

# **CRESCENTA VALLEY WATER DISTRICT**

**2700 Foothill Boulevard, La Crescenta, California**

**Agenda for the  
Adjourned Meeting of the Board of Directors  
of the Crescenta Valley Water District  
to be held on February 19, 2013 at 7:00 p.m.**

**Posted: February 15, 2013 at 3:00 p.m.**

**Any written materials distributed to the Board in connection with this agenda will be made available at the same time for public inspection at the District office located at the above address.**

## **Call to Order and Determination of Quorum**

## **Pledge of Allegiance**

## **Adoption of Agenda**

## **Public Comments**

**At this time the public shall have an opportunity to comment on any non-agenda item relevant to the subject matter jurisdiction of the Board. This opportunity is non-transferable and speakers are limited to one three (3) minute comment.**

## **Foothill Municipal Water District Report**

1. Report on activities at Foothill Municipal Water District.

## **Consent Calendar**

1. Consideration and approval of Minutes of the Regular Meeting February 5, 2013.
2. Ratification of Disbursements for January 2013.

## **Action Calendar**

**The public shall have an opportunity to comment on any action item as each item is considered by the Board prior to action being taken. This opportunity is non-transferable and speakers are limited to one two (2) minute comment.**

1. **Field Inspection Services for 8-Inch Water Main Replacement on the 3000 & 3100 Blocks of Santa Carlotta Street, Project E-911** Consideration and motion to authorize the General Manager to award a contract to Tetra Tech for field inspection services for construction of pipeline replacement on Santa Carlotta Street at a cost of \$48,280.
2. **FMWD/MWD Water Outage/Emergency Preparedness** – Discussion regarding the District's ability to deliver water during the upcoming MWD shutdown and after a catastrophic event.
3. **F/Y 2013/14 Preliminary Water/Wastewater Budget** – Discussion on preliminary FY 2013/14 water and wastewater budgets.

## **Information Items**

## **Written Communications to District**

## **Staff Reports**

### **Secretary-Treasurer**

1. Cash and Investments –February 19, 2013.

**General Manager**

1. Administrative Report.

**District Engineer**

1. Water Production Report –February 1 – 17, 2013.
2. Report on Administrative and Field Operations.

**Program Specialist**

1. Report on Water Conservation issues.

**Attorney**

1. Report on legal and related matters relevant to the District.

**Reports of Committees**

**Engineering Committee**

1. Consideration of engineering issues affecting the District.

**Finance Committee**

1. Consideration of finance issues affecting the District.

**Employee Relations Committee**

1. Consideration of employee relations issues affecting the District.

**Policy Committee**

1. Report of Policy Committee meeting held on February 15, 2013.

**Community Relations/Water Conservation Committee**

1. Consideration of Community Relations/Water Conservation Committee.

**Emergency Planning Committee**

1. Report of Emergency Planning Committee meeting held on February 15, 2013.

**Director's Oral Reports**

Report on issues, meetings, or activities attended by Directors.

**Closed Session**

- **Conference with Legal Counsel – Existing Litigation (\$54956.9)**
  - Crescenta Valley Water District vs. Exxon Mobil et al.

**Board Members' Request for Future Agenda Items**

**Adjournment**

# **CRESCENTA VALLEY WATER DISTRICT REGULAR MEETING, BOARD OF DIRECTORS**

**February 5, 2013**

Pursuant to the order of the Board of Directors of the Crescenta Valley Water District, made at the Adjourned Meeting of January 22, 2013, a Regular Meeting was held on February 5, 2013, at 7:00 p.m. at the District office at 2700 Foothill Blvd., La Crescenta, California, with President James D. Bodnar presiding.

At roll call, the following Directors and staff members were present:

|                             |                                                                                                                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Directors:</b>           | <b>James D. Bodnar<br/>Kerry D. Erickson<br/>Kenneth R. Putnam<br/>Kathleen M. Ross<br/>Judy L. Tejeda</b>                                                                                                                                 |
| <b>Attorney:</b>            | <b>Thomas S. Bunn</b>                                                                                                                                                                                                                      |
| <b>General Manager:</b>     | <b>Dennis A. Erdman</b>                                                                                                                                                                                                                    |
| <b>Secretary-Treasurer:</b> | <b>Ron L. Mitchell</b>                                                                                                                                                                                                                     |
| <b>District Engineer:</b>   | <b>David S. Gould</b>                                                                                                                                                                                                                      |
| <b>Others Present:</b>      | <b>Mark Hass, IT Manager<br/>Christy Scott, Program Manager<br/>Wendy Holloway, Customer Accounts Supervisor<br/>Larry Byers, Superintendent<br/>Dennis Maxwell, Sewer Maintenance Supervisor<br/>Bryan Jones, Construction Supervisor</b> |

## **PLEDGE OF ALLEGIANCE**

President Bodnar opened the meeting by asking Director Tejeda to lead the Board and staff in reciting the Pledge of Allegiance.

## **ADOPTION OF AGENDA**

It was moved by Director Putnam, seconded by Director Erickson and carried by a 5-0 vote that the Agenda for the Adjourned Meeting of February 5, 2013 be adopted as presented.

## **PUBLIC COMMENT** - None

## **FOOTHILL MUNICIPAL WATER DISTRICT REPORT** – None

## **CONSENT CALENDAR**

It was moved by Director Ross, seconded by Director Tejeda and carried by a 5-0 vote to approve the Consent Calendar which consisted of the following items:

**Minutes of the Adjourned Board Meeting held on January 22, 2013.**

**Consideration to authorize attendance by Director Tejeda at the Water Education Foundation Executive Briefing to be held March 14-15, 2013 in Sacramento.**

**Consideration to authorize attendance by a Director at the ACWA Legislative Symposium to be held on March 5, 2013 in Sacramento.**

**ACTION CALENDAR**

**8-Inch Water Main Replacement on the 3000 & 3100 Blocks of Santa Carlotta Street – Project E-911** – Mr. Gould report that on December 12, 2012 the Board authorized the General Manager to advertise for bids for the subject project. A mandatory pre-bid meeting was held on January 22, 2013, which was attended by seven (7) contractors. On January 30, 2012, at 2:00 p.m., the District opened and read the bid proposals for this project. J. DeSigio Construction of Baldwin Park was the lowest responsible bidder for the project at a cost of \$363,640 which was 2.5% lower than the engineer's estimate of \$373,000. Staff held a community meeting on January 31, 2013 to discuss the project and the construction schedule to minimize any inconvenience to the residents. Many of the residents from the 3100 Block of Santa Carlotta were present at the Board meeting and spoke regarding their desire to see the pavement repair done in a way that will maintain the good condition of the street, increase the useful pavement life, and be aesthetically pleasing without obvious cut marks. The Board discussed the project and the repaving of the private street. Mr. Gould said that where the trench is dug for the new pipeline and service laterals, the District will repave the trench. President Bodnar and Director Putnam both indicated that they live on a private street and asked legal counsel if they should recuse themselves from discussion. Counsel said that if there is no new policy being established, they do not need to recuse themselves. Staff answered questions related to additional costs related to disposal of asphalt containing petromat material and will inform the contractor about the presence of the material.

Following discussion:

**It was moved by Director Putnam, seconded by Director Erickson to reject all bids and send out a re-quote to include paving of the private street. Mr. Bunn said that since the motion included paving, he believed it was a conflict of interest for Directors Bodnar and Putnam. The motion was withdrawn.**

Following further discussion:

**It was moved by Director Bodnar, seconded by Director Tejeda and carried a 4-1 vote (Putnam) to award the contract for Project E-911, to replace the 8-inch Water Main on the 3000 & 3100 Block of Santa Carlotta to J. DeSigio Construction at a cost of \$363,640 plus a contingency of \$36,000 to cover the cost of unforeseen or additional work.**

**Purchase of Hydro Excavator** – Mr. Gould reported that as part of the Meter Replacement Program, field crews have been using the Vactor truck to clean the meter boxes of debris. This method has shown to reduce the time to clean the meter boxes and increase the amount of meter boxes that can be cleaned during a work day. Using the Vactor truck creates more wear and tear

on the truck and increases maintenance costs. Staff has seen a number of hydro excavators and vacuum trucks at past AWWA conferences which are used for the purpose of excavating dirt or heavy debris by a powerful suction vacuum and with hydro jetting. Staff contacted Pacific Tek about renting a hydro excavator unit for a month to see if the equipment could be used effectively by the crews. Pacific Tek had a PV-350 Hydro Excavator available for use at a cost of \$3,500 for the month. Crews started to use the hydro excavator in January to clean the meter boxes. A 2-man crew was able to clean out 105 meter boxes while working 4 hours each day over a 5-day period. In addition the sewer Vactor was available to clean sewers at the same time. Staff evaluated the need for adding this piece of equipment, including input provided from the field crews, the increased efficiency for cleaning the water meter boxes, the ability to use the unit for excavating in trenches, and for assistance with sewer overflows. It is staff's recommendation to purchase the used PV-350 Trailer Mounted Hydro Excavator from Pacific Tek for a cost of \$20,165.

Following discussion:

**It was moved by Director Ross, seconded by Director Erickson and carried a 5-0 vote to authorize the General Manager to purchase the PV-350 Hydro Excavator from Pacific Tek at a cost of \$20,165.**

**FY 13/14 Water and Wastewater Budget** – Mr. Erdman reported that staff has begun the process of preparing the FY 2013/14 Water and Wastewater Budget and had preliminary meetings with the Finance Committee. The budget process this year will be different than in previous years as the budget approval and proposed rate increases are to occur at the beginning of the fiscal year on July 1, 2013. Staff received an email from District customer Michael Chonos regarding a new tier structure for large lots. President Bodnar requested that this item be placed on the agenda so the full Board can discuss the request. If the Board is in favor of creating a new tier structure, staff will need to know soon so it can be incorporated into the budget for the FY 2013/14. Staff brought up some of the issues to be discussed by the Finance Committee or in a Board workshop. Some of the issues are distribution of MTBE settlement funds to reimburse the District for costs incurred, the level and cost of capital improvement projects for the next five years and whether to use settlement funds to increase levels of spending on capital improvement for the FY 2013/14, water rate increases needed to support the direction provided by the Board, and a 1 year or 2 year Proposition 218 notice. It was discussed by Board and staff to have a Full Board Workshop on February 26, 2013 at 6:00 PM. Mr. Chonos was present and again voiced his concerns to the Board about the plight of large lot customers. This matter was referred to the Policy Committee for more discussion.

**INFORMATION ITEMS** – Merced Sun Star: City of Merced settles MTBE case with oil companies. LA Times: Small water agencies come under increasing scrutiny. San Marino Tribune: Water shortage in Pasadena February 21-28. CV Blog: CV announces critical water alert. LA County Public Works: Accepting water quality fee protests by email. Pasadena Water & Power: Watering restrictions during MWD shutdown. Bloomberg News: CalPERS assets near a record \$260 billion in assets. ACWA: 2013 Legislative Symposium.

**WRITTEN COMMUNICATIONS TO DISTRICT** – ACWA President awards CVWD for Los Loss Ratio in Liability and Property program. E-mail from Michael Chonos concerning large lots.

## **REPORTS OF PERSONNEL**

**SECRETARY-TREASURER** – Mr. Mitchell provided the Summary of Cash and Investment report which contained the following items:

### **Investment Portfolio Summary – as of February 5, 2013:**

|                              |             |
|------------------------------|-------------|
| Cash Accounts                | \$365,255   |
| Great Pacific Securities     |             |
| Bond Debt Service Fund Acct  | \$263,931   |
| Local Agency Investment Fund | \$876,375   |
| Federal Farm Credit (78)     | \$500,065   |
| Federal Farm Credit (81)     | \$1,002,590 |
| Federal Farm Credit (83)     | \$500,845   |
| US Treasury (84)             | \$499,100   |
| Federal Farm Credit (85)     | \$601,014   |
| Federal Farm Credit (86)     | \$984,260   |
| Federal Farm Credit (87)     | \$498,005   |
| US Treasury (88)             | \$751,230   |

### **Fund Balances at December 31, 2012**

|            |                |
|------------|----------------|
| Water      | \$4,864,099.84 |
| Wastewater | \$3,448,949.00 |

**GENERAL MANAGER** – Mr. Erdman reported on the following employee anniversaries: Roy Spaulding at 22 years and Lindsay Spaulding at 1 year. On January 25<sup>th</sup>, our crews responded to a call of water leaking in the intersection of New York and Altura. The crew removed and replaced a four foot long section of the water main. This is the first main break of the New Year. Thanks to our crew who worked until 3:30 a.m. Saturday to get the repair done. He attended the quarterly meeting of the Public Water Agency Group at the Rowland Water District. He also reported the he served on a rating panel for the city of Glendale who is seeking to fill the position of Senior Environmental Program Manager. He and Ron Mitchell attended a training session sponsored by CalPELRA on labor matters focusing on the new provisions of the pension reform act passed last year by the State legislature. Mr. Erdman also reported that the District has received \$12,264 from Constellation Energy.

## **DISTRICIT ENGINEER**

**Water Production** – For the period of January 1 through January 31, 2013, water production averaged 97.3 million gallons per day, which is **12.5% less** than the daily average production of the same period in 2012. This is **7.3% less** from the daily average production of the previous five years.

|                                       |              |
|---------------------------------------|--------------|
| <b>Rainfall: January 1 – 31, 2012</b> | <b>2.21"</b> |
| <b>Season-to-date:</b>                | <b>9.26"</b> |

**Administrative and Field Operations** – Mr. Gould provided a memorandum and discussed the following:

**Rainfall Update** – 2.21” for January 2013. Rainfall total for 2012-13 is at 9.26”.

**Report on Engineering:**

**CIP Projects** – Pipeline 3000 & 3100 Block of Santa Carlotta – Award Contract – Construction starts March 4, 2013. Ocean View Chlorination Station – Submitted to LCF & CDPH for final approval. Ordunio Reservoir – Piping to LADWP – Work started by CVWD crews.

**Local Groundwater Assistance Grant Application** – Application under review. Announcement – Still waiting.

**Glendale** – No Report.

**FMWD Issues** – 8-day MWD shutdown – Set for February 21, 2013.

**ULARA** – No Report.

**Water Meter Replacement Program** – Replaced 590 meters. Complete Meter replacement 1970-1977. Starting on 1978-1980 from January – June 2013.

**Report on Administrative and Field Operations:**

**Well Status** – Current well capacity – Average 3.5 MGD.

**Booster Pumps** – No Report.

**Glenwood Nitrate Plant** – No Report.

**Water Quality** – Annual water sampling.

**Mills Plant** – No Report.

**Reservoirs/Booster Stations** – Encinal Booster A – Low efficiency 32%.

**MTBE Update** – MTBE levels in Wells below 1ppb.

**Field Maintenance and Operations update for December 18 – 31, 2012**

**Water lateral leaks & repairs**

- 3432 Encinal
- 2941 Mary
- 2417 Carol Park Place
- 2212 Maurice
- 2447 Orange
- 4111 New York

**Water Main Leaks** – 1/25/13 Main leak – New York & Altura.

**Fire Hydrant Replacement** – No Report.

**Developers Projects** – No Report.

**Valve Replacement** – No Report.

**General Maintenance** – Valve Exercising Program.

**SCADA/Telemetry System** – Installing small portable generators.

**Sewer Maintenance** – Continue with sewer cleaning.

**WATER CONSERVATION** – Ms. Scott reported on the preparations for the MWD shutdown on February 21-28, 2013. She also reported on the Cub Scout tour that was held on January 30, 2013.

**ATTORNEY** – Mr. Bunn reported on 2 Bills, one in the Assembly and one in the Senate, which would move responsibility for drinking water from the Department of Health to the State Water Resources Control Board. ACWA is watching this legislation and will take a position with this on Friday. The Board is advising to oppose the legislation.

**Engineering Committee** – Director Bodnar reported that the Committee had not met; however a meeting will be scheduled as needed.

**Finance Committee** – Director Tejeda reported that the Committee had not met; however a meeting will be scheduled as needed.

**Employee Relations Committee** – Director Erickson reported that the Committee had not met; however a meeting will be scheduled as needed.

**Policy Committee** – Director Putnam reported that the Committee will meet on February 15, 2013 at 8:00 am.

**Community Relations/Water Conservation Committee** – Director Ross reported that the Committee had not met; however a meeting will be scheduled as needed.

**Emergency Planning Committee** – Director Bodnar reported that the Committee will meet on February 15, 2013 at 8:00 am.

### **DIRECTORS ORAL REPORTS**

Director Ross – No Report

Director Erickson – Asked if the District will be participating in Arbor Day on April 20, 2013.

Director Bodnar – Reported that on January 25<sup>th</sup> he attended the Science Fair at Mountain Avenue School. The District provided materials and information and it was a good event. He also attended the Community meeting on January 31<sup>st</sup> on Santa Carlotta Street and said that David Gould and Christina Olmedo did a great job. He stated that he will attend the ASCE Infrastructure meeting on March 6<sup>th</sup> at Union Station.

Director Tejeda – Reported that she attended the Community meeting on January 31<sup>st</sup> on Santa Carlotta Street and stated that it was conducted very well and thanks to the staff for a job well done.

Director Putnam – On February 11 & 12, there is a conference on Alternative Water Resources for Southern California. There are two associations involved in this and they will be discussing enhancing storm water capture, ground water regulation, and desalination. However, he will not be attending.

### **CLOSED SESSION**

No session was held.

**ADJOURNMENT**

There being no other business to come before the Board, at 9:36 p.m., it was moved by Director Ross, seconded by Director Erickson and carried by a 5-0 vote that the meeting be adjourned to February 19, 2013 at 7:00 p.m.

**APPROVED**

---

James D. Bodnar  
President

---

Ron L. Mitchell  
Secretary-Treasurer

# CASH DISBURSEMENTS LIST

## JANUARY 2013



| Check#         | Check<br>Date | Payable To                        | Description                                              | Amount    |
|----------------|---------------|-----------------------------------|----------------------------------------------------------|-----------|
| Fund: 01 Water |               |                                   |                                                          |           |
| 0              | 1/22/2013     | Southern California Edison Co.    | Power Purchased 12/2012                                  | 16,610.16 |
| 27266          | 1/2/2013      | Regino Avalos                     | Cost to remove three cotton wood trees @ Ocean View Res. | 680.00    |
| 27267          | 1/2/2013      | Backflow Apparatus & Valve Co.    | Calibrate gauge for back flow testing                    | 358.78    |
| 27268          | 1/2/2013      | BC Laboratories, Inc              | Water Analysis                                           | 1,215.50  |
| 27269          | 1/2/2013      | Cargill, Inc - Salt Division      | 25 tons of salt for Nitrate Plant                        | 2,858.88  |
| 27270          | 1/2/2013      | Larissa Church                    | Refund Check                                             | 5.21      |
| 27271          | 1/2/2013      | Civiltec Engineering Inc          | M-897 Hydraulic Modeling Serives                         | 4,070.00  |
| 27272          | 1/2/2013      | Civiltec Engineering Inc          | E-733CS Chloramination Station at Williams Reservoir     | 3,264.98  |
| 27273          | 1/2/2013      | Contractor Compliance & Mont Inc. | E733CS Chloramination Station at Williams Reservoir      | 100.00    |
| 27274          | 1/2/2013      | Euroffins Eaton Analytical Inc.   | Water Analysis                                           | 148.00    |
| 27276          | 1/2/2013      | Grainger                          | Floor mats for entry doors                               | 803.86    |
| 27277          | 1/2/2013      | Great America Leasing Corp.       | Kyocera Copier Leasing                                   | 455.67    |
| 27278          | 1/2/2013      | Hamilton Tool & Engineering       | Cost to fabricate sockets for valve key                  | 440.44    |
| 27279          | 1/2/2013      | Harper & Associates Eng, Inc      | Dunsmore, Ordunio & Ocean View-Inspection of tanks       | 12,850.00 |
| 27280          | 1/2/2013      | Hercules Portable Power, Inc      | Semi Annual Service for 500KW Diesel Generator           | 270.00    |
| 27281          | 1/2/2013      | Joseph G. Pollard Co., Inc        | Misc Parts for Back Flow                                 | 91.56     |
| 27282          | 1/2/2013      | LA Dept Water and Power           | Power Purchased 12/2012                                  | 43.14     |
| 27283          | 1/2/2013      | Mijeong Park                      | Refund Check                                             | 31.80     |
| 27284          | 1/2/2013      | Paveco Construction Inc           | Striping at Glenwood                                     | 371.25    |
| 27285          | 1/2/2013      | Cesar Reinoso                     | Refund Check                                             | 60.80     |
| 27286          | 1/2/2013      | Jean-Paul Resurreccion            | Refund Check                                             | 22.32     |
| 27287          | 1/2/2013      | Rossmoyne Properties, Inc.        | Refund Check                                             | 5.64      |
| 27288          | 1/2/2013      | Royal Wholesale Electric          | Electrical overloads for Booster #A Mills Plant          | 627.44    |
| 27289          | 1/2/2013      | Rush Truck Center of Cal Inc,     | Unit #25-Cost to perform routine maintenance             | 1,166.38  |
| 27290          | 1/2/2013      | Tesco Controls, Inc               | Analog Input Board for RTU at Nitrate Plant              | 1,048.35  |
| 27291          | 1/2/2013      | Tri County Pump Company, Inc.     | E-912 Well 12 Rehabilitation                             | 45,222.30 |
| 27292          | 1/2/2013      | Underground Service Alert/SC      | Underground Notification 11/2012                         | 129.38    |
| 27293          | 1/2/2013      | Western States Surveying, Inc     | E-911 3000 & 3100 Blk Santa Carlotta                     | 1,615.00  |

| Check# | Check<br>Date | Payable To                       | Description                                             | Amount    |
|--------|---------------|----------------------------------|---------------------------------------------------------|-----------|
| 27294  | 1/3/2013      | Stephen P. Korejwo               | IT Support for 12/2012                                  | 1,462.50  |
| 27295  | 1/4/2013      | Ron Mitchell                     | Health Reimbursement                                    | 296.49    |
| 27296  | 1/8/2013      | Abe's Security Systems, Inc      | Misc Keys                                               | 34.33     |
| 27297  | 1/8/2013      | AES Water, Inc                   | Panel upgrades at Eagle Cyn, Shields, & Ed II Res.      | 13,714.79 |
| 27298  | 1/8/2013      | Ameripride Uniform Services, Inc | Uniform Rentals 12/2012                                 | 323.13    |
| 27299  | 1/8/2013      | Anawalt Lumber & Materials Co.   | Misc Hardware 12/2012                                   | 3.26      |
| 27300  | 1/8/2013      | Aqua - Metric Sales, Co.         | Sensus IPEARL meters - 100 - 1" and 3 - 1.5"            | 26,903.67 |
| 27301  | 1/8/2013      | ARC                              | Monthly Bond Plots                                      | 805.31    |
| 27302  | 1/8/2013      | Arrowhead Mountain Spring Wate   | Distilled Water                                         | 56.86     |
| 27303  | 1/8/2013      | AT&T Mobility                    | Cell Phone 2012                                         | 2,086.94  |
| 27304  | 1/8/2013      | Auto Hutch                       | Unit #5-Repaired engine misfire                         | 217.38    |
| 27305  | 1/8/2013      | BC Laboratories, Inc             | Water Analysis                                          | 2,510.00  |
| 27306  | 1/8/2013      | Natalie Bellissimo               | Mileage Reimbursement                                   | 66.42     |
| 27307  | 1/8/2013      | Burke, Williams, & Sorensen, LLP | Legal Services                                          | 708.00    |
| 27308  | 1/8/2013      | CA Dept. of Public Health-OCF    | Certification for Christina Olmedo                      | 70.00     |
| 27309  | 1/8/2013      | CA Dept. of Public Health-OCF    | Grade D2 Certification Renewal Rob Wood                 | 60.00     |
| 27310  | 1/8/2013      | CA-NV Section AWWA               | Cross Connection Certification Renewal Cory Whitman     | 80.00     |
| 27311  | 1/8/2013      | California Water Environment     | Collection System Maint. Certification Renewal Rob Wood | 220.00    |
| 27312  | 1/8/2013      | CalPers                          | Employee Contributions 12/2012                          | 8,395.80  |
| 27313  | 1/8/2013      | Cargill, Inc - Salt Division     | 25 tons of salt for Nitrate                             | 2,860.91  |
| 27314  | 1/8/2013      | Charter Communications           | Services 12/2012 at Glenwood                            | 3,658.50  |
| 27315  | 1/8/2013      | Choice Pest Control              | Monthly Service 3415 Honolulu                           | 243.75    |
| 27316  | 1/8/2013      | City of Glendale Water & Power   | Power Purchased 2012                                    | 35,340.53 |
| 27317  | 1/8/2013      | Colonial Life & Accidents Ins.   | Employee Paid Insurance                                 | 183.61    |
| 27318  | 1/8/2013      | Crescenta Valley Tow Service     | Tow Unit 23B from Highridge to Auto Hutch               | 41.25     |
| 27319  | 1/8/2013      | Curtis 1000, Inc.                | Printing and Mailing Pipeline                           | 1,422.84  |
| 27320  | 1/8/2013      | Euroffns Eaton Analytical Inc.   | Water Analysis                                          | 484.00    |
| 27321  | 1/8/2013      | Euroffns Eaton Analytical Inc.   | Water Analysis                                          | 358.00    |
| 27322  | 1/8/2013      | Finish Line Motro Sports Inc.    | 20 - hour meters for the new portable generators        | 20,520.03 |
| 27323  | 1/8/2013      | First Choice                     | Coffee Service Office                                   | 81.97     |
| 27324  | 1/8/2013      | Sargis Garibyan                  | Refund Check                                            | 99.28     |
| 27325  | 1/8/2013      | General Pump Company, Inc        | E-913 Rosemont Booster #23 Rehab                        | 3,170.60  |
| 27326  | 1/8/2013      | Essex Harvey                     | Refund Check                                            | 20.62     |
| 27327  | 1/8/2013      | Beverly Hays                     | Claim for Property Damage                               | 157.52    |

| Check# | Check<br>Date | Payable To                       | Description                                                    | Amount    |
|--------|---------------|----------------------------------|----------------------------------------------------------------|-----------|
| 27328  | 1/8/2013      | Wendy Holloway                   | Mileage Reimbursement                                          | 11.65     |
| 27329  | 1/8/2013      | Home Depot Credit Services       | Misc Hardware 12/2012                                          | 612.27    |
| 27330  | 1/8/2013      | Joseph A. Huerta                 | Mileage Reimbursement for 11/2012                              | 25.21     |
| 27331  | 1/8/2013      | J&R Concrete Products, Inc       | 44 - 5-1/4 meter box metal covers with hinged lids             | 9,330.75  |
| 27332  | 1/8/2013      | Just Tires, Inc.                 | Repair tire for Unit 21                                        | 11.41     |
| 27333  | 1/8/2013      | Myung Kim                        | Refund Check                                                   | 21.83     |
| 27334  | 1/8/2013      | Lillestrand Leadership Cons. Inc | Consulting Services 10/2012                                    | 2,215.80  |
| 27335  | 1/8/2013      | Lock-Up Inc.                     | Labor to repair bottom gate                                    | 131.25    |
| 27336  | 1/8/2013      | Mad Science of Los Angeles       | Class at Valley View on Water Conservation                     | 615.00    |
| 27337  | 1/8/2013      | Dennis A. Maxwell, Jr            | Certification Renewal T-1 Dennis Maxwell                       | 55.00     |
| 27338  | 1/8/2013      | N.E.C. Electric Inc.             | Booster #32 Maintenance @ Glenwood                             | 2,312.09  |
| 27339  | 1/8/2013      | Niagara Conservation Corp.       | Shower Heads, metal hose nozzles, squirt guns                  | 4,187.12  |
| 27340  | 1/8/2013      | O'Reilly Auto Parts              | Misc Supplies 12/2012                                          | 33.13     |
| 27341  | 1/8/2013      | Office Depot - Credit Plan       | Misc Supplies 12/2012                                          | 400.79    |
| 27342  | 1/8/2013      | Orchard Supply Hardware          | Misc Hardware 12/2012                                          | 790.11    |
| 27343  | 1/8/2013      | Paveco Construction Inc          | Various locations-see list no. 73Y                             | 6,243.29  |
| 27344  | 1/8/2013      | Ramco                            | Crushed Misc Base 12/2012                                      | 837.79    |
| 27345  | 1/8/2013      | Red Wing Shoe Store              | Safety Boots Roy Spaulding - Ricardo Sandoval - Carlos Alvarez | 526.43    |
| 27346  | 1/8/2013      | Royal Wholesale Electric         | Various electrical tools                                       | 146.34    |
| 27347  | 1/8/2013      | Sawyer Petroleum                 | 350 gallons of red dye diesel fuel for G                       | 1,019.08  |
| 27348  | 1/8/2013      | Staples Business Advantage       | Misc Office Supplies                                           | 67.13     |
| 27349  | 1/8/2013      | Sully-Miller Contracting Co.     | 5 tons of cold mix                                             | 537.73    |
| 27350  | 1/8/2013      | The Gas Company                  | Gas Purchased Plant 12/2012                                    | 321.32    |
| 27351  | 1/8/2013      | Tri County Pump Company, Inc.    | E-912 Well #12 Rehabilitation                                  | 5,024.70  |
| 27352  | 1/8/2013      | Tri-Xecutex Corp                 | Security Alarm Monitoring                                      | 178.88    |
| 27353  | 1/8/2013      | Univar USA Inc                   | 740 gallons of sodium hypochlorite for Mills Plant             | 2,210.74  |
| 27354  | 1/8/2013      | Vision Service Plan Co-(CA)      | Vision Insurance for January 2013                              | 224.07    |
| 27355  | 1/8/2013      | Waste Management - Sun Valley    | Diposal Service Office                                         | 1,166.42  |
| 27356  | 1/8/2013      | Water Environment Federation     | Membership Renewal for Brook Yared                             | 228.00    |
| 27357  | 1/8/2013      | Water Wise Consulting, Inc       | Water Audits Various Locations                                 | 700.00    |
| 27358  | 1/8/2013      | Western Water Works              | 6 -meter reading sticks and a Cla-valve for a booster          | 1,194.51  |
| 27359  | 1/8/2013      | Brook Yared                      | Mileage Reimbursement                                          | 149.17    |
| 27360  | 1/16/2013     | ACWA/Joint Powers Ins. Authori   | Worker's Compensation from 10/1/12 to 12/31/12                 | 26,185.00 |
| 27361  | 1/16/2013     | ACWA/JPIA                        | Health and Dental for 02/2013                                  | 33,206.78 |

| Check# | Check<br>Date | Payable To                       | Description                                                      | Amount     |
|--------|---------------|----------------------------------|------------------------------------------------------------------|------------|
| 27363  | 1/16/2013     | Airgas USA, LLC                  | Welding Helmet                                                   | 147.18     |
| 27364  | 1/16/2013     | All American Landscape Co.       | Landscape at Main Office 01/2013                                 | 217.50     |
| 27365  | 1/16/2013     | American Water Works Assoc.      | Membership Renewal for Raymond Dodge                             | 73.50      |
| 27366  | 1/16/2013     | ARC                              | E-911 Plans & Specs for 3000/3100 Blk Santa Carlotta             | 1,307.84   |
| 27367  | 1/16/2013     | Auto Hutch                       | Unit #23B-repair fuel leak, replace radiator, replace bulbs      | 899.89     |
| 27368  | 1/16/2013     | Bonnets Equipment Rentals        | Rentals for 12/2012                                              | 24.55      |
| 27369  | 1/16/2013     | CA Dept. of Public Health-OCP    | Operator Certification Renewal Dave Spain                        | 60.00      |
| 27370  | 1/16/2013     | CalPELRA                         | Registration for Academy 8 - Ron Mitchell                        | 258.75     |
| 27371  | 1/16/2013     | Civiltec Engineering Inc         | E-733 Chlorination Station at Williams Reservoir                 | 4,863.20   |
| 27372  | 1/16/2013     | Coastline Equipment Co.          | Hydraulic hammer for Unit #21                                    | 4,078.60   |
| 27373  | 1/16/2013     | County Sanitation District #2    | Inert Loads for 12/2012                                          | 1,401.14   |
| 27374  | 1/16/2013     | Culver Company, Inc              | 1,000 - Droplet Beanie's, fish sponges, pencils, stickers        | 6,593.94   |
| 27375  | 1/16/2013     | Dell Marketing L.P.              | Anti-virus and security software                                 | 966.53     |
| 27376  | 1/16/2013     | Do-it Center                     | Misc Hardware 12/2012                                            | 90.86      |
| 27377  | 1/16/2013     | EmbroidMe                        | Uniform T-Shirts for Isi                                         | 81.83      |
| 27378  | 1/16/2013     | Foothill Car Wash, Lube & Oil    | Oil Change for Unit 1                                            | 60.05      |
| 27379  | 1/16/2013     | Foothill Municipal Water         | Water Delivery                                                   | 125,067.45 |
| 27380  | 1/16/2013     | Great America Leasing Corp.      | Kyocera Copier Monthly Lease                                     | 457.76     |
| 27381  | 1/16/2013     | HSBC Business Solutions          | Misc Supplies Plant                                              | 480.95     |
| 27382  | 1/16/2013     | Hutchinson & Bloodgood           | Compcon Consulting 12/2012                                       | 135.00     |
| 27383  | 1/16/2013     | Gwendola M & Thomas T Johnson    | Refund Check                                                     | 29.76      |
| 27385  | 1/16/2013     | Landscape Warehouse III, Inc.    | Misc Supplies for Egel Scout Project @ Encinal/Pennsylvania      | 696.09     |
| 27386  | 1/16/2013     | Layne Christensen Co             | Rosemont#23,pull pump, inspect & provide                         | 3,214.57   |
| 27387  | 1/16/2013     | Lock-Up Inc.                     | Cost for four new entry locks for the Glenwood Plant             | 1,125.00   |
| 27388  | 1/16/2013     | Mad Science of Los Angeles       | Water Conservation Class at Dunsmore Elementary                  | 615.00     |
| 27389  | 1/16/2013     | Newegg, Inc.                     | Sony Vaio Lap Top for GIS                                        | 946.43     |
| 27390  | 1/16/2013     | Paper Cuts, Inc                  | Monthly Paper Shredding                                          | 3.75       |
| 27391  | 1/16/2013     | Vahik Pezeshkian                 | Turf Rebate                                                      | 660.00     |
| 27392  | 1/16/2013     | Rassac Air Systems               | Repairs made to Main Office Heating System                       | 685.08     |
| 27393  | 1/16/2013     | Royal Wholesale Electric         | Overload relay, dpix recpt plates, circuit breaker, outlet boxes | 7,097.02   |
| 27394  | 1/16/2013     | Scotty's & Sons, Inc             | Chisels and diamond blades                                       | 274.22     |
| 27395  | 1/16/2013     | Shell                            | Gas Purchased 12/2012                                            | 1,549.99   |
| 27396  | 1/16/2013     | Star Brite Bldg. Maintenance Inc | Janitorial Service                                               | 618.75     |
| 27397  | 1/16/2013     | Toro's Lawnmower & Garden        | (2) 2.5 gallon gas cans                                          | 28.22      |

| Check# | Check<br>Date | Payable To                       | Description                                                         | Amount   |
|--------|---------------|----------------------------------|---------------------------------------------------------------------|----------|
| 27398  | 1/16/2013     | Underground Service Alert/SC     | Underground Notification for 12/2012                                | 113.62   |
| 27399  | 1/16/2013     | UPS                              | Shipping Charges Plant                                              | 15.74    |
| 27400  | 1/16/2013     | Wells Fargo Card Services        | Erdman: ACWA Fall Conf (hotel, reg), LA Times subscription          | 591.00   |
| 27401  | 1/16/2013     | Wells Fargo Card Services        | Gould: SCADA lunch meeting                                          | 73.92    |
| 27402  | 1/16/2013     | Wells Fargo Card Services        | Mitchell: Calpelra Conf (hotel, gas, parking, meals)                | 560.64   |
| 27403  | 1/16/2013     | Wells Fargo Card Services        | Scott: 2 safety jackets, supplies                                   | 121.93   |
| 27404  | 1/16/2013     | Western Water Works              | 3/4"x 2" (m) meter cplg, ball valves, adaptors, clamps for stock    | 4,245.92 |
| 27405  | 1/22/2013     | Airgas USA, LLC                  | Monthly Cylinder Rental                                             | 150.11   |
| 27406  | 1/22/2013     | AT&T                             | PRI Usage charges 12/2012                                           | 1,597.85 |
| 27407  | 1/22/2013     | AT&T Mobility                    | Cell Phone Charges 12/08/12 to 01/07/13                             | 1,719.02 |
| 27408  | 1/22/2013     | BC Laboratories, Inc             | Water Analysis                                                      | 716.50   |
| 27409  | 1/22/2013     | BC Laboratories, Inc             | Water Analysis                                                      | 1,099.00 |
| 27410  | 1/22/2013     | California Water Environment     | Collections Systems Boot Camp 203 Registration Larry Byers          | 175.00   |
| 27411  | 1/22/2013     | Cargill, Inc - Salt Division     | 24.69 tons of salt for Nitrate Plant                                | 2,871.87 |
| 27412  | 1/22/2013     | City of Glendale Fire Dept.      | Annual Certified Unified Permit 2012/13 - hazardous materials       | 1,174.00 |
| 27414  | 1/22/2013     | Kathryn Dwyer                    | Refund Check                                                        | 12.18    |
| 27415  | 1/22/2013     | Eurofins Eaton Analytical Inc.   | Water Analysis                                                      | 414.00   |
| 27416  | 1/22/2013     | Grainger                         | Electrical tools, overalls, storage cabinet                         | 2,882.55 |
| 27417  | 1/22/2013     | Houston Irrigation Services, LLC | Eighteen backflow theft prevention cages                            | 7,340.63 |
| 27418  | 1/22/2013     | Kristin Knauff                   | Refund Check                                                        | 14.18    |
| 27419  | 1/22/2013     | L.A. County Dept. Public Works   | 100 No Parking Signs                                                | 25.00    |
| 27420  | 1/22/2013     | LA Dept Water and Power          | Power Purchased 12/11/12 to 01/12/13                                | 43.33    |
| 27421  | 1/22/2013     | Lagerlof, Senecal, Gosney & Kr   | Legal Services 12/2012                                              | 2,437.50 |
| 27422  | 1/22/2013     | Lincoln Financial Group          | Life Insurance 02/2013                                              | 690.00   |
| 27423  | 1/22/2013     | Montrose 3, LLC                  | Refund of D-12-34                                                   | 3,240.00 |
| 27424  | 1/22/2013     | Sawyer Petroleum                 | 55 gal. T32 well dripper oil                                        | 852.86   |
| 27425  | 1/22/2013     | Zaven Shirikjian                 | Refund Check                                                        | 49.00    |
| 27426  | 1/22/2013     | Karen Snyder                     | Refund Check                                                        | 10.09    |
| 27427  | 1/22/2013     | Sully-Miller Contracting Co.     | 5.05 tons cold patch                                                | 544.93   |
| 27428  | 1/22/2013     | Univar USA Inc                   | 915 gallons of sodium hypochlorite                                  | 1,542.54 |
| 27429  | 1/22/2013     | Vortex Industries, INC.          | Repair to Fire Door at Glenwood                                     | 184.59   |
| 27431  | 1/22/2013     | Wells Fargo Card Services        | Hass: Monthly recurring charges, dinner for crews working main leak | 215.90   |
| 27432  | 1/22/2013     | Chun Woo                         | Refund Check                                                        | 67.91    |
| 27433  | 1/22/2013     | Christy Joana Scott              | Health Reimbursement                                                | 244.80   |

