

# Amador Water Agency

## **System-Wide Cost of Service and Water Rate Study**

July 26, 2012

*The Reed Group, Inc.*



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## Study Objectives

- **Develop water rates that accurately reflect the cost of providing service**
- **Improve equity for customers across all water service areas**
- **Improve Agency's financial stability**
- **Avoid more costly multiple, duplicative rate setting processes**
- **Provide rates that reduce administrative and customer service costs**
- **Support more efficient budgeting and accounting practices**



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## Presentation Outline

- Revisions from March 2012
- FY 12-13 revenue requirement
- Proposed water rates
- Summary
  - Benefits of the system-wide water rates
- Next steps



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## AWS CFD Revenue for Debt Service

- Special tax revenue from the AWS CFD for debt service is estimated at \$120,200 annually
- This additional revenue equates to savings of about \$1.37/month for residential AWS customers



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## FY 12-13 Water System Costs

|                         |                    |
|-------------------------|--------------------|
| Operation and maint.    | \$5,207,300        |
| Debt service payments   |                    |
| AWS                     | \$1,823,900        |
| CAWP                    | \$516,400          |
| Lake Camanche           | \$43,600           |
| La Mel Heights          | \$19,800           |
| Rehab./replac. projects | \$160,000          |
| Operating reserve       | <u>\$220,000</u>   |
| <b>TOTAL</b>            | <b>\$7,991,000</b> |



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## Offsetting Non-Rate Revenue

|                         |                    |
|-------------------------|--------------------|
| Plymouth DS payments    | \$189,300          |
| PG&E contract payments  | \$173,000          |
| AWS partic. fees for DS | \$41,000           |
| AWS CFD revenue for DS  | \$120,200          |
| CAWP-W revenue for DS   | \$94,300           |
| CAWP-W revenue for O&M  | \$294,000          |
| Misc. operating revenue | <u>\$91,100</u>    |
| <b>TOTAL</b>            | <b>\$1,002,900</b> |



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*Bob Red — Decision on CAWP must be made until End of Year or later.*

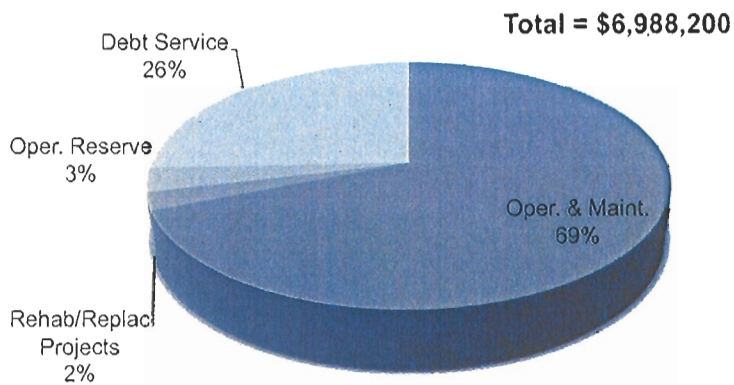
## FY 12-13 Water Rate Revenue Requirement

|                         |                    |
|-------------------------|--------------------|
| Operation and maint.    | \$4,822,200        |
| Rehab./replac. projects | \$160,000          |
| Operating reserves      | \$220,000          |
| Debt service payments   | <u>\$1,786,000</u> |
| <b>TOTAL REV. RQMT.</b> | <b>\$6,988,200</b> |



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## Water Rate Revenue Requirement Summary



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## Water Rate Revenue Requirement Summary

- |                         |             |
|-------------------------|-------------|
| ➤ Current rate revenues | \$6,477,000 |
| ➤ FY 12-13 rev. reqmt.  | \$6,988,500 |
| ➤ Increase              | \$511,500   |
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- Proposed overall rate increase is 8%
    - About 2% less than without the AWS CFD



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## Functional Cost Categories

- Customer cost
- Administrative costs
- Supply/transmission costs
- Water treatment costs
- Water distribution costs
- Rehabilitation/replacement project costs
- Operating reserve contribution
- Debt service costs



