

- **Board of Directors**
Water Planning and Stewardship Committee

September 11, 2007 Board Meeting

9-2

Subject

Report on Innovative Conservation Program grant recipients

Description

Metropolitan's competitive selection process identified 15 research proposals listed in [Attachment 1](#) for funding under the Innovative Conservation Program (ICP). Grants totaling \$610,000 would be provided to support the evaluation of new conservation ideas. Metropolitan will contribute \$250,000 and the Bureau of Reclamation will contribute \$360,000. Funded projects typically take about two years to complete. The program provides an orderly business approach to periodically assess fresh ideas in water conservation that have the greatest potential for our region.

The ICP encourages investigation and development of new and creative ways to conserve water. Individuals and organizations can participate. ICP results are reviewed with member agencies and considered for Metropolitan's rebates during its annual review process. Several devices identified under past ICP efforts are now included in Metropolitan's water conservation rebate program including the pressurized water broom, re-circulating x-ray film developer used in hospitals, and connectionless food steamer used in commercial kitchens and restaurants. The last program cycle was started in 2004.

[Attachment 2](#) lists 39 proposals totaling \$6 million in funding requests that were received from public agencies, member and retail agencies, community-based organizations, private companies, entrepreneurs, universities, laboratories, research institutes, and equipment manufacturers. A five-member panel evaluated and ranked proposals based on selection criteria shown in [Attachment 3](#). Panel members included a representative from one member agency, United States Bureau of Reclamation, Southern California Gas Company, Huntington Botanical Gardens, and Metropolitan.

Contract development, negotiations, and executions are forthcoming. Metropolitan funding agreements will provide a portion of each grant award up front with the remaining balance provided upon completion and submittal of final reports. Metropolitan staff will monitor progress according to an agreed upon schedule. As results come in, staff will review applicability to incentive programs, public and private standards, marketplace changes or other means of advancing regional water conservation.

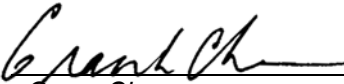
Policy

By Minute Item 44974, dated August 20, 2002, the Board authorized the Innovative Conservation Program on a biennial basis.

Fiscal Impact

\$250,000 from budgeted funds

\$360,000 from U.S. Bureau of Reclamation Grant funding



Grace Chan
for Stephen N. Arakawa
Manager, Water Resource Management

8/20/2007

Date



Jeffrey Knightlinger
General Manager

8/23/2007

Date

Attachment 1 – Innovative Conservation Program/Selected Projects

Attachment 2 – Innovative Conservation Program/Project Proposals Received

Attachment 3 – Innovative Conservation Program Selection Criteria

BLA #5466

Innovative Conservation Program

Selected Projects

Organization	Project
Central Basin MWD	Water Savings in Disadvantaged Communities Measure water saving from installing high-efficiency toilets (HETs) in multi-family dwellings in disadvantaged communities.
ConservCo Water Conservation Products, LLC	Faucet Washer Retrofit Program Measure water savings from leak reduction of new faucet valve technology.
DC Instruments	Water Leak Detection & Stoppage in Automatic Sprinkler Systems Measure water savings of controller system that detects water leaks.
Fytogreen Pacific, Inc	Aminoplast Resin Foam as Water Saving Soil Amendment & Agent to Improve Soil Structure Measure water savings of soil amendment to reduce water and fertilizer usage in residential and commercial turf.
Global Energy Partners, LLC	Industrial Water Reclamation System Demonstration Program Document water savings associated with the use of technology that captures and condenses moisture from boiler exhaust gases for reuse.
Inland Empire Utilities Agency	Groundwater Infiltration Using Porous Concrete Estimate on-site and basin-wide water conservation and supply benefits of using porous concrete.
Irvine Ranch Water District	ET Public Data via Web Services Project - Phase II Evaluate the viability of a standardized public Evapotranspiration (ET) data daily report to guide various water-based irrigation controllers.
Long Beach Water Department	Conservation Potential of Commercial Blender Rinsing Devices Measure water savings of new technology for cleaning commercial retail food blenders.
Orange County Coast Keepers	Orange County Stormwater Infiltration Retrofit Pilot Program Measure reduced residential irrigation requirement resulting from retrofit of selected sites with technologies to capture runoff.
Perpetual Water Ltd.	On-Site Grey Water Purification Measure water savings and cost of domestic grey water purification technology.
Pomerado Hospital	Evaluate Water Savings Potential of Landscape Irrigation with Blowdown Water from Cooling System Measure water savings associated with use of treated cooling tower wastewater for irrigating landscape.
Slingshot LLC	No More Geysers -- Sweetwater School District Demonstration Project Measure water savings and effectiveness of auto shut-off sprinkler risers that detect broken heads.

Organization	Project
TOTO USA, Inc.	Water Savings Potential of Automatic Faucets Measure water savings of automatic auto-close faucets in commercial setting.
WaterSaver Technologies, LLC	The AQUST™ - Innovative, Small Scale Water Reuse System for Flushing Toilets Measure water savings through the installation of system that recycles domestic sink water for toilet flushing.
West Basin MWD	Complete Restroom Retrofit Monitoring Program Install a variety of plumbing fixtures to document real-world water savings in commercial restrooms.