| Check#                  | Check<br>Date | Payable To                            | Description                                                       | Amount        |
|-------------------------|---------------|---------------------------------------|-------------------------------------------------------------------|---------------|
| 27434                   | 1/28/2013     | Aflac                                 | Employee Paid Insurance                                           | 1,174.72      |
| 27435                   | 1/28/2013     | AT&T                                  | PRI Line charges 12/2012                                          | 252.96        |
| 27437                   | 1/28/2013     | CA-NV Section AWWA                    | AWWA Sustainability Conference - Mark Hass                        | 445.00        |
| 27438                   | 1/28/2013     | CA-NV Section AWWA                    | AWWA Sustainability Conference - David Gould                      | 465.00        |
| 27439                   | 1/28/2013     | CalPERS                               | Payoff the PERS Side Fund                                         | 432,595.20    |
| 27440                   | 1/28/2013     | Cannon                                | M-916 FMWD Emergency Generator Peer Review                        | 7,280.63      |
| 27441                   | 1/28/2013     | Cash-Petty Cash                       | Reimburse Petty Cash                                              | 366.05        |
| 27442                   | 1/28/2013     | Centro Print Solutions                | 1099 Forms                                                        | 25.80         |
| 27443                   | 1/28/2013     | Matt-Chlor Inc                        | 2 - foot valve assemblies, 2 - suction valves, 4-injection valves | 1,092.84      |
| 27444                   | 1/28/2013     | McGraw-Hill Construction Publ.        | Advertise for Bids for E-911 - Santa Carlotta Main Replacement    | 303.17        |
| 27445                   | 1/28/2013     | New Image Landscape & Design          | Monthly Landscape                                                 | 827.50        |
| 27446                   | 1/28/2013     | Northern Safety Co., Inc              | 4(10 pk.bags) of welding respirators                              | 207.56        |
| 27447                   | 1/28/2013     | Thomas M. Regan                       | M-781 Professional Consulting Service for MTBE                    | 8,031.55      |
| 27449                   | 1/28/2013     | Scotty's & Sons, Inc                  | Repair Bosch hammer drill                                         | 109.80        |
| 27450                   | 1/28/2013     | Tyler Smith                           | Cost to clean vehicles                                            | 327.00        |
| 27451                   | 1/29/2013     | CA Dept. of Health Services           | Grade D2 Renewal Christina Olmedo                                 | 80.00         |
| 27452                   | 1/29/2013     | Municipal Maintenance Equipment, Inc. | Used 2006 GO-4 Interceptor III                                    | 20,620.00     |
| Fund: 02 Wastewater     |               |                                       |                                                                   |               |
| 0                       | 1/22/2013     | Southern California Edison Co.        | Power Purchased 12/2012                                           | 208.82        |
| 27275                   | 1/2/2013      | Fred M. Boerner Motor Co.             | Replace broken serpentine belt on Unit #31                        | 414.15        |
| 27276                   | 1/2/2013      | Grainger                              | Floor mats for entry doors                                        | 373.17        |
| 27277                   | 1/2/2013      | Great America Leasing Corp.           | Kyocera Copier Leasing                                            | 455.66        |
| 27278                   | 1/2/2013      | Hamilton Tool & Engineering           | Cost to fabricate sockets for valve key                           | 146.81        |
| 27284                   | 1/2/2013      | Pavoco Construction Inc               | Striping at Glenwood                                              | 123.75        |
| 27289                   | 1/2/2013      | Rush Truck Center of Cal Inc,         | Unit #25-Cost to perform routine maintenance                      | 388.79        |
| 27292                   | 1/2/2013      | Underground Service Alert/SC          | Underground Notification 11/2012                                  | 43.12         |
| 27294                   | 1/3/2013      | Stephen P. Korejwo                    | IT Support for 12/2012                                            | 1,462.50      |
| 27295                   | 1/4/2013      | Ron Mitchell                          | Health Reimbursement                                              | 197.66        |
| 27296                   | 1/8/2013      | Abe's Security Systems, Inc           | Misc Keys                                                         | 34.32         |
| 27298                   | 1/8/2013      | Ameripride Uniform Services, Inc      | Uniform Rentals 12/2012                                           | 107.71        |
| 27299                   | 1/8/2013      | Anawalt Lumber & Materials Co.        | Misc Hardware 12/2012                                             | 1.08          |
| Total for Fund:01 Water |               |                                       |                                                                   | \$ 997,199.21 |

| Check# | Check Date | Payable To                       | Description                                                    | Amount    |
|--------|------------|----------------------------------|----------------------------------------------------------------|-----------|
| 27301  | 1/8/2013   | ARC                              | Monthly Bond Plots                                             | 268.44    |
| 27303  | 1/8/2013   | AT&T Mobility                    | Cell Phone 2012                                                | 695.64    |
| 27304  | 1/8/2013   | Auto Hutch                       | Unit #5-Repaired engine misfire                                | 72.46     |
| 27306  | 1/8/2013   | Natalie Bellissimo               | Mileage Reimbursement                                          | 8.41      |
| 27307  | 1/8/2013   | Burke, Williams, & Sorensen, LLP | Legal Services thru 11/2012                                    | 236.00    |
| 27312  | 1/8/2013   | CalPers                          | Employee Contributions 12/2012                                 | 5,597.20  |
| 27314  | 1/8/2013   | Charter Communications           | Services 12/2012 at Glenwood                                   | 1,219.50  |
| 27315  | 1/8/2013   | Choice Pest Control              | Monthly Service 3240 Mills                                     | 65.25     |
| 27316  | 1/8/2013   | City of Glendale Water & Power   | Power Purchased 2012                                           | 11.93     |
| 27318  | 1/8/2013   | Crescenta Valley Tow Service     | Tow Unit 238 from Highridge to Auto Hutch                      | 13.75     |
| 27319  | 1/8/2013   | Curtis 1000, Inc.                | Printing and Mailing Pipeline                                  | 1,422.84  |
| 27323  | 1/8/2013   | First Choice                     | Coffee Service Office                                          | 81.97     |
| 27328  | 1/8/2013   | Wendy Holloway                   | Mileage Reimbursement                                          | 3.89      |
| 27329  | 1/8/2013   | Home Depot Credit Services       | Misc Hardware 12/2012                                          | 204.09    |
| 27332  | 1/8/2013   | Just Tires, Inc.                 | Repaire tire for Unit 21                                       | 3.80      |
| 27334  | 1/8/2013   | Lillestrand Leadership Cons. Inc | Consulting Services 10/2012                                    | 738.60    |
| 27335  | 1/8/2013   | Lock-Up Inc.                     | Labor to repair bottom gate.                                   | 43.75     |
| 27340  | 1/8/2013   | O'Reilly Auto Parts              | Misc Supplies 12/2012                                          | 16.30     |
| 27341  | 1/8/2013   | Office Depot - Credit Plan       | Misc Supplies 12/2012                                          | 281.16    |
| 27342  | 1/8/2013   | Orchard Supply Hardware          | Misc Hardware 12/2012                                          | 351.26    |
| 27345  | 1/8/2013   | Red Wing Shoe Store              | Safety Boots Roy Spaulding - Ricardo Sandoval - Carlos Alvarez | 175.48    |
| 27346  | 1/8/2013   | Royal Wholesale Electric         | Various electrical tools                                       | 146.34    |
| 27347  | 1/8/2013   | Sawyer Petroleum                 | 350 gallons of red dye diesel fuel for Glenwood                | 339.70    |
| 27348  | 1/8/2013   | Staples Business Advantage       | Misc Office Supplies                                           | 67.12     |
| 27350  | 1/8/2013   | The Gas Company                  | Gas Purchased Plant 12/2012                                    | 107.10    |
| 27352  | 1/8/2013   | Tri-Xecutex Corp                 | Security Alarm Monitoring                                      | 59.62     |
| 27354  | 1/8/2013   | Vision Service Plan Co-(CA)      | Vision Insurance for January 2013                              | 149.37    |
| 27355  | 1/8/2013   | Waste Management - Sun Valley    | Diposal Service Office                                         | 178.23    |
| 27359  | 1/8/2013   | Brook Yared                      | Mileage Reimbursement                                          | 42.32     |
| 27360  | 1/16/2013  | ACWA/Joint Powers Ins. Authori   | Worker's Compensation from 10/1/12 to 12/31/12                 | 17,456.00 |
| 27361  | 1/16/2013  | ACWA/JPIA                        | Health and Dental for 02/2013                                  | 22,137.85 |
| 27362  | 1/16/2013  | ADS, LLC                         | Monthly Monitoring                                             | 1,580.00  |
| 27363  | 1/16/2013  | Airgas USA, LLC                  | Welding Helmet                                                 | 147.17    |
| 27364  | 1/16/2013  | All American Landscape Co.       | Landscape at Main Office 01/2013                               | 72.50     |

| Check# | Check<br>Date | Payable To                       | Description                                                 | Amount     |
|--------|---------------|----------------------------------|-------------------------------------------------------------|------------|
| 27365  | 1/16/2013     | American Water Works Assoc.      | Membership Renewal for Raymond Dodge                        | 24.50      |
| 27367  | 1/16/2013     | Auto Huth                        | Unit #23B-repair fuel leak, replace radiator, replace bulbs | 299.95     |
| 27368  | 1/16/2013     | Bonniers Equipment Rentals       | Rentals for 12/2012                                         | 24.55      |
| 27370  | 1/16/2013     | CalPELRA                         | Registration for Academy 8 - Ron Mitchell                   | 86.25      |
| 27372  | 1/16/2013     | Coastline Equipment Co.          | Hydraulic hammer for Unit #21                               | 4,070.00   |
| 27375  | 1/16/2013     | Dell Marketing L.P.              | Anti-virus and security software                            | 322.16     |
| 27376  | 1/16/2013     | Do-it Center                     | Misc Hardware 12/2012                                       | 4.12       |
| 27377  | 1/16/2013     | EmbroidMe                        | Uniform T-Shirts for Isi                                    | 27.27      |
| 27378  | 1/16/2013     | Foothill Car Wash, Lube & Oil    | Oil Change for Unit 1                                       | 20.01      |
| 27380  | 1/16/2013     | Great America Leasing Corp.      | Kyocera Copier Monthly Lease                                | 457.75     |
| 27381  | 1/16/2013     | HSBC Business Solutions          | Misc Supplies Plant                                         | 480.95     |
| 27382  | 1/16/2013     | Hutchinson & Bloodgood           | Compcon Consulting 12/2012                                  | 45.00      |
| 27384  | 1/16/2013     | KR Nida Companies                | Repair Handheld Spot Light for Unit 31                      | 78.26      |
| 27387  | 1/16/2013     | Lock-Up Inc.                     | Cost for four new entry locks for the Glenwood Plant        | 375.00     |
| 27389  | 1/16/2013     | Newegg, Inc.                     | Sony Vaio Lap Top for GIS                                   | 315.47     |
| 27390  | 1/16/2013     | Paper Cuts, Inc                  | Monthly Paper Shredding                                     | 1.25       |
| 27392  | 1/16/2013     | Rassac Air Systems               | Repairs made to Main Office Heating System                  | 228.36     |
| 27394  | 1/16/2013     | Scotty's & Sons, Inc             | Chisels and diamond blades                                  | 274.21     |
| 27395  | 1/16/2013     | Shell                            | Gas Purchased 12/2012                                       | 516.66     |
| 27396  | 1/16/2013     | Star Brite Bldg. Maintenance Inc | Janitorial Service                                          | 206.25     |
| 27397  | 1/16/2013     | Toro's Lawnmower & Garden        | (2) 2.5 gallon gas cans                                     | 28.22      |
| 27398  | 1/16/2013     | Underground Service Alert/SC     | Underground Notification for 12/2012                        | 37.88      |
| 27399  | 1/16/2013     | UPS                              | Shipping Charges Plant                                      | 15.74      |
| 27400  | 1/16/2013     | Wells Fargo Card Services        | Erdman: ACWA Fall Conf (hotel, reg), LA Times subscription  | 196.99     |
| 27401  | 1/16/2013     | Wells Fargo Card Services        | Gould: SCADA lunch meeting                                  | 5.67       |
| 27402  | 1/16/2013     | Wells Fargo Card Services        | Mitchell: Calpelra Conf (hotel, gas, parking, meals)        | 186.86     |
| 27403  | 1/16/2013     | Wells Fargo Card Services        | Scott: 2 safety jackets, supplies                           | 40.65      |
| 27405  | 1/22/2013     | Airgas USA, LLC                  | Monthly Cylinder Rental                                     | 150.11     |
| 27406  | 1/22/2013     | AT&T                             | PRI Usage charges 12/2012                                   | 531.63     |
| 27407  | 1/22/2013     | AT&T Mobility                    | Cell Phone Charges 12/08/12 to 01/07/13                     | 585.85     |
| 27413  | 1/22/2013     | City of Los Angeles              | Capital/O&M Portion of ASSSC to Los Angeles                 | 133,565.00 |
| 27416  | 1/22/2013     | Grainger                         | Electrical tools, overalls, storage cabinet                 | 376.52     |
| 27419  | 1/22/2013     | L.A. County Dept. Public Works   | 100 No Parking Signs                                        | 25.00      |
| 27421  | 1/22/2013     | Lagerlof, Senecal, Gosney & Kr   | Legal Services 12/2012                                      | 1,075.00   |

| Check#                       | Check<br>Date | Payable To                   | Description                                                         | Amount          |
|------------------------------|---------------|------------------------------|---------------------------------------------------------------------|-----------------|
| 27422                        | 1/22/2013     | Lincoln Financial Group      | Life Insurance 02/2013                                              | 460.00          |
| 27429                        | 1/22/2013     | Vortex Industries, INC.      | Repair to Fire Door at Glenwood                                     | 61.53           |
| 27430                        | 1/22/2013     | Weight Watchers              | Refund Check                                                        | 25.62           |
| 27431                        | 1/22/2013     | Wells Fargo Card Services    | Hass: Monthly recurring charges, dinner for crews working main leak | 34.49           |
| 27433                        | 1/22/2013     | Christy Joana Scott          | Health Reimbursement                                                | 163.20          |
| 27435                        | 1/28/2013     | AT&T                         | PRI Line charges 12/2012                                            | 84.32           |
| 27436                        | 1/28/2013     | AW Direct, Inc               | Three emergency work lights for Unit #31                            | 376.44          |
| 27439                        | 1/28/2013     | CalPers                      | Payoff the PERS Side Fund                                           | 288,396.80      |
| 27441                        | 1/28/2013     | Cash-Petty Cash              | Reimburse Petty Cash                                                | 105.20          |
| 27442                        | 1/28/2013     | Centro Print Solutions       | 1099 Forms                                                          | 25.80           |
| 27445                        | 1/28/2013     | New Image Landscape & Design | Monthly Landscape                                                   | 152.50          |
| 27446                        | 1/28/2013     | Northern Safety Co., Inc     | 4(10 pk.bags) of welding respirators                                | 69.18           |
| 27448                        | 1/28/2013     | Robert Brkich Const. Corp    | S-914 Repalce sewer main and lateral 3130 Harmony Pl.               | 9,350.00        |
| 27449                        | 1/28/2013     | Scotty's & Sons, Inc         | Repair Bosch hammer drill                                           | 109.80          |
| 27450                        | 1/28/2013     | Tyler Smith                  | Cost to clean vehicles                                              | 109.00          |
| Total for Fund:02 Wastewater |               |                              |                                                                     | \$ 502,155.55   |
| Grand Total                  |               |                              |                                                                     | \$ 1,499,354.76 |

# **PAYROLL REPORT** **January-13**

|                              |    |         |
|------------------------------|----|---------|
| Directors.....               | \$ | 1,260   |
| Office Regular Payroll.....  | \$ | 122,560 |
| Vacation/Sick Pay Out.....   | \$ | 4,263   |
| Plant Regular Payroll.....   | \$ | 106,178 |
| Vacation/Sick Pay Out.....   | \$ | 18,103  |
| Employer Payroll Taxes.....  | \$ | 25,496  |
| Payroll Service Charges..... | \$ | 354     |
| Total.....                   | \$ | 278,214 |

# CRESCENTA VALLEY WATER DISTRICT

## BOARD OF DIRECTORS - STAFF REPORT

**To:** Honorable President and Members of the Board of Directors  
**From:** David S. Gould, P.E. – District Engineer  
**Subject:** **Field Inspection Services for 8-Inch Water Main Replacement on the 3000 & 3100 Blocks of Santa Carlotta Street and Cloud Ave. from Paraiso Way to Santa Carlotta Street, Project E-911**

---

Action Item No. 1  
February 19, 2013

### **ACTION ITEM:**

1. **Field Inspection Services for 8-Inch Water Main Replacement on the 3000 & 3100 Blocks of Santa Carlotta Street, Project E-911** Consideration and motion to authorize the General Manager to award a contract to Tetra Tech for field inspection services for construction of pipeline replacement on Santa Carlotta Street at a cost of \$48,280.

### **PROJECT DESCRIPTION:**

CVWD has awarded a contract to J. De Sigio Construction to install the 8-inch water main pipeline on the 3000 & 3100 Blocks of Santa Carlotta Street and the lower portion of the 4900 Block of Cloud Avenue from Paraiso Way to Santa Carlotta Street. Construction administration services are handled by CVWD's Engineering Department which includes field inspection that is done by CVWD's inspector.

Mr. Ernie Diego, CVWD's inspector since 2007 and Construction Supervisor since 1993 had decided after 20 years to retire from CVWD. His official last day was February 15, 2013 and staff will miss his leadership in the field and construction knowledge.

In the interim period between CVWD hiring a new inspector and the start of construction of the pipeline project on Santa Carlotta Street, staff needs the assistance of a field inspector from an outside construction management firm to provide proper inspection and oversee the contractor.

### **DISCUSSION:**

Staff prepared a request for proposal (see attached) and sent in to four (4) firms that have previously performed construction inspection services on similar water pipeline projects.

- 1) Butier Engineering
- 2) Civiltec Engineering, Inc.
- 3) Dudek
- 4) Tetra Tech, Inc.

The proposal requests the firms to provide field inspection service including on-site inspection of the pipeline installation based on the contract documents, daily reports, coordination of shop drawings, observe the contractor for compliance with site and job safety requirements and project close out. The field inspector will report to CVWD's construction manager, Christina Olmedo, who will handle contract administration for the project. In addition the field inspector will represent the District with respect to coordination with the local residents.

The proposals were due on February 14, 2013 and CVWD received 3 proposals for the project:

|     | <b><u>Consulting Firm</u></b> | <b><u>Proposal Amount</u></b> |
|-----|-------------------------------|-------------------------------|
| Low | Tetra Tech                    | \$48,280                      |
| 2   | Civiltec Engineering          | \$54,150                      |
| 3   | Dudek                         | \$67,320                      |
| 4   | Butier Engineering            | Declined to Propose           |

Tetra Tech provided the lowest proposal at \$48,280 to provide field inspection services. Tetra Tech's office is located in Irvine, CA and they have provided these services on a number of projects throughout Southern California. Tetra Tech just completed a project in Long Beach for replacement of water pipeline in alleys, relocation of a water main near the I-5 Freeway in Santa Fe Springs and a 16-inch water main for the City of Glendora. Staff contacted references provided by Tetra Tech and the responses received were favorable with respect to attentiveness to the project, providing proper paperwork and follow-up, and being responsive to the public.

**RECOMMENDATION:**

It is staff's recommendation to award the contract for field inspection service to Tetra Tech at a cost of \$48,280. Staff has not worked with Tetra Tech in the past on a similar field inspection service, since these services were in-house. The District Engineer has worked with Tetra Tech at a prior job and was impressed with their performance. In addition, the field inspector that will be assigned to CVWD has over 15 years of construction experience.

Staff will meet with Tetra Tech prior to the pre-construction meeting to discuss procedures, coordination with the residents and the field inspector's responsibilities.

We anticipate construction beginning the first week of March, 2013, which is after the MWD/FMWD shutdown and completed by the middle of May 2013.

**ENVIRONMENTAL REVIEW:**

The Board had previously found this project to be exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 of the CEQA Guidelines. This exemption covers the repair of existing facilities involving negligible or no expansion of existing use.

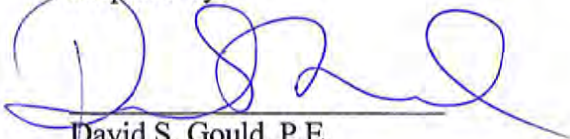
**FUNDING AVAILABILITY:**

There are sufficient funds available in the following accounts for the project:

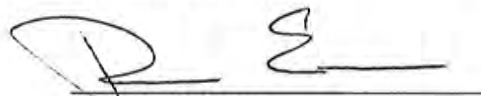
| Account Description                                                 | Amount                  |
|---------------------------------------------------------------------|-------------------------|
| FY 12/13 Water CIP– Water Distribution –Remaining as of 12/1/12     | \$455,795               |
| Transfer – Reservoir Site Imp. – Pickens Canyon                     | \$43,000                |
| <b>Revised Total</b>                                                | <b>\$498,795</b>        |
| Contractor Costs                                                    | <\$363,640>             |
| Unforeseen or additional work                                       | <\$36,000>              |
| <b>Field Inspection Services</b>                                    | <b>&lt;\$48,280&gt;</b> |
| Additional costs such as material purchase by CVWD & soils engineer | <\$46,500>              |
| Total Estimated Cost                                                | \$494,420               |
| <b>Amount Remaining in Water CIP – Distribution System</b>          | <b>\$4,375</b>          |

Prepared by:

Submitted by:



David S. Gould, P.E.  
District Engineer



Dennis Erdman  
General Manager

Attachments:

1. Request for Proposal



TETRA TECH

February 14, 2013

Mr. David S. Gould, P.E.  
District Engineer  
Crescenta Valley Water District  
2700 Foothill Boulevard  
La Crescenta, CA 91214

**Reference: Proposal to Provide Field Inspection Services for Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of Santa Carlotta Street and Cloud Avenue from Paraiso Way to Santa Carlotta Street, Project E-911**

Dear Mr. Gould:

Tetra Tech is pleased to submit our proposal to provide Field Inspection Services for Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of Santa Carlotta Street and Cloud Avenue from Paraiso way to Santa Carlotta Street, Project E-911. We have an outstanding team, which combines the experience, depth, and understanding needed for the successful delivery of this type of Construction Management Services contract. We are ranked as the *#1 Water Firm by Engineering News-Report (ENR)* in a survey of 500 firms. Our firm is a leader in water/wastewater/reclaimed water facility design and has a long history working in Southern California on challenging civil engineering projects such as those expected to result from the subject contract. We bring the following distinct advantages to the Crescenta Valley Water District:

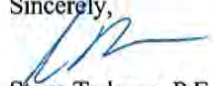
***Commitment of Our Best People to the Contract*** – We are committing one of our most experienced Construction Managers to this contract. Ms. Luanne Bean, P.E., with over 25 years of experience, has been responsible for the Construction Management of a variety of water/wastewater projects throughout Southern California. Our project team, including our Special Inspectors and Construction Observers, has a proven track record of managing the construction contractor and completing a variety of projects on time and within budget with a high degree of client satisfaction.

***Superior Project Team*** – We have assembled a first class project team of professionals experienced in the construction of water/wastewater projects. That includes our Construction Manager, Luanne Bean, P.E. and our Construction Observer, Rick Wiggins. As both a Licensed Civil Engineer in the State of California and a former Class A General Engineer Contractor, Ms. Bean brings a unique prospective to Construction Management from both sides of the fence to benefit the CVWD. Tetra Tech will commit to keep these experienced individuals with the CVWD.

***Dedication to the Crescenta Valley Water Department*** – Tetra Tech is accustomed to serving as a team member on the Construction Management of water/wastewater projects and has demonstrated our ability to integrate our people with clients' staff. Our approach to this project will include a "teamwork and partnering" approach with the Crescenta Valley Water District. Our intention is to use this project as another step in building a solid, long-term working relationship with you. We will do this by exceeding your expectations through hard work, attention to detail, high level of communication and professional presentations.

Thank you for giving us the opportunity to submit our proposal. We look forward to your positive response. If you need additional information or have any questions, please feel free to contact me directly at (949) 809-5153.

Sincerely,

  
Steve Tedesco, P.E.  
Senior Vice President, Engineering & Consulting Services

SDT/LB/cg  
M:\Marketing\Proposals\WTR\IFY2013\CM\027\_Crescenta  
Attachment

  
Luanne Bean, P.E.  
Construction Manager

Tetra Tech, Inc.

17885 Von Karman Avenue, Suite 500, Irvine, CA 92614-6213  
Tel 949.809.5000 Fax 949.809.5010 www.tetrattech.com



## TABLE OF CONTENTS

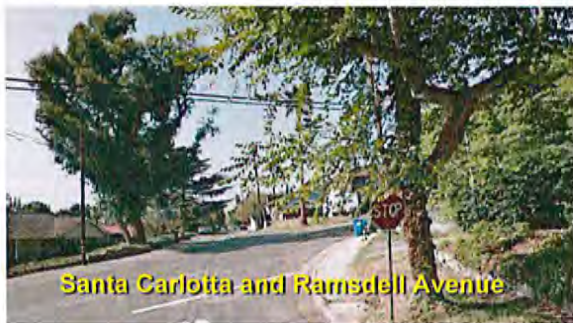
|                                                      | Page |
|------------------------------------------------------|------|
| Cover Letter .....                                   | 1    |
| 1 - Project Understanding and Project Approach ..... | 2    |
| 2 - Scope of Services .....                          | 9    |
| 3 - Statement of Qualifications .....                | 11   |
| 4 - Project Team .....                               | 18   |
| 5 - Project Schedule .....                           | 19   |
| 6 – Fee Proposal .....                               | 27   |





## 1 – PROJECT UNDERSTANDING AND PROJECT APPROACH

The project involves the installation an 8-inch steel water main on Santa Carlotta Street and Cloud Avenue. The Construction Contract was awarded on February 5, 2013 and it is expected that a pre-construction meeting will take place on February 27, 2013 followed by commencement of construction on March 4, 2013. The construction work is expected to be completed after a short 70 calendar day construction, which will be issued after the Notice to Proceed.



Santa Carlotta and Ramsdell Avenue

It is anticipated that Construction will be completed by May 15, 2013 which involves the following:

- 1,760 linear feet of 8.625-inch OD CMC&CML weld bell pipe, 10Ga per AWWA C200 and C205
- 4-20 foot sections of 8.625-inch OD CMC&CML weld bell pipe, 10Ga per AWWA C200 and C205
- 12-20 foot sections of 6-inch OD CMC&CML weld bell pipe, 10Ga per AWWA C200
- Eight 8-inch Gate Valves (FExFE) per AWWA Std. C-509
- Four 6-inch Gate Valves (FExFE) per AWWA Std. C-509
- Four 6-inch Fire Hydrant Assemblies including 6-inch-6 hole 125 lbs. slip-on flange, elbow, 8"x8"x6" flanged end tee, 8"x8"x6" flanged end reducing tee and 6"x4"x2-1/2" hydrant and Check Valve



Paraiso Way and Cloud Avenue

- 44 Meter Boxes (W5-1/4 Polymer Meter Boxes by J&R Concrete
- 44 Meter Box Steel lids
- 15 3/4-inch Meters#



Santa Carlotta Looking towards  
LACDPW Quail Creek Channel

As shown by the photo of Santa Carlotta Street, much of the work involves working within narrow residential streets which are already occupied by underground utilities such as sewer, and further have overhead electrical and telephone lines for the contractor to contend with during construction. It is imperative that Tetra Tech carefully monitor the contractor to ensure that he properly constructs the water line for the required horizontal and vertical separation of the potable water line adjacent to the sewer and its associated sewer laterals. Additionally, Tetra tech will make sure that the contractor adequately coordinates the notification to the residences and CVWD for the required shutdown seven days in advance. Tetra Tech will also ensure that the contractor complies with the requirements of the County of Los Angeles permit. Since this is a residential neighborhood, the construction hours from 7:30 am to 4:30 pm Monday through Friday need to be strictly enforced. Additionally, the construction of the water main within the private street of Santa Carlotta Street need to be completed prior to commencement of the construction on Santa Carlotta Avenue, which is a public Right-of-Way. Other work includes trench work including pavement restoration and curb and gutter replacement. New potable water pipelines also require pressure testing and disinfection. All construction work requires that the contractor develop his SWPPP and safety plans, and implement them throughout construction. Tetra Tech will make certain that the contractor pays particular attention to the requirements to keep the facilities operational such that service is not accidentally disrupted to CVWD's customers for each of the existing facilities.



Tetra Tech will enforce the requirements of the plans and specifications issued to the contractor for bid which were written based on the Green Book and include select Standard Plans from the Los Angeles County Waterworks Districts, Addendum No. 1, and 5 detailed drawings of the entire reach of pipeline and its associated connection.

*With integrity, we are  
committed to achieving  
success in your projects!*

**Meetings, Reports, Project Coordination, and Communication** – Our approach to this project will be to establish from the kickoff meeting the required key individuals and lines of communications with the District's staff, continuing with our weekly updated inspection and construction activity reports to the District's Project Manager. Lines of communication, and a review of the contractor's work processes to be followed throughout the project duration will also be established. Additional meetings will be held outside of the regular meetings for final coordination before each linestop/shut down to ensure that everyone involved understands what has to be done, what their duties are, and how these items are to be performed. Tetra Tech will actively promote the cooperation of all involved parties through the use of formal and informal methods.

**Lines of Communication during Construction** including quick response to critical issues are one of the keys to a successful project. Our project communication starts at the top with our Project Manager who will be responsible for formulating the scope of work and budget with CVWD's Project Engineer. Tetra Tech's staff has an open door policy with our clients, and our staff can be reached at any time to openly discuss project issues via cell phone. Field staff must balance good working relationships with the contractor's superintendent with the appropriate written documentation. It would be inappropriate, for example, if one of Tetra Tech's field special inspectors or construction observers verbally directed one of the contractor's laborers. Noted corrections to the contractor's work by our staff will be directed to the contractor's on-site superintendent/foreman in responsible charge followed by written documentation in the form of Daily Logs, Corrective Action Notices, or other appropriate written documentation which would also be copied to CVWD. This method of communication would serve to resolve conflicts in the field in a timely manner as well as to

manage and ensure effective and documented internal and external communications. Tetra Tech believes that proper coordination throughout the project duration facilitated through documented communication will mitigate delays and mitigate increased construction costs.

Regarding team integration, Tetra Tech's goal is to have our entire staff from our Resident Engineer down to our on-site staff including our Special Inspectors and Construction Observers integrated members of CVWD's staff with seamless and well documented communication. We will work directly with CVWD in-person or electronically to ensure that CVWD's requests are addressed in a timely fashion followed by written documentation of critical decisions as necessary.

**Maintaining Traffic and Public Safety** is a key concern during construction. The safety of the public, the contractor's employees, CVWD's staff, and Tetra Tech's staff is of paramount importance. It is vitally important that the contractor properly executes the approved traffic control plan throughout construction. Monitoring traffic conditions, channelization, and warning devices of the traffic control system to facilitate proper function and correct driver interpretation will be critical. This project additionally calls for phased traffic control depending on which side of the street and which lanes the contractor needs to take for his work and the required buffer zone. Flaggers are also required according to the traffic control plans especially to maintain pedestrian traffic around the closed sidewalk areas. Replacement and repair of knocked down or broken traffic control equipment in the shortest time possible is essential to the safety of both the motoring traffic and the project construction personnel. The provisions of the CVWD's Traffic Control Plans in concert with the WATCH manual as implemented by the contractor will be monitored and observed by Tetra Tech to ensure that they are properly implemented to maintain public safety. Contractor inattention to these requirements will not be tolerated and be grounds for stopping work until corrections are made.

**Traffic Control Devices** properly implemented and maintained are imperative to protect both the workers and the public. Tetra Tech will ensure that these devices including the required warning signs are in-place throughout the day.





**Thrust Restraints** are imperative to the proper construction of the water main. Tetra Tech will ensure that the contractor properly places the required thrust restraints on the pipeline at each horizontal and vertical angle change within the pipeline.

**Construction Safety and Public Safety** in and around the construction planned by your projects will be of concern for project participants. Tetra Tech will enforce the project plans and specifications which have detailed traffic control plans as well as the California Occupational Safety & Health Administration (Cal-OSHA) regulations. Tetra Tech will attend the morning tail gate safety meetings, and review the contractor's site specific Injury and Illness Prevention Program (IIPP) and their Jobsite Hazard Analysis (JHAs). Should Tetra Tech observe an unsafe construction practice by a worker, Tetra Tech will immediately notify the contractor's on-site supervisor of the unsafe practice followed by a written warning and notification to CVWD.

**Utility Location** – It remains the contractor's responsibility to identify and mark all underground utilities within the project area that may be in the way of his work. Existing utility crossings can slow a project and cause change orders if not encountered as shown on the plans. Tetra Tech will make certain that the contractor properly performs his USA alerts, and that he potholes all known utility locations. We will ensure that the contractor locates utilities and calls and follows up with the USA DigAlert for public utilities prior to construction and notes any deviations from the utilities shown on the plans for clarification by CVWD and our staff.

**Public Interaction** – Tetra Tech is the first line that the public sees on a day to day basis. This project affects intersections, adjacent businesses and residents, and traffic directly. We will listen to the public's concerns; provide them with the appropriate information such as schedule duration and what the work involves. We will also be sure to pass on any information to CVWD if requested by the public. Since we are right there interacting directly with the public, it is imperative that Tetra Tech represents CVWD's interests and listens to and resolves any complaints about the project so that they do not escalate.

**Notifications and Timing** – The project Specifications require a 7-day notification of shutdowns. Tetra Tech will ensure that the contractor

stays on top of these notifications, and that they are fully coordinated with the CVWD for each section.

**Potable Water Line Connections** – At each of the four separate intersections, the contractor must make connections into CVWD's existing potable water distribution system. The method in which the contractor makes this connection will be carefully watched by Tetra Tech to ensure that 1) the approved traffic control plans are properly implemented, 2) all existing underground utilities have been USA'd and located via potholing by the contractor, 3) the contractor has fully isolated the new construction from the existing water distribution system, and 4) that during flushing, disinfection, and de-chlorination cross connections to the CVWD's live potable water distribution system are not made. The contractor must have an external source of water such as a fire hydrant equipped with a metered backflow preventer to ensure that cross connections are not made.

**Testing** – Each reach of pipeline is required to be tested to the specified within the Specifications. The contractor must supply a bulkhead on the new lines, such that testing would not be against CVWD's upstream closed valves. Tetra Tech will be sure that the contractor coordinates his testing plan with CVWD valve operations.

**Flushing and Disinfection** – Tetra Tech will ensure the contractor performs the flushing and disinfection in accordance with the EPA requirements, CVWD standards, and the Specifications. Particular attention must be paid by the contractor not to accidentally contaminate the existing water main during draining. This could happen for example, if the contractor allows the water level in the trench to rise above the invert of the pipeline. Tetra Tech will make sure that the trench is adequately pumped out by the contractor ensuring the proper air gap is maintained during dewatering. Faulty or inadequate flushing or disinfection could lead to DPH problems which CVWD must avoid. Because of this, it is imperative that full time construction observation be provided by the Tetra Tech Construction Management team to ensure that flushing and disinfection of each individual connection is properly performed in accordance with the approved plans and specifications.

**Project Compliance** will be continuously monitored by Tetra Tech. CVWD has a specific set of Contract Documents which include an approved set of plans and specifications which clearly outline what is



required of the contractor. Each of these requirements represents an important aspect of the project which Tetra Tech will monitor in order to assure compliance.

**Written Documentation** is essential to provide a clear record of the construction to any party who may wish to become informed of the project's progress at any time. Tetra Tech personnel will comply with the documentation procedures established by CVWD. Daily Observation Reports adequately describing the contractor's accomplishments with photographic documentation will be completed and submitted on a weekly basis to the CVWD. The reports will provide advance warning of potential problem areas and will document the contractor's progress made in the field, and any issues and their resolution supported by the plans and specifications.

**Submittals** – Accurate submittal review in a timely fashion is the first step to ensuring project compliance in accordance with the requirements of the plans and specifications. Our Resident Engineer, Luanne Bean, P.E., who has an integral design background in addition to her Construction Management background, will ensure that the submittals are properly coordinated between the contractor and CVWD.

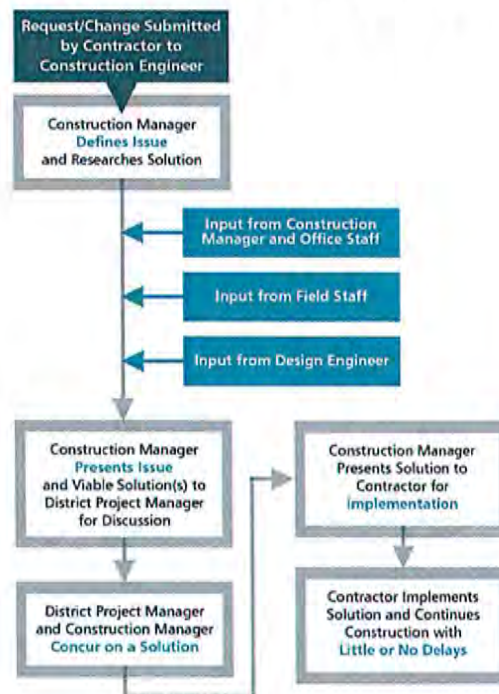
**Claims Avoidance** is an issue we take seriously. Claims and change orders can be minimized with advance knowledge of potential problem areas. This is best accomplished by a thorough review of the plans and specifications together with field investigations as noted by our on-site staff. Minimizing claims leads to less cost, fewer schedule delays, and fewer problems. Tetra Tech will assist with identifying potential claims and meet with CVWD to help resolve any problems.

**Cost Control** begins with our Notice to Proceed from CVWD. This is a feature that involves both our internal project costs and the construction costs from the contractor since both of these are separate contracts let by CVWD that Tetra Tech must monitor and control. To monitor our internal costs and schedules, specific control systems are established and updated regularly within Tetra Tech. To monitor the contractor's costs, Tetra Tech will evaluate his Schedule of Values and Pay Requests as compared to the work completed and the contractor's schedule. Only work completed will be allowed to be submitted in the contractor's properly formatted Pay Request, complete with the required lean releases, schedule

update, and certified payrolls. By monitoring the contractor's baseline schedule against the actual earned value of the schedule, it can be estimated if he is ahead of or behind in schedule, and therefore construction costs. Tetra Tech will alert CVWD if the contractor falls behind schedule, because often this means the contractor is losing money and often will try and cut corners to catch up which will not be tolerated by Tetra Tech.

**Resolving Issues:** Tetra Tech has a vast array of experience from other projects that readily applies to the CVWD's. Our experienced on-site construction observers and resident engineer will always be on the lookout to protect the Crescenta Valley Water District's interest in the contractor's execution of construction of the work. *Quick resolution of issues keeping all parties informed will result in mitigating project time and cost impacts.* The *Resolving Issues* chart on the following page shows how we keep CVWD fully informed while presenting a viable solution to the issue.

#### RESOLVING ISSUES



The following example on improper disinfection illustrates our experience in issue resolution on



projects that may be similar to that of CVWD's Project.

**Improper Disinfection Example from Past Experience:** As the third party Construction Manager on a water main distribution expansion project, the contractor had no disinfection plan. Furthermore, it was discovered through questioning the contractor by our on-site staff, that to obtain the water for the disinfection within the newly constructed pipeline, the contractor intended on "cracking" the City's valve which connected the newly constructed line to the City's on-line distribution system. Also, at the end of disinfection to get rid of the "hot" chlorinated water, the contractor would again "crack" open the City's valve allowing pressurized water from the City's main line to bleed through the valve forcing the "hot" chlorinated water out to the blow off downstream. While this had been the practice of the City to allow this in the past, the City had high chlorine residuals elsewhere within their downstream distribution system that would coincide with de-chlorination in this manner. Also, such practices would not meet the code requirements of AWWA or the standards of EPA for a potable water distribution system. These practices would cause cross contamination between the new pipeline and the existing distribution system for which both the City and the contractor were unaware of. After consulting with the City to rectify this, Tetra Tech required the contractor to fill the pipeline through a fire hydrant complete with a backflow preventer to avoid cross contamination with the existing system with all cross connecting valves in the fully closed position. Air would also be bled off of the end of the pipeline through a dedicated blow off which the contractor needed to install for his own use or means and methods. These changes to the contractor's plan were implemented at no-cost to the City because Tetra Tech simply ensured that the contractor's means and methods were in accordance with the specified AWWA and EPA requirements.

**Dust, Trash, and Noise Control** are always sensitive issues on construction projects and more so for this project since we will be working adjacent to private property and public businesses. It is extremely important for the contractor to keep his construction site clean as his activities directly impact private property and adjacent businesses. The construction observer will be proactive in identifying potential problems in the areas of dust control, trash, and noise

pollution. Our construction observer will work with the contractor to avoid public complaints.

**The Resident Engineer and Construction Observer –** The Resident Engineer and Construction Observer make up the core of Tetra Tech's Construction Management Team. Furthermore, the service life of a properly designed potable water main depends on the construction method and quality of materials used in the construction. Tetra Tech's Construction Management Team will ensure that materials used in the work comply with specifications and are installed with the workmanship as required from the Contract Documents. Daily reports will be distributed to CVWD and serve as the basis for the weekly status reports as shown below. Dealings with the contractor will be above board and documented in writing, with no under the table or below the board undocumented transactions behind CVWD's back on your project.

