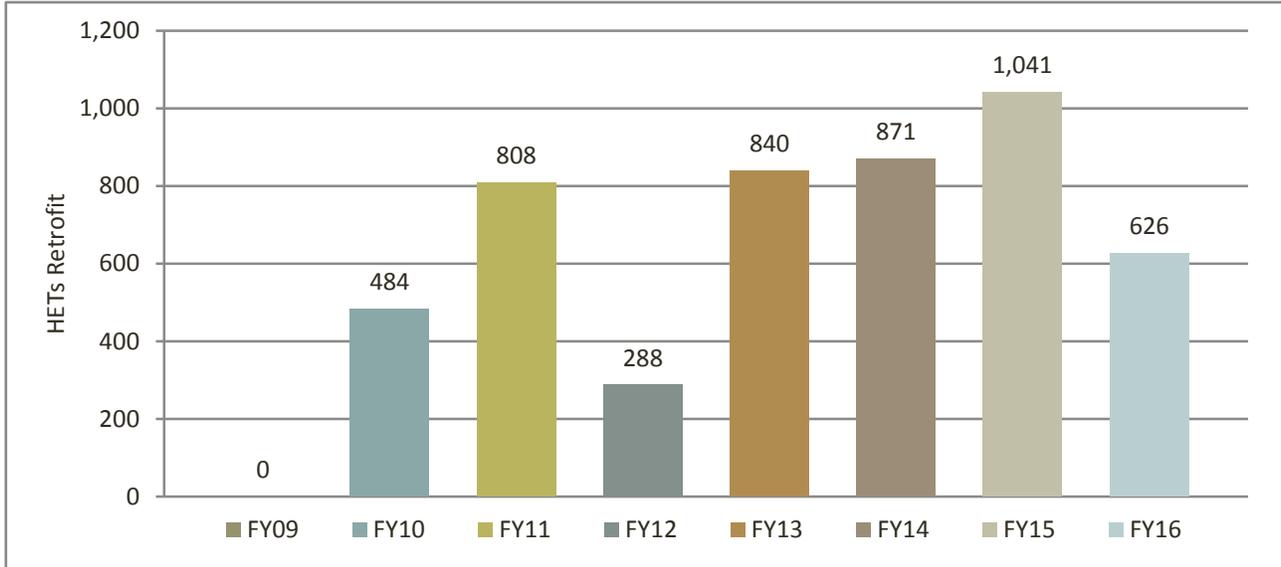
	FY 15/16	Cumulative		Start Date: TBD
Applications Approved:	1	1	Staff Labor Hours:	4
Expenditure: ¹	\$ 1,834	\$ 1,834	Budget:	\$ 75,000
Estimated Gallons Saved:	0	0	Percent of Budget:	2%
Estimated Acre-Feet Saved:	0	0		



Tucson Water
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FY 2015-16 Through April

