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### **Recycled Water Program Education and Outreach**

WateReuse Inland Empire Chapter Meeting September 30, 2014

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EMWD Recycled Water Background

Education

Collateral Materials / Outreach

Agency Coordination

• Future

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## EMWD Overview

- 542 Square Miles
- Population of 768,000 / 45%
   Ultimate Build-out
- Water, Wastewater and Recycled Water Services
- 7 Cities plus Unincorporated Riverside County





### **Recycled Water System History**

- EMWD Began Treating Wastewater in the 1960's
- Originally Disposed in Ponds & Fields
- In 1991, Began To Develop a Recycled Water "Backbone" to Expand Reuse





San Jacinto Valley RWRF 1960's



### **Recycled Water System Overview**

- Four Operating RWRF's
- 2013 Production 47,650 AFY
- Over 200 miles of pipeline
- 1.8 Billion gallons storage
- 4 Stabilized pressure zones
- \$110M Investment since 2003
- Objective: 100% Beneficial Use



### **Education - Start Early!**



### Tell me and I forget.

# Teach me and I remember.

# **Involve me and I learn.**

**Benjamin Franklin** 

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# **Educational Programs**



- The mission of EMWD's Education Program is to foster understanding of water and wastewater issues and to promote wise water use among the future leaders of our community.
  - Programs include:
    - ➤ Write Off
    - Student Art
    - Solar Cup
    - Field Trips/Presentations
    - Assembly Program
    - Community Events
    - Materials

# San Jacinto Valley RWRF





# Education Center





## **Collateral Materials**



- **Customer newsletters**
- SMART
- Youth books
- Consistency of message
- Staff involvement

Trivia Tidbit: One recent method EMWD uses

### **Rates developed with Recycled** Water Advisory Committee input

EMMD promotes an 'enterprise' approach coordinating with regional takeholders, such as the Recycled Water Advisory Committee (RRC): RAC members and who they represent included Andy Domenipsoni (Ag), Rajph Daily (Quality Urrl), Larry Minor (Agri-Empire/Valley-Wide), Essie Bootsma (Bootsma Dairy), Don Bean (Ag), Ralph Schaffnebreg (City) of Moreno Valley, Landscaping), Bruce Scott (Scott Bros. Dairy and In-lieu customer), Lewis Sweeney (Inland Empire Energy Center), and Scott Sewell (California Department of Fish and Game, Environmental).

The enterprise process impacts recycled water plan conditioning, design, construction, site managemen promoting public acceptance.

After meeting several times since September 2009, the RAC gave its recommendations to EMWD's Board of Directors. On March 24, the Board approved the following:

 Increase rates 4 percent/year for all customers except California Department of Fish and Game and those using nontraction water

 Increase sever customers' share of operating and maintenance costs for recycled water storage and distribution equal to the cost of discharge (approximately \$0.50/month) 3. Fund and support operational enhan

4 Provide annual contract renewals

5. Enhance customer communications and notifications 6. Review system performance in two years

**Rates** information Detailed information on both fresh and recycled water rates can be found at www.emwd.org.

EMWD Ag News Visit us on the Internet at www.emwcl.org. agricultural customers of Eastern Municipal Water District www.ement.Department of Eastern Municipal Water District.

2270 Trumble Road, PO Box 8300, Perris, CA 92572-8300 EMWD Board of Directors Division 1: Philip E. Paule ion 2: Joseph J. Kuebler, CPA - Vice P ed Director of Ma A: Ronald W Sullivan Per

to help control the cost of producing recycled water is through fuel cells, which use methane gas generated from the reclamation process. The cells at the Moreno Valley Regional Water Reclamation Facility began to operate in the summer of 2009. They provide 40 percent of the electricity at peak hours for that plant.