The image displays four overlapping forms from Tetra Tech. The topmost form is the 'O&M Observer Daily Report of Work Progress', which includes fields for project name, location, date, and a table for daily observations. Below it is the 'Construction Management Team' form, which lists roles and names. The third form is the 'Field Inspection Report', which contains sections for project information, inspection details, and a definition of completion. The bottom-most form is the 'Notice of Completion', which includes a section for the contractor's statement and a section for the observer's statement.



**Photographic Documentation** of the Work will be performed by the Tetra Tech Construction Management Team. Complete photographic documentation of all existing structures prior to the start of construction will be performed by Tetra Tech. Special attention to daily items will be paid to photographically document disputed work items, duplicated work, or defective work that has to be replaced or removed, completed work, extra work, permit requirements, and environmental issues including implementation BMPs. Digital photographic documentation and 35mm will be provided to CVWD.

**Contractor's Schedule of Values and Pay Requests** will be reviewed for accuracy by Tetra Tech prior to making the appropriate payment recommendations to CVWD. We will recommend approval or disapproval to CVWD by comparison to known and monitored quantities of on-site materials and work completed. Tetra Tech will ensure that the additional paper work required within the Contract Documents such as labor data and schedule updates is included within the pay request.

**Concrete/Geotechnical Testing** for this project will be performed CVWD and coordinated by Tetra Tech. We will test for trench backfill compaction, subgrade compaction, as well as asphalt placement throughout the project to ensure that the materials placed on the project meets the required specifications.

**CVWD Utility Shutdowns** will be coordinated between the contractor and CVWD by Tetra Tech to ensure the timely notification to both CVWD's valve operations for opening and closing their valves, and to CVWD's laboratory to ensure that when the Bac-T and HPC tests are taken, they can be appropriately run by the lab.

**CVWD's Engineer Furnished Services** - Tetra Tech assumes that CVWD's design consultant (Engineer) will be available to answer questions during the project especially with regard to those items which may have an extensive history, or to those items that CVWD may have a strong preference for. Tetra Tech assumes that CVWD will assist in coordinating and providing the existing project documentation prior to construction, and provide timely assistance during the construction process for items that require CVWD's review or consent, such as substitutions or corrections, of the contractor's defective work. Tetra Tech will keep CVWD's Engineer informed as the project

progresses paying particular attention to critical items, cost, and construction schedule.

**Common Goals** of the Project's construction communication are to:

- *Develop an integrated team with CVWD, our inspection/observation staff, and CVWD's design engineer to ensure that the project is constructed in accordance with the terms and conditions of the Contract Documents, conflicts are resolved in a timely manner, and that the construction or any deviation thereof is documented.*
- *Maintain an open-door policy with CVWD regarding communicating with Tetra Tech. We are always reachable by phone or in person.*
- *Develop an amicable scope of work and budget with CVWD staff for this project.*
- *Receive and implement the authority delegated to Tetra Tech by CVWD via verbal and written communication regarding the construction project.*
- *Resolve conflicts in the field in a timely manner.*
- *Document the field resolution in writing.*
- *Keep CVWD informed as to any items requiring resolution along with the final resolution.*
- *Inform CVWD in writing of the day-to-day construction progress.*
- ***Keep the project on-schedule and CVWD Informed!***
- *Bring the project in on time and within budget!*
- *Mitigate foreseeable construction change orders and claims.*
- *Ensure communication channels between CVWD, Engineer, Contractor, and outside Agencies is maintained.*



We understand that it is imperative to work closely with CVWD to ensure a successful project.



FIELD INSPECTION SERVICES  
Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of  
Santa Carlotta Street and Cloud Avenue from Paraiso Way to  
Santa Carlotta Street, Project E-911

**Final Project Documentation** - Tetra Tech will transmit our project files to CVWD which will include all project construction documentation from daily reports, RFIs, submittals, as-builts, etc. for their use and filing. The chart on the following page illustrates

the process of a smoothly run and managed construction project illustrating some of the various activities throughout the pre-construction, construction and project close-out phases.

#### CONSTRUCTION MANAGEMENT SCOPE-OF-SERVICES SUMMARY

| PRE-CONSTRUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CONSTRUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | START-UP PHASE                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Meet and Confirm District's Requirements For the Project<br><br>Establish Coordination and Communication Procedures Phone, Email, Written<br><br>Coordinate Mobilization of Contractor(s)<br><br>Pre-Construction Documentation, Video, Photos<br><br>Conduct Pre-Construction Meeting<br><br>Receive, Distribute, Log, Track Pre-Construction Submittals and RFIs<br><br>Obtain Outstanding Consent Letters of Entry Agreement<br><br>Review Contractor's Shop Drawings<br><br>Review Contractor's RFIs<br><br>Ensure Contractor has Secured Construction Permits<br><br>Notify Residences/Businesses | Process, Log, and Track Submittals, RFIs, Change Orders<br><br>Coordinate Construction Activities with Internal and External Stakeholders<br><br>Construction Observation, Special Inspection Services, Verify Compliance with PS&E<br><br>Coordinate Geotechnical/Soils and Materials Testing Services<br><br>Log, Track, Resolve, Negotiate on Behalf of the District Construction Change Orders<br><br>Document Contractor's Work Daily Reports (Written and Photographic)<br><br>Coordinate Outside Services/Agencies<br><br>Maintain Public Relations for Construction Activities | Monitor Contractor's Safety Compliance<br><br>Evaluate Contractor's Compliance with Environmental Requirements, SWPPP, NPDES, BMPs<br><br>Evaluate Contractor's Traffic Control Compliance with Caltrans MUCTD<br><br>Certify and Process Contractor's Request for Progress Payments<br><br>Evaluate Contractor's Critical Path Construction Schedule Against Actual Work<br><br>Coordinate District's Outages<br><br>Maintain As-Built Drawings<br><br>Review Contractor's Safety Program<br><br>Maintain Construction Documentation | Prepare Preliminary and Final Punch Lists<br><br>Obtain Lien Releases, Bonds, Guarantees, Closeout Documents<br><br>Monitor and Document Contractor's Deficiency Corrections<br><br>Receive Contractor's Final As-Builts<br><br>Production of Record Drawings<br><br>Make Recommendation for Final Completion<br><br>Coordinate and Observe Testing and Startup<br><br>Demobilize from Site<br><br>Provide Final Documents to the District |
| DELIVERABLES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DELIVERABLES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DELIVERABLES                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Video/Photographic Documentation of Pre-Construction Condition<br><br>Coordination and Communication Procedures<br><br>Meeting Agendas and Minutes<br><br>Evaluation of Baseline Schedule<br><br>Contractor's Shop Drawings<br><br>Contractor's RFIs                                                                                                                                                                                                                                                                                                                                                   | Final Copies: Submittals, RFIs, Change Orders, Logs<br><br>Contractor's Traffic Control<br><br>Construction Observer's/Special Inspector's Daily Reports<br><br>Materials Testing Data<br><br>Construction Documentation<br><br>Contractor's CPM Baseline, Three Week Look Ahead, and Schedule Updates                                                                                                                                                                                                                                                                                 | Permit Compliance Documentation<br><br>Construction Change Orders<br><br>Contractor's Finalized Progress Payments                                                                                                                                                                                                                                                                                                                                                                                                                     | Preliminary and Final Punch Lists<br><br>Lien Releases, Bonds, Guarantees<br><br>As-Builts<br><br>Final Record Drawings<br><br>Project Files                                                                                                                                                                                                                                                                                               |



## 2 – SCOPE OF SERVICES

Our discussion of constraints, problems, and issues anticipated during the contract, and suggestions for approaches to resolving them are included in the previous section under Project Approach.

### I. Preconstruction Services

Work with District staff prior to construction to identify key individuals and lines of communications with District personnel, establish general reporting procedures, establish construction reporting procedures including field clarifications, change orders, and establish project close-out procedures.

### II. Construction Services

Establish and implement a continuous program to monitor the construction activities, including the following:

1. Maintain and update a master construction schedule based on the construction schedule provided by the contractor. The construction manager shall be responsible to notify the District if the contractor is not meeting the established schedule.
2. Provide daily and weekly updated inspection and construction activity reports to the District's Project Manager.
3. Provide on-site field inspection for all construction activities in accordance with the contract documents.
4. Provide coordination of shop drawings between contractor and District.
5. Observe all deliveries of materials with respect to the contractor's conformance to the contract documents, and shop drawings.
6. Provide coordination of construction activities including coordination of water main shutdowns, and any other coordination efforts required per the contract documents.
7. Observe the contractor for compliance with site and job safety requirements. Inform the District of any concerns or problems concerning site or job safety observed. Direct the contractor to comply with all safety orders or immediately stop work.
8. Document construction progress by preparing a daily record of construction and taking 35mm photographs at significant times during construction. Picture shall be labeled as to date, location and specific task photographed.
9. Assist District in processing the monthly progress pay estimate including review of contractor's work progress with the District's project manager.
10. Organize and draft requests for change orders, request for information and request for proposals requested by the contractor and for review and approval by District.
11. Coordinate the geotechnical testing activities with the soils engineering firm and the contractor.
12. Maintain construction record drawings including any change orders, showing any modifications or deviations from the plans regarding construction materials, dimensions, and details. The record drawings shall include information obtained and approved by District and/or consultant.
13. Provide guidance and recommendations to the District with respect to the contractor's general conformance to Contract Documents.

### III. Project Close-out

Coordinate with District staff, consultant, and contractor to prepare project close-out as follows:

1. Determine that all testing as required by the contract documents have been successfully completed and is satisfactory.
2. Prepare final punch list of deficiencies for review and approval by District.
3. Observe contractor's successful completion of all work required by the final punch list.
4. Obtain from the contractor any written documents required by the Contract Documents for project close-out, such as warranties, per the contract documents.
5. Deliver all project records to the District including daily logs and photographs.



#### **IV. District's Responsibilities**

The District will provide the following to assist the Consultant with the project and its completion:

1. District will provide a Project Manager who will be the main contact person between the District and the Consultant.
2. District will be responsible for construction administration services and correspondence with the contractor.
3. Contract documents, technical specifications, plans, and drawings, as are available and appurtenant to the proposed project.
4. Design criteria, hydraulic data and other technical information, as are available and appurtenant to the project.
5. District shall be responsible for completing applications to obtain any required permits from the County or other governing agencies.



FIELD INSPECTION SERVICES  
Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of  
Santa Carlotta Street and Cloud Avenue from Paraiso Way to  
Santa Carlotta Street, Project E-911

### 3 - STATEMENT OF QUALIFICATIONS

Tetra Tech, Inc. is a nationally recognized engineering and resource management firm of more than 13,000 engineers, scientists, construction specialists, and technical support personnel in over 330 offices worldwide. Listed on the NASDAQ Exchange (TTEK), our annual revenues exceed \$2.7 billion (2012). Thus, we are in an excellent financial position and can provide necessary resources to rapidly deploy and meet aggressive project schedules.

Tetra Tech was established in 1966, and is a leading provider of specialized management consulting and technical services in three principal business areas: resource management, infrastructure, and communications. Tetra Tech is a full service, multi-disciplinary architecture, engineering, environmental consulting, and construction management firm. In total, Tetra Tech offers specialized expertise in 65 technical disciplines, associated with a wide range of architectural and engineering (A/E) services in the areas of planning, designing, and permitting; project and construction management; and post construction services.

Tetra Tech offers a multitude of services, including *Environmental Consulting Services* (scientific, consulting, engineering, and project management services for water resources, groundwater, watershed management, mining, geotechnical, environmental management, and information technology projects); *Technical Support Services* (consulting services to support international development, climate change and environmental programs, energy management, disaster management and emergency response, and staff augmentation/facilities management projects); *Engineering and Architecture Services* (engineering, architecture, interior and exterior design, and program administration services for water and wastewater facilities, buildings, land development projects, and transportation infrastructure); and *Remediation and Construction Management* (program management and construction services, including design-build and design-bid-build services, for environmental remediation, infrastructure, heavy civil, military

transformation, ports and harbors, energy, and communications projects).

Tetra Tech has served over 5,000 different clients since 1966, successfully solving design and construction challenges through our innovative approaches to "real world" design and construction activities. Our clients include a diverse base of municipalities, public and private sector water, wastewater, and flood control agencies, as well as residential, commercial, and industrial developers located in the U.S. and internationally.

#### Experience

Tetra Tech was ranked number one in five markets (water, environmental management, water supply, treatment/desalination, and transmission/aqueducts) as reported by *Engineering News-Record* magazine.

Tetra Tech has extensive experience in the analysis, design, project management, construction observation and construction management for various types of public works projects including, but not limited to, water and reclaimed water pipeline distribution and transmission systems, pump stations, treatment plants, wastewater collection systems, wastewater lift stations, facility master plans, storm drainage systems, road design, and site improvement design services. In addition, our experience includes development of conceptual, preliminary and final design geometry, quantity and cost estimates; preparation of hydrology and hydraulic studies; development of grading and drainage plans; structural design; construction staging plans; electrical plans; signing and striping plans; traffic signal plans; railroad track plans; and preparation of specifications/special provisions.

Our staff is knowledgeable in the use of the latest computer software, including CADD, horizontal control, hydrology, hydraulics, scheduling, and various word processing and spreadsheet programs. Additionally, Tetra Tech's personnel have experience in cost estimating, construction schedule estimating, shop drawing review, and shop fabrication inspection.





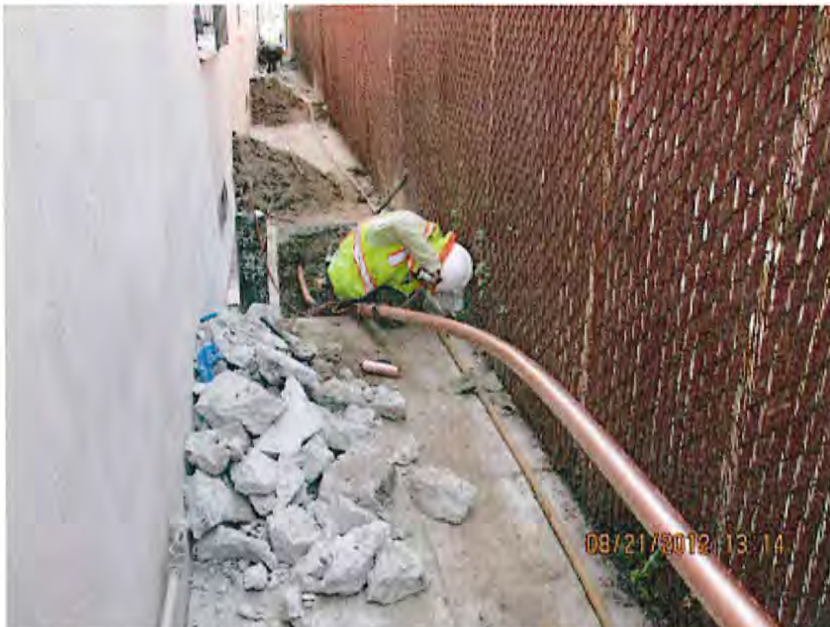
FIELD INSPECTION SERVICES  
Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of  
Santa Carlotta Street and Cloud Avenue from Paraiso Way to  
Santa Carlotta Street, Project E-911

Tetra Tech has established a dedicated, qualified, and experienced team of professionals that will provide Crescenta Valley Water District with the technical and managerial qualifications, specialized expertise, and professional resources required to successfully complete this project. The projects shown in this section are examples of our relevant experience, and

highlight our proficiency on projects similar to that of CVWD's. These featured projects have been either successfully completed on time and within budget or are currently in progress, and involve the same team members we are proposing to use to staff your various sewer, recycled and potable water projects.

## Phase II Alley Water Main Conversion (2012)

Long Beach Water Department, Long Beach, CA



### Project Value

\$768,000

### Project Duration

2012

### Reference

Long Beach Water Department  
1800 E. Wardlow road  
Long Beach, CA 90807

Mr. Richard Robillard, P.E.  
562-570-2326  
richard.robillard@lbwater.com

Tetra Tech just completed the Construction Management and Inspection Services for the Phase II Alley Water Main Conversion. Tetra Tech provided full time Construction Observation and Special Inspection services on-site. Additionally, we are providing Resident Engineering services including review of the contractor's critical path schedule, shop drawing review, RFI review, review of contractor's request for payment and change order justification. Tetra Tech's on-site staff is ensuring that the contractor 1) stays in compliance with their permit requirements with the Caltrans, 2) monitors the contractor's work product for quality control in accordance with the plans and specifications, 3) keeps the LBWD informed of the contractor's progress, 4) coordinates shutdowns with LBWD, and ensures coordinates with the required residential shutdowns for the final new meter conversions.



FIELD INSPECTION SERVICES  
Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of  
Santa Carlotta Street and Cloud Avenue from Paraiso Way to  
Santa Carlotta Street, Project E-911

## Dos Palmas (ACEC) Water Supply Development Coachella, California



### Project Value

\$102,500

### Project Duration

2011

### Reference

Coachella Valley Water  
District  
85-995 Avenue 52  
Coachella, CA 92236

Mr. Ty Mull  
760-398-2651  
tmull@cvwd.org

Tetra Tech provided construction support services during the construction of 1,800 linear feet of recharge basin in the old unlined Coachella Canal. The purpose of this project was to safeguard the ecological sustainability and natural diversity of Dos Palmas' unique ecosystem. This project also involved the construction of 740 linear feet of 6-inch water supply pipeline; construction of 400 linear feet of PVC pipeline within Dos Palmas ACEC; construction of a monitoring well near the unlined canal percolation basin; construction and development of one production well with discharge head within Aqua Farms; destruction of two wells, and the mechanical cleaning of two existing wells; and clearing of 600 linear feet of recharge basin within Aqua Farms property.

Tetra Tech's responsibilities included monitoring the construction schedule to make sure that the contractor was following the schedule; ensuring that the contractor fully adhered to the plans and specifications; identifying field problems and immediately contacting CVWD to inform the Project Manager of all issues as they occurred; documenting the contractor's daily work; and making sure that the safety programs developed by the contractor were practiced in the field.



## I-5 Water Main Relocations at the Carmenita Road Segment Santa Fe Springs, California



### Project Highlights

- 13,500 linear feet of 12-inch and 16-inch water main
- 3 separate bore and jacks
- Complex existing street/utilities & future street/utilities coordination
- Complex construction coordination with other contractors/work

### Project Value

\$4,500,000 (Construction)

### Project Duration

July 2012 – October 2012  
(est.)

### Reference

City of Santa Fe Springs  
11710 Telegraph Road  
Santa Fe Springs, CA  
90670

Mr. Frank Beach  
562-868-0511, Ext. 3611  
frankbeach@santafesprings.org

A Caltrans freeway widening project impacted frontage roads, connector ramps, and utilities requiring the relocation of approximately 13,500 linear feet of water main. Work included bore and jack construction in three locations: under the 5 freeway, under Carmenita Road, and under railroad tracks. Construction work was performed simultaneously with a Caltrans contractor performing infrastructure improvements to support the freeway widening including construction of a new street, relocating existing streets, repaving streets, and other work. In addition, other utilities were working on relocation of their improvements including telephone, power, oil, and sewer. Hydrocarbon contaminated soils were identified in numerous areas within the water main alignment and the bid documents were configured to provide for working in these areas on an as-needed unit basis. Tetra Tech provided design, construction management, and construction inspection services.



FIELD INSPECTION SERVICES  
Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of  
Santa Carlotta Street and Cloud Avenue from Paraiso Way to  
Santa Carlotta Street, Project E-911

## South Hills East 16-Inch Transmission Main Glendora, California



### Project Value

\$143,000

### Project Duration

2010

### Reference

City of Glendora  
116 E. Foothill Boulevard  
Glendora, CA 91741

Ms. Kelly Gardner  
626-914-8246  
kellygardner@ci.glendora.ca.us

Tetra Tech provided design engineering and construction support services for approximately 1,200 linear feet of 16-inch water main. This project involved the installation of 296 lineal feet of 16-inch steel water main within an existing 36-inch casing; construction of 457 lineal feet of 16-inch steel water main; construction of 16-inch steel water main across the San Dimas wash drainage channel; connections to existing 14-inch and 16-inch water mains; and testing and disinfection of the water main. The pipeline traversed cross country along rugged terrain with slopes up to 2:1. The pipeline also crossed the 210 freeway and an open channel flood control facility. The freeway crossing utilized an existing casing and the flood control channel was crossed by bridging over the top. Permits were obtained from Los Angeles County Flood Control, Caltrans, and the City of Los Angeles Department of Water and Power. Construction support services included maintaining written records of daily field activities; responding to RFIs and shop drawings; monitoring the contractor's adherence to the project's plans and specifications; and serving as the liaison between the City, contractor, local agencies, and residents.



FIELD INSPECTION SERVICES  
Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of  
Santa Carlotta Street and Cloud Avenue from Paraiso Way to  
Santa Carlotta Street, Project E-911

## Construction Support Services for the Irvine Desalter Project

Irvine, California



### Project Duration

2007

### Reference

Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

Mr. Steve Malloy, P.E.  
949-453-5300  
malloy@irwd.com

The Irvine Desalter Project purifies water found in the Irvine sub-basin of the larger Orange County groundwater basin by removing a volatile organic compound called trichloroethylene (TCE). It is a two-part endeavor, with recycled water and drinking water components. The Irvine Desalter Project was a joint groundwater quality restoration project by the Irvine Ranch Water District and the Orange County Water District, with financial participation by the U.S. Bureau of Reclamation, the U.S. Navy, the California State Water Resources Control Board, the California Department of Water Resources, and the Metropolitan Water District of Southern California. The purified water supplies enough drinking water each year for about 50,000 people.

Tetra Tech provided construction support services during the construction of over 47,000 linear feet of raw water conveyance pipeline, with 12- to 20-inch diameter steel pipe. The pipeline network conveys raw water from neighboring wells to a reverse osmosis treatment facility where the raw water is treated to remove salts for potable water use. Raw water with contaminated VOCs is treated via air strippers and subsequently discharged into the District's recycled water distribution system for non-potable water reuse or injection wells to minimize plume movement. A brine discharge line was also part of the IDP pipeline network. Construction support services included constructability review, traffic control, construction observation and inspection, field engineering, quality assurance, and contract administration. The IDP is a win-win solution for the community: water rates did not go up as a result of the project, the quality of drinking water was preserved, and a source of contamination was actively being removed.



FIELD INSPECTION SERVICES  
Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of  
Santa Carlotta Street and Cloud Avenue from Paraiso Way to  
Santa Carlotta Street, Project E-911

## Construction Management and Observation Services Irvine, California



### Project Value

\$214,000

### Project Duration

2008

### Reference

Irvine Ranch Water District  
15600 Sand Canyon Avenue  
Irvine, CA 92618

Mr. Randy Sundberg, P.E.  
949-453-5300  
sundberg@irwd.com



Tetra Tech was awarded a contract for on-call construction management and construction observation services. Projects involved the installation of new water mains up to 12-inches, lowering of water mains, service connections, house-line connections, fire services, water quality testing, resurfacing streets, pulling permits, and punch lists. Construction support services included responding to RFIs and shop drawings; maintaining written reports of contractor's daily field activities, supplemented with digital photographs; acting as the liaison between IRWD, contractor, local agencies, and residents; and reviewing project documents and reports.



#### 4 – PROJECT TEAM

Tetra Tech has a depth of resources for staffing CVWD's assignments with experienced, qualified personnel. The organizational chart to the right defines the project role of each key team member and delineates communication and reporting relationships among the key project staff. Brief bios are included in the following pages, with their 1-page resumes at the end of this proposal.

Our proposed staff has an excellent track record of successfully working together on projects over the past several years. Every project team member will work together on your projects to ensure quality results. Each member will not only apply the extensive experience she/he has gained on these projects, but will also bring with her/him a proven track record of expertly performing designated job responsibilities. Our goal will be to assume "turn-key" responsibility for the project, requiring minimal CVWD staff time that will be primarily limited to decision-making and approval.

Tetra Tech will be the prime consultant and will be responsible for overall project management, to include schedule and budget control. The key to providing efficient and cost-effective construction support services is to utilize experienced staff familiar with sewer, recycled and potable water projects and who have the knowledge of construction management and the associated community relations. We have structured our team so that experienced, disciplined personnel are responsible for providing leadership, monitoring of task schedules and budgets, and first-line quality control.

#### PROJECT TEAM CHART



**Mr. Steve Tedesco, P.E.** is our proposed Project Director. Mr. Tedesco has over 32 years of professional experience in water, wastewater, and reclaimed water engineering. Mr. Tedesco has been responsible for the preparation of water, wastewater, and reclaimed water master plans; project design reports for various water, wastewater, and reclaimed water facilities; and the planning and design of water, wastewater, and reclaimed water pipelines, along with pump stations and reservoirs.

**Ms. Luanne Bean, P.E.**, will serve as the Construction Manager. She has more than 25 years of extensive engineering and construction management experience of large transportation, environmental, municipal, industrial, federal, and public works facilities, including extensive Caltrans experience and large

diameter pipelines up to 12-feet in diameter. Additionally, her experience is unique because Ms. Bean is both a Licensed Civil Engineer and was also a Class A General Engineering Contractor. As such, Ms. Bean has seen design and construction from both sides of the fence and brings with her proactive solutions to many common construction issues. She is fully aware of the misinterpretations that may be experienced with the contractor, such

as front end loading of the Schedule of Values and hiding float within the project schedule, and will endeavor to address these issues to serve the best interests of CVWD. Ms. Bean's duties will include providing Resident Engineering services supervising the on-site staff including the Construction Observers, Surveying teams, and Concrete/Geotechnical/Soils Testing laboratories.

*Tetra Tech will fully commit this Project Team to Crescenta Valley Water District for your Projects; each person will fulfill his/her role as stated in this Proposal. None of these key persons will be removed or replaced without prior written concurrence of CVWD.*



**Mr. Brad Therrien, P.E.** will serve as the Alternate Construction Manager and backup to Luanne Bean. He is an experienced Construction Manager with a professional background including Construction Management, Engineering, Surveying and Inspection. His project experience includes bridges; highway and local roads; water resource and sewage facilities. His background includes extensive public sector experience serving as City Engineer and Public Works Director in several Southern California communities. Mr. Therrien has served as a Construction Manager/Resident Engineer on Caltrans type projects and has acted as agency liaison to Caltrans, U.S. Army Corps of Engineers, and Los Angeles County working on freeway and river projects in five California communities.

**Mr. Rick Wiggins** will serve as our Construction Observer. Mr. Wiggins is a Registered Construction Inspector through the ACIA, a Certified Public Works Inspector, and is also NPDES certified. He excels at making sure that contractors' operations are in compliance with approved Contract Documents. He is adept at interpreting Contract Documents including specifications by others, correctly under field conditions. Mr. Wiggins is also skilled at witnessing performance tests conducted by contractors on infrastructure improvements. Mr. Wiggins is expert at preparing detailed Field Reports documenting observed conditions, conducting "punch list" observations of all improvements, and coordinating all activities between client, office, and contractor. Furthermore, Mr. Wiggins effectively communicates in an objective, non-confrontational manner. His projects have included the construction of water mains, sewer lines, storm drains, box culverts, and commercial and residential developments.

**Mr. Sal Avalos** will be the Construction Observer Alternate to supplement Mr. Wiggins. He is a Registered Construction Inspector from American Construction Inspectors Association. Currently he is providing shift inspection supplementing Bill Fernandez for the Phase II Construction for the Alley Water Main Conversion – Pacific, Pine, and Locust Avenues Project MC-5093 and this project should be finishing about the same time this new project starts. Because of this prior experience, Mr. Avalos is readily familiar with the requirements of this project for the same type of conversions for the Lewis and Lemon Avenues Project. He has 15 years of

experience as a skilled construction observer in all aspects of pipeline installation, sewer lining, sewer replacement, concrete finishing, and roadway restoration. Projects include construction of water mains, sewer lines, storm drains, box culverts, and commercial and residential developments. Through his construction experience he has obtained the skills required to understand the full spectrum design of multidiscipline projects. Mr. Avalos is familiar with the documentation and compliance procedures maintained on large scale construction projects. He is adept at conveying information between the client, contractor, and utility representatives.

**Mr. Vik Mathur** is also an alternate Construction Observer Alternate to supplement Mr. Wiggins for unseen circumstances. On his recent project for the City of Burbank, Mr. Mathur received an unsolicited accolade from the local resident which went to the City directly praising the great care that our team did in the performance of the construction work immediately in front of their home.

## 5 – PROJECT SCHEDULE

As with all projects, a key element to the success of the project lies within the consultant's ability to meet or exceed schedule commitments within the allotted budget. Our proposal provides a complete schedule accommodating the contractor's submittal period, mobilization, and construction time frames. The Project Schedule and project work plan must encompass Tetra Tech's resources integrated into the contractor's plan of work for his own project schedule. Tetra Tech must manage both our internal resources to ensure that Tetra Tech has allocated the right resources at the right times to ensure project coverage balanced against the means and methods of the construction contractor. Tetra Tech will update the project schedule during construction upon reviewing the contractor's Critical Path Construction Schedule and inform the district of any foreseeable delays in the project.

### CVWD Preliminary Project Schedule

| ID | Task Name                                            | Duration | Start       | Finish      | Predecessors |
|----|------------------------------------------------------|----------|-------------|-------------|--------------|
| 1  | CVWD Construction Services Project E-911             |          |             |             |              |
| 2  | Pre Construction Activities                          | 19 days  | Tue 2/5/13  | Fri 3/1/13  |              |
| 3  | Award of Construction Contract                       | 0 days   | Tue 2/5/13  | Tue 2/5/13  |              |
| 4  | Award of Inspection Contract                         | 0 days   | Tue 2/19/13 | Tue 2/19/13 |              |
| 5  | Pre-Construction Meeting                             | 0 days   | Wed 2/27/13 | Wed 2/27/13 |              |
| 6  | Contractor Prepares, Submits, and Acquires Materials | 19 days  | Tue 2/5/13  | Fri 3/1/13  | 3            |
| 7  | Construction Activities                              | 52 days  | Mon 3/4/13  | Wed 5/15/13 |              |
| 8  | Contractor Mobilizes to Site                         | 1 day    | Mon 3/4/13  | Mon 3/4/13  | 6            |
| 9  | Construction Activities                              | 52 days  | Mon 3/4/13  | Tue 5/14/13 |              |
| 10 | Punch List and Construction Finalization             | 5 days   | Wed 5/8/13  | Wed 5/15/13 | 11FF         |
| 11 | Completion of Construction                           | 0 days   | Wed 5/15/13 | Wed 5/15/13 |              |

|                                               | Task      | Project Summary                                                                       | Inactive Milestone                                                                    | Manual Summary Rollup                                                                 | Deadline                                                                            |
|-----------------------------------------------|-----------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Project: Schedule 2 CVWD<br>Date: Thu 2/14/13 | Split     |  |  |  |  |
|                                               | Milestone |    |    |    |  |
|                                               | Summary   |    |    |    |  |
|                                               |           |    |    |    |  |
|                                               |           |    |    |    |  |



**Steve Tedesco, P.E.**  
Project Director

Mr. Tedesco is experienced in the planning, analysis, design, construction of water supply, water treatment and water distribution and collection systems. His experience includes water master planning, water treatment plant design, construction management and Design-Build delivery methods. Mr. Tedesco brings a unique perspective to the overall project, as he is well accustomed to not only reviewing deliverables for quality, but also for constructability. Mr. Tedesco has served as Design Manager on 12 Design-Build projects.

Mr. Tedesco has authored several master plans and infrastructure planning studies for sewer, water, and reclaimed water programs. He understands collection and treatment of wastewater and is knowledgeable regarding the key issues associated with supplying and storing domestic and reclaimed water. He has designed and directed the design of water and wastewater systems, pump stations, water supply reservoirs, water transmission, and wastewater collection mains.

**EXPERIENCE**

**Irvine Desalter Project, Irvine Ranch Water District, Irvine, CA** – Project Manager for \$35 million project to mitigate VOC contamination and increase local water supply. Project includes design of six groundwater wells, eight miles of pipeline, 8.0 mgd RO plant, and VOC removal facilities.

**Carlsbad Seawater Desalter Conveyance Pipeline, Poseidon Resources Corporation, Carlsbad, CA** – Project Director for 82,000 linear feet of pipeline that serves the product water from the planned 50 mgd desalination plant in the City of Carlsbad. Pipeline diameters range from 24-inch to 54-inch welded steel pipeline operating at a maximum pressure of 800 psi. Seven flow control facilities are planned. The pipeline is routed through the cities of Carlsbad, San Marcos, Vista and Oceanside. In addition, there are two bridge crossings, Caltrans right-of-way crossing, railroad crossing, and several bore and jack crossings located throughout the project

**Shady Canyon Pipelines, Irvine Ranch Water District, Irvine, CA** – Project Director for the design and construction support services for about 25,000 linear feet of 12- to 24-inch potable and recycled water transmission mains as part of the Shady Canyon Development.

**Groundwater Replenishment System Lacy Jail Pipeline, Orange County Water District, Fountain Valley, CA** – Project Director of design of 2,200 linear feet of 66-inch pipeline. This portion of the project was fast-tracked in order to allow parking lot expansion of the Lacy Detention Facility. The design included pipeline design and details, parking lot design, site drainage, bike and equestrian trail relocation and retaining wall between the parking lot and Santa Ana River.

**Barrier Pipelines, Orange County Water District, Fountain Valley, CA** – Project Director for design of about 12,000 linear feet of 20- to 42-inch pipeline as part of the Groundwater Replenishment Project. Project included the design of a drain line for the injection wells and coordination of permits from the City of Huntington Beach, City of Fountain Valley and SCE.

**Education:**

B.S., Civil Engineering,  
Polytechnic Institute of New  
York, 1979

**Registrations/Certifications:**

Professional Engineer,  
California, 1986, No. 39261

Board Certified Environmental  
Engineer (BCEE)

**Professional Affiliations:**

American Society of Civil  
Engineers

American Water Works  
Association

Orange County Water  
Association

WaterReuse Association

Southwest Membrane Operators  
Association

**Office:**

Irvine, California

**Years of Experience:**

32

**Years with Tetra Tech:**

26



FIELD INSPECTION SERVICES  
Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of  
Santa Carlotta Street and Cloud Avenue from Paraiso Way to  
Santa Carlotta Street, Project E-911

## **Luanne Bean, P.E.** **Construction Manager**

Ms. Bean is the leader of the Construction Management Group for Tetra Tech. She has more than 25 years of extensive engineering and construction management experience of large environmental, municipal, industrial, federal, and public works facilities ranging in size up to 600 mgd for water treatment plants, 25 MG for reservoirs, and 12-feet for pipelines. Ms. Bean's duties included providing leadership and supervising complex high performance project teams in the construction management, resident engineering, inspection, cost estimating, project administration, of projects including reservoirs, water and wastewater treatment plants, booster pumping stations and distribution pipelines for water and waste water, Caltrans roadway construction projects, hazardous and nuclear waste projects and a variety of other infrastructure projects.

### **EXPERIENCE**

**Water Main Bridge Crossing Project, Long Beach Water Department, Long Beach, CA** – Resident Engineer providing Construction Management and Inspection Services for the Water Main Bridge Crossing which is currently on-going and expected to finish just prior to the commencement of this project. Tetra Tech is providing office engineering support services and full time Construction Observation and Special Inspection testing services for this project. Field work includes fully trained staff in HAZMAT services to deal with the existing lead and zinc paint contamination. Tetra Tech's on-site staff is ensuring that the contractor 1) stays in compliance with their permit requirements with the LACFCD, 2) has achieved the appropriate sandblast cleaning profile to SSPC-SP10, 3) is achieve the appropriate mill thickness coverage of the 3+3+2 mil for a total of 8 mil minimum coating system, 4) does not have holidays within the coating system, 4) has fully coordinated with the Port-of-Long Beach.

**On-Call Construction Management Services, Long Beach Water Department, Long Beach, CA** – Construction Manager for construction support services for the CIPP lining and rehabilitation of 11,000 linear feet of 8-inch and 10-inch sewer pipeline.

**Upper Narrows Sewer Line Interceptor Replacement, Victor Valley Wastewater Reclamation Authority, Victorville, CA** – Ms. Bean was VVWRA's Project Manager during preliminary engineering responsible to coordinate and secure FEMA funding for the loss of Victor Valley Wastewater Reclamation Authority's main sewer line interceptor originally constructed in 1970 within the Mojave Riverbed lost during the storm event of December/January 2011. Her reports have generated requests for funding of over \$16M from the Public Assistance Program in accordance with the provisions of the Stafford Act for the construction and continued operation of VVWRA's emergency by-pass pipeline and booster pumping stations to convey 12 mgd of raw sewer water.

**Terra Lago Pump Station and Pipeline, City of Indio, CA** – Ms. Bean was the Construction Manager for this project which involved the construction inspection of the \$2.2 million dollar Terra Lago Booster Pump Station in the City of Indio. Ms. Bean's role in this project initially was Construction Inspection of both the pump station and the influent and effluent pipelines. The design of this pump station and its associated 24-inch influent and 18-inch effluent lines were engineered prior to the start of construction by a different company.

### **Education:**

University of California Los Angeles

M.S (with High Honors), Civil Engineering with a Specialization in Structural and Seismic Engineering, 1991

State Polytechnic University at Pomona B.S. (with Honors Cum Laude) - Civil Engineering, 1989

### **Registrations/Certifications:**

Professional Civil Engineer  
California, 1991, No. 50129

Registered Professional Civil Engineer

Nevada, 1997, No.012725

FEMA OPS-1 - FEMA

HAZMAT First  
Responder/Operations Level

DOT Offers of Bulk and Non-Bulk HAZMAT Packages

Former Class A General  
Engineering Contractor - State of California

Nuclear Waste Safety for  
workers

### **Office:**

Irvine, California

### **Years of Experience:**

25

### **Years with Tetra Tech:**

Two



**Brad Therrien, P.E.**  
Construction Manager (Alternate)

Mr. Therrien is an experienced Construction Manager with a professional background including Construction Management, Engineering, Surveying and Inspection. His project experience includes bridges; highway and local roads; water resource and sewage facilities. His background includes extensive public sector experience serving as City Engineer and Public Works Director in several Southern California communities. Mr. Therrien has served as a Construction Manager/Resident Engineer on Caltrans type projects and has acted as agency liaison to Caltrans, U.S. Army Corps of Engineers, and Los Angeles County working on freeway and river projects in five California communities.

**EXPERIENCE**

**Monte Verde Development, Santa Clarita, CA** – Project/Construction Manager with over 12 million cubic yards of grading and major infrastructure including water, sewer, roadways, 96-inch RCP drainage, 6 detention basins, lighting, erosion control, and landscaping. Project included construction of two 1 MG gallon steel tank reservoirs fed by 16-inch transmission lines and one pumping station with SCADA systems, pumping redundancy and emergency power backup.

**Bear Valley Springs CSD, Tehachapi, CA** – While serving as Public Works Director/District Engineer Brad supervised all aspects of a full service public works operation including a 19 well and reservoir public water system. During his tenure, he instituted a program to replace an outdated telemetry system with modern controls allowing better monitoring and control of the water delivery system. In addition, Brad also established two new well locations utilizing seismic refraction technology to locate sub-surface anomalies as an indicator of underground water locations. During drought conditions, he negotiated access to the California Aqueduct system along with temporary easements, pumping and piping systems to transport water approximately three miles over a mountain into the valley.

**State Highway 246, Buellton, CA** – Mr. Therrien recently completed a streetscape improvement project the Caltrans right-of-way on Highway 246 as Resident Engineer in the City of Buellton. The project included reconstruction of sidewalks and pavement, installation of median improvements, signal modifications, landscaping and enhanced lighting features. The project required extensive public outreach and coordination of temporary traffic modifications.

**Old Town Newhall Streetscape, Santa Clarita, CA** – Mr. Therrien served as Construction Manager on phases 1 and 2 of a 3 phase revitalization project in downtown Newhall. The project consisted of the complete removal and reconstruction of public facilities in an older business community. Work included brick paver sidewalks, extensive landscaping, colored concrete curb and gutter, new pavement with enhanced traffic features, new storm drains systems and traffic signals, nostalgic street lighting and public amenities. Mr. Therrien performed extensive public outreach and contract administration, inspection, grade checking, quantity control, negotiating change orders, and agency coordination.