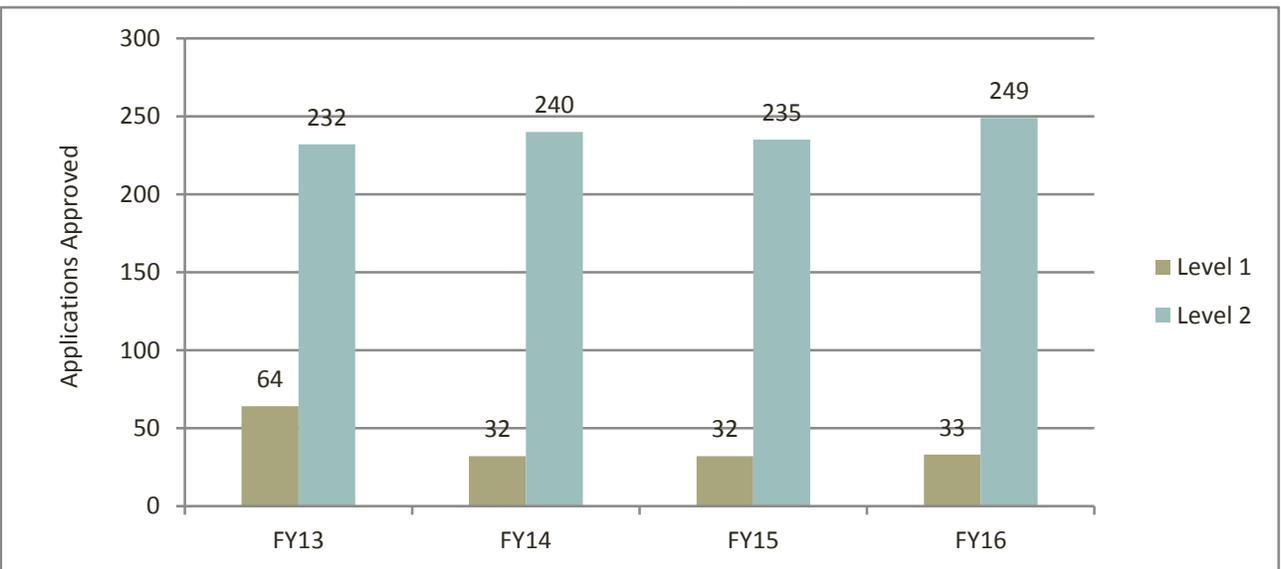
Low-Income HET Direct Install

	FY 15/16	Cumulative	Start Date: Oct-09
HETs Retrofit:	626	4,958	Staff Labor Hours: 50
Expenditure: ¹	\$ 208,199	\$ 1,784,143	Budget: ² \$ 337,000
Estimated Gallons Saved:	5,369,515	114,929,923	Percent of Budget: 62%
Estimated Acre-Feet Saved:	16	353	



Rainwater Harvesting Rebate

	FY 15/16	Cumulative	Start Date: Jun-12
Applications Approved:	282	1,117	Staff Labor Hours: 230
Expenditure: ¹	\$ 370,142	\$ 1,398,527	Budget: \$ 400,000
Estimated Gallons Offset: ³	2,266,010	20,570,135	Percent of Budget: 93%
Estimated Acre-Feet Offset: ³	7	63	