**Innovative Conservation Program
Project Proposals Received**

	Submitted by:	Project Title
1	DC Instruments	Water Leak Detection & Stoppage in Automatic Sprinkler Systems
2	Global Energy Partners, LLC	Industrial Water Reclamation System Demonstration Program
3	Garden Promise Company, Inc.	Evaluating Irrigation System Water Savings & Other Benefits Using GPC Patented Liquid Organic Fertilizer Method
4	ET Water Systems, LLC	Optimizing Conservation Via Web-Based Integration of Three Leading Irrigation Technologies
5	Long Beach Water Department	Conservation Potential of Commercial Blender Rinsing Devices
6	Digital Map Products	Meter-Level Landscape Area Measurements for BMP5
7	Pomerado Hospital	Evaluating the Water Savings Potential of Landscape Irrigation with Blowdown Water from Cooling System
8	Southwest Water Solutions, LLC d/b/a Aquaverde	Aquaverde Cycle Residential Graywater Irrigation System
9	SIRF Systems, LLC	Scientific Evaluation of Water Energy & Energy Savings for SIRF System In Landscaping
10	Earthquake SOLUTIONS	"Portable Relief"
11	Alpine Automation, Inc.	"A Practical Approach to Water Conservation Utilizing Soil Moisture Sensing"
12	Gerald W. Miller	Handless Automatic Water Flow Control (HAWFCO)
13	Auto Trap	Kitchen Faucet Control System - Door Operated
14	Rancho California WD & JV Manufacturing, Inc.	Watermiser Faucet Flow Control Pilot Project
15	WaterSaver Technologies, LLC	The AQUST™ - Innovative, Small Scale Water Reuse System for Flushing Toilets
16	Lieventum USA	Simply Save Faucet H2O
17	Intergy Corporation	Innovative Water and Energy Savers Program (IWESP)
18	ConservCo Water Conservation Products, LLC	Faucet Washer Retrofit Program
19	Sentinel Hydrosolutions, LLC	The W.A.A.L.D.O. Project (Water Accountability and Leak Defense Operation)
20	Orange County Coast Keepers	Orange County Stormwater Infiltration Retrofit Pilot Program
21	The Air to Water Company (ATWC)	Mobil Energy Response Vehicle (MERV)
22	Tony Adams	Sprinkler Monitoring Device
23	EZ-FLO Fertilizing System	EZ-FLO Water & Energy Conservation -- Landscape Management Program

	Submitted by:	Project Title
24	Central Basin MWD	Water Savings in Disadvantaged Communities
25	Power-Tech Engineers, Inc.	Electrical Energy Retrofit Project (Assessment Feasibility Study)
26	TOTO USA, Inc.	Review Water Savings Potential of Electronically Metered Faucets with a 20% Flow Rate Reduction from Rated Maximums w/ Auto-Close Feature
27	Perpetual Water Ltd.	On Site Grey Water Purification
28	Balboa Garden Products, Inc	The Garden I.V. SMART Feeder: Train plants to conserve water by applying SMART Materials through the sprinkler system
29	County of San Bernardino, Land Use Services Dept.	Establishing an Innovative Approach to Enforcing & Monitoring Landscaping Standards Compliance with Regional Inter-Agency Cooperation
30	Irvine Ranch Water District	ET Public Data via Web Services Project Phase II
31	Valvette, Inc. dba Valvette Systems	LittleValve Irrigation Products
32	Fytogreen Pacific, Inc	The Effectiveness of Aminoplast Resin Foam as Water Saving Soil Amendment & Agent to Improve Soil Structure
33	Slingshot LLC	No More Geysers -- Sweetwater School District Demonstration Project
34	Rancho California WD & HydroPoint Data Systems, Inc.	Using Public Policy and Advanced Technology to Create an Accelerated Sustainable Landscape Conservation Program
35	West Basin MWD	Complete Restroom Retrofit Monitoring Program
36	Aqua Trap Corporation	Aqua Trap Service
37	Shepherd of the Valley Lutheran Church and School	Shepherd of the Valley Lutheran Church and School's Field of Dreams
38	DigAbode, Inc.	MyWaterUse
39	Inland Empire UA	Groundwater Infiltration Using Porous Concrete: Implementation of a Pilot Incentive Rebate Program

Innovative Conservation Program Selection Criteria

Criteria	Description	Points
Project Innovation	Aspects of the project that are new or different from existing devices and/or programs	30
Water, Energy and Environmental Benefits	How project will provide water, energy, and/or environmental savings and benefits	30
Regional Applicability	Broad-based applicability of the project to State, member agencies and retail agencies	20
Cost-Effectiveness	Cost vs. proposed benefits for amount of funding requested from Metropolitan	10
Readiness to Proceed	Ability to begin and end project in a timely manner	10
Maximum Possible Points		100

Innovative Conservation Program Panel

Name	Agency
Deb Whitney	U.S. Bureau of Reclamation
David Blanke	Southern California Gas & San Diego Gas & Electric
Lisa Morgan-Perales	Inland Empire Utilities Agency
Sean Lehmeyer	Huntington Botanical Garden
Bill McDonnell	Metropolitan staff