**Education:**

University of Rhode Island  
RE Academy  
Emergency Response,  
Assessment & Recovery  
HAZWOPPER  
CA State Registered Disaster  
Responder  
RE Academy

**Registrations/Certifications:**

Professional Civil Engineer  
California No. 37301  
Professional Land Surveyor  
California No. – 5519

**Areas of Expertise:**

Construction management and  
inspection  
Caltrans, Local Agency  
Bridges  
Roadways  
Water and sewer  
Public agency coordination

**Office:**

Irvine, California

**Years of Experience:**

20



**Rick Wiggins, Jr.**  
Construction Observer

Mr. Wiggins excels at making sure that contractor's work is in compliance with approved contract documents. He is adept at interpreting contract documents including specifications, correctly under field conditions. Mr. Wiggins is also skilled at witnessing performance tests conducted by contractors on infrastructure improvements. Mr. Wiggins is expert at preparing detailed Field Reports documenting observed conditions, conducting "punch list" inspections of all improvements, and coordinating all activities between Client, engineers, and contractor. Furthermore, Mr. Wiggins effectively communicates in an objective, non-confrontational manner. His projects have included the construction of water mains, sewer lines, storm drains and box culverts.

**EXPERIENCE**

**CVWD Dos Palmas, Coachella Valley Water District, Coachella Valley, CA** – Construction Observer during the construction of 1,800 linear feet of recharge basin in the old unlined Coachella Canal. This project also involved the construction of 740 linear feet of 6-inch water supply pipeline; construction of 400 linear feet of 2-inch PVC pipeline within Dos Palmas ACEC; construction of one 2-inch diameter monitoring well near the unlined canal percolation basin; construction and development of one production well with discharge head within Aqua Farms; destruction of two wells, and the mechanical cleaning of two existing wells; and clearing of 600 linear feet of recharge basin within Aqua Farms property.

**Headlands Development Project, South Coast Water District, Dana Point, CA** – Construction Observer for the installation of 8-inch and 12-inch water main and appurtenances including water services, fire hydrants, air vacs, disinfection of pipeline and hydrostatic pressure testing; 8-inch sewer main and appurtenances including sewer services, cleanouts, manholes and air pressure testing.

**Created Marsh for the Coachella Canal Lining Project, Coachella Valley Water District, Dos Palmas Preserve, CA** – Construction Observer for the installation of 12-inch epoxy coated and lined ductile iron pipes and all appurtenances; 12-inch concrete pipe and all appurtenances; precast vaults, covers, and all appurtenances; 12-inch Waterman C10 flat backed slide gates including all appurtenances; and 12-inch Waterman C20 flat backed slide gates including all appurtenances. This project also involved dewatering; earthwork, grading, berms, and geotextile fabric; and cast-in-place concrete pads and weirs.

**Sewer Rehabilitation #08-04 Project, City of Hawthorne, Hawthorne, CA** – Construction Observer for the rehabilitation and lining of sewer manholes, and sewer main point repairs which included removal of sections of damaged sewer main and replacing with new piping. Project also involved the removal of large sections of 8-inch VCP sewer main and replacing with new, larger diameter piping, 10-inch and 12-inch VCP (upsizing), as well as sewer main lining to damaged sewer mains.

**Education:**

Indio High School, 1996

**Registrations/Certifications:**

OSHA 10-Hour Construction Safety

NPDES Regulations & Best Management Practices

Registered Construction Inspector through the ACIA

Certified Public Works Inspector through the ACIA

40-Hour HAZWOPER as per CFR 1910.120(e)

Confined Spaces Training

**Office:**

Irvine, California

**Years of Experience:**

15

**Years with Tetra Tech:**

Six

## Vik Mathur

### Construction Observer (Alternate)

Mr. Mathur is experienced in project planning, management, and field leadership for environmental soil and groundwater investigations. He also has a strong health and safety management background. His experience includes working on USEPA Superfund sites, military bases, and on commercial and industrial sites throughout the Western U.S.

## EXPERIENCE

**BS 1361 – City Wide Sidewalk Rehabilitation, Burbank, CA –** Construction Observer responsible for oversight of the contractor. This project involved notifications to the impacted residents, advance marking and logging of the portion of the sidewalk to be rehabilitated, monitoring the contractor's workmanship and materials for quality assurance, and logging the contractor's finished work for payment. Tetra Tech received zero public complaints to the City. The City received an unsolicited public accolade for the great care that he took with the residents there.

**Field Investigations- Environmental Sampling/Monitoring - JPL and POLA, Los Angeles, County, CA -** Site geologist responsible for field documentation and execution of environmental sample collection. Responsibilities included geologic logging, health and safety, soil and groundwater sample collection, preparation for laboratory analyses, and reporting.

**Safety Team Advisor/Environmental Consultant Bureau Veritas, Costa Mesa, CA - Emergency Oil Spill Response - British Petroleum Deepwater Horizon Project (Gulf of Mexico) –** Responsible for safety oversight and heat stress advisement for clean-up responders to a major offshore oil spill. Performed health and safety oversight at the Lafitte, Grand Isle, and Port Fourchon, Louisiana Forward Operating Bases (FOBs), overseeing beach, boat, and dock operations, including confined-space and decontamination activities.

**Field Investigation - Soil and Surface Water Sampling at the Bolsa Chica Wetlands, Huntington Beach, CA -** Site lead geologist responsible for all field documentation and execution of soil sample collection utilizing a direct-push Geoprobe drill rig. Responsibilities included geologic logging, health and safety, sample labeling, preparation of chain-of-custodies, and soil sample shipment. Additionally, was part of a team that acquired surface water samples.

**Site Assessment - Phase I Site Assessment for the Alameda Transportation Corridor, Los Angeles, CA -** Involved in site reconnaissance, field mapping, and preparation of a scope of work for additional soil investigations.

### Education:

M.S., Geology,  
California State University Long  
Beach, 1994

B.S., Physics,  
California State University  
Irvine, 1988

### Registrations/Certifications:

FEMA Certification Incident  
Command System ICS-100

40 Hour Hazardous Waste  
Training (HAZWOPER)

8 Hour Annual HAZWOPER

CPR/AED Training (2 year)

Medical Services and First aid  
(3 year)

### Training Courses:

Field Safety Coordinator

Evacuation Safety

Asbestos Awareness

10 Hour Construction Safety  
Awareness

Hazard Communication

Fall Protection

Fire Extinguisher

Trench Safety

Confined Space Entry

Chemical Storage

DOT Hazardous Material  
Transportation

Hydrogeology

Hazardous Waste Management

Engineering Geology

Geophysical Subsurface  
Investigation Techniques

### Office:

Irvine, California

### Years of Experience:

16

### Years with Tetra Tech:

One



## Sal Avalos

### Construction Observer (Alternate)

Mr. Avalos is a Registered Construction Inspector from American Construction Inspectors Association. He has 15 years of experience as a skilled construction observer in all aspects of pipeline installation, sewer lining, sewer replacement, concrete finishing, and roadway restoration. Projects include construction of water mains, sewer lines, storm drains, box culverts, and commercial and residential developments. Through his construction experience has obtained the skills required to understand the full spectrum design of multidiscipline projects, Mr. Avalos is familiar with the documentation and compliance procedures maintained on large scale construction projects. He is adept at conveying information between the client, contractor, agency, and utility representatives.

### EXPERIENCE

**Phase II Construction for the Alley Water Main Conversion – Pacific, Pine, and Locust avenues Project MC-5093, Long Beach Water Department, Long Beach, CA** – Shift Construction Observer providing oversight to ensure the contractor properly installed the private water service lines from the new water meter to the shutoff valve.

**The Port of Long Beach Fiber Optic Network, Port of Long Beach** – Construction Observer for the Homeland Security Project which includes 30 miles of micro-trenching, directional boring and installing micro-conduits. This project also includes the installation of manholes, hand holes and 12-strand single mode fiber as well as 72-strand single mode fiber along the Port of Long Beach roadways and adjacent City of Long Beach roadways. As the Construction Observer, Mr. Avalos's duties include: quantity verification, construction installation verification in accordance with plans and specifications, and construction progress documentation which includes daily record of progress, and photographic documentation.

**Security Manhole Entrances for Port Utility Network Project, Port of Long Beach** - The purpose of this project is to further increase the security of the Port by limiting the access points within the Port by replacing existing manhole frames and covers with secure manhole lids. This project will improve 200 manhole entrances by replacing current infrastructure with secure locking manhole lids. Mr. Avalos currently serves as the Construction Observer. His responsibilities include: quantity verification, construction installation verification in accordance with plans and specifications, and construction progress documentation which includes daily record of progress, and photographic documentation.

**Headlands Development Project, City of Dana Point** – Construction Observer for a 120-acre development site for future residential and commercial tracts and public parks. Project included mass grading of development, installation of sewer and water lines, paving, and the construction of a new sewer lift station. Mr. Avalos project duties included the inspection of the water main, sewer main, water services, and fire hydrant installation.

### Education:

Kings College

San Bernardino Valley College

### Registrations/Certifications:

OSHA 10-Hour Construction Safety

Registered Construction Inspector- American Construction Inspectors Association

Dig Alert/Trenching & Excavation Safety

Certified Fiber Optic Technician- Fiber Optic Association

### Office:

Irvine, California

### Years of Experience:

15

### Years with Tetra Tech:

10



February 14, 2013

Mr. David S. Gould, P.E.  
District Engineer  
Crescenta Valley Water District  
2700 Foothill Boulevard  
La Crescenta, CA 91214

**Reference: Fee Proposal to Provide Field Inspection Services for Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of Santa Carlotta Street and Cloud Avenue from Paraiso Way to Santa Carlotta Street, Project E-911**

Dear Mr. Gould:

Tetra Tech is pleased to submit our fee proposal to provide Field Inspection Services for Construction of an 8-Inch Water Main on the 3000 and 3100 Blocks of Santa Carlotta Street and Cloud Avenue from Paraiso way to Santa Carlotta Street, Project E-911. The rate schedule attached includes overhead, profit, and expenses. All work will be performed on a time and material basis "not-to-exceed" the contract price and no additional compensation will be received beyond the price negotiated to be performed unless changes are approved in advance by an amendment to our contract signed by the Crescenta Valley Water District (CVWD).

Attached is our work plan with a breakdown of labor hours by employee billing classification, together with the cost of non-labor and subconsultant services included in the fee proposal. Costs for film developing will be passed onto CVWD with a 10% markup. Our labor rates include mileage, computer, and cell phone charges at no additional cost to the District. Additionally, we are holding our 2011/2012 billing rates to the CVWD for the duration of this project. Also attached are Tetra Tech's standard billing rates for all classifications of staff likely to be involved in the Project.

In pricing our proposal for this project to CVWD, we have included the following services:

- 1) Full Time Construction Observation by Rick Wiggins at \$95/hour for a total of 400 hours and \$38,000
- 2) Part Time Construction Management by Luanne Bean on an as-needed basis to be as-needed by the District for 48 hours at \$8,640.
  - I. Preconstruction Services**
    - Identify Key individuals and establish lines of communication 4
  - II. Construction Services**
    1. Maintain and update Schedule 12
    2. Provide Daily and Weekly Inspection and Construction Activity Reports 6
    4. Shop Drawing Coordination 4
    9. Assist District with Monthly Pay Estimate 4
    10. Draft Request
      - Change Orders (assume 3) 3
      - RFIs (assume 5) 5
    13. Provide Guidance & Recommendations to the District 6
  - III. Project Close-Out**
    5. Deliver Project Records to District 4

**Tetra Tech, Inc.**

17885 Von Karman Avenue, Suite 500, Irvine, CA 92614-6213  
Tel 949.809.5000 Fax 949.809.5010 [www.tetratech.com](http://www.tetratech.com)

Mr. David S. Gould, P.E.  
February 14, 2013  
Page 2

- 3) Part Time Construction Administration by Mylynn Nguyen for 24 hours at \$65/hour a total of \$1,560 to provide word processing and production of the following:
- II - 2. Provide Daily and Weekly Inspection and Construction Activity Reports,
  - II - 8. Document Construction Progress
  - III- 5. Deliver Project Records to the District.

Additionally, billing rates for our Alternate staff proposed will be the same as the primary staff noted herein. A fully detailed Labor report and their associated staffing and costs in attached to this letter along with our billing rates.

Thank you for giving us the opportunity to submit our proposal. We look forward to your positive response. If you need additional information or have any questions, please feel free to contact me directly at (949) 809-5153.

Sincerely,



Steve Tedesco, P.E.  
Senior Vice President, Engineering & Consulting Services

SDT/LB/cg

M:\Marketing\Proposals\WTR\FY2013\CM027\_CVWD-Crescenta



Luanne Bean, P.E.  
Construction Manager

Attachments



**EXHIBIT "A"**  
**2012**

**HOURLY CHARGE RATE AND  
EXPENSE REIMBURSEMENT SCHEDULE**

**Professional**

|                                            |           |
|--------------------------------------------|-----------|
| Engineering Intern/Technician/Assistant... | \$ 65.00  |
| Project Administrator.....                 | \$ 65.00  |
| Designer/CAD Operator/Engineer I .....     | \$ 120.00 |
| Engineer II and III/Senior Designer .....  | \$ 128.00 |
| Biologist.....                             | \$ 120.00 |
| Planner .....                              | \$ 120.00 |
| Senior Engineer/Landscape Architect.....   | \$ 130.00 |
| Project Engineer/Project Coordinator ..... | \$ 150.00 |
| Senior Planner.....                        | \$ 160.00 |
| Senior Scientist .....                     | \$ 160.00 |
| Senior Project Engineer .....              | \$ 210.00 |
| Project Manager/Sr. Project Coordinator... | \$ 200.00 |
| Senior Project Manager. ....               | \$ 280.00 |
| Program Director/Project Director.....     | \$ 275.00 |

**Administrative**

|                                     |           |
|-------------------------------------|-----------|
| Administrative Clerk .....          | \$ 65.00  |
| Word Processor/Admin. Support ..... | \$ 90.00  |
| Graphic Designer/CADD.....          | \$ 120.00 |

**Reimbursable In-House Costs**

|                                     |              |
|-------------------------------------|--------------|
| Photo Copies (B&W 8.5"x11") .....   | \$ 0.15/Each |
| Photo Copies (B&W 11"x17") .....    | \$ 0.40/Each |
| Color Copies (up to 8.5"x11") ..... | \$ 2.00/Each |
| Color Copies (to 11"x17") .....     | \$ 3.00/Each |

**Survey/Mapping**

|                                             |           |
|---------------------------------------------|-----------|
| Survey Technician I .....                   | \$ 109.00 |
| Survey Technician II/Field Supervisor ..... | \$ 125.00 |
| Senior Surveyor. ....                       | \$ 141.00 |
| Project Surveyor. ....                      | \$ 163.00 |
| Two-Person Survey Party .....               | \$ 230.00 |
| Two-Person Survey Party with GPS .....      | \$ 275.00 |
| Three-Person Survey Party .....             | \$ 320.00 |
| Survey Travel Time (Two-person) .....       | \$ 109.00 |
| Survey Travel Time (Three-person) .....     | \$ 153.00 |

**Construction Management**

|                                          |           |
|------------------------------------------|-----------|
| Construction Observer I.....             | \$ 95.00  |
| Construction Observer II .....           | \$ 113.00 |
| Senior Construction Observer.....        | \$ 135.00 |
| Resident Engineer/Construction Manager . | \$ 180.00 |

|                                                                                                                                           |               |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Compact Discs .....                                                                                                                       | \$10.00/Each  |
| Large Format Copies .....                                                                                                                 | \$ 0.80/S.F.  |
| Mileage .....                                                                                                                             | \$0.50/Mile * |
| *Mileage for company vehicles is included in labor rates, other mileage is subject to the current GSA POV. Mileage Rate subject to change |               |

All other direct costs, such as subconsultants, reproduction, special photography, postage, delivery services, overnight mail, and printing will be billed at cost.

**NOTE:** Rates subject to change annually.





General Civil, Municipal, Water and Wastewater Engineering,  
Planning, Construction Management and Surveying  
Monrovia Prescott Phoenix

February 14, 2013



Crescenta Valley Water District  
2700 Foothill Boulevard  
La Crescenta, CA 91214

Attention: David S. Gould, P.E., District Engineer

Subject: Proposal to Provide Field Inspection Services for the Carlotta Street and Cloud Avenue 8-Inch Water Main Construction Project; Project E-911

Dear Mr. Gould:

*CIVILTEC engineering, inc. (Civiltec)* is pleased to present our proposal to provide Inspection Services for the Carlotta Street and Cloud Avenue 8-Inch Water Main Construction Project. *Civiltec* has a wealth of successful experience working for municipalities, water and wastewater districts and state and federal agencies in completing public works, water and wastewater system improvement projects, designing small and large diameter pipeline infrastructure, inspection services, and construction management. *Civiltec* routinely works well with other consultant team members in the course of efficiently completing projects, and has a proven successful relationship with the Team proposed herein.

*Civiltec* has provided construction management and inspection services for numerous pipeline construction projects of this nature and lists a few of the most recent such accomplishments herein. We appreciate the opportunity to submit our proposal and look forward to assisting Crescenta Valley Water District in the successful completion of this important project.

Very truly yours,

*CIVILTEC engineering, inc.*

A handwritten signature in blue ink, appearing to read "W. David Byrum".

W. David Byrum, P.E.  
Senior Vice President  
Principal Engineer

WDB:DS:dlo

W:\2013\Proposals\PM13031 CVWD 8-Inch Steel Pipeline Inspection Services.doc



## Table of Contents

|                                                               |    |
|---------------------------------------------------------------|----|
| Table of Contents .....                                       | 2  |
| Authorized Responsible Engineers .....                        | 3  |
| Relevant Project Experience .....                             | 4  |
| Project Understanding.....                                    | 8  |
| Scope of Services .....                                       | 8  |
| Budget Summary .....                                          | 10 |
| <b>Appendix A – Monrovia Organizational Chart and Resumes</b> |    |
| <b>Appendix B – Engineering Estimate of Budget</b>            |    |
| <b>Appendix C – Company Rate Schedule</b>                     |    |

---





## Authorized Responsible Engineers

**W. David Byrum, P.E., (C043296)** will function as **Principal-in-Charge** for this important Crescenta Valley Water District project and will be responsible for a timely response and quality completion of this assignment. Mr. Byrum is Senior Vice President of *Civiltec* and has the authority to commit all *Civiltec* resources and take any action necessary to meet your requests. Mr. Byrum will be the company representative in all contractual relations between *Civiltec* and CVWD and the primary contact between our company and CVWD. Mr. Byrum has over 30-years experience in the water and wastewater industries in Southern California. He has designed and managed construction for hundreds of small and large diameter pipeline projects since 1984. Mr. Byrum will be assigned tasks as requested by the Construction Manager to support critical aspects of the project.

*Civiltec* will assign **Terry L. Kerger, P.E. (C034896)**, Associate, as **Principal Engineer**. Mr. Kerger has over 35 years of engineering experience and has been the responsible engineer for the design or construction management of reservoirs, pump stations, well facilities, pipelines and treatment plants. His primary responsibilities include the supervision of professional and technical staff, management of project budgets and schedules, effective utilization of *Civiltec's* resources in meeting project technical and schedule requirements, maintaining lines of communication between *Civiltec* and their clients and maintaining *Civiltec's* quality assurance and technical review programs.

*Civiltec* will assign **David Song, P.E. (C076613)** as **Construction Manager** for this project. Mr. Song is a Project Engineer in the Monrovia office. Mr. Song has been involved in the design and construction management of several water pipeline projects. Mr. Song has served as construction manager on pipeline projects for Suburban Water Company, the City of Garden Grove, and Santa Clarita Water Division. Mr. Song will be assigned as construction manager for activities on this project including assessment of memos, observation reports, change orders, and RFI's, assessment of schedule and critical path issues and attendance at critical meetings.

*Civiltec* will assign **Daniel Fison** to this project to provide full-time inspection services. Mr. Fison has over 27 years experience as a water system supervisor, field inspector and water system maintenance man. Mr. Fison retired from the City of Cerritos in 2011 and brings a wide range of experiences to this project. Mr. Fison has been Resident Inspector for numerous City of Cerritos potable and recycled water projects. Mr. Fison will serve as the full-time onsite inspector for the duration of the project.

Full resumes of these key members of the project team are presented in Appendix A along with an overall Organization Chart for the Monrovia Office.



## Relevant Project Experience

*Civiltec* has construction managed large transmission pipeline projects for the California Domestic Water Company as part of a multi-phased approach over several years. All CDWC projects were design by *Civiltec* staff and project and construction managed by David Byrum and Terry Kerger. Project inspection was provided by Jim Smitherman and Jim Archuleta. The total length of pipeline is approximately 49,000 feet and the total construction cost was approximately \$18,000,000. The projects components are as follows:

**“M” Line Phase I** - approximately 4,800 linear feet of 48-inch steel pipeline, cement mortar lined and coated. The new pipeline was constructed on Workman Mill Road in the City of Industry. The project involved design of crossing of a Union Pacific Railroad right-of-way and a crossing of an open channel box culvert under the jurisdiction of the County of Los Angeles and Army Corp of Engineers. *Civiltec* applied for and obtained all City of Industry, LA County Flood Control, Army Corp and Union Pacific Railroad permits for the project.



**“M” Line Phase II** - approximately 6,200 linear feet of 54-inch steel pipeline, cement mortar lined and coated. The new pipeline was constructed on Parkway Avenue in the City of El Monte. The project involved design of crossing of an arterial highway by jack and bore, crossing a school site through a new easement, and work within the City of El Monte streets. *Civiltec* applied for and obtained all City permits for the project, developed and recorded all new easements and assisted in the negotiation of a new franchise agreement with the City of El Monte.

**“H” Line Phase I and II** - approximately 22,760 linear feet of 36-inch steel pipeline, cement mortar lined and coated. The new pipeline was constructed from the CDWC Plant No. 3 to Plant No. 6. A portion of the pipeline alignment was constructed in arterial highways under the jurisdiction of Caltrans. *Civiltec* applied for and obtained all City of Whittier and La Habra, LA and Orange County Flood Control, and Caltrans permits for the project. A portion of the pipeline was constructed at night due to permit requirements by Caltrans. The alignment also crossed a ‘blue-line’ stream requiring a Department of Fish and Game permit.

Contact: Mr. Jim Byerrum, President  
California Domestic Water Company  
15505 East Whittier Boulevard  
Whittier, CA 90603-1338  
(562) 947-3811

## Crescenta Valley Water District

David S. Gould, P.E., District Engineer

Proposal to Provide Field Inspection Services

February 14, 2013

Page 5 of 10



*Civiltec* is under annual contract with the City of La Verne to provide engineering services for infrastructure projects including water system improvements, sewer system improvements, street reconstruction projects and miscellaneous engineering. Mr. Byrum has been City Engineer and/or City Utility Engineer for the City since 1984. Mr. Byrum, Mr. Kerger and the *Civiltec* engineering staff has designed reservoirs, pump stations, rehabilitation of existing wells, an air-stripper to remove VOC's, a nitrate/perchlorate removal treatment plant, miles of water and sewer pipelines and building renovations. *Civiltec* staff has designed and construction managed numerous waterline projects for the City of La Verne ranging in size from 8-inch distribution pipelines to 24-inch transmission pipelines. All projects were designed and construction managed by either Mr. Kerger or by Mr. Byrum. *Civiltec* applied for and obtained all L.A. County Flood Control and Public Works permits, Department of Public Health permits, Caltrans permits and NPDES permits for the projects.



Contact: Mr. Dan Keesey, Director of Public Works  
City of La Verne  
3660 "D" Street  
La Verne, CA 91750  
(909) 596-8741

*Civiltec* has construction managed large transmission pipeline projects for the Covina Irrigating Company since 2005. The Sierra Madre Highway 39 - 42-inch Transmission Pipeline project consisted of approximately 4,550 feet of 42-inch ductile iron pipeline transmission pipeline from the City of Azusa Canyon Filtration Plant to the intersection of Sierra Madre Avenue and Hilltop Avenue. The pipeline connected to an existing 42-inch pipeline at this intersection. Mr. Byrum served as Construction Manager of the entire project and was assisted by Jim Smitherman in performing full time inspection of the Phase I component, which consisted of approximately 1,365 feet of the 42-inch pipeline and 1,605 feet of a 30-inch pipeline constructed in the same trench for the City of Glendora. Project was determined to be substantially complete on October 30<sup>th</sup>, 2009. Initiation of the Phase II component, which consisted of the balance of the remaining alignment, began construction in December 2009 and was completed in July 2010. We also provided inspection services for the Rosedale Development in Azusa, which included approximately another 4,800 feet of 42-inch transmission pipeline for Covina Irrigating Company as well pipelines, reservoirs and pump station for the City of Azusa.



Contact: Mr. Matthew Kuns, Project Manager  
Covina Irrigating Company  
146 East College Street  
Covina, CA 91723  
(626) 332-1502

**Crescenta Valley Water District**

David S. Gould, P.E., District Engineer

Proposal to Provide Field Inspection Services

February 14, 2013

Page 6 of 10



*Civiltec* has completed the construction management of the Longden and Van Nuys Reservoirs, the Van Nuys Booster Pump Station and the 24-inch Parallel Pipeline; a large improvement project for the San Gabriel County Water District. The Booster Station houses four vertical turbine pumps in a block building. The construction included 24-inch suction and discharge piping, site improvements, landscaping, sound attenuation, flow meter, pressure relief, and site electrical system upgrades. The Project also included approximately 7,500 feet of 24-inch pipeline from the discharge of the Pump Station to the Van Nuys Reservoir site, through the streets of San Marino, as well as two large concrete reservoirs. The project was constructed over a 2 ½ year period at a cost of just over \$12,000,000.

*Civiltec* provided a full time inspector on the project and Mr. Byrum served as construction manager. The Project was bound by an extensive EIR and was under extreme scrutiny of the community. Because of these reasons, *Civiltec* performed a complete and thorough constructability review and value engineering of the entire project. The 3.8 mg Longden Reservoir and 6.0 mg Van Nuys Reservoir were designed by others and were reviewed at several stages during the design process for EIR mitigation measure compliance as well as construction feasibility and cost impact to the budget. The pump station and pipeline projects were redesigned after the issuance of the EIR and settlement of the litigation between the City of San Marino and the Water District to address construction impact issues and mitigation measures. The project is complete and in service.

Contact: Mr. Charles Shaw, General Manager  
San Gabriel County Water District  
8366 Grand Avenue  
San Gabriel, CA 91778  
(626) 287-0341

*Civiltec* has construction managed large transmission pipeline projects and distribution pipeline projects for the La Habra Heights County Water District since 1998. Mr. Byrum served as construction manager these projects which included construction management and inspection of approximately 6,000 linear feet of ductile iron pipe ranging in sizes from 6-inch to 8-inch. The project was constructed over various streets within the Districts service area. All components of the project were completed late 2008. The project was completed without change orders or delays and was built on time and within budget. We have also construction managed the 20-inch transmission project for LHHWCWD on Whittier Boulevard in 2010 that was within Caltrans right-of-way and constructed at night per the permit conditions.

Contact: Mr. Michael Gualtieri, General Manager  
La Habra Heights County Water District  
1271 North Hacienda Boulevard  
La Habra Heights, CA 90631  
(562) 697-6769



*Civiltec* and Mr. Kerger have served as construction manager for multiple projects for the City of Alhambra which include the Hill Top pipeline replacement project consisted of replacing 5,600 feet of 6-inch and 8-inch ductile iron water main. Pipeline required to replace old vintage 1920's cast iron water distribution mains to improve system reliability and upgrade fire protection capability. Pipeline replacement included upgrading all customer services, new line valves, upgrading fire hydrants and water main appurtenances. Pipeline trench resurfacing and slurry sealing of affected residential streets was included to restore street surfaces to original condition.

Siwanoy Pressure zone conversion pipeline included installation of 10,500 lineal feet of 12-inch ductile iron water main to connect the Siwanoy Pressure Zone with the Garvey pressure zone. The existing Siwanoy elevated reservoir was removed due to structural deterioration and seismic consideration. Pipeline replacement included upgrading all customer services, new line valves, upgrading fire hydrants, inter zone connections, and water main appurtenances. Pipeline trench resurfacing and slurry sealing of affected residential streets was included to restore street surfaces to original condition.



The Water Treatment Plant Waste Brine line project consisted of installing 12,500 feet of 8-inch PVC waste brine sewer pipeline from the City of Alhambra Ground Water Treatment Plant southerly to a connection with the County of Los Angeles Sanitation District Industrial Trunk Sewer in the City of Monterey Park. Waste sewer line included bored and jacked casing crossings at the Southern Pacific Railroad and Cal Trans I-10 Freeway. Sewer main installation included all access manhole appurtenances, street resurfacing, utility relocations, and Sanitation District connection and metering facilities.

Contact      Mr. Martin Ray, Deputy Director of Utilities  
City of Alhambra, Department of Utilities  
111 South First Street  
Alhambra, CA 91801  
(626) 570-3280



## Project Understanding

*Civiltec* understands the objective of this project is the inspection and construction management services for construction of 1,840 linear feet of 8-inch CML & CMC steel water pipeline including fire hydrants and water services.

A resident inspector will be provided for construction inspection on a full time basis for the duration of construction. The inspector will not be moved or reassigned after beginning inspection services for the project. We understand that construction of the project is scheduled to last approximately 70 calendar days, starting March 4, 2013 and ending May 15, 2013.

## Scope of Services

### Phase 1 – Pre-Construction Services

- A. **Project Management.** *Civiltec* will work with CVWD staff prior to construction to identify key individuals and lines of communications with District personnel, establish general and construction reporting procedures including field clarifications, RFIs, change orders, and establish project close-out procedures.
- B. **Preconstruction Meeting.** *Civiltec* will arrange and conduct a preconstruction meeting under supervision of the Construction Manager. Distribute agenda and minutes to Project Team. Video record and photograph the site with the Project Team during pre-construction and post-construction. Provide a DVD of video and photos to CVWD. We will document the condition of the existing roadways to ensure that any existing damage is well documented. We will perform this same review at the end of the construction project and document any changes to streets.

### Phase 2 – Construction Services

- A. **Construction Schedule.** *Civiltec* will maintain and update a master construction schedule based on the construction schedule provided by the contractor. The Construction Manager shall be responsible to notify the District if the contractor is not meeting the established schedule.
- B. **Weekly Progress Meetings.** *Civiltec* will arrange and conduct regular and weekly job site meetings with CVWD, inspector, contractor and participating outside consultants and agencies. Review schedule, work progress, as-built drawings, and clarifications to be discussed and minutes of the meeting outlining action items for the contractor and each Project Team member. We believe these weekly jobsite meetings keep the contractor focused on the tasks at hand and upcoming tasks.



- C. Inspection:** *Civiltec* will provide on-going full-time inspection of construction work identified herein to assure quality of construction and adherence to specifications, drawings, and submittals. We will monitor and ensure the Contractor's compliance with all requirements of the project. Provide coordination of shop drawings and construction activities, including coordination of water main shutdowns and geotechnical testing activities with the soils engineering firm. Document daily work progress with written logs, digital photographs and video logs as well as monitor all major equipment deliveries in accordance with the contract documents and approved shop drawings. Provide weekly summary reports to the District's Project Manager documenting progress that will include daily reports, test results and an updated schedule. Observe the contractor for compliance with site and job safety requirements. Inform CVWD of any concerns or problems concerning site or job safety observed. Halt construction activities if safety orders are not followed. *Civiltec* anticipates that our inspector will be on-site approximately 53 working days; therefore we have budgeted **424 hours** for full-time inspection.
- D. RFI's, Change Orders, and Progress Payment Review:** *Civiltec* will manage requests for RFI's and change orders by the contractor. Provide RFI's and requests for change orders with documentation to CVWD for review and recommendations. Assist the District in processing monthly progress pay estimate including review of contractor's work progress. Implement changes as required and directed by the Project Team.
- E. As-Built Package:** *Civiltec* will maintain the official construction record drawings indicating any changes in the design, materials, dimensions and details. This work will be done in concert with the contractor. The redline drawings, photos of all above and underground utilities, photos and specifications for all civil and mechanical items, will be issued to CVWD.

### **Phase 3 – Project Close-Out**

- A. Final Inspection:** *Civiltec* will arrange and conduct the final inspection of work placed into service to be witnessed by the Project Team. Obtain and ensure all operational manuals and warranties are reviewed and approved. Determine all testing has been successfully completed and is satisfactory. Prepare a "punch list" of all items to be completed by the contractor to obtain final completion. Ensure items are completed.



## Budget Summary

*Civiltec* proposes to provide the Scope of Services herein on a time and materials basis per the attached rate schedule, not to exceed the following total budget, without written authorization from Crescenta Valley Water District:

### PHASE 1 – PRE-CONSTRUCTION SERVICES

|                                  |                    |
|----------------------------------|--------------------|
| Task A – Project Management      | \$ 2,530.00        |
| Task B – Preconstruction Meeting | <u>\$ 900.00</u>   |
| <b>TOTAL PHASE 1 TASKS</b>       | <b>\$ 3,430.00</b> |

### PHASE 2 – CONSTRUCTION SERVICES

|                                                            |                     |
|------------------------------------------------------------|---------------------|
| Task A – Construction Schedule                             | \$ 1,740.00         |
| Task B – Weekly Progress Meetings                          | \$ 4,240.00         |
| Task C – Inspection                                        | \$ 34,940.00        |
| Task D – RFI's, Change Orders, and Progress Payment Review | \$ 4,640.00         |
| Task E – As-Built Package                                  | <u>\$ 2,440.00</u>  |
| <b>TOTAL PHASE 2 TASKS</b>                                 | <b>\$ 48,000.00</b> |

### PHASE 3 – PROJECT CLOSE-OUT

|                            |                    |
|----------------------------|--------------------|
| Task A – Final Inspection  | <u>\$ 2,720.00</u> |
| <b>TOTAL PHASE 3 TASKS</b> | <b>\$ 2,720.00</b> |

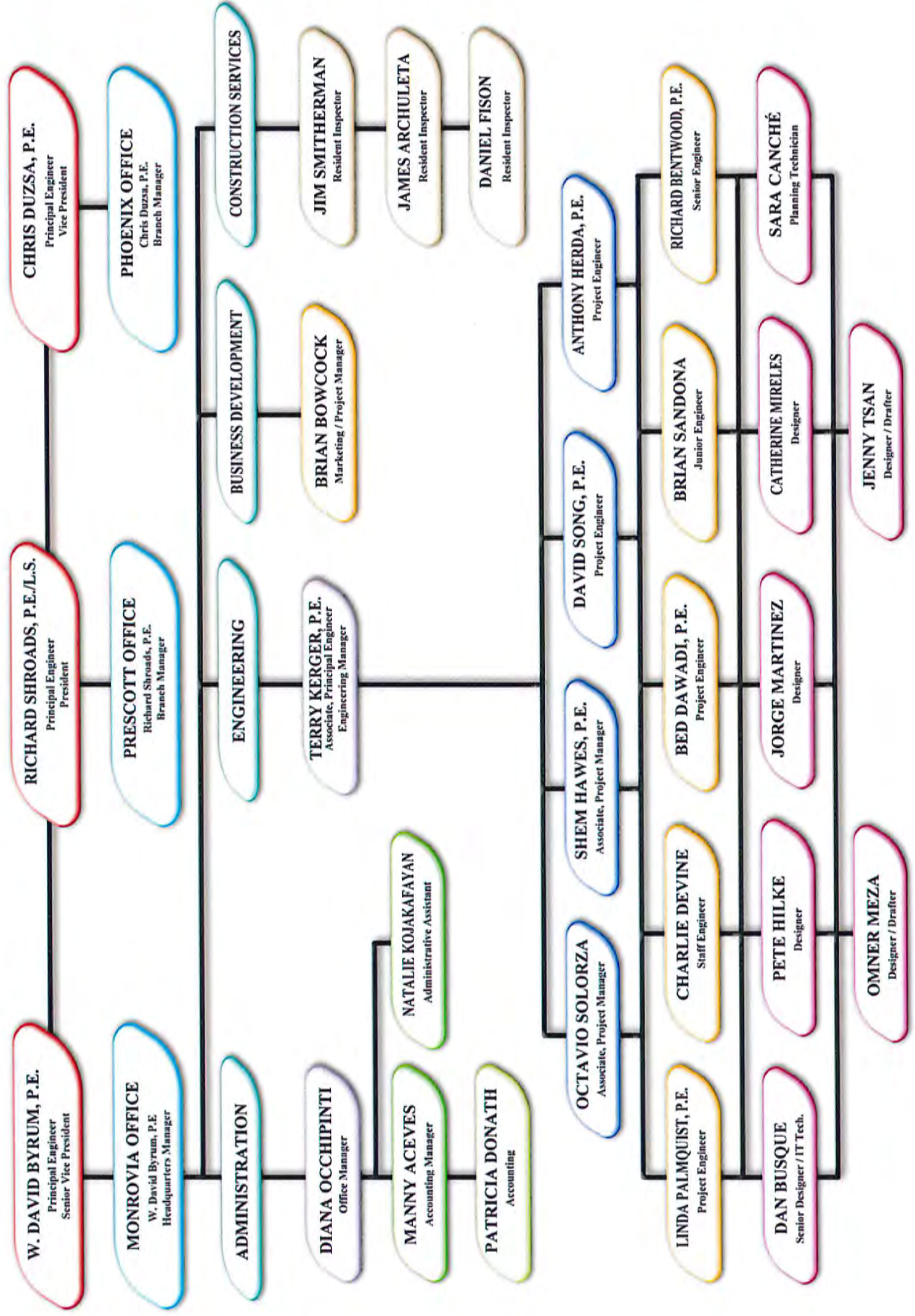
|                                       |                     |
|---------------------------------------|---------------------|
| <b>GRAND TOTAL CONSTRUCTION TASKS</b> | <b>\$ 54,150.00</b> |
|---------------------------------------|---------------------|

Enclosed in Appendix B is the budget summary and man-hour estimate. Appendix C is a Company Rate Schedule that we will keep in effect for the duration of the Project for your review.

## Appendix A

# CIVILTEC engineering inc.

## ORGANIZATIONAL CHART



## REGISTRATION

California Registered  
Civil Engineer No. 43296

## EDUCATION

Western Texas College  
Electro-Mechanical  
Engineering  
1974

University of California  
Los Angeles  
Mechanical Engineering  
1977

## PROFESSIONAL AFFILIATIONS

American Water Works  
Association

National Society of  
Professional Engineers

Association of California  
Water Agencies

Southern California Water  
Utilities Association

Orange County  
Water Association

California Utility Executives  
Management Association

## SUMMARY

Mr. Byrum is owner, Senior Vice President and Principal Engineer of **CIVILTEC engineering, inc.** He is responsible for the overall management of the **Civiltec** headquarters office. Mr. Byrum has over 30 years of experience as a systems planner, design engineer, project manager and construction manager. He is an expert in design of water distribution and transmission pipelines, water treatment plants, booster pumping stations, steel and concrete reservoirs, groundwater wells, specialty valving stations, wastewater lift stations, flow equalization stations, wastewater treatment plants, storm drains, and street improvement projects.

Mr. Byrum was employed by the California Institute of Technology (Caltech) in Pasadena, California from 1975 to 1979, initially as an intern and hired as full time in 1977. At Caltech, he supported experimental research of sewage outfall systems, stratified flows, cavitation, sediment transportation and Tsunami studies.

From 1979 to 1984, Mr. Byrum was employed by the City of Arcadia in the Engineering Division of the Department of Public Works. His responsibilities included the administration of street reconstruction projects, water, sewer and storm drain projects, assessment district formation and all phases of the implementation of new subdivisions from plan checking to final inspections.

From 1984 to 1992 Mr. Byrum was employed by the firm of Kenneth I. Mullen, Consulting Engineers, Inc., as Principal Engineer and Vice President. His responsibilities included water system studies and master plans, sewer system studies, system valuations, assessment district proceedings and complete engineering for treatment systems, groundwater wells, booster pump stations, hydropneumatic pump stations, wastewater lift stations, pipeline projects and reservoirs.

