WE U DID GAN

Starting a Residential Recycled Water Fill Station



Dublin San Ramon Services District

Water, wastewater, recycled water

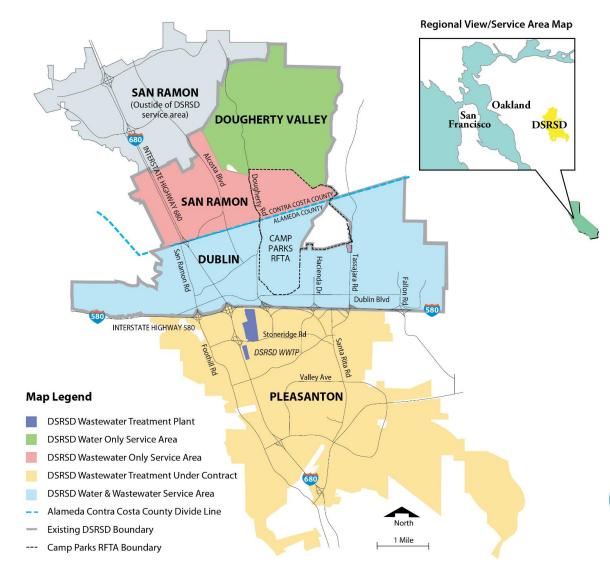
California Association of Sanitation Agencies

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Winter Conference Palm Springs, CA January 21, 2015

Dublin San Ramon Services District (DSRSD)



Dublin San Ramon Services District

About Dublin San Ramon Services District

- \$54.8M O&M budget (FYE 2015)
- \$12.5M capital projects (FYE 2015)
- 113 employees, serve 145,000 customers
- 10.5 MGD wastewater flow (annual daily average)
- 9.4 MGD potable water distribution
- 3,200 acre-feet/year recycled water production



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Overview of DSRSD's Recycled Water Program

- Partnership with East Bay Municipal Utilities District serving customers recycled water (DERWA)
 - ► Since 2006
 - 61.1 miles of purple pipe





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Overview of DSRSD's Recycled Water Program

- DERWA backbone distribution system (1,000 MG in 2014)
- Commercial Fill Station (16.2 MG in 2014)
- Residential Fill Station (2.3 MG in 2014)





DUBLIN SAN RAMON SERVICES DISTRICT Residential Recycled Water Fill Station

► Things we learned

- Fill stations located near the plant entrance
- Used existing basin wash-down plumbing
- Three hose bibs not enough...now there are eight





Things we learned

 Provide a mix of "back in" and "drive through" fill stations for trailers





► Things we learned

- Need shut off valves on the ends of the hoses because many customers climb into the bed of their pick-up truck to fill their containers
- Things break, repairs are common





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Things we learned

- Shed is a plus
 - shelter from the sun and wind
 - gives staff a place to store materials







- Things we learned
 - Signage is crucial
 - Residents need a clear route through the plant
 - Traffic control is needed on busy days
 - Some people are not good drivers







For Construction & Maintenance Details

CONTACT:

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Residential Recycled Water Fill Station

- Recycled water is given away free
- Fill Station is open to allnot just DSRSD customers
- Maximum 300 gallons per trip
- Open only during posted hours
- Attendant checks ID's and logs loads





Residential Recycled Water Fill Station

- Must receive training prior to the first use
- Must sign user agreement prior to the first use
- Wallet ID card makes it easy to "sign in" thereafter
- OK to make multiple trips in a day

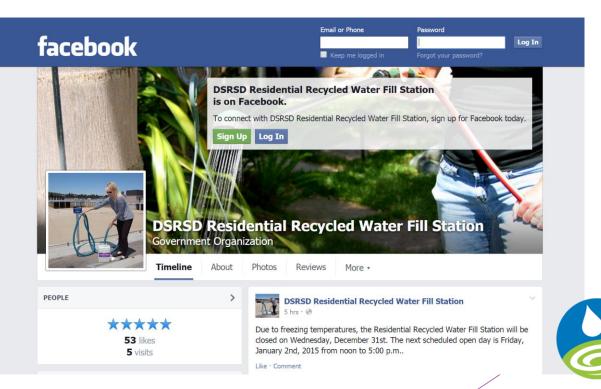




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They Asked for a Facebook Page... So We Created One

Check our what our residential recycled water customers have been saying at <u>https://www.facebook.com/freerecycledwater</u>



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Operational Considerations

- Hire and train attendants (temporary employees)
- \$12/hour pay rate (\$15/hour to temp agency)
- Use District staff to man the facility one day per week





Operational Considerations

- Used ROP students & Operators in Training as attendants
- Open throughout winter... closed when it rains
- Summer hours open 7 days/week
 Monday Friday 2-7pm
 Thursday, Saturday, Sunday 8am-Noon
- Winter hours open 4 days/week
 Monday, Wednesday, Friday Noon-5pm
 Saturday 8am-noon
- Traffic control necessary during peak summer months
 - Averaged between 100 and 120 customer trips/day



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Unexpected Benefits of the Residential Fill Station

- 500 area residents signed up to use the residential fill station
- Users have become comfortable with recycled water, they love it, they want it, they are no longer afraid of it
- Media loved the program (local, state, national, and even international reporters)
- Users and the media are now better educated about recycled water and its role in creating sustainable communities



"Recycled Water Keeps this Garden Green" signs given to residential users to post in their yard.

Commercial Fill Station

EQUIPMENT RENTALS

- Operational since 2007
- Typical loads 2,000-4,000 gallons
- Up to 1,000 GPM fill rate
- \$73 annual permit
- \$10/load for recycled water
- ► PIN gives drivers access 24/7

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ECRESC Summer of 2014: 16.2 MG

For Operational Details

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Regulatory Approvals

California Department of Public Health (CDPH)

- User Agreement with Instructions •
- **Training Program** •

Regional Water Quality Control Board

- CDPH Submittal and approval •
- Allowed under 96-011 General Permit •
- Report requested after the first month •



Regulatory Details

- Training for new residential recycled water users
- User agreement form (on our website) <u>http://www.dsrsd.com/home/showdocument?id=929</u>
- User wallet ID card
- Purple stickers placed on customer's containers
- All loads are logged with customer data



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For Regulatory Details

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DSRSD Board Reaction

- They liked the idea from the start
- Program offered customers an option in the face of mandatory restrictions
- Board saw it as a "quick fix" to lessen customers' drought pain
- Agreed that charging customers for small quantities of water was not cost effective
- The PR aspect was also attractive although no one expected it to be so successful



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The Concept is Already Being Replicated:

- City of Livermore
- Central Contra Costa Sanitary District
- Others?



Central Contra Costa Sanitary District

The Big Picture... the Long Haul

- Recycled water fill stations are a "drop in the bucket" when trying to solve California's water needs
- The program makes it possible for the general public to obtain and use recycled water at home
- DSRSD has been very active in WateReuse, contributing \$150,000 over the years to the Direct Potable Reuse Initiative



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What Customers Say



"Everyone who comes here is pretty happy about it. It's a fantastic program that's for the future. They keep adding stations as it gets more popular - making it as convenient as possible. I love the program. I hope more people do it."



"We started with 5 gallon water jugs, moved up to a 55 gallon drum and now we've got the 275 gallon tote. Our yard is really green. We're really glad this program has been offered."



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What Customers Say



"It's a joy to come here. There's a sense of camaraderie. It made me appreciate how we take water for granted. We've cut water usage to half of last year."



"It's an awesome service and everyone is so nice. It does help. More agencies need to do this or it's just water that gets dumped into the Bay."



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Q&A

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