### Who do EMWD's ag customers most often deal with?

EMWD Contacts for Ag Customers 951-928-3777

egrated Operations Ce Staffed 24-hours/day Ext, 6265 Cecelia Jackson - Recycled Water Program Co

nd – Supervisor of Recycled I

Trivia Tidbit: During 2009, more than 73 percent of EMWD's reclamation plant flows were sold, the highest percentage ever. That percentage is considerably more than the state average of only 15 percent. During summer months, nearly all of EMWD's total

supply of 46 million gallons is in demand.

the EMWD Ag N

This the first in an occusional series indicates a significant portion of the of newsletter. For agricitation more than 513 billions corporalization customers of Eastern Municipal Water is produced within the San Jacinto/ Dirticit. Agriculture, and the jobs and Termoslu Valley geographic dirticut. Revenues it has produced, has always them an important segment for EMMS. Iture continues to water. All agricultural water dem omic challenges, the since 2007 (including parks, golf cou reage and crop report schools, etc.) are represented below

Ag Water Sales (acre-feet) 2007 2008 2009 2010 (through May) 5,967 3,624 3,496 385 18,828 21,885 22,718 4,235

**EMWD Ag News** 

Welcome to the first edition of

**EMWD Ag News!** 





### **Professor Purrkis Ponders Purple Pipes**

A story about recycled water

Produced by Eastern Humicipal Water Detrict

and Rancho California Water District





### Eastern Municipal Water District **RECYCLED WATER**

PROGRAM EMWD has been recycling water within its service area since 1966 Five (5) reclamation facilities, which are linked together, produce secondary and tertiary water totaling approximately 46 million gallons every day.

The recycled water system features 192 miles of pipeline and 18 pumping facilities.

 EMWD can store more than 2 billion gallons of recycled water That's equal to three to four months' worth of supply. In 2007, EMWD served 210 active accounts with sales of more that

26.000 acre feet EMWD is developing conceptual plans to recharge the San Jacint Basin (SJ Basin) with desalted recycled water. The SJ Basin current

provides 15 percent of EMWD's water supply The Recycled Water System Pressurization & Expansion Project

 Up to 60,000 feet of 24 - 30-inch diameter recycled water pip Up to 60,000 feet of new 8 - 12-inch distribution pipeline; and Three (3) new steel storage tanks (up to eight million gallons total) to provide the operational storage, flow control and preneeded to provide the "on-demand" service required by municipal of

For more information on recycled water services, visit wi

**RECYCLED WATER IS S.M.A.R.T.** 

Safe Money-saving Available Resourceful Timely

Safe high level to it can be reused for almost any purpose except drinking

Money-saving

ster is significantly less than the regular potable The cust or ray, (drinking) w

Available able to more than half of EMWD's total production capacity is used. It can be

Resourceful, Drought-Proof Supply With more than 50,000 acre-feet of recycled water p

Fimely fo meet future water demands and avoid shortages due to drough



Authored and Illustrated by Alyssa Rossi and Iliana Reyes

So what's EMWD dor

EMWD was recognized WateReuse California as

year 2009, EMWD sold 32,4 to all recycled water cust

AF. As part of the rec it was noted that EMW wested more than \$148 n

customers bought

capital infrastructure

storage capacity, a netwo transmission and distrib

pipelines greater than 200 ind 18 pumping facilities.

Methane gas, a rer energy source, is produce

To help supply agricu

other recycled water custo EMWD's four reclam facilities produce only tert

quality water. About 70 pe of the recycled water sold is









### **Customer Use Site Maps**

wh



Recycled lifete Site #: 329 Potace Viel ingetion Wei BIND Recy ded 10 at BIND Poste Nam Recipied Interior Val Provide in Station 12 are







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## Outreach



- Video YouTube
  - Customer presentations
    - o HOA's
    - City Council
    - $\circ$  Marketing
  - WateReuse
    - o California
    - o National
    - Customer of the Year Award
  - Aligning:
    - $\circ$  Vision
    - $\circ$  Message
    - o Management
    - o Staff
    - o Skillsets



### **Recycled Water Program**

# **Agency Coordination**



- Mandatory Use Policy = "Stakeholder – Alignment"
- Recycled water changes EMWD's role

   Regulatory
- 20+ Land Use Agencies
- "Integrated Business Process Flow" (IBPF)
- Challenges:
  - $\circ$  Roles
  - Costs
  - o Schedule







- Currently developing "framework plan"
- School District collaboration

   Western Center Academy
- Leverage Opportunities Drought!!!
- "Resource Management" Recycled Water's Role
- Partnerships are critical!



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# **Questions?**

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