Mr. Byrum joined **CIVILTEC engineering, inc.** in 1992. In addition to corporate management responsibilities, Mr. Byrum is responsible for the design and construction management of steel and concrete reservoirs, booster and hydropneumatic pumping stations, groundwater wells, pipelines, water treatment facilities, wastewater lift stations, surge and cathodic protection facilities, street reconstruction projects and municipal engineering. Mr. Byrum also prepares regulatory agency compliance reports and technical studies to ensure water purveyors remain in compliance with current regulations. Mr. Byrum serves as an expert witness and has been involved in cases centered on water industry issues including the Chromium 6 PG&E case.

## PROJECT EXPERIENCE

### Water Master Plans

Mr. Byrum has prepared numerous water system master plans since 1984. The three most recent water system master plans have been prepared for the La Habra Heights County Water District (2005, 2011), the Santa Clarita Water (2008, 2012) and the City of La Verne (2004, 2011). Each master plan consisted of the compilation and fine-tuning of a water system computer model, analysis of the existing and ultimate water system and recommendations for capital improvements with financing methods. Contact Michael Gualtieri of La Habra Heights County Water District at (562) 697-6769.

### Treatment Plants

Mr. Byrum has been responsible for the design and construction management of over 10 treatment plants in his career including a 2000 gpm air stripper plant and a 2500 gpm perchlorate and nitrate reduction treatment plant for the City of La Verne, a 7000 gpm VOC and nitrate reduction treatment plant for the City of Alhambra, a 4000 gpm VOC treatment plant for the City of Monterey Park, a 4000 gpm air stripper for the City of Monrovia and a 500 gpm biological and carbon plant for JPL/NASA to remove VOCs and perchlorate (OU-1) as well as a 7000 gpm perchlorate and VOC plant (OU-3). One of the City of La Verne's projects involved combining production from four wells into a perchlorate IX treatment system and then into a nitrate IX system. All treatment plants involved CDPH permitting. The City of Alhambra Plant involved preparation of a 97-005 assessment. Contact Dan Keesey of the City of La Verne at (909) 596-8741.

### Pipelines

Mr. Byrum has been responsible for the design and construction of numerous pipeline projects including approximately 150,000 linear feet of various sized pipelines for Golden State Water Company, 7,000 linear feet of 24-inch pipeline for San Gabriel County Water District, over 35,000 linear feet of 30, 36, 48 and 54-inch pipelines for the California Domestic Water Company (CDWC), 6,000 linear feet of 30-inch pipeline and 3,000 linear feet of 16-inch pipeline for the Three Valleys Municipal Water District (TVMWD), and 7,000 linear feet of 42-inch pipeline for Covina Irrigating Company, among others. Contact Richard W. Hansen of TVMWD at (909) 621-5568 and Jim Byerrum of CDWC at (562) 947-3811.

### Reservoirs

Mr. Byrum has been responsible for the design and construction management of over 50 steel and concrete reservoir projects in his career. The most recent reservoirs designed and constructed have been a 1.5 mg steel reservoir for La Puente Valley County Water District, a 0.5 and a 1.6 million gallon (mg) steel reservoir for Los Angeles County Water Works District No. 29, a 3.0 mg concrete reservoir for the City of La Verne, a 5.0 mg steel reservoir for the City of La Verne, a 5.0 mg steel reservoir for Suburban Water Systems, 3.75 mg steel reservoir for Santa Clarita Water and a 10 mg steel reservoir and a 15 mg steel reservoir for the City of Brea. Mr. Byrum has also been involved in over ten reservoir rehabilitation projects in the last five years. Two rehabilitation projects have been for the City of La Verne, three for the Golden State Water Company, one for the California American Water Company, one for the City of Brea and two for the City of Alhambra, among others. Contact Greg Galindo of La Puente Valley County Water District at (626) 330-212 and Mauricio Guardado, Jr., P.E., Santa Clarita Water at (661) 259-2737.

### **Pump Stations**

Mr. Byrum has been responsible for the design and construction management of over 100 pump stations in his career including two 9 cfs pump stations for the City of La Verne, an 18 cfs booster station for San Gabriel County Water District, an 8 cfs booster station for Three Valleys Municipal Water District and a 50 cfs pump station for SBVMWD. One of the City of La Verne's projects involved boosting an import source of low nitrate water to be blended with high nitrate groundwater. The State of California Department of Public Health was involved in approval of an in line static mixer (the first in Los Angeles County) and pump combination methods to achieve an acceptable nitrate blend rates. Contact Dan Keesey of the City of La Verne at (909) 596-8741.

### **Groundwater Wells**

Mr. Byrum has recently completed wells for the City of Upland and San Bernardino Valley Municipal Water District (SBVMWD), San Gabriel County Water District, City of Monrovia, California Domestic Water Company, City of Arcadia, La Habra Heights County Water District, Crescenta Valley Water District and the City of La Verne. The two SBVMWD facilities were each 1,000 HP, 5,000 gpm, wells including site piping, vaults, buildings and variable frequency drive units. Most well facilities included buildings, chlorination, piping, and electrical improvements. Contact Barbara Carrera of SGCWD at (626) 287-0341, Michael Gualtieri of the La Habra Heights County Water District at (562) 697-6769 and Dan Keesey of the City of La Verne at (909) 596-8741.

### **Wastewater Lift Stations**

Mr. Byrum served as Project Manager and Design Engineer for a City of Newport Beach Wastewater Lift Station Project. The Project was entitled "Cameo Shores Wastewater Lift Station Reconstruction and Force Main Installation" and was a joint effort between the City of Newport Beach and Irvine Ranch Water District to serve the existing Cameo Shores development and a new adjacent development. The design encompassed the development of new design criteria that fit the lift station's new function, a Preliminary Design Report, installation of redundant wet wells, demolition of the existing wet well, building upgrades, site improvements, re-piping of the gravity system, 1700 linear feet of force main, replacement of the existing pumping system with a redundant duplex system, new motor controls and an upgraded telemetry system. Mr. Byrum worked with the City of Newport Beach and Irvine ranch Water District to accomplish the design and construction assistance tasks. Contact Mike Sinacori, City Engineer of the City of Newport Beach at (949) 644-3342.

### **Disinfection Systems**

Mr. Byrum has engineered numerous water system disinfection systems including gas chlorination, sodium hypochlorite bulk and generation systems and chloramination systems. Recently, Mr. Byrum designed disinfection conversion systems for the cities of Signal Hill, La Verne and Alhambra as well as Crescenta Valley Water District. Each agency was using gas chlorination and was converted to sodium hypochlorite generation systems. The Signal Hill and CVWD system had ammonia storage, chillers and bulk systems added to facilitate chloramination of the potable water system. Contact Dan Keesey of the City of La Verne at (909) 596-8741 and David Gould, P.E. of CVWD at (818) 248-3925.

### **Expert Witness**

#### **Danny Aguayo, et al, vs. Betz Laboratories, Inc., Pacific Gas and Electric, et al. – 2001-06**

Mr. Byrum has completed working as an Expert Witness for the plaintiffs on a case involving alleged chromium 6 contamination of the groundwater and alleged delivery to on site workers and the surrounding community at the PG&E Kettleman and Hinkley Compressor Stations. Mr. Byrum analyzed the raw and potable water delivery systems to determine the possibility of delivery of chromium 6 contaminated water from the raw water system into the potable water system. Mr. Byrum has completed his analysis work and has completed the final deposition. The trial was averted with a settlement. Mr. Byrum has also been involved as an expert witness on numerous cases assisting in the settlement of or avoiding construction claims. Mr. Byrum has also been involved as an expert witness on numerous cases involving water system operations and professional engineering ethics.

### **Construction Management Projects**

Mr. Byrum has been Construction Manager for the following projects:

City of La Verne, Zone V Booster Pump Station  
City of La Verne, Amherst Well  
City of La Verne, Walnut Well  
City of La Verne, Amherst Treatment Plant  
Pepperdine University, Rho Lot Reclaimed Water Pump Station  
Pepperdine University, Meadows Reclaimed Water Pump Station  
Pepperdine University, Wastewater Flow Equalization Station  
Pepperdine University, UCD Potable and Recycled Water Reservoirs  
City of Alhambra, Well No. 7 Air Strippers  
City of Alhambra, Groundwater Treatment Plant  
City of Glendora, Greencroft Pump Station  
City of Glendora, Hook Canyon Reservoirs  
California Domestic Water Company, "I" Line 30-inch Pipeline  
California Domestic Water Company, "H" Line 36-inch Pipeline  
California Domestic Water Company, Plant 3 Pump Station and Reservoir  
San Gabriel County Water District, Van Nuys Pump Station  
San Gabriel County Water District, Van Nuys and Longden Reservoirs  
City of Monrovia, Well No. 6 Project  
City of Monrovia, Air Stripper Project  
Covina Irrigating Company, Covina Canal 42-inch Pipeline  
City of Azusa, Rosedale Development Water System  
City of Signal Hill, Gundry Disinfection System Conversion

### **CEQA Documentation**

Mr. Byrum has been project manager for numerous environmental assessments associated with reservoir, pump station, pipeline and groundwater well projects. The assessments have included preparation of an initial study environmental checklist in accordance with the CEQA Statutes and Guidelines leading to Negative Declarations, Mitigated Negative Declarations or Environmental Impact Reports. Mr. Byrum has recently been involved in the preparation of Environmental Impacts Reports in the Counties of Los Angeles and Orange, including the San Gabriel County Water District Longden and Van Nuys Reservoirs and the Pepperdine University Graduate Campus Project. He has also recently prepared and processed numerous environmental assessments associated with new facilities construction undertaken by the cities of La Verne, Arcadia, Alhambra and Brea and by Santa Clarita Water. Contact Dan Keesey of the City of La Verne (909) 596-8741 and Barbara Carrera of SGCWD (626) 287-0341.



**Terry Kerger, P.E.**  
Principal Engineer

## REGISTRATION

California Registered  
Civil Engineer No. 34896

## EDUCATION

B.S. Civil Engineering, 1985  
California State University  
Los Angeles

A.A. Architecture  
El Camino College

## PROFESSIONAL AFFILIATIONS

Southern California Water  
Utilities Association

American Water Works  
Association

Past Chairperson ASCE  
Pipeline Technical Group  
(Los Angeles Chapter)

## SUMMARY

Mr. Kerger has more than 40 years experience in the design and management of Civil Engineering projects including water supply, sewerage, water containment, flood control facilities, bikeway, roadway design, grading plans, Water Master Plans, and agency plan check programs. He has designed and managed projects ranging from small water main improvements to a \$5 million groundwater production facility.

He has conducted and managed computerized hydraulic network analysis using Fluid Analysis and Simulation Technique (H2ONet) for several clients including Rowland Water District, the cities of Beverly Hills, Manhattan Beach, Thousand Oaks, Camarillo, Ontario, Lincoln Avenue Water Company, Orchard Dale Water District, and Crescenta Valley Water Company.

Mr. Kerger provided Project Management for Jet Propulsion Laboratory (JPL) projects for the modification of Pioneer and Surveyor Roads and construction of the North Lab parking area as well as the preparation of plans and specifications for the repair of storm drain culverts. Other JPL projects include preliminary reporting on storm drain problems near Buildings 300, 302, and 303; storm drain design report on flood control projects; updated topographic and utility service map for grids D-4 and E-4; realignment of the main south entrance and security check station; surveys to establish control points required for grading design; and contract documents and cost estimates for rehabilitation of various paved roads and parking areas at Goldstone Deep space Tracking Station.

For more than 40 years, Mr. Kerger has been Project Manager and Design Engineer for all water projects for Rowland Water District. The more than 400 projects he has completed include water distribution, system design, transmission main design, 54-inch pipeline relocation, steel and concrete reservoir designs, booster pump station design, MWD flow control facility design, telemetry system design, master planning, hydraulic modeling, financial planning, construction administration, and field inspection services.

As the City of El Monte's Project Manager for water system improvements projects, his responsibilities have included pipeline improvements, well design, investigations of well head water treatment and well water blending, hydraulic modeling, capital improvement planning, telemetry system design, feasibility studies for purchase of adjacent mutual water systems, including system appraisal, financial options, and identifying system upgrades.

Following the January, 1993 Altadena fire storm, Mr. Kerger assessed damage to Kinneloa Irrigation District facilities, preparing fire damage reports and applications for FEMA assistance. Feasibility studies and hazard mitigation studies were also prepared to upgrade distribution piping, reservoir storage, and pumping facilities to meet increased fire protection requirements. He also worked with a Los Angeles County Fire Department committee to establish criteria for design of wild fire protection facilities in hillside areas served by public water systems.

Project Manager for CADD mapping for Los Angeles County Water Works District Nos. 8 and 34 in the Lancaster area, Mr. Kerger oversaw the conversion of mapping data from AutoCAD format to the County's computer version CADD format. More than 300 CADD maps were prepared and delivered in hard copy and on diskette.

Other project contributions by Mr. Kerger include mapping and flow computations for master plans, hydraulic calculations for transmission lines, and metering facilities. He has been responsible for the design of more than 50 miles of water transmission mains of various sizes from 6 to 30 inches in diameter.

## PROJECT EXPERIENCE

### Reservoirs

**Rowland Water District** - Designed two steel tank water storage reservoirs having capacities of 2.0 MG and 5.0 MG. This project involved site grading, landscaping, and construction inspection.

**City of Monterey Park** - Designed a 3.0 MG steel tank reservoir which involved site grading, landscaping, and construction inspection.

**Longden Reservoir** - Served as quality assurance engineer.

**Beverly Hills Sunset Reservoir** - Served as Project Manager for this reconstruction project. This reservoir has a tennis court added at the top.

**Rowland Water District** - Designed six steel tanks and one concrete water storage reservoirs having capacities ranging from 1.0 MG to 8.0 MG. These projects included site grading, landscaping, and construction inspection.

**Big Rock Reservoir, Topanga Reservoir, Blue Rock Reservoir, Bute Reservoir, Topanga Beach Reservoir, Fairground Reservoir, and Avenue K-8 Reservoir, Los Angeles County** - Conducted reservoir inspection, prepared specifications for replacing interior coating materials, and coordinating construction inspection service for interior recoating.

**Coldwater Reservoir, Beverly Hills** - Reconstruction of an 8.0 MG reservoir. This project consisted of a feasibility investigation to provide interim water supply to the city's downtown business district during demolition and reconstruction of a structurally deficient buried concrete reservoir. Included was evaluating existing zone storage and flow control of Metropolitan Water District's water supply. Interim service solution recommended construction of a supplemental reservoir for additional storage and modification of zone transfer facilities for efficient emergency operation.

**City of Pomona** - Project Manager for a 4.0 MG concrete reservoir.

**Reservoir No. 1, Rowland Water District** - This project included investigation of a failure of reinforcing wire strand wrap of a 1965 vintage reinforced concrete circular 3.0 MG reservoir. Also included plans, specifications, and construction management for installing post-tensioned reinforcing bar system with gunite concrete corrosion protection. Reservoir was repaired and returned to service in 60 days.

**Reservoir No. 11, Rowland Water District** - Designed a 5.0 MG wire-wrapped partially buried concrete reservoir including site grading, landscaping, irrigation system, telemetry, and site improvements, including paving and decorative wrought iron fencing. Full construction administration services included surveying, inspection, and testing.

**Orchard Dale Water District** - Conducted reservoir inspection, prepared project specifications, reviewed bids, and made recommendation of award for recoating interior of three 1.0 MG Colima Road Reservoirs and one 5.0 MG Telegraph Road Reservoir.

**Hearst Castle, San Simeon State Park, Office of the State Architect** - Principal engineer for the design of a 1.5 MG buried concrete reservoir. This project included a design report identifying storage requirements, pump station requirements, surface water treatment system, chlorination system, and water system O&M recommendations, as well as plans and specifications for the reservoir, a 500 gpm variable reverse osmosis water treatment and pumping system, and assistance with the bid process along with construction management services. On-site part-time inspection services were also included.

## **Pump Stations**

***Pumping Facilities 4B, 8, and 6, Beverly Hills*** - Completed the design of these standby pumping facilities along with related telemetry and piping work.

***John Galvin Booster Pump Station, Ontario*** - As Project Engineer, his responsibilities included redesign of the pumps, on-call inspection during construction, review of shop drawing submittals, and contract administration.

***Larson Street Booster, Manhattan Beach*** - Replacement of existing fixed speed staged booster pump operation with variable frequency and an electrical converter to control pump speed and system pressure.

***2nd Street Emergency Fire Protection Booster Pump Manhattan Beach*** - Designed a natural gas engine driven fire pump for water system, including automatic engine start controls and telemetry system for reporting engine status and failure alarms. Engine start and stop signals supplied from discharge pressures switch gauges.

***Reclaimed Pump Station, Industry*** - Project Manager of facility with seven pumps and 17,000 gpm to provide reclaimed water to four purveyors. Project included a masonry building.

***La Vina Booster Stations, Lincoln Avenue Water Company*** - Project Manager for the design of three booster stations to serve a private water company. The capacities are 2,000, 2,000, and 1,000 gpm. Two are located inside buildings.

***Zones III and IV Booster Stations, Rowland Water District*** - Project Manager for the design of these two facilities. The former was a remodel of an existing station (add two at 600 gpm) and the latter involved a new facility inside a building (three at 500 gpm).

***El Rio Booster Station, United Water Conservation District*** - Project Engineer for a 23,700 gpm booster station capable of pumping as low as 0.2 cfs with bypass facilities and variable speed drives on all units. Project included a separate electrical building.

## **Pipelines**

***Century Reclaimed Water Project, Central Basin Municipal Water District*** - Involved approximately 26 miles of reclaimed water pipeline ranging in size from 8-inch to 24-inch in diameter.

***Industry Hills Civic-Recreation-Conservation Area*** - Principal designer to this award-winning project. Services including two 2.5 MG water storage reservoirs, two 6500 gpm pumping stations, and six miles of 36-inch reclaimed water transmission main. He was responsible for the design of the telemetry and control system including central control and remote sites for three reservoirs and three pump stations.

***Rio Hondo Reclaimed Water Project, Central Basin Municipal Water District*** - Involved approximately 33 miles of reclaimed water pipeline ranging in size from 8-inch to 24-inch in diameter.

***Pomona/Walnut/Rowland Joint Water Commission*** - Relocation of five miles of 54-inch pipeline.

***City of Glendale*** - Design of ten miles of 34-inch to 36-inch reclaimed water pipeline involving hydraulic investigation.

***City of El Monte*** - Replacement and upgrading of 4,500 feet of pipeline due to excessive leaks.

***City of Lakewood*** - Replacement of distribution system pipelines due to aggressive soils and pipeline corrosion failures. Project was implemented in three phases for budget purposes.

***San Gabriel County Water District*** - Replacement of deteriorated distribution pipelines and extension of transmission pipelines to improve transmission of well production to meet District's service demands.

***City of Cerritos*** - Replacement of 1,500 feet of distribution piping and services. New distribution piping and services were located in the street in front of residences. Existing pipeline and easements crossing back yards of residences were abandoned.

***Pipeline Replacement, South Gate*** - Project Manager for the installation of 39,000 feet of pipeline replacement. Project included preparing 45 base map plan sheets using the city's GIS database in Microstation format, and involved utility record research, field verification of utility records, pipeline and appurtenance design, project specifications, cost estimates, bidding assistance, construction administration services, and record drawings. Microstation format and the city's GIS data allowed completion of the design phase in six weeks.

## **Wells**

***Wells No. 40 & 44, City of Ontario*** - As Senior Project Manager, investigated potential sites; prepared plans, specifications, and estimates for the drilling and equipping of two 1,200-foot domestic water wells with capacities of 2,000 to 3,000 gpm. Generated permit applications. Project included disinfection and construction administration, and construction of masonry block enclosure with open roof courtyard.

***Well No. 11, Huntington Park*** - Designed well installation including drilling and equipping.

***City of Manhattan Beach*** - Designed well installation, including drilling and equipping.

***K-3 Well, Kinneloa Irrigation District*** - Prepared plans and specifications for the cleaning, video, redevelopment, and test pumping of an existing well, increasing capacity from 500 gpm to 800 gpm. Also provided construction administration for the well, which was drilled to a depth of 680 feet with a 16-inch casing.

***C-5 Water Well, City of Cerritos*** - Design included equipping of a 3,000 gpm municipal water well with dual drive capability (electric motor and natural gas engine), 1-ton cylinder chlorination facility, provisions for future chloramination, and chlorine containment system. Design also included a well pump building with architectural treatment to blend into an urban neighborhood setting.

***Well No. 39, City of Ontario*** - Senior Manager for completion of design and the construction administration for the drilling and equipping of Well No. 39. A 350 hp motor was used to drive the 1,000-foot deep, 3,000 gpm well. 150 lb chlorine cylinders provided disinfection. The concrete block building used to house the well and chlorination station included a removable roof over the well. For aesthetic concerns, the building included a courtyard for the well discharge piping.

***Well No. 13, City of El Monte*** - Provided preliminary investigation of the well site; designed the plans and prepared specifications and cost estimates for drilling and equipping. Well depth was approximately 700 feet and, with equipping, now pumps approximately 2,500 gpm. Provided inspection services during both site grading and well drilling.

***City of Industry*** - Designed well installation including drilling and equipping of two wells.

***Well No. 33 & No. 34, City of Ontario*** - Designed and performed construction administration for two well installations including drilling and equipping. Each well was drilled to a depth of 800 feet and was equipped with a 500 HP motor. Pumping capacity was 3,000 gpm.

***San Gabriel County Water District*** - Designed well installation, including drilling and equipping.

***City of Pico Rivera*** - Designed a new well, including drilling and equipping.

## **Plan Checking**

***Plan Check Services, Los Angeles County Water Districts*** - Mr. Kerger managed all plan checking services provided to the District. These services were provided to review water facility plans for developments within the County's Lancaster, Palmdale, and Malibu Districts. Approximately 280 plan check projects were completed between February 1988 and June 1992. Services included review and updating plan check review forms, establishing plan check schedules, reviewing plan check fee schedules, and revising standard drawings and details. A plan check database was developed and maintained to assure prompt response to plan check scheduling.

***Plan Check Services, City of Camarillo*** - Mr. Kerger has directed the plan check services provided to the City since November 1995. Management responsibilities include replacing and training staff, reviewing and updating standards and procedures, coordinating staff assignments, developing staff skills, and reviewing plan check submittals and construction change orders.

***City of Industry*** - Participated in the plan checking for the design of the reservoir, including shop drawing review.

***Rowland Water District*** - Participated in the plan checking of development plans for drainage, grading, steel improvements, etc., as they pertain to the District's water distribution facilities.

## **Construction Management**

Mr. Kerger is a qualified construction manager, having provided these services to several clients for the past 10 years. His construction management projects have included the City of Pomona 4 MG Reservoir 2A; 4 Summit Reservoirs, Nicholas Beach Reservoirs; Hasley Canyon Reservoir; Godde Hill Reservoir; California-American Water Company 1.0 MG Longden Reservoir; seven concrete and steel reservoirs for Rowland Water District; Kinneloa Irrigation District Eucalyptus Reservoir expansion; and reconstruction of Clarke Avenue for the city of Arcadia.

His construction management responsibilities have included scheduling and conducting preconstruction meetings, coordination of subconsultants and field staff, reviews of daily observation reports, review and negotiation of change orders, review of certified payroll and program pay requests, monitoring and expedition of project schedules, coordination of submittal review and distribution, coordination and monitoring agency permit compliance, coordination of final project testing, and coordination of final project documentation preparation.

## **Inspection**

*Rowland Water District* - Pipeline, reservoir, pump stations, and building inspection.

*Monterey Park* - Reservoir inspection.

*City of Manhattan Beach* - Water well and pump station inspection.

*San Gabriel County Water District* - Warehouse building and water well inspection.

*Dominquez Water Corporatio* - Elevated tank painting and ground-level steel tank construction inspection.

*City of South Pasadena* - Pump station inspection.

*Industry Hills Civic-Recreation-Conservation Area* - Provided inspection consulting.

## **Telemetry**

*City of El Monte* - Analyzed the existing and designed the new telemetry system for the city's water, sewer, and storm drain systems. The central control station monitors and controls four existing wells, two proposed wells, and one elevated water tank. The sewer components monitor four sewer lift stations and monitors seven storm water pumping stations. Central control station features include a graphic display panel and annunciator panel to indicate system failures.



**David Song, P.E.**  
Project Engineer

#### REGISTRATION

California Registered  
Civil Engineer No. 76613

#### EDUCATION

University of California  
Los Angeles  
Bachelor of Science  
Civil and Environmental  
Engineering  
2004

#### CERTIFICATIONS

AutoCAD and Land Desktop  
2007

#### COMPUTER SKILLS

AutoCAD Land Desktop  
H2ONET  
Microsoft Office  
Windows OS

#### SUMMARY

Since 2006, Mr. Song has been working with *CIVILTEC engineering, inc.* in project management and design engineering. His primary responsibilities include construction management, pipeline design, well and pump station design, reservoir design, technical writing and planning, hydraulic analysis, developing contract bid documentation, preparing specifications and cost estimates, and performing project plan checks.

#### PROJECT EXPERIENCE

##### **Pump Station and Well Design and Engineering**

Mr. Song has served as project engineer for the design of the Holt Avenue Pump Station for the City of Covina. The pump station consists of a single horizontal pump with the capacity of 1,000 gpm which will serve as emergency supply to the City's upper pressure zone. The pump station includes space for an additional pump of equal size for future installation. The pump station is equipped with mechanical, architectural, landscape, electrical and plumbing equipment to house the pumps as well as a male and female restroom.

Mr. Song has served as project engineer for the Los Angeles County Marshall Canyon pump station which replaces the pumping facilities serving the Marshall Canyon golf course and Los Angeles County probation camp facilities. The pump station total capacity is approximately 1,000 gpm.

Mr. Song has served as project engineer for the Forest Lawn Recycled Water Pump Station which conveys water from Cal Poly Pomona recycled water open reservoir to Forest Lawn's recycled water tanks. The pump station capacity is 2,260 gpm with a normal operating capacity of 1,695 gpm.

Mr. Song has served as project engineer for the design of the Camino Real Well No. 3 and the Longley Well No. 3 for the City of Arcadia. The well design included two 1,200 feet deep wells which had capacities of 2,400 gpm and 1,600 gpm. One of which included a submersible pump, the other a vertical turbine pump.

Mr. Song has served as project engineer for the Yorba Linda Water District Well No. 20 project. This well served as a replacement well for the existing Well No. 11 and included a vertical turbine pump with a capacity of 3,000 gpm.

Mr. Song is currently serving as project engineer for the San Gabriel Water District Well No. 15. This well serves as a replacement well for the abandoned Well No. 7 and includes a vertical turbine pump with a capacity of 2,000 gpm.

### **Pipeline Design**

Mr. Song has been responsible for the design and project management of over 75,000 linear feet of distribution and transmission piping in his career. Mr. Song has worked closely with multiple clients including Santa Clarita Water Division, La Canada Irrigation District, City of Garden Grove, Azusa Light and Water, Newhall County Water District, City of La Verne and Valley County Water District to name a few.

Mr. Song served as Project Engineer for the design and project management of approximately 30,000 linear feet of 10" and 16" potable water pipelines for the City of Garden Grove including construction management, the design of approximately 20,000 linear feet of 8" to 16" pipelines for the Santa Clarita Water Division, the design of approximately 10,000 linear feet of 8" to 12" pipelines for the City of La Verne, the design of approximately 5,000 linear feet of 8" to 12" pipelines for Golden State Water Company, and the design of approximately 5,000 linear feet of 8" pipeline for La Canada Irrigation District.

### **Reservoir Design and Engineering**

Mr. Song has served as project engineer in the design of the Charter Oak Reservoir No.4 for the City of Covina. This concrete reservoir has a capacity of 3 million gallons and was constructed adjacent to the City's other 3 concrete reservoirs of identical size. The project included the replacing an existing wooden roof of Charter Oak Reservoir No. 1, site grading and drainage, and construction management.

Mr. Song has served as project engineer in the design of the Mesa Tank for Santa Clarita Water Division. The steel reservoir has a capacity of 3.75 million gallons and constructed adjacent to Castaic Lake Water Agency's 1 million Gallon Rio Vista Tank. The project included site grading and drainage and the installation of a SolarBee reservoir management system.

Mr. Song has served as project engineer in the design of the Seco Tank for Santa Clarita Water Division. The steel reservoir has a capacity of 0.5 million gallons and constructed adjacent to a 2 million gallon and a 1 million gallon steel tank. The project included site grading and drainage and the installation of a roof bridge spanning across the reservoir roofs onsite.

### **General Engineering and Design**

#### ***Traffic Control***

Mr. Song has completed numerous traffic control plans conforming to the MUTCD, Caltrans, and City standards for numerous clients that include the City of Pomona, City of Garden Grove, Suburban Water Systems, Newhall County Water District, and La Canada Irrigation District.

#### ***Grant Application Processing***

Mr. Song has processed applications to the California Department of Public Health and awarded funding from the State of California Proposition 84 that funds municipal agency water projects. Funding awarded to treat the City of El Monte's Well No. 3 for VOC and Nitrate contamination. Requested amount: \$990,413 Awarded amount: \$990,413

# DANIEL A. FISON

## RESUME

---

### PROFESSIONAL EXPERIENCE

---

**City Of Cerritos, Cerritos, California**

April 2005 to May 2011 (Retired May 2011)

***Water Supervisor***

Supervise and participate in the installation, repair, operation and maintenance of all City water and recycled lines, fire hydrants, water services, reservoirs, sewer and storm water pump/lift stations and other related stations • Plan, assign, schedule, and coordinate work of subordinates in all areas of the water system • Assist in selecting personnel as well as supervise, train and evaluate subordinates • Assist in the review of development and construction plans • Oversee water sample scheduling and collection • Advise consumers regarding water service and quality • Assist in the preparation of the Water Division annual operating budget • Keep daily records of Water Division-related work • Inspect job sites for proper safety practices, equipment, materials and installation practices • Attend meetings in place of Water Superintendent, as needed, such as Central Basin Water District meetings, SEWC Board meetings, and Central Basin Water Association meetings • Supervise, train and instruct crews in proper use of equipment and proper safety procedures • Oversee installation of recycled water services • Knowledge of backflow testing and cross-connection control practices • Municipal water system facilities, methods, materials, equipment and practices used in water and reclaimed water construction and maintenance • Knowledge of advanced principles of math, hydraulics and chemistry.

**City of Cerritos, Cerritos, California**

January 2003 to April 2005

***Water Inspector***

Inspect materials to be used and installation of these materials in the construction of City potable and reclaimed water systems • Review development and construction plans to determine compliance with water standards and Health Department standards then recommend approval, revision or rejection • Read and interpret plans, specifications and standards • Oversee updating of Water Division system maps and standard specifications • Conduct inspections and tests of backflow devices as required by State and County Health departments • Schedule and conduct cross-connection surveys of public and private facilities • Collect water and reclaimed water samples as required for bacteriological, general mineral, organic and inorganic chemical tests, lead and copper, general physical or other constituents • Prepare water inspection and cross connection inspection budget • Answer customer complaints and questions related to water operations and quality concerns • Monitor and recommend adjustments of chlorine and phosphate residuals in the water system • Respond to hazardous material spills, if needed.

**City of Cerritos, Cerritos, California**

January 1984 to January 2003

***Water Maintenance Man II (day shift)***

Perform maintenance and repair of the City's water distribution system (potable and reclaimed) including new installation and repair of water services, mains, valves, backflow devices, hydrants, meters, etc. • Read water meters, carry out field service requests and collect delinquent water payments • Assist supervisor in improving preventative maintenance programs • Fabrication, design, and modification of tools and equipment to achieve greater productivity and efficiency • Assist Production/Distribution in pumping facilities with various projects and routine activities as needed • Work closely with outside contractors with inspection of water system repairs and construction projects relating to or affecting the water distribution system • Schedule, assign and carry out daily water maintenance operations including supervision of work crews in the absence of the supervisor • Gather information on equipment, parts and materials for use in department projects and yearly budgets • Keep supervision informed of system related concerns and daily operations verbally and through detailed daily work orders and reports • Carry out City policy and promote an effective relationship with the public while emphasizing customer satisfaction • Participation with other city departments and outside consultants in projects relating to the water distribution system including ongoing involvement with Engineering Department on the GIS project.

**City of Cerritos, Cerritos, California**

November 1980 to July 1981

*Water Maintenance Man I (Night Man, solo swing shift) Promoted to Maintenance Man II, July 1981, and remained on nights until January 1984*

Responsible for all water, tree, sewer and related public works calls after regular business hours • Primary emphasis placed on customer service and emergency calls • Worked very closely with Production/Distribution Supervisor in pumping facilities operations, rate of flow changes, trouble shooting and problem resolution as well as routing assignments • Compiled monthly water production reports from station daily totals.

**EDUCATION****Santiago Canyon College, Orange, California**

1998 to 2002

Completion of the Certificate Program in Water Utilities Science Curriculum. Emphasis on Water Quality/Chemistry, Construction Standards, County, State and Federal Regulations, Cross Connection Control and Backflow Testing.

**Cerritos Community College, Cerritos, California**

1980 to 1984

General Education requirements for Associate of Science Degree.

**SPECIAL ACOMPLISHMENTS****Management of the Water Division Safety Program**

2006 to Present

Establish the safety training program consisting of 15 safety modules of training and the maintenance of the training matrix plan which encompasses 1, 2 and 3 year training cycles through the year 2016.

**Capital Improvement Water Main Project on Pioneer Blvd**

2007 to 2008

Oversight of the 16 inch water main installation project from planning stages through completion.

**Replacement of 24 inch Valve**

2007 to 2008

Replacement of a 24 inch valve on a City transmission main as part of the 16 inch water main project.

**GIS Water System Mapping Project**

1998 to 2001

Played a instrumental role in the collection, conversion, and design of the Water Divisions Digital Mapping Program.

**Revision of Water Division Standards**

2004

Cooperative effort with Water Superintendent on a complete revision of the City's "Water Division Development Procedures and Standards" book.

**SKILLS/KNOWLEDGE**

- Operations of piping, valves and related equipment common to water treatment, distribution, pump supply and water conservation.
- Modern water treatment and distribution system, methods and practices.
- Physical, chemical and bacteriological processes involved in the treatment, supply and distribution of water.
- State of California Water Quality Requirements and reporting procedures.
- Ability to identify water system needs and develop cost effective plans to meet identified needs.
- State and federal Laws, codes and regulations applicable to municipal utility operations.
- ESRI Arcview 3.2 GIS Software.
- Ability to read and understand maps, plans and schematics.
- Knowledge of AWWA Water Utilities *Standards and Specifications*.

## CERTIFICATES/TRAINING

---

- State of California D-4 Operator Certification
- State of California T-2 Operator Certification
- Studebaker Safety Systems, 8 hour "Hazwoper" Refresher Course
- Studebaker Safety Systems, Confined Space Entry
- NATEC International, Asbestos Cement Pipe-Craft Worker Course
- Studebaker Safety Systems, Hot Work Safety
- Studebaker Safety Systems, Traffic Control and Flagging Safety
- Studebaker Safety Systems, "Lock Out/Tag Out" Refresher
- California JPIA, Public Works Academy, three course seminar
- OSHA Outreach, Tony Lipka, Electrical Safe Work Practices
- Studebaker Safety Systems, Machine Guarding Safety
- Studebaker Safety Systems, Trenching and Shoring Safety, "Competent Person"
- Studebaker Safety Systems, Industrial Truck Certification
- Studebaker Safety Systems, Power and Hand Tool Safety
- Studebaker Safety Systems, Personal Protection Equipment and Hearing Safety
- Rockhurst University, Time Management and Organizational Skills
- Rockhurst University, OSHA Compliance and Workplace Safety
- Santiago Canyon College Certificate of Completion in Water Treatment
- Los Angeles County Certified Backflow Tester
- MWH Soft H2O Map Water Distribution Modeling
- Software Training Center, Excel 97/2000
- Software Training Center, Word 2000
- Standardized Emergency Management System (SEMS) Training
- Trimble, Pathfinder Pro XRS and Pathfinder Office Software Training (GPS)
- Hansen Version 7.0 Software Training (Asset Management)
- Associated Compliance Systems, 40 Hour "Hazwoper" Training
- Associated Compliance Systems, "Lock Out/Block Out" Training
- Torrance Loss Control Corp, Confined Spaces Respiratory Protection and Emergency Rescue Program
- Torrance Loss Control Corp, Commercial Driver's License, Excavations, Trenching, and Heavy Equipment Operations
- All Pure Chemical, Chlorine Safety program
- Subtronic Corp, Underground Utility Location Theory, Intermediate Level
- Macco Constructors Inc, Underground Construction: Shoring, Benching, and Sloping Systems
- Red Cross First Aid Certification

## Appendix B

**CRESCENTA VALLEY WATER DISTRICT**  
 Carlotta Street and Cloud Avenue 8-Inch Steel Pipeline Inspection Services

| CRESCENTA VALLEY WATER DISTRICT     |                           |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
|-------------------------------------|---------------------------|------------------------|-------------------------|-----------------------|----------------------|---------------------------|---------------------|-----------------------------|-----------------------|-----------|--------------|
| INSPECTION SERVICES - PROJECT E-911 |                           |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
| ENGINEERING COST ESTIMATE           |                           |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
| DATE:                               | 14-Feb-13                 |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
|                                     | HOURS BY<br>Principal Eng | HOURS BY<br>Senior Eng | HOURS BY<br>Project Eng | HOURS BY<br>Staff Eng | HOURS BY<br>Designer | HOURS BY<br>Planning Tech | HOURS BY<br>Drafter | HOURS BY<br>Admin Assistant | HOURS BY<br>Inspector |           |              |
| RATE                                | \$ 195.00                 | \$ 180.00              | \$ 145.00               | \$ 135.00             | \$ 115.00            | \$ 95.00                  | \$ 85.00            | \$ 65.00                    | \$ 80.00              |           |              |
| PHASE 1 - PRE-CONSTRUCTION SERVICES |                           |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
| A                                   | 2                         | 4                      | 8                       |                       |                      |                           |                     | 4                           |                       |           |              |
| B                                   |                           |                        | 4                       |                       |                      |                           |                     |                             | 4                     |           |              |
| HOURS                               | 2                         | 4                      | 12                      | 0                     | 0                    | 0                         | 0                   | 4                           | 4                     |           |              |
| BUDGET                              | \$ 390.00                 | \$ 720.00              | \$ 1,740.00             | \$ -                  | \$ -                 | \$ -                      | \$ -                | \$ 260.00                   | \$ 320.00             | \$ -      | \$ 3,430.00  |
| PHASE 2 - CONSTRUCTION SERVICES     |                           |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
| A                                   |                           |                        | 12                      |                       |                      |                           |                     |                             |                       |           |              |
| B                                   |                           |                        | 16                      |                       |                      |                           |                     |                             | 24                    |           |              |
| C                                   |                           |                        |                         |                       |                      |                           |                     | 8                           | 424                   | \$ 500.00 | \$ 34,940.00 |
| D                                   |                           |                        | 32                      |                       |                      |                           |                     |                             |                       |           | \$ 4,640.00  |
| E                                   |                           |                        | 8                       |                       |                      |                           |                     |                             | 16                    |           | \$ 2,440.00  |
| HOURS                               | 0                         | 0                      | 68                      | 0                     | 0                    | 0                         | 0                   | 8                           | 484                   |           | 540          |
| BUDGET                              | \$ -                      | \$ -                   | \$ 9,860.00             | \$ -                  | \$ -                 | \$ -                      | \$ -                | \$ 520.00                   | \$ 37,120.00          | \$ 500.00 | \$ 48,000.00 |
| PHASE 3 - PROJECT CLOSE-OUT         |                           |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
| A                                   | 4                         | 4                      | 4                       |                       |                      |                           |                     |                             | 8                     |           | \$ 2,720.00  |
| HOURS                               | 4                         | 4                      | 4                       | 0                     | 0                    | 0                         | 0                   | 0                           | 8                     |           | 20           |
| BUDGET                              | \$ 780.00                 | \$ 720.00              | \$ 580.00               | \$ -                  | \$ -                 | \$ -                      | \$ -                | \$ -                        | \$ 640.00             | \$ -      | \$ 2,720.00  |
| GRAND TOTAL                         |                           |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
|                                     |                           |                        |                         |                       |                      |                           | \$ 54,150.00        |                             |                       |           |              |
| CIVILTEC LABOR (MINUS EXPENSES)     |                           |                        |                         |                       |                      |                           |                     |                             |                       |           |              |
| CIVILTEC MANHOURS                   |                           |                        |                         |                       |                      | \$ 53,650.00              |                     |                             |                       |           |              |
| CIVILTEC COST PER MANHOUR           |                           |                        |                         |                       |                      | \$ 91.55                  |                     |                             |                       |           |              |

## Appendix C



General Civil, Transportation, Municipal, Water and Wastewater Engineering  
Planning, Construction Management and Surveying

Monrovia Prescott Phoenix Kingman

**RATE SCHEDULE**

EFFECTIVE UNTIL DECEMBER 31, 2013

|                                                    |               |
|----------------------------------------------------|---------------|
| Principal Engineer.....                            | \$195.00      |
| Principal Engineer - Expert Witness Testimony..... | \$325.00      |
| Senior Engineer.....                               | \$180.00      |
| Project Manager.....                               | \$155.00      |
| Project Engineer.....                              | \$145.00      |
| Staff Engineer.....                                | \$135.00      |
| Senior Designer.....                               | \$125.00      |
| Designer.....                                      | \$115.00      |
| Designer/Drafter.....                              | \$100.00      |
| Planning Technician.....                           | \$95.00       |
| Senior Resident Engineer/Inspector.....            | \$90.00       |
| Resident Engineer/Inspector.....                   | \$80.00       |
| Drafter.....                                       | \$85.00       |
| Senior Administrative Assistant.....               | \$75.00       |
| Administrative Assistant/Clerical.....             | \$65.00       |
| One Man Survey Party.....                          | \$175.00      |
| Two Man Survey Party.....                          | \$225.00      |
| Survey Manager.....                                | \$130.00      |
| Staff Land Surveyor.....                           | \$115.00      |
| Survey Technician.....                             | \$100.00      |
| Subcontracted Services.....                        | Cost plus 15% |
| Mileage.....                                       | \$0.55/mile   |

**NOTE:** All rates are effective until December 31, 2013. Any increases in rates after that date will be limited to 8% maximum.