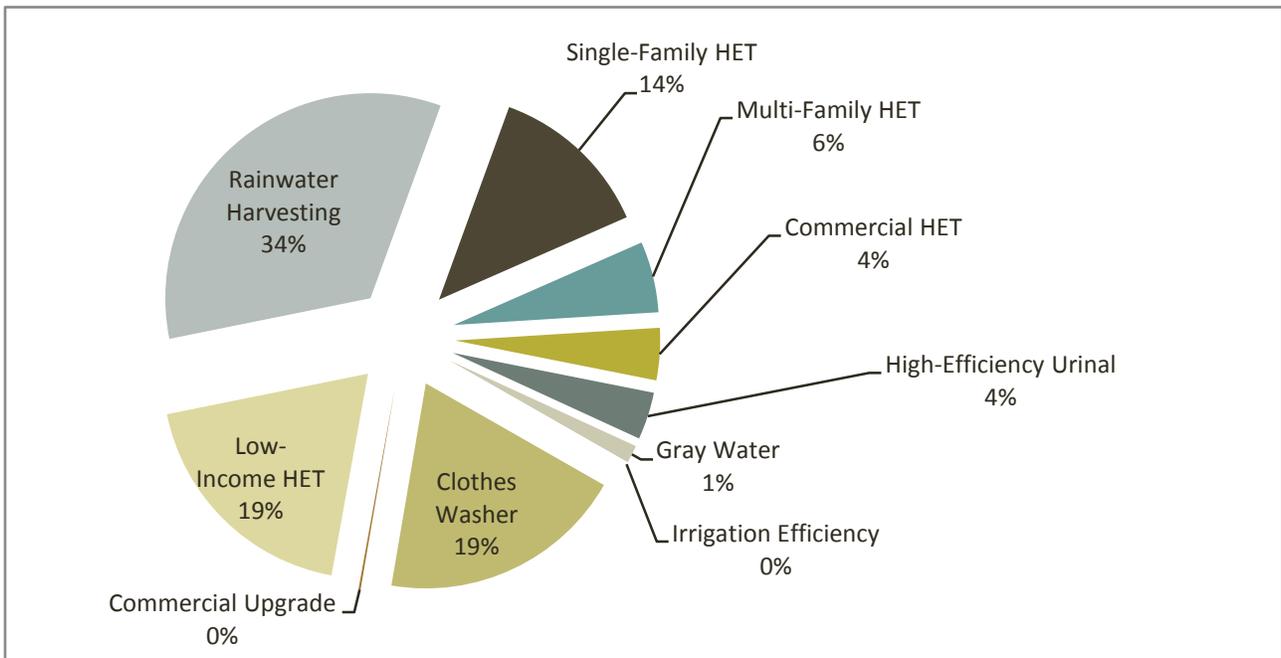


Tucson Water
Incentive Program Implementation
FY 2015-16 Through April

Program Totals

	FY 15/16	Cumulative		
HETs/HEUs Installed:	4,036	42,261	Staff Labor Hours:	3,117
Expenditure: ¹	\$ 1,097,333	\$ 7,201,578	Budget:	\$ 1,804,500
Estimated Gallons Saved:	40,220,836	917,379,690	Percent of Budget:	61%
Estimated Acre-Feet Saved:	123	2,815		

Expenditures by Program for FY 2015-16



The numbers and expenditures in this report reflect when the rebate or expenditure is approved and not when paid. This report is an operational report and not intended to reconcile with financial reports.

¹The expenditure does not include the cost of staff time

²The budget shown in this report for the low-income HET direct install program is combined from two object codes. Toilet installation is categorized in professional services and the cost of the toilet and miscellaneous materials is categorized in materials. All other rebate program expenditures are in the object code for efficiency programs

³The combined total of all program participants for rainwater harvesting is not showing a water savings at the meter. However, it is assumed there is a potential offset based on the capacity of the rainwater harvesting system.

**CWAC Conservation and Education Subcommittee
Three-Year Work Plan, FY16-18**

FISCAL YEAR 2015-16

Month	Items for Subcommittee Review	Completion/Approval by CWAC	Program Updates & Presentations (<i>tentative</i>)
September 2015	- FY14-15 Annual Report - FY16-17 Budget Proposal		
October 2015	- Conservation Planning Process	- FY16-17 Budget Proposal	
November 2015		- FY14-15 Annual Report	- SERI Pilot Program update
December 2015			- SmartScape Program Update
January 2016			- Project WET Program Update - EEExchange Program Update
February 2016	- FY 15-16 Mid-Year Report - New Program Ideas & Research*		- Low-Income Toilet Program (CHSPA)
March 2016	- New Program Ideas & Research - C&E mission statement/policy review		- Inter-agency Collaboration (Internal presentation)
April 2016	- FY16-17 Program Plan		- Zanjero Program Update (Internal presentation)
May 2016	- Conservation definitions & evaluation metrics		
June 2016	- Five-year Conservation Plan - FY17-18 Budget Proposal		- Commercial/WaterSmart Business Program Update (Internal presentation)

*New Program Ideas & Research is a designated 3-month period for CWAC Members & Staff to present new program ideas to be considered for evaluation and development in the next fiscal year to start the following July. All ideas should be presented with baseline research completed on resource needs, savings potential and existing case studies and example programs. All ideas will be analyzed using the AWE Conservation Tracking Tool and final determination of programs will be weighed with Conservation Plan goals. Depending on the number and complexity of new program ideas, additional meetings may be scheduled during this time.