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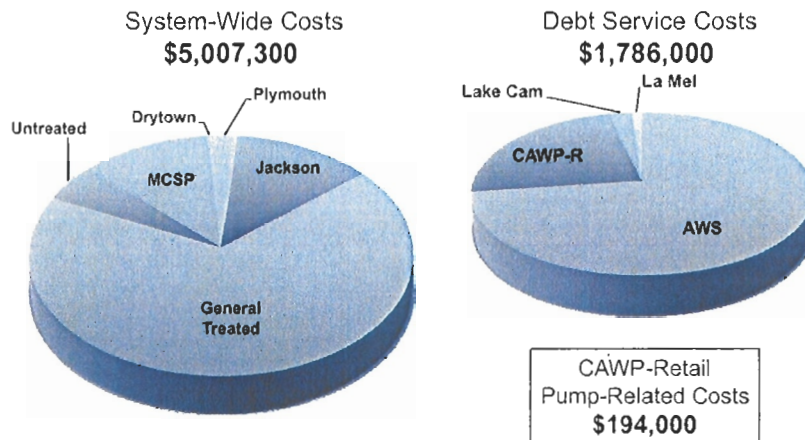
## Service/Demand Factors

- No. of customer accounts
- No. of equivalent meters
- Annual water use
- Maximum month water use
- Service type (untreated, treated, resale)
- Customer class (residential, non-residential, irrigation, industrial)



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## Summary of System-Wide Cost Allocation



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## Water Rate Design

- **Water rates recover the costs of providing service to each customer class from each customer class**
- **Three elements of rate structure:**
  - **Customer charge**
  - **Capacity charge**
  - **Usage charge**
- **Revenue mix:**
  - **50% from fixed service charges**
  - **50% from water usage charges**



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## Water Rate Structure

- **Water usage rate**
  - **3-tier rates for single family residential**
  - **Uniform rate for all other customer classes**
  - **Different rates for treated, untreated, MCSP, and resale**
- **Monthly service charges**
  - **Based on size of water meter**
  - **Different charges for treated, untreated, MCSP, and each resale customer**



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## Water Rate Structure - Continued

- **Monthly debt service charges**
  - **Varies for each water service area**
  - **Based on size of water meter**
  - **Individualized charges for MSCP and each resale customer**
- **CAWP-Retail pumping surcharge**
  - **Additional usage rate applied to all water use**



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## CAWP-Retail Pumping Surcharge

|  | With Existing<br>Pump System | With<br>GSL       | Cost<br>Savings   |
|--|------------------------------|-------------------|-------------------|
| <b>Annual Pump-Related Costs (1)</b>                     |                              |                   |                   |
| Pumping Energy   | \$ 271,000                   |                   | \$ 271,000        |
| Standby Power  |                              | \$ 20,600         | \$ (20,600)       |
| Power Foregone   | \$ 36,900                    | \$ 87,100         | \$ (50,200)       |
| SLP & TC Pump Station Maint                              | \$ 77,300                    | \$ 16,200         | \$ 61,100         |
| <b>Total Pump-Related Costs</b>                          | <b>\$ 385,200</b>            | <b>\$ 123,900</b> | <b>\$ 261,300</b> |
| Annual CAWP-Wholesale Water Production (1,000s gal.) (2) |                              |                   | 279,800           |
| Cost Savings per 1,000 gal.                              |                              |                   | \$ 0.93           |
| Unaccounted-For Water System Lose Rate (3)               |                              |                   | -12%              |
| Pumping Surcharge per 1,000 gal.                         |                              |                   | \$ 1.06           |
| <b>Pumping Surcharge per CCF</b>                         |                              |                   | <b>\$ 0.79</b>    |

**Notes:**

- (1) From Agency's cost analysis of the GSL project.
- (2) CAWP-Wholesale water deliveries to CAWP-Retail and three retail agencies.
- (3) Based on the difference between CAWP-Wholesale deliveries into the CAWP-Retail service area and metered water sales within the CAWP-Retail service area.



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# Proposed Water Rates

| Water Usage Rates (\$/CCF)     |                        |  | Monthly Service Charges |                 |               |
|--------------------------------|------------------------|--|-------------------------|-----------------|---------------|
|                                | Treated Water          |  |                         | Untreated Water | Treated Water |
| Single Family Residential      |                        |  | 5/8" meter              | \$ 7.34         | \$ 12.55      |
| Tier 1 0-10 CCF/mo.            | \$ 1.92                |  | 3/4" meter              | \$ 8.89         | \$ 16.71      |
| Tier 2 11-40 CCF/mo.           | \$ 2.40                |  | 1" meter                | \$ 11.99        | \$ 25.01      |
| Tier 3 >40 CCF/mo.             | \$ 3.00                |  | 1 1/2" meter            | \$ 19.73        | \$ 45.78      |
| Multi-Family and Commercial    | \$ 2.19                |  | 2" meter                | \$ 29.03        | \$ 70.70      |
| Mule Creek State Prison        | \$ 1.61                |  | 3" meter                | \$ 53.80        | \$ 137.16     |
| Drytown, Plymouth, Jackson     | \$ 1.21                |  | 4" meter                | \$ 81.68        | \$ 211.92     |
|                                | <b>Untreated Water</b> |  | 6" meter                | \$ 159.11       | \$ 419.59     |
| Untreated Irrigation           | \$ 0.61                |  | 2" Indus./Public meter  | \$ 103.36       |               |
| Untreated Indus. & Publ. Agen. | \$ 0.61                |  | 3" Indus./Public meter  | \$ 202.47       |               |
|                                | <b>Pump. Surch.</b>    |  | 4" Indus./Public meter  | \$ 313.97       |               |
| CAWP Retail Customers Only (1) | \$ 0.79                |  | 6" Indus./Public meter  | \$ 623.70       |               |
|                                |                        |  | Mule Creek State Prison |                 | \$ 11,422     |
|                                |                        |  | Drytown CWD             |                 | \$ 642        |
|                                |                        |  | City of Plymouth        |                 | \$ 2,404      |
|                                |                        |  | City of Jackson         |                 | \$ 10,532     |