W:\ADMINISTRATION\Rates\SCHEDULE.13.doc

# DUDEK

31878 CAMINO CAPISTRANO, #200  
SAN JUAN CAPISTRANO, CALIFORNIA 92675  
T 949.450.2525, F 949.450.2626

February 14, 2013

Mr. David S. Gould, P.E.  
District Engineer  
Crescenta Valley Water District  
2700 Foothill Boulevard  
La Crescenta, CA 91214

**Subject:** *Field Inspection Services for Construction of an 8-inch Water Main on the 3000 and 3100 Blocks of Santa Carlotta Street and Cloud Avenue from Paraiso Way to Santa Carlotta Street, Project E-911*

Dear Mr. Gould:

We are pleased to provide our proposal for field inspection services for the subject project. Dudek has a proven track record for providing field inspection services on welded steel pipeline projects. There will be no "learning curve" as far as our experience with this type of construction project. Our proposed inspector(s) are professionals who can meet the challenges of this project and will easily adapt to the procedures and management approach of the District. Our overriding approach and philosophy is to engage and work shoulder-to-shoulder with the District to facilitate the construction of the project on time and to ensure the project is constructed to the District's standards.

We are proposing Bill Lopez as the field inspector and Garrett White as the alternate field inspector, as requested in the RFP. Bill Lopez has over 15 years' experience as a senior water district inspector on similar projects. Garrett White has over 10 years of experience on pipeline projects. As a firm, Dudek has inspected over 10 combined miles of welded steel pipeline projects for the City of Huntington Beach, Triunfo Sanitation District, Laguna Beach Water District, and the San Diego County Water Authority.

Enclosed are following items:

1. Resumes for Bill Lopez and Garrett White;
2. List of firm experience and references on similar projects;
3. Not-To-Exceed cost proposal broken down by task;
4. Dudek's Standard Schedule of Charges.

Dudek's staff has a strong desire—and the ability—to supply the District with the level of service expected, as our existing clients will attest. We urge you to check our references; our clients are our best resume. Our commitment is to be an advocate of the District, providing services as directed by the District, and to work diligently on your behalf. We will provide the District with peace of mind in knowing that this project will be constructed with your interests first.

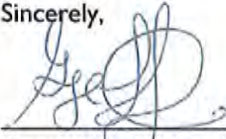
*Crescenta Valley Water District*

*Subject: Field Inspection Services for Construction of an 8-inch Water Main on the 3000 and 3100 Blocks of Santa Carlotta Street and Cloud Avenue from Paraiso Way to Santa Carlotta Street, Project E-911*

---

We look forward to working with you on this project. If you have any questions regarding our proposal or require more information, please do not hesitate to contact me at (619) 980-7048 or by email, [glitzinger@dudek.com](mailto:glitzinger@dudek.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'G. Litzinger', written over a horizontal line.

George Litzinger, P.E.  
Project Principal

## William Lopez – Field Inspector

15 years combined experience as a senior engineering inspector for the Carlsbad Municipal Water District and the City of Carlsbad.

10 years experience as a public works consulting inspector for Woodside Kubota and Associates Engineers conducting inspections for various cities, water and sewer districts.

### EDUCATION

Santa Ana College, Santa Ana, California  
Variety of courses in water and wastewater maintenance and operations  
Mira Costa College  
Courses in drafting and general engineering

### PROJECT EXPERIENCE

#### **Simon Wong Engineering, San Diego, California**

Assigned to the City of Carlsbad, for inspection of public works projects and some land developments projects. Inspection duties include: various traffic signals, street light projects, water mains, sewer mains, sewer force mains, grading, asphalt paving, curb & gutter, sidewalk, and water and sewer pump stations.

#### **City of Carlsbad and Carlsbad Municipal Water District, Carlsbad, California**

Senior Engineering Inspector responsible for the inspection of public works and land development projects. Inspection duties include underground dry utilities, traffic signal installations, street light installations, storm drains, sewer mains, water mains, final grading, curb and gutter, sidewalk and asphalt paving, all concrete underground structures, including prestressed concrete reservoirs, steel reinforced concrete reservoirs, fabricated steel reservoirs, floating reservoir covers, water booster pump stations, sewage lift stations, and sewer force mains.

#### **Woodside Kubota and Associates Engineers**

Public Works Consulting Inspector of capital improvements for various cities, water and sewer districts. Responsible for the inspection of public works projects, initiation and monitoring of progress payments for various water and sewer projects, including water transmission and distribution mains, water booster pump stations, sewage lift stations, prestressed concrete reservoirs, steel reinforced reservoirs, fabricated steel reservoirs, and sewer force mains.

#### **Santa Margarita Water District**

Inspector. Enforcement of District standards and specifications; inspection of installation of water and sewer system facilities including transmission and distribution mains, water services, fire hydrants, booster stations, sanitary sewer collection system, sewage lift stations and force mains. Initiation of progress payment controls for District-financed construction projects.

#### **South Coast Community Hospital**

Licensed Steam Engineer responsible for operations and maintenance of boiler room and hospital facilities.

#### **Burtech Pipeline, Encinitas, California**

Responsible for assisting owner in scheduling crews, materials and equipment for installation of sewer mains, water mains and storm drains, also scheduling inspections with various cities, water and sewer districts.

#### **United States Army, SP-4, Honorably Discharged**

INTENTIONALLY LEFT BLANK

## Garrett White – Field Inspector (Alternate)

Garrett White has over 24 years' experience in the construction industry, with an emphasis in the construction of water, wastewater, and storm drain facilities for public agencies. He has been involved with the construction of large- and small-diameter steel and HDPE pipelines, treatment plants; pump stations for potable and non-potable distribution systems, gas distribution lines horizontal directional drilling (HDD), with an emphasis in trenchless technologies. For the past 10 years, Mr. White has been responsible for providing field inspection services and construction management for various cities and water districts on capital improvement and developer projects. As an inspector, he is responsible for project coordination, issuing field orders, verifying adherence to submitted schedules, quality control and assurance, project documentation, and review of as-built records.

### RELATED PROJECT EXPERIENCE

**Conifer Tank Replacement Project, Triunfo Sanitation District, Ventura, California.** Mr. White is currently the inspector for the two 20-inch welded steel pipelines on this project, which includes the construction of a 2.1 million gallon CIP reservoir.

**City of San Marcos, As-Needed Private Development and QSP Inspector.** Mr. White served as a full time public works inspector for the City of San Marcos providing inspection services for 16 different projects. The projects varied from small commercial development, large urban housing to residential developments up to 400 homes. Mr. White provided field inspections, quality control, drafting daily reports and photographs as well as field orders and correction notices. As a certified QSP he also provided SWPPP compliance and reporting for the City of San Marcos. Mr. White was responsible for inspection for sign off Completion of Work for final occupancy on the residential developments.

**As-needed Inspection of Gas Line Repairs and Cathodic Protection, City of Huntington Beach, California.** Mr. White inspected installation of and fusion repairs to buried HDPE service gas lines at the request of the City. Mr. White also inspected impressed cathodic protection test stations installed on three high pressure steel gas transmission mains.

**Yorktown 30-Inch Transmission Main Rehabilitation Project, City of Huntington Beach, California.** Mr. White was the inspector for the rehabilitation of 18,000 lf of 30-inch CML&C waterline, performing confined space entry into the waterline for condition assessment. This project included installation of 350-feet of 30" CML&C WSP, six 30-inch butterfly valves, multiple air and vacuum valves, access manholes, aged interconnection and inline valves, replacement of PVC and AC distribution lines between 6-inch to 20-inches and high-lining private and commercial services, traffic control, asphalt paving, and replacement of sidewalk. The project included installation of an impressed current cathodic protection system on the 30-inch pipeline with three (3) deep well anodes and test stations on three (3) high-pressure steel gas transmission mains. Mr. White also implemented and maintained strict compliance of SWPPP documentation per NPDES requirements during construction.

### EDUCATION

Palomar College Courses  
Public Works Inspection I  
Water Distribution I  
Water Treatment I

### CERTIFICATIONS

NASSCO Certifications:  
Cured-in-Place Pipe (ITCP)  
Inspection Certification Program  
Pipeline Assessment Certification  
Program (PACP)  
Manhole Assessment and  
Certification Program (MACP)  
Certified Trainer  
ACI Concrete Field Testing  
Technician Grade I  
ACI Concrete Repair Basics  
SWPPP Certification  
OSHA 10-Hour Confined Space  
Safety  
SWPPP Certification/QSP Certified

**Solana Beach Force Main, City of Solana Beach, California.** Project involved installation of approximately 3,000 feet of new 16-inch DR11 HDPE pipeline using HDD methods in excess of 45 feet below the surface; installation of 1,040 feet of new 16-inch DR11 HDPE pipeline using direct burial methods; rehabilitating approximately 850 feet of the existing force main with 12-inch FPVC structural lining. Services included on-site inspection and quality control and assurance. Acting as liaison between the construction manager, City Engineer, and San Elijo Joint Powers Authority, Mr. White provided daily documentation, construction observation, strict adherence to contract plans and specifications, progress payment reports, and implementing and maintaining SWPPP requirements and public awareness outreach program. He assured adherence to CEQA mitigation, monitoring, and reporting program requirements, scheduled and co-coordinated wildlife biologists as well as assisted the construction manager with reviewing and filing of RFIs, submittals, and change orders.

**Sewer Rehabilitation Project P-906, Culver City, California.** This project included the rehabilitation of over three (3) miles of sewer main and lateral connections utilizing trenchless technologies (CIPP & Fold & Form PVC) including rehabilitation of over 40 manholes with either spray on polyurethane or poly-tri-plex bags. Mr. White played an integral role with initial condition assessment for the project design which included condition assessment based upon NASSCO PACP and MACP rating system. Due the close proximity of high density urban housing, coordination of public outreach meetings and quickly resolving resident complaints from styrene odors was a critical aspect to ensuring a successful project. Responsibilities during construction included maintaining daily progress reports; ensuring compliance with project plans and specifications; monitoring traffic control and public safety; monitoring job progress; review of change order requests and progress payments based upon quantities installed and make recommendations to city project manager for numerous dig and replace point repairs.

**Main and Eastside Lift Stations, City of El Centro, California.** Mr. White served as the inspector for the construction of the Main and Eastside Lift Stations. The project consisted of replacing the wet well and site improvement for the Main Lift Station and replacement of submersible pumps, piping, controls, pump room improvements and start up of the Eastside Lift Station.

**Riverside Community Services District Regional Wastewater Facilities Replacement.** Mr. White served simultaneously as the inspector of record for construction for the Force Main and Gravity Sewer project, Regional and Juan Diaz Lift stations, and the Kern Peralta Rehabilitation project.

**Regional and Juan Diaz Lift Stations.** Construction of the above grade masonry control buildings, below grade wet well, dry pit and debris basket chambers, and all related appurtenances. The larger Regional Lift Station consisted of four chambered 50 HP submersible pumps connected to a 14-inch and 18-inch force mains with an odor control bio-filter system. The small Juan Diaz Lift Station consisted of two 7.5 HP single chambered submersible pumps connected to a 6-inch force main.

**Force Main and Gravity Sewer.** The Force Main and Gravity Sewer project consisted of installation of approximately 2,580 linear feet of 14- and 18-inch DR11 HDPE force mains by directional drilling through dual bore holes. Installation of approximately 1,660 linear feet of 16- and 18-inch PVC force mains. Installation of approximately 2,360 linear feet of 12-inch PVC deep cut gravity sewer. All construction of the project occurred within a culturally sensitive native area.

## I FIRM EXPERIENCE AND REFERENCES

### CONIFER TANK REPLACEMENT PROJECT

**CLIENT:** Triunfo Sanitation District

**CLIENT REFERENCE:** Sally Coleman, 805.658.4674 /  
Tim Doyle, 805. 658.4606

**PROJECT DATES:** May 2011 – Feb. 2013

**CONTRACTOR:** Lash Construction

**COST OF PROJECT:** \$5 Million

Dudek is currently providing construction management and inspection services on the District's \$5 million reservoir and pipeline replacement project. The project consists of the following elements:

- 2.1 million gallon buried pre-stressed concrete reservoir;
- Two 20-inch diameter CML&C weld steel 1,100-foot EA long pipelines under the Oak Canyon Reservoir access road;
- Two 30-inch diameter 390-foot long steel casings installed by bore and jack;
- 1,500 feet of concrete and geoweb-contained gravel access road;
- A 12-Inch diameter temporary bypass pipe installed with line-stops on an existing 30-inch diameter steel rod-wrapped pipe;
- Two 16-inch diameter connections to an existing 30-inch diameter steel rod-wrapped pipe;
- A valve vault with a 16-inch motor controlled valve;
- Two pressure reducing valve vaults for 10-inch and 12-inch diameter pipe;
- A 12-inch diameter PVC, 1,200-foot long pipeline in Kanan Road.



The project is nearby an upscale community in Westlake Village in Ventura County. Consequently, Dudek coordinates daily with the District's in-house public relations representative for project updates that are put on the District's website, published in the local newspaper, put on door hangers, and added to the project hotline. The District has received very few complaints due to the proactive public relations program for the project.

## WATER RECYCLING DEMONSTRATION PROJECT

**CLIENT:** City of Anaheim

**CLIENT REFERENCE:** Bill Moorhead, Project Manager, 714.765.4165

**PROJECT DATES:** June 2011 – Ongoing (March 2013)

**CONTRACTOR:** USS Cal Builders

**COST OF PROJECT:** \$7 Million

Dudek is currently providing construction management and inspection services for the Water Recycling Demonstration Project, which will serve as a demonstration project showcasing the viability of recycled water and the value of conserving limited potable water supplies. The project consists of a 100,000 gallon per day (gpd) capacity water reclamation facility at the north side of the City Hall. The project will be designed and constructed in phases to reduce the initial cost. The first phase of the project consists of a 50,000 gpd water recycling facility that could be expanded to 100,000 gpd in the future. The project included the installation of 3,000 LF of steel, ductile iron, PVC and HDPE recycled and potable water pipelines from 4-inches to 12-inches in diameter.



## YORKTOWN 30" TRANSMISSION MAIN REHABILITATION PROJECT

**CLIENT:** City of Huntington Beach

**CLIENT REFERENCE:** Andrew Ferrigno, PE, 714.536.5291

**PROJECT DATES:** Nov. 2010 – Sept. 2011

**CONTRACTOR:** CCL Contracting, Inc.

**PROJECT COST:** \$2.8 Million

Dudek provided construction management, inspection services and corrosion engineering services for this challenging multi-phased project. The project involved the installation of impressed current cathodic protection system and replacement multiple pipe sections, inline and interconnect valves, air vacuum valves and blow offs on

18,000 LF of the City's 30-inch steel transmission main located in Yorktown Avenue, originally constructed in 1964. The project was broken down into four (4) separate phase sections isolating the 30-inch transmission main to maintain water distribution throughout the City. The shutdowns for tie-ins to interconnect pipelines to replace valve and connection piping were completed in 4- and 8-hours maximum as to not effect customers. Multi-agency coordination with Caltrans and Mesa Consolidated Water District were required to complete this project.



Work performed on this project includes installation/replacement of 350 LF of CML&C weld steel pipe, six (6) 30-inch butterfly valves, twenty (20) air and vacuum release valves, twenty (20) blow assemblies, blind flange replacements, access manholes, replacement of twenty-five (25) interconnections to existing PVC and AC distribution lines between 6-inch to 20-inches and high-lining private and commercial services, traffic control, asphalt paving, and replacement of sidewalk. This project also included the hydrostatic testing and disinfection and bacteria testing of 18,000 LF of 30-inch CML&C. The project also involved construction of a new 8-inch PVC water line.

# COST PROPOSAL

## DUDEK NOT TO EXCEED FEE PROPOSAL

### Field Inspection Services for Crescenta Valley Water District 8-Inch Water Main on the 3000 AND 3100 Blocks of Santa Carlotta Street and Cloud Avenue

| Task       | Labor Category                                          | Field Inspector | Labor Subtotal Dudek | Direct Expenses | Total Budget     |
|------------|---------------------------------------------------------|-----------------|----------------------|-----------------|------------------|
|            | Team Member                                             | Bill Lopez      |                      |                 |                  |
|            | Billing Rate                                            | \$ 120.00       |                      |                 |                  |
| <b>1.0</b> | <b>Preconstruction Services</b>                         |                 |                      |                 |                  |
| 1.1        | Establish Project Procedures                            | 8               | \$ 960               | \$ -            | \$ 960           |
| 1.2        | Preconstruction Meeting                                 | 2               | \$ 240               | \$ -            | \$ 240           |
|            | <b>Task Subtotal:</b>                                   | <b>10</b>       | <b>\$ 1,200</b>      | <b>\$ -</b>     | <b>\$ 1,200</b>  |
| <b>2.0</b> | <b>Construction Phase Services</b>                      |                 |                      |                 |                  |
| 2.1        | Maintain Master Schedule                                | 24              | \$ 2,880             | \$ -            | \$ 2,880         |
| 2.2        | Daily and Weekly Reports                                | 35              | \$ 4,200             |                 | \$ 4,200         |
| 2.3        | Project Coordination and Communication                  | 30              | \$ 3,600             | \$ -            | \$ 3,600         |
|            | <b>Task Subtotal:</b>                                   | <b>89</b>       | <b>\$ 10,680</b>     | <b>\$ -</b>     | <b>\$ 10,680</b> |
|            | <b>Submittals and RFIs</b>                              |                 |                      |                 |                  |
| 2.4        | Shop Drawings and Submittal Coordination                | 4               | \$ 480               | \$ -            | \$ 480           |
| 2.5        | RFI Coordination                                        | 8               | \$ 960               | \$ -            | \$ 960           |
|            | <b>Task Subtotal:</b>                                   | <b>12</b>       | <b>\$ 1,440</b>      | <b>\$ -</b>     | <b>\$ 1,440</b>  |
|            | <b>Daily Inspection Services</b>                        |                 |                      |                 |                  |
| 2.6        | Daily Inspection and Witness Testing                    | 340             | \$ 40,800            | \$ -            | \$ 40,800        |
| 2.7        | Coordinate Geotechnical and Material Testing            | 24              | \$ 2,880             | \$ -            | \$ 2,880         |
| 2.8        | Record Drawings                                         | 10              | \$ 1,200             | \$ -            | \$ 1,200         |
| 2.9        | Project Photographs                                     | 30              | \$ 3,600             | \$ -            | \$ 3,600         |
|            | <b>Task Subtotal:</b>                                   | <b>404</b>      | <b>\$ 48,480</b>     | <b>\$ -</b>     | <b>\$ 48,480</b> |
|            | <b>Progress Payments</b>                                |                 |                      |                 |                  |
| 2.10       | Progress Payments                                       | 6               | \$ 720               | \$ -            | \$ 720           |
|            | <b>Task Subtotal:</b>                                   | <b>6</b>        | <b>\$ 720</b>        | <b>\$ -</b>     | <b>\$ 720</b>    |
|            | <b>Change Orders</b>                                    |                 |                      |                 |                  |
| 2.11       | Change Orders (Draft Change Orders and Review Requests) | 20              | \$ 2,400             | \$ -            | \$ 2,400         |
|            | <b>Task Subtotal:</b>                                   | <b>20</b>       | <b>\$ 2,400</b>      | <b>\$ -</b>     | <b>\$ 2,400</b>  |
| <b>3.0</b> | <b>Project Closeout</b>                                 |                 |                      |                 |                  |
| 3.1        | Final Inspections and Testing                           | 8               | \$ 960               | \$ -            | \$ 960           |

|     |                                         |                                   |                 |             |                  |
|-----|-----------------------------------------|-----------------------------------|-----------------|-------------|------------------|
| 3.2 | Punch Lists                             | 8                                 | \$ 960          | \$ -        | \$ 960           |
| 3.3 | Provide Project Record Documents        | 4                                 | \$ 480          |             | \$ 480           |
|     | <b>Task Subtotal:</b>                   | <b>20</b>                         | <b>\$ 2,400</b> | <b>\$ -</b> | <b>\$ 2,400</b>  |
|     |                                         | <b>NOT-TO-EXCEED GRAND TOTAL:</b> |                 |             | <b>\$ 67,320</b> |
|     | Hours Total                             | 561                               |                 |             |                  |
|     | Hours per week avg. for 70 working days | 40                                |                 |             |                  |

Our proposed fee is based on a 70 working day construction contract. Dudek will bill only actual hours worked per day on a time and material basis.

**DUDEK**  
**2013 STANDARD SCHEDULE OF CHARGES**

**ENGINEERING SERVICES**

|                                          |             |
|------------------------------------------|-------------|
| Project Director .....                   | \$240.00/hr |
| Principal Engineer III.....              | \$220.00/hr |
| Principal Engineer II .....              | \$210.00/hr |
| Principal Engineer I .....               | \$198.00/hr |
| Program Manager .....                    | \$200.00/hr |
| Senior Project Manager.....              | \$188.00/hr |
| Project Manager .....                    | \$178.00/hr |
| Senior Engineer III.....                 | \$170.00/hr |
| Senior Engineer II .....                 | \$165.00/hr |
| Senior Engineer I .....                  | \$155.00/hr |
| Project Engineer IV/Technician IV .....  | \$145.00/hr |
| Project Engineer III/Technician III..... | \$130.00/hr |
| Project Engineer II/Technician II.....   | \$120.00/hr |
| Project Engineer I/Technician I .....    | \$105.00/hr |
| Project Coordinator .....                | \$85.00/hr  |
| Engineering Assistant.....               | \$75.00/hr  |

**ENVIRONMENTAL SERVICES**

|                                            |             |
|--------------------------------------------|-------------|
| Principal .....                            | \$225.00/hr |
| Senior Project Manager/Specialist II ..... | \$210.00/hr |
| Senior Project Manager/Specialist I .....  | \$200.00/hr |
| Environmental Specialist/Planner VI .....  | \$180.00/hr |
| Environmental Specialist/Planner V .....   | \$160.00/hr |
| Environmental Specialist/Planner IV .....  | \$150.00/hr |
| Environmental Specialist/Planner III.....  | \$140.00/hr |
| Environmental Specialist/Planner II.....   | \$130.00/hr |
| Environmental Specialist/Planner I.....    | \$120.00/hr |
| Analyst .....                              | \$100.00/hr |
| Planning Research Assistant .....          | \$80.00/hr  |

**COASTAL PLANNING/POLICY SERVICES**

|                                                   |             |
|---------------------------------------------------|-------------|
| Senior Project Manager/Coastal Planner I .....    | \$200.00/hr |
| Environmental Specialist/Coastal Planner VI ..... | \$190.00/hr |
| Environmental Specialist/Coastal Planner V .....  | \$170.00/hr |
| Environmental Specialist/Coastal Planner IV ..... | \$160.00/hr |
| Environmental Specialist/Coastal Planner III..... | \$150.00/hr |
| Environmental Specialist/Coastal Planner II.....  | \$140.00/hr |
| Environmental Specialist/Coastal Planner I.....   | \$130.00/hr |

**ARCHAEOLOGICAL SERVICES**

|                                                  |             |
|--------------------------------------------------|-------------|
| Senior Project Manager/Archaeologist II .....    | \$210.00/hr |
| Senior Project Manager/Archaeologist I .....     | \$200.00/hr |
| Environmental Specialist/Archaeologist VI .....  | \$180.00/hr |
| Environmental Specialist/Archaeologist V .....   | \$160.00/hr |
| Environmental Specialist/Archaeologist IV .....  | \$150.00/hr |
| Environmental Specialist/Archaeologist III ..... | \$140.00/hr |
| Environmental Specialist/Archaeologist II .....  | \$130.00/hr |
| Environmental Specialist/Archaeologist I .....   | \$120.00/hr |
| Archaeologist Technician II .....                | \$70.00/hr  |
| Archaeologist Technician I .....                 | \$50.00/hr  |

**CONSTRUCTION MANAGEMENT SERVICES**

|                                      |             |
|--------------------------------------|-------------|
| Principal/Manager .....              | \$195.00/hr |
| Senior Construction Manager .....    | \$180.00/hr |
| Senior Project Manager.....          | \$160.00/hr |
| Construction Manager .....           | \$150.00/hr |
| Project Manager .....                | \$140.00/hr |
| Resident Engineer.....               | \$140.00/hr |
| Construction Engineer.....           | \$135.00/hr |
| On-site Owner's Representative ..... | \$130.00/hr |
| Construction Inspector III .....     | \$125.00/hr |
| Construction Inspector II .....      | \$115.00/hr |
| Construction Inspector I .....       | \$105.00/hr |
| Prevailing Wage Inspector .....      | \$135.00/hr |

**HYDROGEOLOGICAL SERVICES**

|                                         |             |
|-----------------------------------------|-------------|
| Principal .....                         | \$230.00/hr |
| Sr. Environmental Engineer .....        | \$190.00/hr |
| Sr. Hydrogeologist/Sr. Proj Mgr.....    | \$170.00/hr |
| Project Manager .....                   | \$155.00/hr |
| Associate Hydrogeologist/Engineer ..... | \$140.00/hr |
| Hydrogeologist IV/Engineer IV .....     | \$125.00/hr |
| Hydrogeologist III/Engineer III .....   | \$115.00/hr |
| Hydrogeologist II/Engineer II .....     | \$105.00/hr |
| Hydrogeologist I/Engineer I .....       | \$95.00/hr  |
| Technician .....                        | \$95.00/hr  |

**DISTRICT MANAGEMENT & OPERATIONS**

|                                        |             |
|----------------------------------------|-------------|
| District General Manager .....         | \$175.00/hr |
| District Engineer.....                 | \$160.00/hr |
| Operations Manager .....               | \$150.00/hr |
| District Secretary/Accountant .....    | \$85.00/hr  |
| Collections System Manager.....        | \$95.00/hr  |
| Grade V Operator.....                  | \$100.00/hr |
| Grade IV Operator.....                 | \$85.00/hr  |
| Grade III Operator .....               | \$80.00/hr  |
| Grade II Operator .....                | \$63.00/hr  |
| Grade I Operator .....                 | \$55.00/hr  |
| Operator in Training .....             | \$40.00/hr  |
| Collection Maintenance Worker II ..... | \$55.00/hr  |
| Collection Maintenance Worker I .....  | \$40.00/hr  |

**OFFICE SERVICES**

*Technical/Drafting/CADD Services*

|                          |             |
|--------------------------|-------------|
| 3D Graphic Artist.....   | \$150.00/hr |
| Senior Designer .....    | \$135.00/hr |
| Designer.....            | \$125.00/hr |
| Assistant Designer ..... | \$120.00/hr |
| GIS Specialist IV .....  | \$150.00/hr |
| GIS Specialist III.....  | \$140.00/hr |
| GIS Specialist II.....   | \$130.00/hr |
| GIS Specialist I.....    | \$120.00/hr |
| CADD Operator III.....   | \$115.00/hr |
| CADD Operator II .....   | \$110.00/hr |
| CADD Operator I.....     | \$95.00/hr  |
| CADD Drafter .....       | \$85.00/hr  |
| CADD Technician.....     | \$75.00/hr  |

**SUPPORT SERVICES**

|                                  |             |
|----------------------------------|-------------|
| Technical Editor III .....       | \$140.00/hr |
| Technical Editor II .....        | \$125.00/hr |
| Technical Editor I.....          | \$110.00/hr |
| Publications Assistant III ..... | \$100.00/hr |
| Publications Assistant II.....   | \$90.00/hr  |
| Publications Assistant I.....    | \$80.00/hr  |
| Clerical Administration II.....  | \$80.00/hr  |
| Clerical Administration I.....   | \$75.00/hr  |

**Forensic Engineering** – Court appearances, depositions, and interrogatories as expert witness will be billed at 2.00 times normal rates.

**Emergency and Holidays** – Minimum charge of two hours will be billed at 1.75 times the normal rate.

**Material and Outside Services** – Subcontractors, rental of special equipment, special reproductions and blueprinting, outside data processing and computer services, etc., are charged at 1.15 times the direct cost.

**Travel Expenses** – Mileage at current IRS allowable rates. Per diem where overnight stay is involved is charged at cost

**Invoices/Late Charges.** - All fees will be billed to Client monthly and shall be due and payable upon receipt. Invoices are delinquent if not paid within thirty (30) days from the date of the invoice. Client agrees to pay a monthly late charge equal to one percent (1%) per month of the outstanding balance until paid in full.

#2

# CRESCENTA VALLEY WATER DISTRICT

## BOARD OF DIRECTORS - STAFF REPORT

**To:** Honorable President and Members of the Board of Directors  
**From:** Christy J. Scott – Program Specialist  
**Subject:** Discussion on the District's plan for the February 2013 MWD/FMWD Imported Water Shutdown (UPDATE)

---

**MWD/FMWD Shutdown** – Discussion regarding the upcoming Metropolitan Water District/Foothill Municipal Water District shutdown scheduled for February 21-28, 2013.

### **BACKGROUND:**

From February 21<sup>st</sup> to February 24<sup>th</sup>, 2013, Metropolitan Water District of Southern California (MWD) will shut down its F.E. Weymouth Water Treatment Plant in La Verne to make needed reliability upgrades, prepare the plant for ozone treatment, and inspect structures that are inaccessible when the plant is in service.

This shutdown also includes an additional four (4) days (February 25<sup>th</sup> – February 28<sup>th</sup>, 2013) for the inspection and maintenance of the Upper Feeder pipeline and the replacement of the slide gates at MWD's Eagle Rock facility.

This MWD shutdown will impact 1.7 million customers stretching from La Crescenta to Claremont including FMWD, Pasadena and other local agencies. However, the shutdown will not impact the City of Glendale or the City of Los Angeles.

The District purchases imported water from MWD through Foothill Municipal Water District (FMWD) to supplement and blend with local groundwater.

### **Water Supply & Demand:**

CVWD's water supply is typically a ratio of 60% local groundwater and 40% imported water on an annual basis. In February, which is usually a low demand month, the ratio of local groundwater to imported water usually averages 67% to 33%.

With the low demand in February, CVWD has imported an average of 1.2 MGD of water from FMWD and 2.5 MGD from local groundwater for an average total customers' demand of 3.7 MGD.

In 2004 the District constructed an emergency water supply interconnection with the City of Glendale. This interconnection allows the District to obtain water from the City of Glendale for emergency purposes. During the shutdown period, Glendale has stated that the District would be able to take the maximum amount of 5 cfs, which is approximately 3.2 MGD.

### **DISCUSSION:**

The District does not anticipate any water supply difficulties during the MWD/FMWD shutdown, as past water demands in February have averaged 3.7 MGD and current daily groundwater production is 3.4 MGD and the Glendale interconnection can provide 3.2 MGD, which will be for blending and any emergency conditions. Therefore, CVWD should be able to meet average daily demands with its current water supply. In addition, CVWD has been working with La Canada Irrigation District (LCID) on

providing water during the shutdown. The District anticipates supplying a small amount of water to LCID, 0.20 cfs or 100 gpm or 0.13 MGD during the latter part of the shutdown period.

**Public Outreach:**

The impact of the MWD/FMWD shutdown varies from agency to agency; however, the Foothill water agencies as well as Pasadena Water and Power have agreed upon a unified message to the communities during this shutdown period.

The Foothill Agencies will move to the **Red or Critical Water Alert Condition** and Pasadena Water and Power will be requesting their City Council to declare a water emergency. This will ensure that reservoirs and local supplies will not be drawn down and available for emergencies.

The **Red or Critical Water Alert Condition** means that no outdoor irrigation will be permitted and residents are encouraged to conserve indoor water use. Besides no outdoor watering, critical alert restrictions include no hand-washing vehicles, filling swimming pools or spas during the eight days. Other water-saving measures include running only full loads in washing machines and dishwashers, keeping showers to a maximum of 5 minutes and not leaving the water running while brushing teeth or shaving.

Steps the District will be taking towards Public Outreach are:

1. Press releases (Completed 2-4-13)
2. Message on bill (Completed 1-22-13)
3. Article in Pipeline (direct mailer) (Completed 2-12-13)
4. Meet with the Town Council (Complete, Thanks James and Dennis) (Completed 1-17-13)
5. Meeting with Caltrans, Parks, and Schools (Completed end of January)
6. Display red flags and signs throughout the District's service area (Will be posted 2-20-13)
7. Flyers at various locations (Library, OSH, Ralphs) (Will be Distributed 2-19-13)
8. Possibility of flyer in local elementary schools' "Thursday Folder" (Completed 1-23-13)
9. Notice on District website (Completed 2-4-13 with flag to be changed to red on 2-20-13)
10. Nixle alerts (Will begin on 2-15-2013 and continue throughout the shutdown)
11. Possibly message boards (under discussion with FMWD)

Note: At the time of this memo update, this matter is still under discussion.

Staff anticipates that the previous steps discussed above will be completed before the MWD/FMWD shutdown so that the community is informed of the situation and can assist the District with meeting its customers' water demands.

Staff will notify the community at the conclusion of the MWD/FMWD shutdown about resuming outdoor water and lifting of restrictions via District website, press releases thanking residents, and NIXLE.

**Operations:**

Staff plans to meet with the system operators a week prior to the MWD/FMWD shutdown to discuss operational scenarios, personnel staffing during the shutdown and review emergency operations. In addition, perform testing on the Glendale/CVWD interconnection and the CVWD/LCID interconnection to ensure that those interconnections are operational.

Starting on February 19, 2013, CVWD will fill the reservoirs to maximum water storage prior to the shutdown. On February 21, the System Operators will close the FMWD valve connections and begin taking water from the City of Glendale, as well as maximizing groundwater production. The System

January 22, 2013 Update for committee meeting February 15, 2013

Operators will monitor the water system through SCADA on a daily basis to make sure reservoir levels remain high and water supply can meet water demand.

Staff has put into place operational procedures for emergency situations such as an increase in water demand from customers or loss of reservoir storage that can be implemented in case of an emergency event.

Overall, staff believes that the District will be in good shape during the MWD/FMWD shutdown if demand is decreased due to the public outreach program and no emergency event occurs.

g:\management\emergency planning committee\01-22-13 board memo - mwd shutdown v2.docx

World North America United States California La Crescenta



for La Crescenta, CA

English (US), °F

Login

United States  
WEATHERLa Crescenta, CA  
WEATHERWIND  
ADVISORY

MGRSING

Now

Weekend

Extended

Month

Radar

&lt; January 2013

View:

February

2013

March 2013 &gt;

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Jan 27

28

29

30

31

Feb 1

2

Ct

At

Ad

Ca

Pr

Mc

Cc

©

Act

Tel

Pri

Actual Temp

59° Lo 47°

Hist. Avg.

68° Lo 42°

3

Actual Temp

58° Lo 46°

Hist. Avg.

68° Lo 42°

4

Actual Temp

59° Lo 42°

Hist. Avg.

68° Lo 42°

5

Actual Temp

71° Lo 40°

Hist. Avg.

68° Lo 42°

6

Actual Temp

78° Lo 43°

Hist. Avg.

68° Lo 43°

7

Actual Temp

74° Lo 46°

Hist. Avg.

68° Lo 43°

8

Actual Temp

76° Lo 55°

Hist. Avg.

68° Lo 43°

9

Actual Temp

79° Lo 53°

Hist. Avg.

68° Lo 43°

10

Actual Temp

73° Lo 47°

Hist. Avg.

68° Lo 43°

11

Actual Temp

60° Lo 49°

Hist. Avg.

68° Lo 43°

12

Actual Temp

63° Lo 47°

Hist. Avg.

68° Lo 43°

Yesterday 13

Actual Temp

61° Lo 42°

Hist. Avg.

68° Lo 43°

Today 14

Actual Temp

52° Lo 40°

Hist. Avg.

68° Lo 43°

15

Actual Temp

56° Lo 36°

Hist. Avg.

68° Lo 43°

16

Actual Temp

55° Lo 38°

Hist. Avg.

68° Lo 43°

17

Actual Temp

70° Lo 41°

Hist. Avg.

68° Lo 44°

18

Actual Temp

69° Lo 38°

Hist. Avg.

68° Lo 44°

19

Actual Temp

73° Lo 39°

Hist. Avg.

68° Lo 44°

20

Pleasant with  
plenty of sun

73° Lo 49°

Hist. Avg.

68° Lo 44°

21

Mostly sunny and  
warm

81° Lo 51°

Hist. Avg.

68° Lo 44°

22

Partly sunny and  
very warm

80° Lo 46°

Hist. Avg.

68° Lo 44°

23

Partly sunny and  
not as warm

70° Lo 46°

Hist. Avg.

68° Lo 44°

24

Mostly sunny

62° Lo 45°

Hist. Avg.

68° Lo 44°

25

A couple of  
showers possible

59° Lo 44°

Hist. Avg.

68° Lo 44°

26

Some sun, a  
shower possible

56° Lo 41°

Hist. Avg.

68° Lo 44°

27

Sun and clouds

61° Lo 40°

Hist. Avg.

68° Lo 45°

28

Turning cloudy

56° Lo 42°

Hist. Avg.

68° Lo 45°

Mar 1

A touch of  
morning rain

55° Lo 41°

Hist. Avg.

68° Lo 45°

2

Periods of rain

53° Lo 37°

Hist. Avg.

68° Lo 45°

Sunny intervals

54° Lo 38°

Hist. Avg.

68° Lo 45°

Rain at times

53° Lo 36°

Hist. Avg.

69° Lo 45°

Brilliant sunshine

55° Lo 40°

Hist. Avg.

69° Lo 45°

Sunny

59° Lo 35°

Hist. Avg.

69° Lo 45°

Mostly cloudy

61° Lo 37°

Hist. Avg.

69° Lo 45°

Mostly cloudy

62° Lo 40°

Hist. Avg.

69° Lo 45°

&lt; January 2013

March 2013 &gt;

Temperature Graph February 2013



Info item

The Metropolitan Water District of Southern California

## NEWS RELEASE

P. O. Box 54153, Los Angeles, California 90054-0153 • (213) 217-6485 • [www.mwdh2o.com](http://www.mwdh2o.com)

Contacts: Bob Muir, Metropolitan, (213) 217-6930; (213) 324-5213, mobile  
Valerie Howard, Pasadena Water and Power, (562) 298-2947, mobile  
Nina Jazmadarian, Foothill MWD, (818) 790-4036; (213) 709-9142, mobile

Feb. 11, 2013

### RESIDENTS IN PASADENA, THREE NEIGHBORING FOOTHILL COMMUNITIES ASKED TO CURTAIL WATER USE DURING PIPELINE SHUTDOWN

***Upgrades to major regional water line to begin Feb. 21,  
affecting imported supplies for up to 250,000 consumers***

Consumers in the city of Pasadena and three adjoining Los Angeles County foothill communities are requested to reduce their water use—including refraining from outdoor watering—while a major imported water pipeline is taken out of service for eight days beginning Thursday, Feb. 21.