Draft: per 13 April 2016 C&E Subcommittee meeting

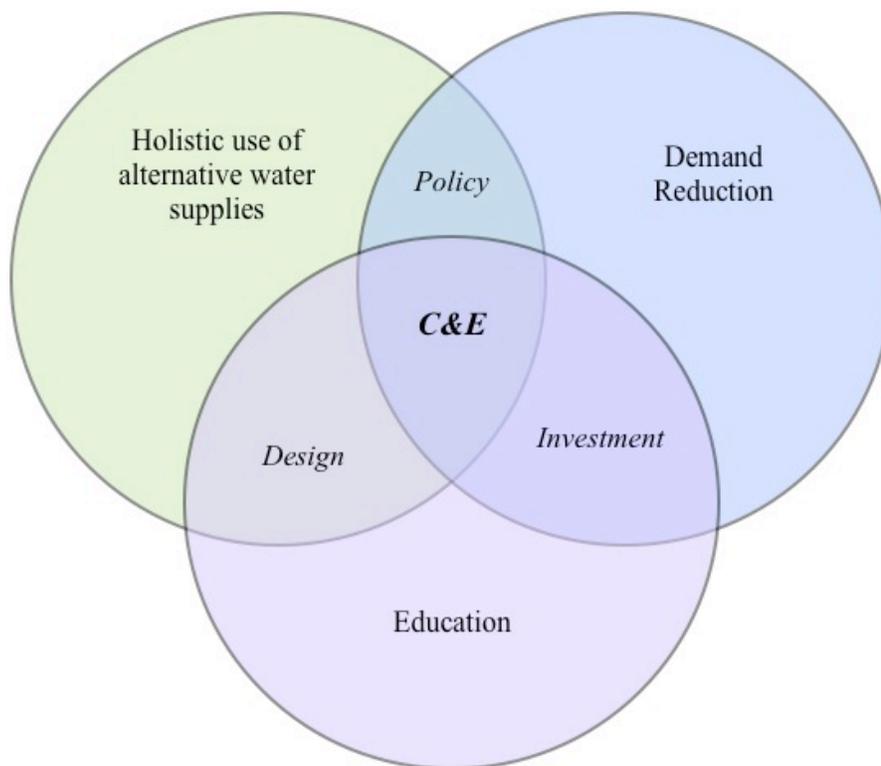
Proposed Conservation and Education Framework for Tucson Water

To support Plan Tucson it is proposed that Tucson Water's conservation and education encompasses:

- a) holistic use of alternative water supplies (rainwater, greywater, stormwater) to reduce stress on potable supplies,
- b) demand reduction to increase life of infrastructure and increase long-range water security,
- c) education to develop stewardship and community connection to water supplies/resources,

through:

- design of conservation targets to inform long-range planning,
- investment of water to improve community health by meeting unmet community needs (social, economic, and environmental), and
- policy to incentivize conservation and promote groundwater security.



Kris LaFleur - Metric brainstorm for evaluating C&E goals

From: Catlow Shipek <catlow@watershedmg.org>
To: Kris LaFleur <kris.lafleur@tucsonaz.gov>
Date: 4/25/2016 5:20 PM
Subject: Metric brainstorm for evaluating C&E goals

Initial Metric Brainstorm for evaluating C&E fund goals

For (A) holistic use of alternative water supplies to reduce stress on potable supplies:

- % parcel adoption by subwatershed and ward
- cumulative capacity of active RWH systems
- # parcels treated with passive RWH systems (include Commercial ordinance properties and neighborhood block grant projects?)
- Food producing area not using potable/groundwater
- # trees planted and supported by RWH
- gallons of greywater diverted
- utilization of reclaimed to reduce groundwater and CAP
- participation trends:
 - total #
 - by area/subwatershed
 - by income
- Tucson basin groundwater levels

For (B) demand reduction to increase life of infrastructure and increase long-range water security:

- Gallons saved
- per capita rates
- avoided infrastructure costs

Other metrics to investigate and potentially include:

- estimated landscape water use vs. actual amount of potable water supplied (using NAIP? and comparison with water use by neighborhood?)
- targeted behavior metrics (study referenced by Mark)
- energy demand reductions
- # partnerships
- # C2E participants

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