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# Proposed Debt Service Charges

| Monthly Debt Service Charges by Service Area |                                  |                                     |                                 |                            |                             |
|--|----------------------------------|-------------------------------------|---------------------------------|----------------------------|-----------------------------|
|  | CAWP-Retail Service Area         |                                     |                                 |                            |                             |
|  | Amador Water System Service Area | CAWP CFD Not Approved by Voters (2) | CAWP CFD Approved by Voters (2) | Lake Camanche Service Area | La Mel Heights Service Area |
| 5/8" meter                                   | \$ 14.90                         | \$ 32.47                            | \$ 12.39                        | \$ 4.83                    | \$ 31.20                    |
| 3/4" meter                                   | \$ 22.35                         | \$ 48.70                            | \$ 18.59                        | \$ 7.39                    | \$ 46.80                    |
| 1" meter                                     | \$ 37.26                         | \$ 81.17                            | \$ 30.98                        | \$ 12.32                   | \$ 78.00                    |
| 1 1/2" meter                                 | \$ 74.51                         | \$ 162.35                           | \$ 61.95                        | \$ 24.64                   | \$ 155.99                   |
| 2" meter                                     | \$ 119.22                        | \$ 259.75                           | \$ 99.13                        | \$ 39.43                   | \$ 249.58                   |
| 3" meter                                     | \$ 238.44                        | \$ 519.51                           | \$ 198.26                       |                            |                             |
| 4" meter                                     | \$ 372.56                        | \$ 811.73                           | \$ 309.77                       |                            |                             |
| 6" meter                                     | \$ 745.13                        | \$ 1,623.46                         | \$ 619.55                       |                            |                             |
| 2" Indus./Public meter                       | \$ 476.88                        |                                     |                                 |                            |                             |
| 3" Indus./Public meter                       | \$ 953.76                        |                                     |                                 |                            |                             |
| 4" Indus./Public meter                       | \$ 1,490.26                      |                                     |                                 |                            |                             |
| 6" Indus./Public meter                       | \$ 2,980.51                      |                                     |                                 |                            |                             |
| Mule Creek State Prison                      | \$ 11,922                        |                                     |                                 |                            |                             |
| Drytown CWD                                  | \$ 1,192                         |                                     |                                 |                            |                             |
| City of Plymouth                             | \$ 5,469                         |                                     |                                 |                            |                             |
| City of Jackson                              | \$ 19,373                        |                                     |                                 |                            |                             |



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## CAWP Gravity Supply Line

- Estimated cost = \$13.4 million
- Financed with approved USDA grant/loan
  - \$5.08M grant (38%) and \$8.33M loan (62%)
  - Loan repaid at 3.25% over 40 years
  - Annual loan payment ~ \$412,800 (P+I+R)
- Proposed CAWP CFD
  - Special tax would pay off USDA loan
- Eliminates extraordinary pump-related costs
- Lower water bills for CAWP customers



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## CAWP Pump Station Upgrades and Pipeline Replacement

- Estimated cost = \$9.7 million
- Bond or COP financing required
  - \$10.9M repaid over 30-years at 5.5%
  - Annual payment ~ \$750,000
- Repay Interim WDF loan of \$900,000
  - Annual payment ~ \$161,200
- Continues operation with high pump-related costs
- Higher water bills for CAWP customers



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## Typical Monthly Single Family Water Bills\*