Officials from the Metropolitan Water District of Southern California joined with Pasadena Water and Power, Foothill Municipal Water District and local retail water agencies in making the water-saving request as Metropolitan prepares to upgrade its Upper Feeder pipeline. The outage is scheduled to last until Feb. 28.

In addition to Pasadena, consumers in Altadena, La Cañada Flintridge and La Crescenta are asked to contact their local water supplier to determine water-use restrictions for their area. Supplies for about 250,000 people in the affected communities will be limited during the shutdown.

Starting Thursday, Feb. 14, residents can visit [www.mwdh2o.com](http://www.mwdh2o.com) and [www.bewaterwise.com](http://www.bewaterwise.com) for the latest information on the planned shutdown as well as water-saving tips. During the shutdown, regular updates on the upgrade work will be posted on the websites.

One of the oldest water lines operated and maintained by Metropolitan, a portion of the Upper Feeder delivers treated drinking water from the district's F. E. Weymouth Water Treatment Plant in La Verne to foothill cities and communities in eastern Los Angeles County from Pomona to Glendale.

In preparation for the shutdown, the Pasadena City Council declared a Level 4 water shortage during the outage. The action bans outdoor watering and requires other water-use restrictions throughout the city. In addition to the watering restrictions, PWP is asking all customers to reduce daily use by at least 30 percent to help preserve local supplies.

more . . . . .

“Even though this temporary cut in our supply is severe, we are confident Pasadena will once again rise to the challenge and cut back on daily water use, so that we all have enough water for drinking and vital indoor uses,” said Phyllis Currie, Pasadena Water and Power general manager.

Nina Jazmadarian, general manager of Foothill MWD, which serves La Cañada Flintridge and portions of Glendale as well as the communities of Altadena, Montrose and La Crescenta, said some local agencies will access groundwater, stored reservoir supplies and other sources to meet retail demands during the shutdown.

“Conservation by residents and businesses in the affected areas will be essential in helping complete the repair work without additional water service impacts,” Jazmadarian said. “Because this is a critical upgrade, we all need to do our part to reduce water use while the Upper Feeder is out of service.”

Debra C. Man, Metropolitan’s chief operating officer and assistant general manager, said the district routinely schedules shutdowns of its facilities in the winter and early spring, when temperatures usually are cooler and demands are lower, to complete inspections and perform maintenance and upgrades with the least impact on consumers.

“One of the biggest challenges to ensuring reliable deliveries is the constant need to repair and upgrade aging facilities,” Man said, noting that more than 40 percent of the district’s water system is over 60 years old. Construction of the Upper Feeder—which is comprised of tunnels, mortar-lined pipelines, and buried steel pipelines—started in 1933 and ended when water was first delivered to Pasadena in November 1941.

In preparation for the shutdown, residents and businesses are asked to do their part to ensure reservoirs and local supplies aren’t drawn down. Depending on the availability of local supplies, water conservation steps include no outdoor watering, hand-washing vehicles, filling swimming pools or spas, or hosing down driveways and sidewalks. Other water-saving measures include running only full loads in washing machines and dishwashers, not leaving the tap running when washing dishes, keeping showers to a maximum of 5 minutes and not leaving the water running while brushing your teeth or shaving.

With the start of spring nearing, gardeners are asked to delay planting new landscaping—which typically requires continual watering to establish plants, shrubs and trees—until after the shutdown. If the weather warms prior to the shutdown, residents may want to deep-root water plants to help keep them healthy. Deep-root watering, however, should be done before the shutdown begins Feb. 21.

###

*The Metropolitan Water District of Southern California is a cooperative of 26 cities and water agencies serving nearly 19 million people in six counties. The district imports water from the Colorado River and Northern California to supplement local supplies, and helps its members to develop increased water conservation, recycling, storage and other resource-management programs.*



info item

The Metropolitan Water District of Southern California

# NEWS RELEASE

P. O. Box 54153, Los Angeles, California 90054-0153 • (213) 217-6485 • [www.mwdh2o.com](http://www.mwdh2o.com)

*The following are helpful tips for consumers in the Los Angeles County foothill communities of Pasadena, La Cañada Flintridge, La Crescenta and Altadena as the Metropolitan Water District of Southern California prepares to take a major water line out of service for eight days to make upgrades.*

*The shutdown begins Thursday, Feb. 21, affecting imported water supplies serving the area. Consumers are asked to contact their local water supplier to determine water-use restrictions for their area.*

## THINGS TO DO BEFORE THURSDAY, FEB. 21

### Beginning Monday, Feb. 18

- Do not plant new landscaping, which typically requires continual watering to establish plants, shrubs and trees. Delay new plantings until after Feb. 28.
- Set mowers for a higher cut than normal. Longer blades of grass help reduce evaporation. Or, avoid mowing altogether.
- Avoid fertilizing lawns and plants prior to the shutdown. Fertilizer, which encourages growth, requires more water.
- Have a deep collection dish at the base of house plants. Fill the dish Wednesday night, Feb 20, so plants can draw on that water throughout the week.
- Fill large containers, like trash bins, and use that water for hand watering delicate plants during the week.
- Until Wednesday, Feb. 20, deep-water trees and shrubs by either setting out soaker hoses or watering with a regular hose on a slow trickle. Water until the soil is soaked to a depth of about 8–12 inches (deeper for trees, more shallow for shrubs). Use a soil probe or a shovel to determine the depth to which the water has percolated.
- Do all laundry before Wednesday night and avoid using the clothes washer during the shutdown.

### Wednesday, Feb. 20

- Do a normal, thorough watering of lawns, but not more than normal because the extra water will be wasted. Hand-water "hot" or dry spots on lawns.

more . . . . .

**Thursday, Feb. 21**

- Do not water landscapes or lawns.
- Set sprinkler timers to the “OFF” position Wednesday night.
- Do final fill-ups of any large containers.
- Do not wash cars.

*THINGS TO DO DURING THE SHUTDOWN*

- Take short showers (5-minute max). Do not use the warm shower as a sauna.
- Put a bucket in the shower to collect the water before the shower warms up. Use this water for plants.
- Use collected water in trash bins or bathtubs to hand-water houseplants and sensitive outdoor plants as well as areas of the lawn that may show excessive stress (the hot spots).
- Do not leave water running when washing dishes.
- Run only full loads in washing machine and dishwasher.
- Do not leave water running when brushing your teeth or shaving.
- Do not mow your lawns. Minimize the use of your lawn (i.e. playing on it, leaving vehicles on it) to reduce stress on the turf.

For more water-saving tips, visit [www.bewaterwise.com](http://www.bewaterwise.com).

###

## CVWD Issues Critical Water Conservation Notice

 Posted by [Robin Goldsworthy](#) on Feb 7th, 2013 and filed under [News](#). You can follow any responses to this entry through the [RSS 2.0](#). You can leave a response or trackback to this entry

The Metropolitan Water District of Southern California (MWD) in conjunction with Foothill Municipal Water District (FMWD) is planning a shutdown of its imported water facilities to Crescenta Valley Water District and other local agencies from Thursday, Feb. 21 through Thursday, Feb. 28.

The district does not anticipate any water supply problems during the shutdown due to current demand, local ground water capacity and the district's emergency connection with Glendale Water and Power.

CVWD, along with the other Foothill water agencies in the La Crescenta, La Cañada, and Altadena areas, will be in a red or critical water alert condition during the shutdown period to ensure ample local supplies for indoor water use and emergencies.

During the red or critical alert, no outdoor irrigation will be permitted and residents are encouraged to conserve indoor water use. In addition to no outdoor watering, please refrain from hand-washing vehicles, filling swimming pools or spas.

CVWD will be working with Caltrans, schools, and the local parks to turn off their irrigation systems during this period.

The district will use the Nixle network system to update the community on any water supply conditions. Those who don't have a Nixle account can create one at [www.Nixle.com](http://www.Nixle.com). Nixle is a notification service for law enforcement and government agencies.

MWD will also have water tips and updates at [www.bewaterwise.com](http://www.bewaterwise.com).

For more information and water saving tips, visit the district's website [www.cvwd.com](http://www.cvwd.com).

This outage does not affect water customers of Glendale Water and Power.

## Get Ready to Conserve



Posted by [Robin Goldsworthy](#) on Feb 14th, 2013 and filed under [News](#). You can follow any responses to this entry through the [RSS 2.0](#). You can leave a response or [trackback](#) to this entry

By Mary O'KEEFE

Local residents will be asked to increase their water conservation efforts from Feb. 21 to Feb. 28 as a major supply line from Metropolitan Water District is repaired.

Foothill Municipal Water District and Crescenta Valley Water District receive their imported water from Metropolitan Water District. The upper feeder system will be shut down for repairs for eight days, which means no imported water.

"Crescenta Valley has one emergency route connection with Glendale that they will take advantage of [that will bring] a little bit of water," said Nina Jazmadarian, Foothill Municipal Water District's general manager.

CV also has some ground water, but that will not be enough to make up for what will be lost through the shut down.

"La Cañada and Crescenta Valley have no other source of imported water," Jazmadarian said.

The shut down put the communities into Critical Alert, which means no outside irrigation will be allowed and customers are asked to take additional conservation actions.

"The [upper feeder line] was built in 1941," said Bob Muir, Metropolitan Water District's spokesman. He added the line is one of the oldest and largest sections that supplies water to Southern California.

The repairs are necessary. The water district is now spending more money repairing old lines to keep them up and running.

"In the mid-1990s, we spent \$5 million on rehabilitation. In the next two years, we will spend \$270 million," Muir said.

If the repairs are not done, the possibility of damage to the line increases, which could also increase the possibility of a longer shut down at a time not determined by the district.

“[Customers] cannot afford to have a major import water line go down,” he added.

When a shutdown is required, the district usually schedules it in the winter months.

Jazmadarian said there are ways to prepare before Feb. 21 including deep watering plants.

“If you see a plant that is stressed, then fill a [small] bucket and water it,” she said.

The districts had asked customers in 2011 to go the extra conservation mile for 10 days. Customers took that conservation to heart and got through the 10 days. In addition, there were several summers when the levels were critical and customers came through with their conservation efforts.

The water line repair also affects Pasadena and Altadena. No outdoor watering, hosing or car washing are mandatory during the shutdown, however other measures can be taken to help conserve water. CVWD has tips for the shutdown that include taking five minute or shorter showers, putting a bucket in the shower to collect water before the shower warms up to use for watering plants, not leaving water running when washing dishes, running only full loads in the washing machine and dishwasher, not leaving water running when brushing teeth or shaving and not mowing the lawn to reduce stress on the turf.

This shut down does not affect Glendale city customers.



Follow us:

Info  
Item

## Glendale Water & Power Customers Not Affected By MWD Outage

Atineh Haroutunian

2/12/2013

818.548.3381

The Metropolitan Water District (MWD) issued a press release asking residents in Pasadena and the Foothill Communities (La Crescenta, La Canada and Altadena) to curtail water use during a pipeline shutdown starting February 21 – February 28. Although Glendale *Water & Power* customers are not affected by the shutdown, approximately 2500 Glendale residents and businesses in the La Crescenta area are impacted because their water service is provided by Crescenta Valley Water District. Glendale Water & Power will not be adversely impacted by this outage because we have more than one connection with MWD and have taken mitigations and coordinated with MWD to ensure that water service to our customers is not interrupted. Customers of Pasadena Water & Power, Crescenta Valley Water and Foothill Water Districts need to curtail their water use, especially outdoor watering during this outage period. However, we encourage our customers to continue with their conservation efforts. If you have any questions or concerns, please contact our customer service department (818) 548-3300.

## Utility works on user-friendly, 'smart' apps

By Brittany Levine, [brittany.levine@latimes.com](mailto:brittany.levine@latimes.com)

February 6, 2013 4:09 p.m.

While Glendale Water & Power prepares to cap off the back-end work of its years-long transition to smart meters, officials plan to create Web and mobile applications so customers can take advantage of the new technology more easily within the next year and a half.

Utility commissioners said during a meeting this week that the applications have been a long time coming. .

"We have yet to show some tangible benefits back to the customer so they can touch and feel this investment," Commission President Zanku Armenian said.

The \$70-million project to convert Glendale's roughly 120,000 water and electric meters into devices that can transmit data digitally in near real time is winding down, but there's still about \$5 million to spend by March 2014.

The city received \$21 million in federal and state grants for the project, and the deadline, which was extended by a year, was imposed by the U.S. Department of Energy.

The final millions may be spent on updating computer systems to efficiently read the transmitted data as well as preparing online and mobile applications that customers can use to better understand their energy use.

However, which projects move forward depend on City Council approval during the budgeting process for next fiscal year, said Craig Kuennen, the utility's business transformation and marketing administrator.

A smart thermostat program that tracks air-conditioning use and costs is one of the first programs that may come online in the coming months, Kuennen said.

Glendale Water & Power is also testing a digital photo frame that shows energy and water use on an easy-to-read display, but the utility plans to host focus groups with the 72 customers who have been using the display before expanding the pilot program and setting prices on the service.

An online portal where customers can track their energy use is still in the works and may be integrated into a new website the city is planning to launch, Kuennen said.

Last month, the utility began billing all of its customers directly through the smart meters. Previously, the utility had been using meter readers to manually report electricity and water use in addition to receiving the digital reads to ensure the system worked accurately.

An outspoken but small group of critics has long complained about the smart meters, contending their electronic transmissions make them sick.

Opponents were allowed to have their transmissions turned off, but it costs \$35 to \$56 a month. Thirty-five customers have signed up for that option, according to utility officials.

Of the roughly 120,000 meters, 88 are struggling to communicate wirelessly because of their locations. Two out of the utility's original 10 meter readers continue to perform part of their former jobs, but they will soon transition to other tasks.

Some of the former meter readers took an early retirement option when the entire city downsized staff last year. Others have already moved to other jobs within the utility.



## WATER EDUCATION FOUNDATION

717 K Street, Suite 317  
Sacramento, CA 95814  
Phone: 916-444-6240  
Fax: 916-448-7699  
[www.watereducation.org](http://www.watereducation.org)  
[www.aquafornia.com](http://www.aquafornia.com)

**PRESIDENT**, William R. Mills  
Groundwater Consulting Engineer

**VICE-PRESIDENT**, Scott A. Morris  
Kronick Moskowitz Tiedemann & Girard

**SECRETARY**, Gary Weatherford  
California Public Utilities Commission

**TREASURER**, Michael T. Savage  
Brown and Caldwell

**EXECUTIVE DIRECTOR**,  
Rita Schmidt Sudman  
Water Education Foundation

**DIRECTORS**:  
John Algots  
Fort Mojave Indian Tribe

Jennifer P. Allen  
Contra Costa Water District

Thomas M. Berliner  
Duane Morris, LLP

Thaddeus L. Bettner  
Glenn-Colusa Irrigation District

Gwendolyn M. Buchholz  
CH2M Hill

Byron M. Buck  
State and Federal Contractors Water Agency

Celeste Cantú  
Santa Ana Watershed Project Authority

Ja'Neil Cook  
MWH

Ane D. Deister  
Parsons Corporation

Daniel M. Dooley  
University of California

Phil Dunn  
AECOM

Harrison C. "Hap" Dunning  
The Bay Institute of San Francisco

Dennis Falaschi  
Panoche and Pacheco Water District

Gary J. Freeman  
Pacific Gas & Electric Company

Ronald R. Gastelum  
Cordoba Corporation

David J. Guy  
Northern California Water Association

Maurice Hall  
The Nature Conservancy

Robert W. Johnson  
HDR Engineering, Inc.

Cynthia Kochler  
Carpe Diem West

Alexa La Plante  
ICF International

Patricia Lock-Dawson  
League of Women Voters

Mary Aileen Mathies  
Irvine Ranch Water District

Jonas Minton  
Planning & Conservation League

David Orth  
Kings River Conservation District

Thomas S. Philp  
MWD of Southern California

Timothy H. Quinn  
ACWA

Ronald B. Robie  
Court of Appeal, 3rd Appellate District

Lester Snow  
California Water Foundation

Peter C. Wijsman  
ARCADIS

Information  
Item

RECEIVED

February 4, 2013

FEB 11 2013

CRESCENTA VALLEY  
WATER DISTRICT

Dennis Erdman  
Crescenta Valley Water District  
2700 Foothill Boulevard  
La Crescenta, CA 91214

Dear Mr. Erdman:

I am contacting you today to send you a special invitation to be part of a unique tour.

The Water Education Foundation is planning a **Sea to Sierra Water Tour**, Thursday and Friday, **April 4 & 5**. The tour will be an opportunity to view California water and discuss the key issues while traveling across the state on **Amtrak's famed California Zephyr**. Participants will travel from the edge of sparkling San Francisco Bay, through the meandering channels of the Delta, past rich Central Valley farmland, growing cities, historic mining areas and into the snowy Sierra Nevada mountain range. **The tour highlights are included on the enclosed brochure.**

**As part of the California Water Community, the Foundation is inviting you to register for this unique tour. If you are unable to attend, please extend this invitation to the appropriate person in your organization.**

There will only be 62 seats available on the privately reserved train car, and the registration will be on a **first-come, first-served basis**. The cost for this 2-day, 1-night tour is \$495 per person, single occupancy room, or \$425 each for two people sharing a room.

Scholarships will be available in certain cases. Contact the Foundation to learn about scholarship qualifications. **Please register immediately using the attached brochure or call our office to make arrangements.** You can also register securely online at [www.watereducation.org/tours](http://www.watereducation.org/tours). A detailed agenda will follow with registration.

Please feel free to call me if you have any questions.

Sincerely,

Rita Schmidt Sudman  
Executive Director

Encl.



# Sea to Sierra Water Tour

## Rolling Seminar on California Water Issues

*This winter, view California water and discuss the key issues while you travel across the state on Amtrak's famed California Zephyr. Travel from the edge of sparkling San Francisco Bay, through the meandering channels of the Delta, past rich Central Valley farmland, growing cities, historic mining areas and into the snowy Sierra Nevada mountain range.*

**April 4-5, 2013**

*Presented by*



**WATER EDUCATION  
FOUNDATION**

This privately reserved train car holds 74 people and will host this special tour traveling the state on April 4-5, 2013.

Speakers from stakeholder groups and governmental organizations will join the train and speak to the participants on the way from the Bay through the Sierras.

*Some of the places you will see from the train:* ➤ San Francisco Bay and tidelands ➤ San Pablo Bay and the Carquinez Strait shipping lane and the "Mothball Fleet" of World War II ships ➤ Suisun Marsh – where fresh and salt water mix in the Sacramento-San Joaquin Delta ➤ Agriculture in the Sacramento Valley ➤ The Yolo Bypass flood control basin between Davis and Sacramento ➤ The confluence of the Sacramento and American rivers ➤ Gold Rush era flumes – some still in use today – built to transport water to the mines in the Sierra Nevada foothills ➤ Emigrant Gap, the American River Canyon and Mt. Judah, towering 7,000 feet above sea level, where the Chinese immigrants struggled to build the great rails ➤ Donner Lake where the Donner Party was stranded in the winter of 1846-1847 ➤ The Truckee River – long the focus of negotiations on water issues between California and Nevada

Enjoy a comfortable seat in the rail car, stretch your legs with a walk to the glass dome car and enjoy lunch in the lovely dining car.

**Make your reservation today. Contact the Water Education Foundation, 916-444-6240.**

INFO ITEM

# Lawsuit seeking refund from Water Replenishment District of Southern California nearly set for trial

Mike Sprague, Staff Writer

Posted: 02/07/2013 08:34:16 PM PST

Updated: 02/07/2013 08:42:17 PM PST

LOS ANGELES - A lawsuit filed in September 2010 challenging a regional water district's rate-setting procedures may be going to trial.

Los Angeles Superior Court Judge Ralph Dau on Thursday set a March 5 trial-setting conference in the lawsuit by the cities of Cerritos, Downey and Signal Hill against the Water Replenishment District of Southern California.

A second judge, James C. Chalfant, already has ruled twice that the district violated Proposition 218 procedural requirements in setting the rate.

What's left to be decided is how much, if any, refund the district must pay the three cities as well as others that have filed similar lawsuits.

Attorneys for both sides said they're happy the case finally may be going to trial.

"We are looking forward to it," said Ed Casey, attorney for the replenishment district. "These folks are looking to get water for free."

But Patricia Quilizapa, attorney for the cities, said her clients just want to pay what's legal.

"We don't want to be illegally taxed," Quilizapa said.

The cities' lawsuit accuses the district of not following procedures set by Proposition 218, when it set its rate for the pumping of the underground aquifer.

Still to be decided is in what years the cities can seek a refund.

The cities intend to seek a refund for the years from 2007-2011 but the district officials say it should be limited to 2011.

Judge Dau in December 2012 allowed cities the right to seek a refund.

On Thursday, he upheld a district challenge to a cities' attempt to file a federal claim for a refund on the basis that the district violated their state and constitutional rights.

However, Dau did give the cities' permission to refile their claim.

Casey said the judge agreed with his argument that governmental entities can't seek a refund on the constitutional basis because municipalities aren't "persons" within the meaning of the due process clauses in the federal and state constitutions.

Quilizapa said the cities are "taxpayers" like anyone else and entitled to a refund.

**Christy Scott**

---

**From:** Michael Chonos [mandlbus@att.net]  
**Sent:** Sunday, February 10, 2013 10:30 PM  
**To:** Christy Scott  
**Subject:** fair pricing for large lots that conserve

Date; 2-10-13  
To; C.V.W.D. Board of Directors  
From; Michael Chonos

Your initial implementation of tier rates was unethical, unfair, not fairly thought out, you appear to be acting money hungry and desperate on the backs of your customers. In your letter dated June 15, 2012 (minutes) you act as if you do implement this concession for large lot customers, you will lose revenue.

If that's your worry know this, some of that money should have never been yours to begin with, fortunately for you, your not being asked to give those \$\$\$ back. You, to this day collect some money unfairly and unethically, Take for instance, the largest collecting water company in our entire area L.A. DWP, Check out their billing, They do have 2 tiers, Not four, They do consider large lots. They don't seem to try to get over on their customers, In the manner. C.V.W.D. Does.

Also county tax assessor says my lot is 22,159 square feet. County assessor mapping (213) 974-7352. However I don't think this should matter, A huge lot becomes a huge lot way before 20,000 square feet.

Director Ross caught me off guard last meeting by stating my front lawn was lush green and not lacking water, Am I not entitled to having a green lawn? Maybe she was insinuating I should not be entitled to any breaks for having a large lot. And the penalty for paying tier 4 rates are just. With all due respect director Ross, I really, really believe you are seeing my situation unjustly. Tier 4 should be put on those who waste water, And that would not be me. C.V.W.Ds desperation for \$\$ seems to be causing a lot unjust decisions. I would like to show you photos of how huge my lawn used to be before a garage went in the front yard. I have scaled so, so, so far back and am still getting nailed. Do you know I have not one sprinkler on the last half of my lot. That even impresses me. And the entire 270ft deep is landscaped or hardscaped. I put in 3 truck loads of concrete (30 yds) for a basketball court to get rid of lawn.

My water bill is huge in summer and much lower in winter (which shows I am only using water outside if I need to) to keep landscape healthy.(you should use this fact as another criterion for large lot qualification.) A bill must be certain % higher in summer than winter which proves conservation. Also director Ross if you prepare your soil correctly with proper amendments and use Scott's turf builder you too can have a real green Lawn that looks like it gets over watered.

Thank you for reading my correspondence once again Please make this happen A.S.A.P.

Thank you  
Michael Chonos

Sent from my iPhone

**CRESCENTA VALLEY WATER DISTRICT**  
**POLICY COMMITTEE MINUTES**

DATE: June 15, 2012  
TO: Policy Committee Meeting  
FROM: Ron Mitchell, Secretary-Treasurer

Following are minutes of the Policy Committee Meeting held at 4:00 p.m. on June 8, 2012, at the CVWD main office, and was attended by the following:

---

|                                                 |                        |
|-------------------------------------------------|------------------------|
| Director Kerry Erickson - Committee Chairperson | CVWD Board of Director |
| Director Kathy Ross - Committee Member          | CVWD Board of Director |
| Dennis Erdman                                   | CVWD                   |
| Ron Mitchell                                    | CVWD                   |

---

**Subject: Potential Water Rate Structure for Large Lots**

The Policy Committee met on June 8, 2012 as requested by the Board to examine a request by District resident Michael Chonos to consider an alternative rate structure for large lots (1/2 acres or more) in the Crescenta Valley Water District service area. Staff developed the attached spreadsheet to help the Committee analyze the impact a potential change in billing could have on the District's revenues if the 2011 consumption was billed using the current cost of service rates (tier 2) versus what was billed using the 2011 tiered billing structure.

Staff informed the Committee that they had researched and found that 148 lots, including some sewer only accounts, have a lot size of ½ acre or more. A random sample size of 25 lots (including Mr. Chonos' lot) was used and it shows that the sample group would result in a loss of revenue to the District totaling \$8,035.97, or 20.11%, if the billing method were changed as described above. If you delete the sewer only accounts from the total affected lots, approximately 130 lots remain that could be affected if the billing structure was changed. That means the District could lose approximately \$40,000 annually in revenue based upon the analysis if consumption patterns remain constant.

The Committee was not in favor of revising the current billing structure for large lots and didn't feel that there was any merit in changing at this time. In fact, it was noted that Mr. Chonos' lot may not even qualify as a "large lot" as defined above. Staff said that they will do an additional analysis and use the tier rate structure suggested by Mr. Chonos against the random sample identified above and see what the impact would be on District revenues. This information will be supplied to the Committee when complete.

**CRESCENTA VALLEY WATER DISTRICT**  
**FISCAL YEAR 2012-13**  
**BUDGET VERSUS ACTUAL**  
**FOR THE SIX MONTHS ENDED DECEMBER 31, 2012**

| Description       |                                         | Budget           | Ending<br>Balance | % of<br>Revenue       | Variance         | Expense<br>% of<br>Budget |
|-------------------|-----------------------------------------|------------------|-------------------|-----------------------|------------------|---------------------------|
| <b>WATER FUND</b> |                                         |                  |                   |                       |                  |                           |
| 01-00-4010-000    | Water Sales - Consumers                 | 3,420,728        | 2,291,496         | 45.85%                | 1,129,232        | 66.99%                    |
| 01-00-4010-005    | FMWD Charge                             | 2,646,164        | 1,433,496         | 28.68%                | 1,212,668        | 54.17%                    |
| 01-00-4010-007    | Irrigation                              | 380,000          | 216,090           | 4.32%                 | 163,910          | 56.87%                    |
| 01-00-4010-008    | Water Sales- Service Charge             | 1,518,000        | 818,193           | 16.37%                | 699,807          | 53.90%                    |
| 01-00-4010-009    | Water Sales - Fire Service              | 28,000           | 14,939            | 0.30%                 | 13,061           | 53.35%                    |
| 01-00-4020-000    | Water Sales - Others                    | 60,000           | 30,849            | 0.62%                 | 29,151           | 51.42%                    |
| 01-00-4110-000    | Meter Installation/Hydrant              | 10,000           | 42,260            | 0.85%                 | (32,260)         | 422.60%                   |
| 01-00-4220-000    | Water Systems Connect Fee               | 75,000           | 71,598            | 1.43%                 | 3,402            | 95.46%                    |
| 01-00-4230-000    | Other Income                            | 10,250           | 1,149             | 0.02%                 | 9,101            | 11.21%                    |
|                   | <b>Operating Revenues-excludes MTBE</b> | <b>8,148,142</b> | <b>4,920,070</b>  | <b>98.45%</b>         | <b>3,228,072</b> | <b>60.38%</b>             |
| 01-00-4240-000    | Interest Earned - Water                 | 113,000          | 32,074            | 0.64%                 | 80,926           | 28.38%                    |
| 01-00-4245-000    | Interest Earned-2007 COPS Proc          | -                | 134               | 0.00%                 | (134)            |                           |
| 01-00-4265-000    | Fair Value Adjustment                   | -                | 12,285            | 0.25%                 | (12,285)         |                           |
| 01-00-4270-000    | Gain/Loss on Sale of Assets             | -                | 21,965            | 0.44%                 | (21,965)         |                           |
| 01-00-4275-001    | Rental Income                           | -                | 11,250            | 0.23%                 | (11,250)         |                           |
| 01-00-4280-000    | Other - MTBE Settlement                 | -                | 1,386,187         | NOT INCLUDED IN TOTAL |                  |                           |
|                   | <b>Non-Operating Revenue</b>            | <b>113,000</b>   | <b>77,708</b>     | <b>1.55%</b>          | <b>35,292</b>    | <b>68.77%</b>             |
|                   | <b>Revenue</b>                          | <b>8,261,142</b> | <b>4,997,778</b>  | <b>100.00%</b>        | <b>3,263,364</b> | <b>60.50%</b>             |
| 01-01-5000-000    | Director Fees                           | 8,100            | 3,690             | 0.07%                 | 4,410            | 45.56%                    |
| 01-01-5010-000    | Officer Salaries                        | 144,000          | 67,959            | 1.36%                 | 76,041           | 47.19%                    |
| 01-01-5015-000    | Administrative Services-Labor           | 336,000          | 140,162           | 2.80%                 | 195,838          | 41.71%                    |
| 01-01-5015-100    | Administrative Services-OT              | 4,700            | 2,781             | 0.06%                 | 1,919            | 59.17%                    |
| 01-01-5020-000    | Engineering-Labor                       | 380,800          | 129,975           | 2.60%                 | 250,825          | 34.13%                    |
| 01-01-5020-100    | Engineering-OT                          | 1,200            | 333               | 0.01%                 | 867              | 27.78%                    |
| 01-01-5045-000    | Automobile Allowance                    | 10,200           | 4,475             | 0.09%                 | 5,725            | 43.87%                    |
| 01-01-5050-000    | Employer Portion of PERS                | 324,400          | 87,970            | 1.76%                 | 236,430          | 27.12%                    |
| 01-01-5060-000    | Taxes-Payroll                           | 128,750          | 53,966            | 1.08%                 | 74,784           | 41.92%                    |
| 01-01-5070-000    | Sick Leave/Vacation-Office              | 130,000          | 66,138            | 1.32%                 | 63,862           | 50.88%                    |
| 01-01-5080-000    | Health Dental Vision                    | 139,800          | 46,160            | 0.92%                 | 93,640           | 33.02%                    |
| 01-01-5080-055    | Retiree Health Care Expense             | 83,000           | 39,209            | 0.78%                 | 43,791           | 47.24%                    |
| 01-01-5082-000    | Life and Disability Insurance           | 7,600            | 4,209             | 0.08%                 | 3,391            | 55.39%                    |
| 01-01-5083-000    | Self Insurance                          | 14,400           | 7,720             | 0.15%                 | 6,680            | 53.61%                    |
| 01-01-5085-000    | Workers' Compensation Ins               | 19,700           | 9,325             | 0.19%                 | 10,375           | 47.34%                    |
| 01-02-5015-000    | Administrative Services-Plant           | 228,900          | 90,663            | 1.81%                 | 138,238          | 39.61%                    |
| 01-02-5015-100    | Administrative OT-Plant                 | 1,000            | 16                | 0.00%                 | 984              | 1.63%                     |
| 01-02-5030-000    | System Operations                       | 314,000          | 143,726           | 2.88%                 | 170,274          | 45.77%                    |

|                | Description                        | Budget           | Ending Balance   | % of Revenue  | Variance         | % of Budget   |
|----------------|------------------------------------|------------------|------------------|---------------|------------------|---------------|
| 01-02-5030-100 | System Operations OT               | 31,200           | 8,772            | 0.18%         | 22,428           | 28.12%        |
| 01-02-5035-000 | Maintenance - Labor                | 380,000          | 170,714          | 3.42%         | 209,286          | 44.92%        |
| 01-02-5035-100 | Maintenance OT                     | 22,500           | 8,909            | 0.18%         | 13,591           | 39.59%        |
| 01-02-5036-000 | Standby Pay                        | 44,000           | 22,521           | 0.45%         | 21,479           | 51.18%        |
| 01-02-5070-000 | Sick Leave/Vacation-Plant          | 86,600           | 44,092           | 0.88%         | 42,508           | 50.91%        |
| 01-02-5080-000 | Health Dental Vision               | 145,500          | 78,182           | 1.56%         | 67,318           | 53.73%        |
| 01-02-5082-000 | Life and Disability Insurance      | 3,000            | -                | 0.00%         | 3,000            | 0.00%         |
| 01-02-5085-000 | Workers' Compensation Ins          | 90,600           | 42,130           | 0.84%         | 48,470           | 46.50%        |
|                | Labor Transfer to Capital          | (150,000)        | (51,993)         | -1.04%        | (98,007)         | 34.66%        |
|                | <b>Compensation and Benefits</b>   | <b>2,929,950</b> | <b>1,273,798</b> | <b>25.49%</b> | <b>1,708,145</b> | <b>43.48%</b> |
| 01-01-5090-000 | GL, Property, Fidelity Ins         | 55,000           | 23,442           | 0.47%         | 31,558           | 42.62%        |
| 01-01-5100-000 | Accounting                         | 11,500           | 6,273            | 0.13%         | 5,227            | 54.55%        |
| 01-01-5125-000 | Legal                              | 42,000           | 23,584           | 0.47%         | 18,416           | 56.15%        |
| 01-01-5125-001 | Legal - MTBE                       |                  | 165,772          |               |                  |               |
| 01-01-5130-000 | Administrative Consultants         | 87,500           | 55,629           | 1.11%         | 31,871           | 63.58%        |
|                | IT Support                         | 12,500           | 5,501            | 0.11%         | 6,999            | 44.01%        |
| 01-01-5140-000 | Election Expense                   | -                | -                | 0.00%         | -                |               |
| 01-01-5150-000 | Building Maintenance-Office        | 10,000           | 4,599            | 0.09%         | 5,401            | 45.99%        |
| 01-01-5170-000 | Landscaping Expense                | 11,000           | 2,543            | 0.05%         | 8,458            | 23.11%        |
| 01-01-5180-000 | Office Supplies & Misc Expense     | 5,000            | 1,771            | 0.04%         | 3,229            | 35.42%        |
| 01-01-5190-000 | Computers and Network              | 11,000           | 8,722            | 0.17%         | 2,278            | 79.29%        |
| 01-01-5195-000 | Computer Software                  | 30,000           | 3,070            | 0.06%         | 26,930           | 10.23%        |
| 01-01-5196-000 | Software Maintenance/Licenses      | 21,000           | 4,963            | 0.10%         | 16,037           | 23.63%        |
| 01-01-5200-000 | Utilities                          | 15,000           | 8,646            | 0.17%         | 6,355            | 57.64%        |
| 01-01-5225-000 | Land-Line Phones/Communication     | 27,000           | 3,370            | 0.07%         | 23,630           | 12.48%        |
| 01-01-5226-000 | Cell Phones-Office                 | 17,500           | 6,392            | 0.13%         | 11,108           | 36.53%        |
| 01-01-5230-000 | Printing Postage Stationery        | 37,000           | 17,226           | 0.34%         | 19,774           | 46.56%        |
| 01-01-5240-000 | Uncollectible Accounts             | 6,000            | -                | 0.00%         | 6,000            | 0.00%         |
| 01-01-5250-000 | Water System Fees                  | 40,000           | 29,945           | 0.60%         | 10,055           | 74.86%        |
| 01-01-5260-000 | Engineering Expense                | 13,000           | 5,110            | 0.10%         | 7,890            | 39.31%        |
| 01-01-5270-001 | Water Conservation Expense         | 60,000           | 10,240           | 0.20%         | 49,760           | 17.07%        |
| 01-01-5270-002 | Water Conservation Advertising     | 6,000            | -                | 0.00%         | 6,000            | 0.00%         |
| 01-01-5270-003 | Water Conservation Turf Rebate     | 25,000           | 12,991           | 0.26%         | 12,009           | 51.96%        |
| 01-01-5270-005 | Water Conservation Rebates         | 21,000           | 2,558            | 0.05%         | 18,442           | 12.18%        |
| 01-01-5300-000 | Training-Office                    | 12,000           | 9,013            | 0.18%         | 2,987            | 75.11%        |
| 01-01-5320-000 | Conferences & Seminars             | 18,000           | 4,387            | 0.09%         | 13,613           | 24.37%        |
| 01-01-5320-005 | Conferences & Seminars-Board       | 2,000            | 368              | 0.01%         | 1,632            | 18.40%        |
| 01-01-5325-000 | Mileage Reimbursements             | 500              | 785              | 0.02%         | (285)            | 156.93%       |
| 01-01-5350-000 | Misc Administration                | 7,000            | 679              | 0.01%         | 6,321            | 9.69%         |
| 01-01-5350-005 | Misc Administration-Board          | 1,000            | 883              | 0.02%         | 117              | 88.26%        |
| 01-01-5355-000 | Memberships/Subscriptions          | 18,000           | 17,100           | 0.34%         | 900              | 95.00%        |
| 01-01-5365-000 | Bank Charges                       | 11,000           | 4,384            | 0.09%         | 6,616            | 39.85%        |
|                | <b>Gen'l and Admin Expenses</b>    | <b>633,500</b>   | <b>439,942</b>   | <b>8.80%</b>  | <b>359,330</b>   | <b>69.45%</b> |
| 01-01-5900-000 | Amortization of Intangibles        | 15,000           | 7,549            | 0.15%         | 7,451            | 50.33%        |
| 01-01-5900-001 | Amortization of Investment Premium |                  | 823              | 0.02%         | (823)            |               |

|                | Description                          | Budget           | Ending Balance   | % of Revenue  | Variance         | % of Budget   |
|----------------|--------------------------------------|------------------|------------------|---------------|------------------|---------------|
| 01-01-5910-000 | Interest Expense - Notes             | 392,400          | 198,019          | 3.96%         | 194,381          | 50.46%        |
| 01-01-5911-000 | Interest Expense - Pension           |                  | 16,442           | 0.33%         |                  |               |
| 01-01-5920-001 | Rental Expense - PA House            | 2,500            | 75               | 0.00%         | 2,425            |               |
| 01-01-5920-002 | Rental Expense - Sycamore House      |                  | 38               | 0.00%         | (38)             |               |
|                | <b>Non-Operating Expense</b>         | <b>409,900</b>   | <b>222,945</b>   | <b>4.46%</b>  | <b>203,397</b>   | <b>54.39%</b> |
| 01-02-5145-000 | Taxes-Property                       | 11,000           | 4,949            | 0.10%         | 6,051            | 44.99%        |
| 01-02-5150-000 | Building Maintenance-Plant           | 23,000           | 6,777            | 0.14%         | 16,223           | 29.46%        |
| 01-02-5170-000 | Landscaping Expenses-Plant           | 5,000            | 2,556            | 0.05%         | 2,444            | 51.11%        |
| 01-02-5200-000 | Utilities-Plant                      | 9,000            | 5,947            | 0.12%         | 3,053            | 66.08%        |
| 01-02-5225-000 | Land-Line Phones/Communication       | 27,500           | 22,634           | 0.45%         | 4,866            | 82.30%        |
| 01-02-5226-000 | Cell Phones-Plant                    | 8,000            | 2,894            | 0.06%         | 5,106            | 36.17%        |
| 01-02-5300-000 | Training-Plant                       | 7,000            | 2,670            | 0.05%         | 4,330            | 38.15%        |
| 01-02-5310-000 | Operator Certifications-Educ         | 5,000            | 1,087            | 0.02%         | 3,913            | 21.74%        |
| 01-02-5330-000 | Safety & Security                    | 12,000           | 14,353           | 0.29%         | (2,353)          | 119.60%       |
| 01-02-5340-000 | Uniforms                             | 8,000            | 4,733            | 0.09%         | 3,267            | 59.17%        |
| 01-02-5360-000 | Emergency Operations/Repairs         | 7,500            | -                | 0.00%         | 7,500            | 0.00%         |
| 01-02-5370-000 | Permit & Assessment Fees             | 1,500            | -                | 0.00%         | 1,500            | 0.00%         |
| 01-02-5380-000 | Tools and Supplies                   | 18,000           | 10,291           | 0.21%         | 7,709            | 57.17%        |
| 01-02-5390-000 | Nitrate Plant                        | 80,000           | 85,482           | 1.71%         | (5,482)          | 106.85%       |
| 01-02-5445-000 | Telemetry & Signal System            | 20,000           | 2,182            | 0.04%         | 17,818           | 10.91%        |
| 01-02-5445-001 | SCADA Hardware                       | 16,000           | 2,451            | 0.05%         | 13,549           | 15.32%        |
| 01-02-5445-002 | SCADA Software                       | 10,000           | -                | 0.00%         | 10,000           | 0.00%         |
| 01-02-5445-003 | SCADA Phone Lines                    | 11,000           | 589              | 0.01%         | 10,411           | 5.36%         |
| 01-02-5450-000 | Lab & Sampling Expense               | 56,000           | 23,918           | 0.48%         | 32,082           | 42.71%        |
| 01-02-5450-013 | Lab & Sampling Expense - MTBE        | 75,000           | 30,427           | 0.61%         | 44,573           | 40.57%        |
| 01-02-5460-000 | Chlorine & Treatment Expense         | 56,000           | 26,891           | 0.54%         | 29,109           | 48.02%        |
|                | <b>Water Plant Operation Expense</b> | <b>466,500</b>   | <b>250,832</b>   | <b>5.02%</b>  | <b>58,127</b>    | <b>53.77%</b> |
| 01-02-5401-000 | Purchased Water                      | 2,108,000        | 1,114,030        | 22.29%        | 993,970          | 52.85%        |
| 01-02-5402-000 | Power Purchased - Pumping            | 653,000          | 318,103          | 6.36%         | 334,897          | 48.71%        |
|                | <b>Water System Expense</b>          | <b>2,761,000</b> | <b>1,432,132</b> | <b>28.66%</b> | <b>1,328,868</b> | <b>51.87%</b> |
| 01-02-5410-000 | Backflow Expense                     | 700              | 596              | 0.01%         | 104              | 85.15%        |
| 01-02-5423-000 | Pipelines - Maintenance              | 35,000           | 24,667           | 0.49%         | 10,333           | 70.48%        |
| 01-02-5423-007 | Pipelines-Paving                     | 15,000           | 12,314           | 0.25%         | 2,686            | 82.09%        |
| 01-02-5423-008 | Fire Hydrant Repair/Replace          | 25,000           | 1,064            | 0.02%         | 23,936           | 4.25%         |
| 01-02-5423-009 | Pipelines-Leak Detect/Repair         | 25,000           | -                | 0.00%         | 25,000           | 0.00%         |
| 01-02-5423-010 | Pipelines-Trench Plate Rentals       | 1,000            | 1,592            | 0.03%         | (592)            | 159.16%       |
| 01-02-5423-012 | Pipelines - Valves                   | 16,000           | 2,486            | 0.05%         | 13,514           | 15.54%        |
| 01-02-5424-000 | Reservoir Maintenance                | 84,000           | 22,452           | 0.45%         | 61,548           | 26.73%        |
| 01-02-5424-006 | Reservoir Landscape                  | 30,000           | 10,826           | 0.22%         | 19,174           | 36.09%        |
| 01-02-5425-000 | Meter Maintenance                    | 255,000          | 76,527           | 1.53%         | 178,473          | 30.01%        |
| 01-02-5425-007 | Meters - Paving                      | 220,000          | 34,266           | 0.69%         | 185,734          | 15.58%        |
| 01-02-5425-008 | Meter Repair/Replace/Upgrade         | 50,000           | 5,520            | 0.11%         | 44,480           | 11.04%        |
| 01-02-5425-009 | Lateral Leaks and Repairs            | 36,000           | 31,003           | 0.62%         | 4,997            | 86.12%        |
| 01-02-5425-010 | Meters - Trench Plate Rentals        | 1,000            | -                | 0.00%         | 1,000            | 0.00%         |
| 01-02-5432-000 | Well Site - Maintenance              | 33,000           | 15,033           | 0.30%         | 17,967           | 45.55%        |

|                | Description                        | Budget           | Ending<br>Balance | % of<br>Revenue | Variance         | % of<br>Budget |
|----------------|------------------------------------|------------------|-------------------|-----------------|------------------|----------------|
| 01-02-5432-006 | Well Site - Landscape              | 5,000            | 1,719             | 0.03%           | 3,281            | 34.38%         |
| 01-02-5432-007 | Well Site - Lease Payment          | 300              | 300               | 0.01%           | -                | 100.00%        |
| 01-02-5433-000 | Maintenance - Booster Pumps        | 61,000           | 33,044            | 0.66%           | 27,956           | 54.17%         |
| 01-02-5434-000 | Emergency Power Generators         | 6,000            | 4,616             | 0.09%           | 1,384            | 76.93%         |
| 01-02-5440-000 | Auto/Truck Maintenance             | 40,000           | 12,588            | 0.25%           | 27,412           | 31.47%         |
| 01-02-5440-015 | Auto/Truck Maintenance-Gas         | 26,000           | 10,919            | 0.22%           | 15,081           | 42.00%         |
| 01-02-5440-016 | Auto/Truck Maintenance-Diesel      | 20,000           | 9,547             | 0.19%           | 10,453           | 47.74%         |
| 01-02-5441-000 | Inventory Shrinkage                |                  | (462)             | -0.01%          | 462              |                |
|                | <b>Distribution System Expense</b> | <b>985,000</b>   | <b>310,617</b>    | <b>6.22%</b>    | <b>674,383</b>   | <b>31.53%</b>  |
|                | <b>Expense</b>                     | <b>8,185,850</b> | <b>3,930,266</b>  | <b>78.64%</b>   | <b>4,332,250</b> | <b>48.01%</b>  |