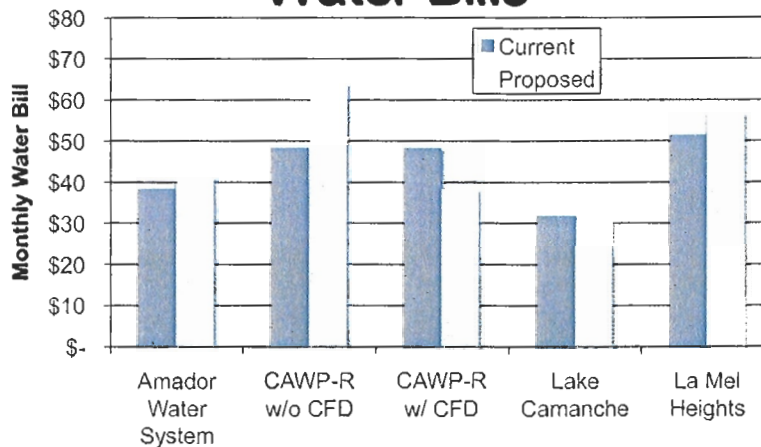
|                    | Amador Water System | CAWP-R w/o CFD | CAWP-R w/ CFD  | Lake Camanche  | La Mel Heights |
|--------------------|---------------------|----------------|----------------|----------------|----------------|
| Usage Charge       | \$13.44             | \$13.44        | \$13.44        | \$13.44        | \$13.44        |
| Service Charge     | \$12.55             | \$12.55        | \$12.55        | \$12.55        | \$12.55        |
| DS Charge          | \$14.90             | \$32.47        | \$12.39        | \$4.93         | \$31.20        |
| Pump. Surcharge    |                     | \$5.53         |                |                |                |
| <b>Bill Totals</b> | <b>\$40.89</b>      | <b>\$63.99</b> | <b>\$38.38</b> | <b>\$30.92</b> | <b>\$57.19</b> |

\* Assumes 5/8" meter and median monthly usage of 7 CCF/month.



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## Typical Monthly Single Family Water Bills\*

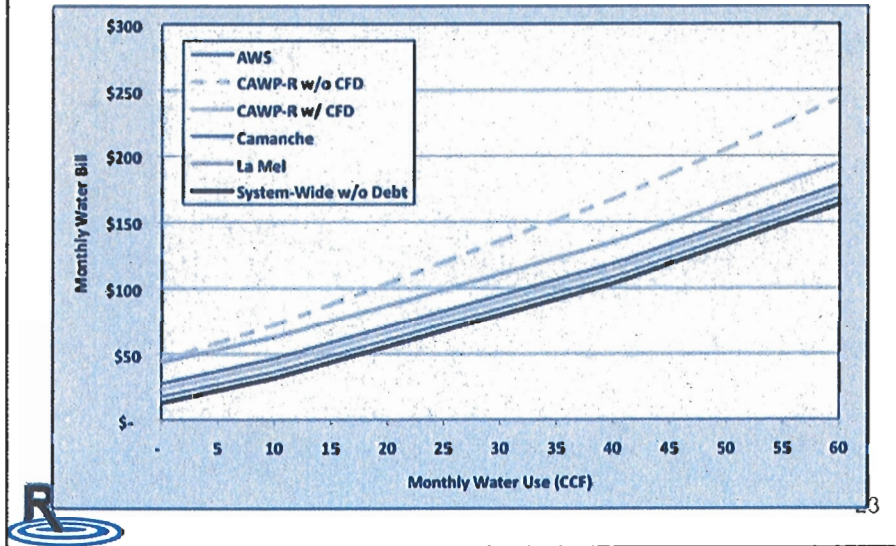


\* Assumes 5/8" meter and 7 CCF/month.



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## Proposed Single Family Water Bills



## Summary of Recommendations

- Adopt proposed new system-wide water rates for all water service areas
- Adopt both debt service charge schedules for CAWP-Retail service area
  - Implement one or the other based on outcome of CAWP CFD election
- Adopt provision to rescind CAWP-R pumping surcharge once GSL becomes operational
- Adopt procedures for annual inflationary adjustment to water usage rates and service charge

## **Benefits of Proposed System-Wide Water Rates**

- **Accurately reflects the cost of providing service**
- **Improves equity for all customers**
- **Improves Agency's financial stability**
- **Avoids more costly multiple, duplicative rate setting processes**
- **Reduces administrative and customer service costs**
- **Helps avoid the need for additional internal loans**
- **Supports more efficient budgeting and accounting practices**



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## **Next Steps**

- **Prepare and mail required Notice of Public Hearing and least 45 days prior to holding a public hearing**
- **Hold public hearing, consider comments, and tabulate any written protests**
- **Absent a majority protest, adopt new system-wide water rates and related recommendations**



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