**WATER INCOME/(LOSS) BEFORE NON-CASH** 75,292 1,067,513 DOES NOT INCLUDE MTBE SETTLEMENT

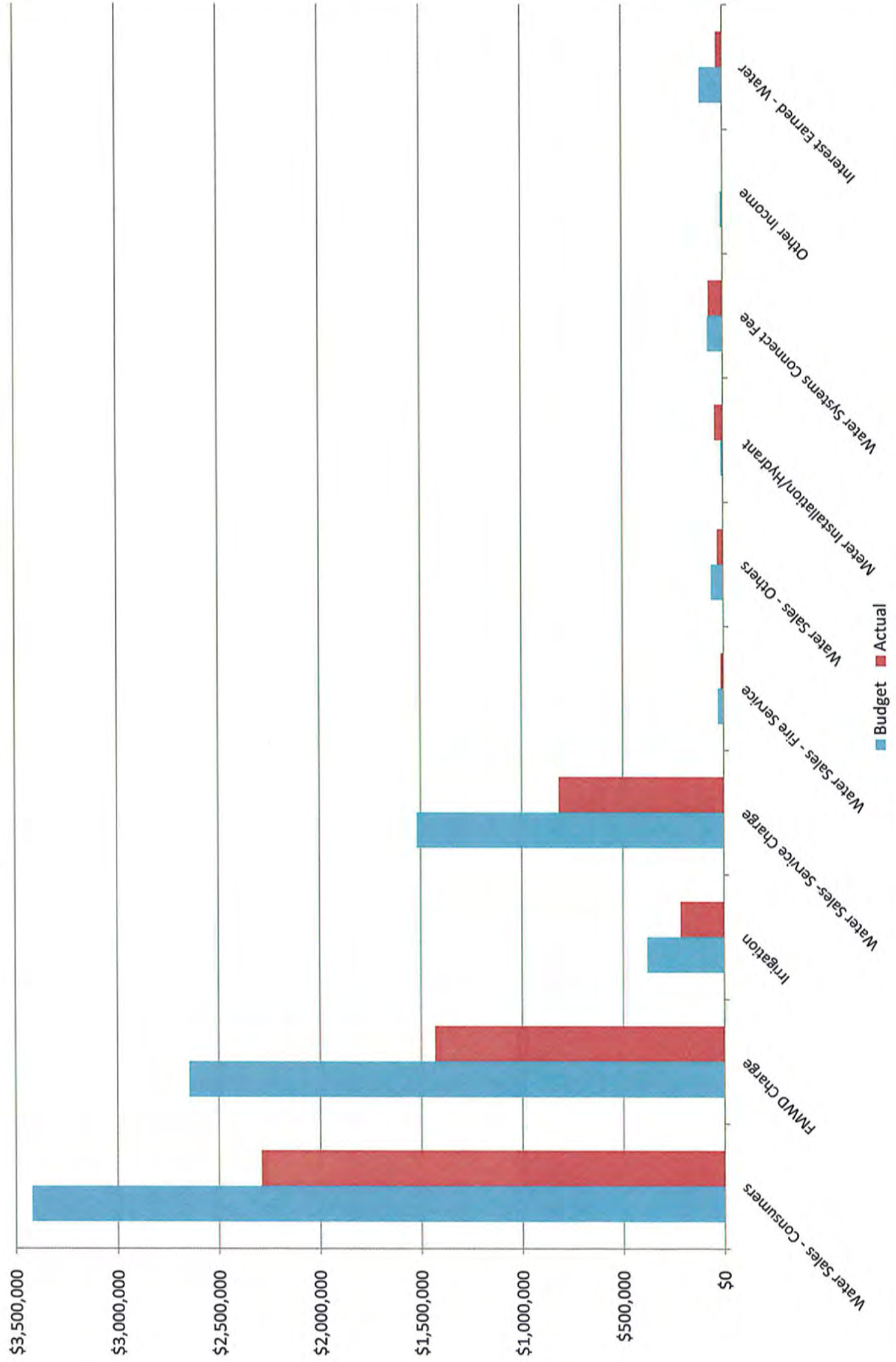
|                                                   |                  |                |         |        |
|---------------------------------------------------|------------------|----------------|---------|--------|
| Water CIP Projects - COPS - Capital Outlay and Eq | 412,000          | 400,273        | 11,727  | 97.15% |
| Commercial D-Jobs (D-09-09)                       |                  | 34,275         |         |        |
| COPS Principal Payment                            | 220,000          | 110,000        | 110,000 | 50.00% |
| OPEB Fund                                         | 100,000          | 50,000         |         |        |
| <b>NET INCOME/(LOSS) ON BUDGET</b>                | <b>(656,708)</b> | <b>507,239</b> |         |        |

|                                                              |             |                                   |
|--------------------------------------------------------------|-------------|-----------------------------------|
| <b>BOND COVENANT</b> Revenue Less Operating Expenses from GL | 1,290,458   | (does not include deprec or OPEB) |
| Debt Service - Principal and Interest                        | 308,019     |                                   |
|                                                              | <b>4.19</b> |                                   |

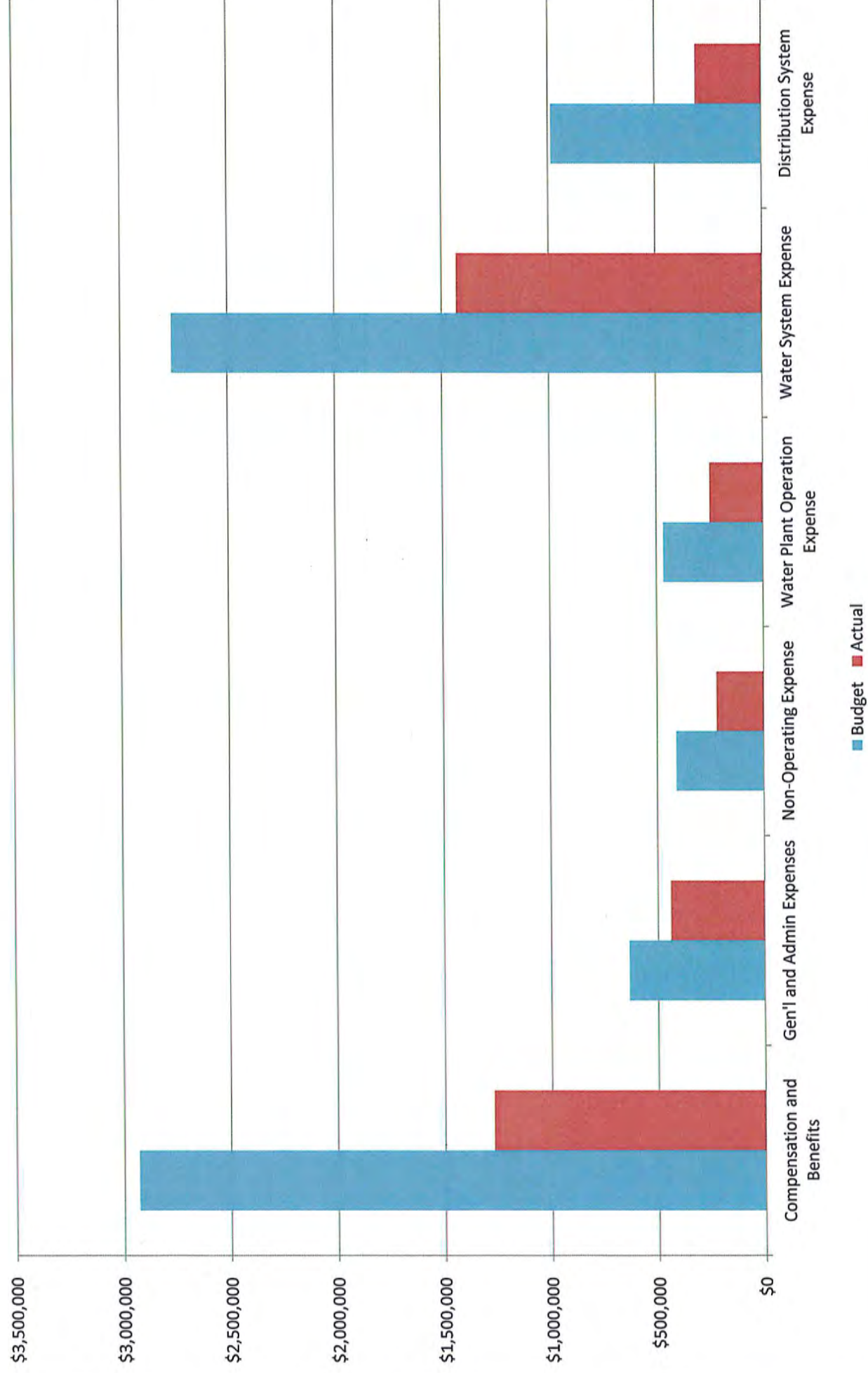
These items are not included in above expenses:

|                |                                  |                |               |
|----------------|----------------------------------|----------------|---------------|
| 01-01-5080-055 | Post Employment Medical Benefits | 382,701        | 7.66%         |
| 01-01-5800-000 | Depreciation - Office            | 47,279         | 0.95%         |
| 01-02-5805-000 | Depreciation-Pumping             | 185,386        | 3.71%         |
| 01-02-5810-000 | Depreciation-Distribution        | 290,956        | 5.82%         |
| 01-02-5815-000 | Depreciation-Nitrate Plant       | 52,842         | 1.06%         |
|                | <b>Non-Cash Expense Items</b>    | <b>959,165</b> | <b>19.19%</b> |

## FY 12/13 Water Revenues - Budget vs. Actual



## FY 12/13 Water Expenses - Budget vs. Actual



|                        | Description                      | Budget           | Ending Balance   | % of Revenue   | Variance         | % of Budget   |
|------------------------|----------------------------------|------------------|------------------|----------------|------------------|---------------|
| <b>WASTEWATER FUND</b> |                                  |                  |                  |                |                  |               |
| 02-00-4010-000         | Sewage Disposal Sales            | 2,934,524        | 1,459,488        | 96.40%         | 1,475,036        | 49.74%        |
| 02-00-4220-000         | Property Owner Assessments       | 7,000            | 50,714           | 3.35%          | (43,714)         | 724.48%       |
| 02-00-4225-000         | Sewer Permits                    | 5,000            | -                | 0.00%          | 5,000            | 0.00%         |
| 02-00-4230-000         | Other Income - Wastewater        | 2,500            |                  | 0.00%          | 2,500            | 0.00%         |
|                        | <b>Operating Revenues</b>        | <b>2,949,024</b> | <b>1,510,202</b> | <b>99.75%</b>  | <b>1,438,822</b> | <b>51.21%</b> |
| 02-00-4240-000         | Interest Earned - Sewer          | 500              | 28               | 0.00%          | 472              | 5.53%         |
| 02-00-4275-002         | Rental Income                    | 7,500            | 3,750            | 0.25%          | 3,750            | 50.00%        |
|                        | <b>Non-Operating Revenue</b>     | <b>8,000</b>     | <b>3,778</b>     | <b>0.25%</b>   | <b>4,222</b>     | <b>47.22%</b> |
|                        | <b>Revenue</b>                   | <b>2,957,024</b> | <b>1,513,980</b> | <b>100.00%</b> | <b>1,443,044</b> | <b>51.20%</b> |
| 02-01-5000-000         | Director Fees                    | 8,100            | 3,690            | 0.24%          | 4,410            | 45.56%        |
| 02-01-5010-000         | Officer Salaries                 | 144,000          | 67,959           | 4.49%          | 76,041           | 47.19%        |
| 02-01-5015-000         | Administrative Services-Labor    | 226,700          | 107,292          | 7.09%          | 119,408          | 47.33%        |
| 02-01-5015-100         | Administrative Services-OT       | 4,700            | 2,781            | 0.18%          | 1,919            | 59.17%        |
| 02-01-5020-000         | Engineering-Labor                | 154,800          | 43,036           | 2.84%          | 111,764          | 27.80%        |
| 02-01-5020-100         | Engineering-OT                   | 400              | 111              | 0.01%          | 289              | 27.78%        |
| 02-01-5045-000         | Automobile Allowance             | 10,200           | 4,475            | 0.30%          | 5,725            | 43.87%        |
| 02-01-5050-000         | Employer Portion of PERS         | 216,200          | 58,919           | 3.89%          | 157,281          | 27.25%        |
| 02-01-5060-000         | Taxes - Payroll                  | 84,500           | 35,978           | 2.38%          | 48,522           | 42.58%        |
| 02-01-5070-000         | Sick Leave/Vacation-Office       | 43,300           | 22,046           | 1.46%          | 21,254           | 50.91%        |
| 02-01-5080-000         | Health Dental Vision             | 93,200           | 30,774           | 2.03%          | 62,426           | 33.02%        |
| 02-01-5080-055         | Retiree Health Care Expense      | 55,200           | 26,139           | 1.73%          | 29,061           | 47.35%        |
| 02-01-5082-000         | Life and Disability Insurance    | 5,100            | 2,806            | 0.19%          | 2,294            | 55.03%        |
| 02-01-5083-000         | Self Insurance                   | 9,600            | 5,147            | 0.34%          | 4,453            | 53.61%        |
| 02-01-5085-000         | Workers' Compensation Ins        | 13,150           | 6,307            | 0.42%          | 6,843            | 47.96%        |
| 02-02-5015-000         | Administrative Services-Plant    | 76,300           | 25,741           | 1.70%          | 50,559           | 33.74%        |
| 02-02-5015-100         | Administrative OT-Plant          | 400              | 5                | 0.00%          | 395              | 1.36%         |
| 02-02-5035-000         | Maintenance-Plant Labor          | 198,600          | 39,671           | 2.62%          | 158,929          | 19.98%        |
| 02-02-5035-100         | Maintenance- OT                  | 16,500           | 5,540            | 0.37%          | 10,960           | 33.58%        |
| 02-02-5036-000         | Standby Pay                      | 14,700           | 7,507            | 0.50%          | 7,193            | 51.07%        |
| 02-02-5070-000         | Sick Leave/Vacation-Plant        | 28,900           | 14,697           | 0.97%          | 14,203           | 50.85%        |
| 02-02-5080-000         | Health Dental Vision             | 97,000           | 52,121           | 3.44%          | 44,879           | 53.73%        |
| 02-02-5082-000         | Life and Disability Insurance    | 2,000            | -                | 0.00%          | 2,000            | 0.00%         |
| 02-02-5085-000         | Workers' Compensation Ins        | 60,400           | 27,996           | 1.85%          | 32,404           | 46.35%        |
|                        | Transfer to Capital              |                  | (2,893)          | -0.19%         |                  |               |
|                        | <b>Compensation and Benefits</b> | <b>1,563,950</b> | <b>590,739</b>   | <b>39.02%</b>  | <b>973,211</b>   | <b>37.77%</b> |
| 02-01-5090-000         | GL, Property, Fidelity Ins       | 55,000           | 23,442           | 1.55%          | 31,558           | 42.62%        |
| 02-01-5100-000         | Accounting                       | 11,500           | 6,273            | 0.41%          | 5,227            | 54.55%        |
| 02-01-5125-000         | Legal                            | 14,000           | 5,607            | 0.37%          | 8,393            | 40.05%        |
| 02-01-5130-000         | Adminstrative Consultants        | 12,500           | 10,187           | 0.67%          | 2,313            | 81.49%        |
|                        | IT Consultant                    | 12,500           | 5,504            | 0.36%          | 6,996            | 44.03%        |
| 02-01-5140-000         | Election Expense                 |                  | -                | 0.00%          | -                |               |
| 02-01-5150-000         | Building Maintenance-Office      | 3,300            | 1,533            | 0.10%          | 1,767            | 46.45%        |
| 02-01-5170-000         | Landscaping Expense-Office       | 3,600            | 848              | 0.06%          | 2,753            | 23.54%        |
| 02-01-5180-000         | Office Supplies & Misc Expense   | 5,000            | 1,771            | 0.12%          | 3,229            | 35.41%        |

|                |                                     |                | Ending         | % of         |                | % of          |
|----------------|-------------------------------------|----------------|----------------|--------------|----------------|---------------|
|                | Description                         | Budget         | Balance        | Revenue      | Variance       | Budget        |
| 02-01-5190-000 | Computers and Network               | 3,600          | 2,898          | 0.19%        | 702            | 80.50%        |
| 02-01-5195-000 | Computer Software                   | 10,000         | 1,046          | 0.07%        | 8,954          | 10.46%        |
| 02-01-5196-000 | Software Maintenance/Licenses       | 7,000          | 1,963          | 0.13%        | 5,037          | 28.04%        |
| 02-01-5200-000 | Utilities                           | 5,000          | 2,545          | 0.17%        | 2,455          | 50.91%        |
| 02-01-5225-000 | Land-Line Phones/Communication      | 9,000          | 1,123          | 0.07%        | 7,877          | 12.48%        |
| 02-01-5226-000 | Cell Phones-Office                  | 5,750          | 2,131          | 0.14%        | 3,619          | 37.05%        |
| 02-01-5230-000 | Printing Postage Stationery         | 37,000         | 18,592         | 1.23%        | 18,408         | 50.25%        |
| 02-01-5240-000 | Uncollectible Accounts              | 2,000          | -              | 0.00%        | 2,000          | 0.00%         |
| 02-01-5260-000 | Engineering Expenses                | 4,300          | 1,703          | 0.11%        | 2,597          | 39.61%        |
| 02-01-5300-000 | Training-Office                     | 4,000          | 2,486          | 0.16%        | 1,514          | 62.15%        |
| 02-01-5320-000 | Conferences & Seminars              | 6,000          | 846            | 0.06%        | 5,154          | 14.10%        |
| 02-01-5320-005 | Conferences & Seminars-Board        | 700            | 123            | 0.01%        | 577            | 17.53%        |
| 02-01-5325-000 | Mileage Reimbursements              | 200            | 262            | 0.02%        | (62)           | 130.77%       |
| 02-01-5350-000 | Misc Administration                 | 3,000          | 622            | 0.04%        | 2,378          | 20.74%        |
| 02-01-5350-005 | Misc Administration-Board           | 400            | 378            | 0.02%        | 22             | 94.51%        |
| 02-01-5355-000 | Memberships/Subscriptions           | 6,000          | 5,599          | 0.37%        | 401            | 93.32%        |
| 02-01-5365-000 | Bank Charges                        | 11,000         | 4,383          | 0.29%        | 6,617          | 39.84%        |
|                | <b>Gen'l and Admin Expenses</b>     | <b>232,350</b> | <b>101,864</b> | <b>6.73%</b> | <b>130,486</b> | <b>43.84%</b> |
| 02-01-5911-000 | Interest Expense - Pension          |                | 10,961         |              |                |               |
| 02-01-5920-001 | Rental Expense - PA House           | 850            | 25             |              | 825            |               |
| 02-01-5920-002 | Rental Expense - Sycamore House     |                | 13             |              |                |               |
|                | <b>Non-Operating Expense</b>        | <b>850</b>     | <b>10,999</b>  |              | <b>825</b>     |               |
| 02-02-5145-000 | Taxes-Property                      | 3,600          | 1,650          | 0.11%        | 1,950          | 45.82%        |
| 02-02-5150-000 | Building Maintenance-Plant          | 6,000          | 2,259          | 0.15%        | 3,741          | 37.65%        |
| 02-02-5170-000 | Landscaping Expense-Plant           | 1,650          | 852            | 0.06%        | 798            | 51.63%        |
| 02-02-5200-000 | Utilities-Plant                     | 3,000          | 1,084          | 0.07%        | 1,916          | 36.14%        |
| 02-02-5225-000 | Land-Line Phones/Communication      | 9,000          | 7,544          | 0.50%        | 1,456          | 83.82%        |
| 02-02-5226-000 | Cell Phones-Plant                   | 2,600          | 965            | 0.06%        | 1,635          | 37.10%        |
| 02-02-5300-000 | Training-Plant                      | 2,300          | 698            | 0.05%        | 1,602          | 30.37%        |
| 02-02-5310-000 | Operator Certifications-Educ        | 1,500          | -              | 0.00%        | 1,500          | 0.00%         |
| 02-02-5330-000 | Safety & Security                   | 4,000          | 4,904          | 0.32%        | (904)          | 122.61%       |
| 02-02-5340-000 | Uniforms                            | 2,700          | 1,578          | 0.10%        | 1,122          | 58.43%        |
| 02-02-5380-000 | Tools and Supplies                  | 18,000         | 12,179         | 0.80%        | 5,821          | 67.66%        |
| 02-02-5402-000 | Power Purchased                     | 900            | 377            | 0.02%        | 523            | 41.87%        |
| 02-02-5445-000 | Telemetry & Signal System           | 6,800          | -              | 0.00%        | 6,800          | 0.00%         |
|                | <b>Wastewater Operation Expense</b> | <b>62,050</b>  | <b>34,089</b>  | <b>2.25%</b> | <b>27,961</b>  | <b>54.94%</b> |
| 02-02-5423-000 | Pipeline Maintenance                | 8,000          | 266            | 0.02%        | 7,734          | 3.33%         |
| 02-02-5440-000 | Autos/Truck Maintenance             | 45,000         | 12,211         | 0.81%        | 32,789         | 27.14%        |
| 02-02-5440-015 | Auto/Truck Maintenance-Gas          | 8,800          | 3,640          | 0.24%        | 5,160          | 41.36%        |
| 02-02-5440-016 | Auto/Truck Maintenance-Diesel       | 6,200          | 3,182          | 0.21%        | 3,018          | 51.33%        |
| 02-02-5441-000 | Inventory Shrinkage                 |                |                | 0.00%        | -              |               |
| 02-02-5621-000 | Sewer Flow Monitoring Expense       | 20,000         | 5,640          | 0.37%        | 14,360         | 28.20%        |
| 02-02-5624-000 | Sewer Camera Van Inspection         | 1,500          | -              | 0.00%        | 1,500          | 0.00%         |
| 02-02-5625-000 | Sewer Interceptor Maintenance       | 6,000          | -              | 0.00%        | 6,000          | 0.00%         |
| 02-02-5628-000 | Sewer Lift Station Maintenance      | 3,500          | 1,170          | 0.08%        | 2,330          | 33.43%        |

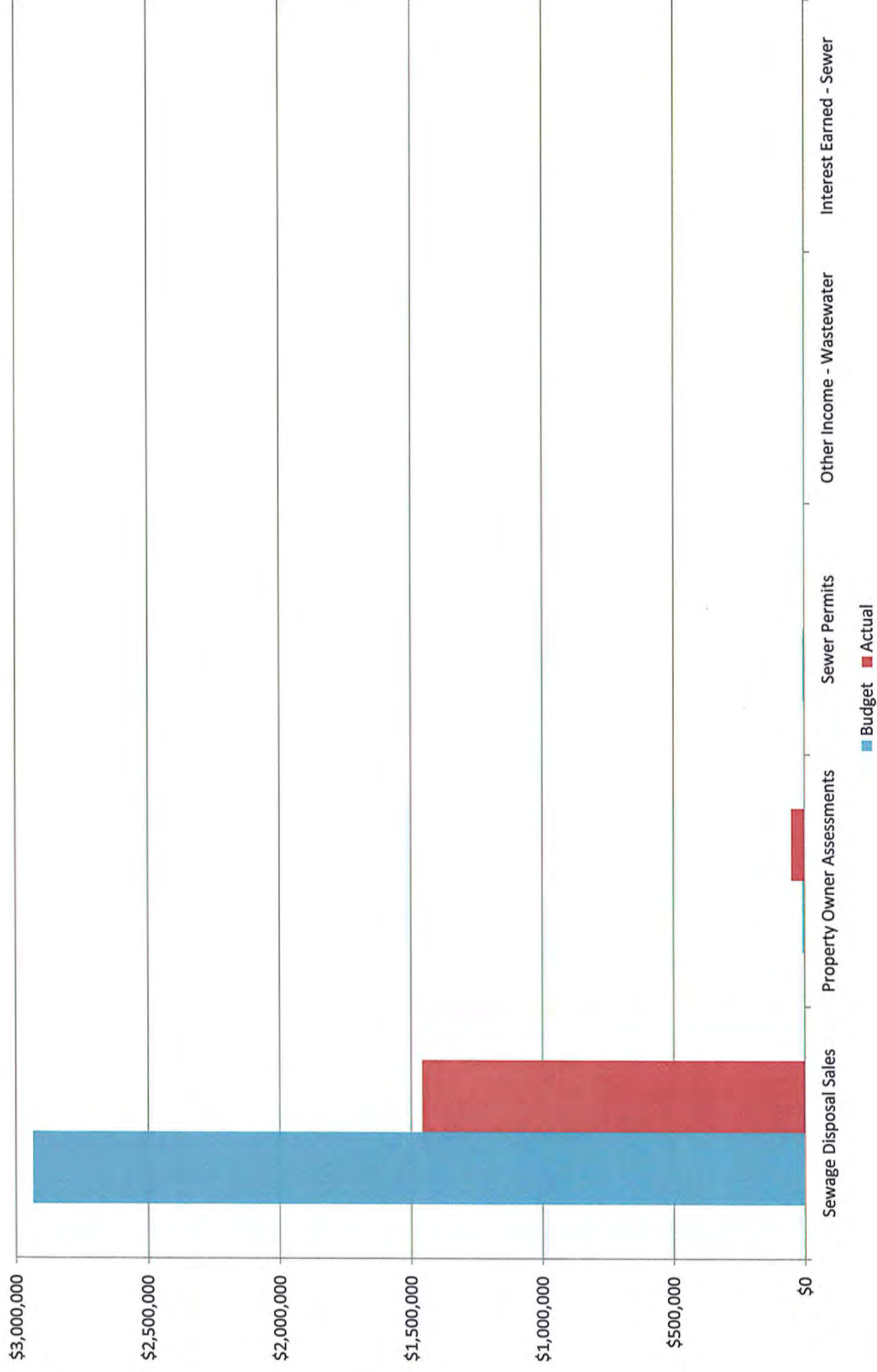
|                                                 | Description                        | Budget           | Ending Balance | % of Revenue | Variance  | % of Budget |
|-------------------------------------------------|------------------------------------|------------------|----------------|--------------|-----------|-------------|
|                                                 | Collection System Expense          | 99,000           | 26,110         | 1.72%        | 72,890    | 26.37%      |
| 02-02-5700-000                                  | Wastewater System Expense          | 1,045,500        | 400,694        | 26.47%       | 644,806   | 38.33%      |
| 02-02-5705-000                                  | Treatment Expense-Wastewater       | 2,500            | -              | 0.00%        | 2,500     | 0.00%       |
|                                                 | Wastewater System Expense          | 1,048,000        | 400,694        | 26.47%       | 647,306   | 38.23%      |
|                                                 | Expense                            | 3,006,200        | 1,164,494      | 76.92%       | 1,852,679 | 38.74%      |
| <b>WASTEWATER INCOME/(LOSS) BEFORE NON-CASH</b> |                                    | <b>(49,176)</b>  | <b>349,485</b> |              |           |             |
|                                                 | Sewer CIP and Capital Outlay       | 255,000          | 21,023         |              |           |             |
|                                                 | <b>NET INCOME/(LOSS) ON BUDGET</b> | <b>(304,176)</b> | <b>328,462</b> |              |           |             |

These items are not included in above expenses:

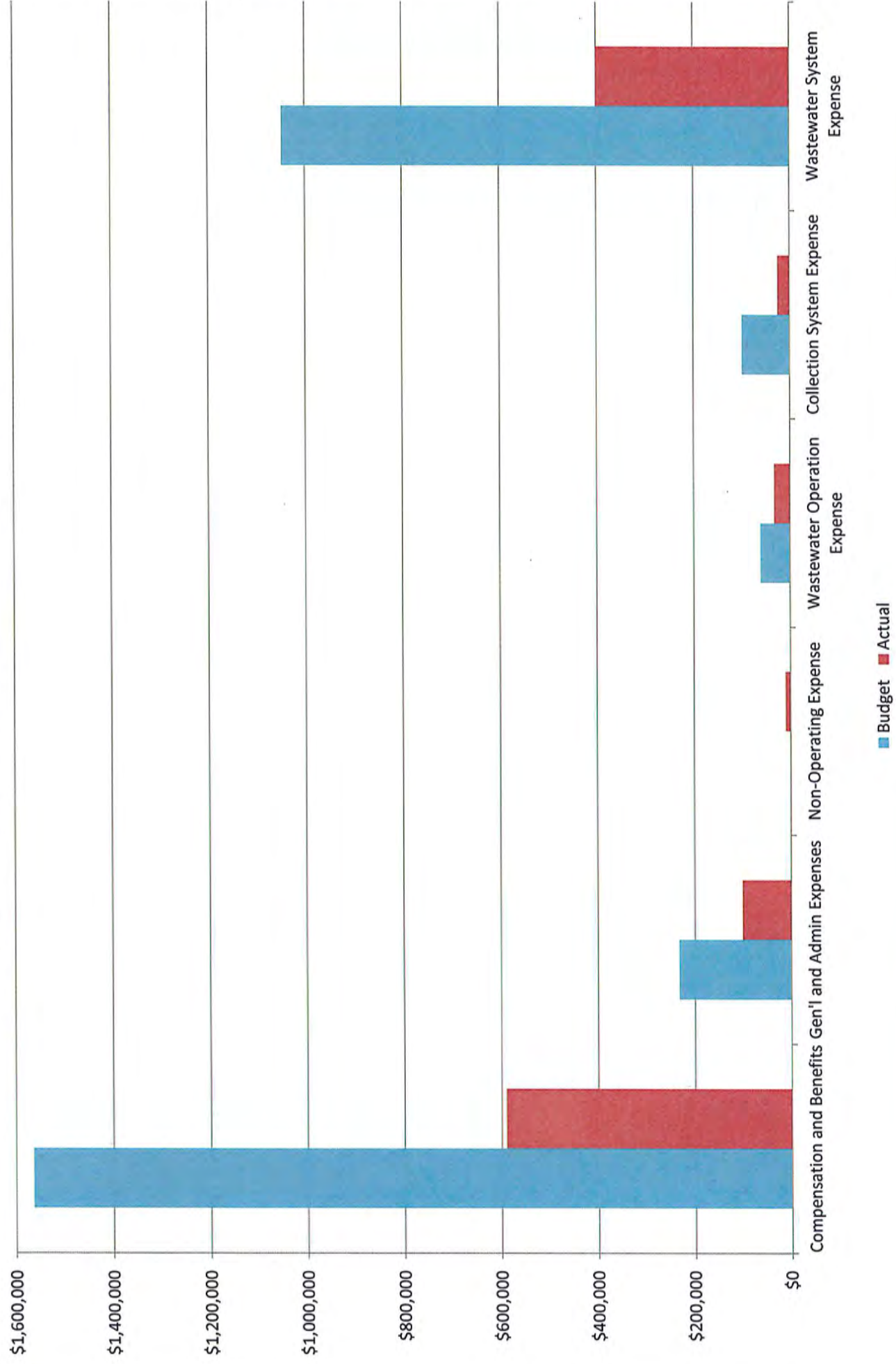
|                |                                |                |
|----------------|--------------------------------|----------------|
| 02-01-5080-055 | Post Employment Medical        | 255,134        |
| 02-01-5800-000 | Depreciation-Office            | 210            |
| 02-02-5805-000 | Depreciation-Pumping           | 7,084          |
| 02-02-5820-000 | Depreciation-Collection System | 379,215        |
|                | <b>Non-Cash Expense Items</b>  | <b>641,644</b> |

|                                                     |                  |                  |
|-----------------------------------------------------|------------------|------------------|
| COMBINED WATER/WASTEWATER REVENUE                   | 11,218,166       | 6,511,758        |
| COMBINED EXPENSES BEFORE NON-CASH                   | 11,192,050       | 5,094,760        |
| <b>INCOME/(LOSS) BEFORE NON-CASH EXPENSES</b>       | <b>26,116</b>    | <b>1,416,998</b> |
| CIP, COPS, CAPITAL OUTLAY/EQ, AND OPEB              | 987,000          | 615,571          |
| <b>COMBINED INCOME/(LOSS) FOR BUDGETING PURPOSE</b> | <b>(960,884)</b> | <b>801,427</b>   |

## FY 12/13 Wastewater Revenues - Budget vs. Actual



## FY 12/13 Wastewater Expense - Budget vs. Actual



## Memorandum

**DATE:** February 19, 2013  
**TO:** Board of Directors  
**FROM:** Dennis A. Erdman   
**RE:** General Manager's Report  
**CC:** Management Staff

As we have discussed, on Thursday February 21 at 8:00 AM, imported water from Foothill Municipal Water District will be shut off for an estimated period of eight days. During this time, maintenance work will be performed at several MWD locations. Also during this time, FMWD will be conducting an internal inspection of their east side transmission main in Alta Dena. CVWD staff has prepared for this event by community outreach via direct mail and print media outlets. Staff believes that CVWD customers will not be impacted by this event, however we have cooperated with the "family of Foothill water agencies" in delivery of a unified message to conserve water during the outage by eliminating outdoor irrigation for the period of the shutdown.

The operations department will be sure we enter the outage with full reservoirs. We intend to activate our emergency connection with the City of Glendale. CVWD groundwater production will continue throughout the outage. I plan to attend the Crescenta Valley Town Council meeting on February 21 to update the Council and answer questions. I will alert CVWD Directors if there are any unexpected issues that develop during the outage.

Ernie Diego, who has served as the District's construction inspector for the last seven years of his nineteen plus years at CVWD, retired on February 15. We wish him well and thank him for his service to the District and for the wisdom and experience he shared with the men he lead at CVWD, we will miss him.

# **CRESCENTA VALLEY WATER DISTRICT**

## **BOARD OF DIRECTORS - STAFF REPORT**

February 19, 2013  
Staff Report

**To:** Honorable President and Members of the Board of Directors  
**From:** David S. Gould, P.E. – District Engineer  
**Subject:** **8-Inch Water Main Replacement on the 3000 & 3100 Blocks of Santa Carlotta Street and Cloud Ave. from Paraiso Way to Santa Carlotta Street, Project E-911**

---

The Board of Directors requested that Staff follow up with information regarding disposal of AC pavement with Petromat within the 3100 Block of Santa Carlotta Street, which is a private street.

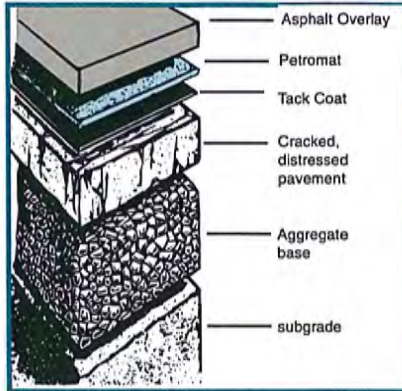
In 2003, the street was re-paved with a 2-inch AC overlay and a layer of Petromat to extend the life of the AC pavement. The concern that was brought to the attention of staff was the disposal of AC pavement with the Petromat when pavement is removed during the installation of the pipeline. The Board asked for staff to research where the material can be disposed and will this result in an extra charge from the contractor.

Staff contracted the manufacturer of Petromat to get further information on the material and safe disposal (see attached). Staff also contacted Scholl Canyon Landfill about disposing of the material. Scholl Canyon personnel indicated that it can accept the material as "trash", which is \$49/ton. The cost of disposal of AC material is \$8/ton. Staff estimated about 5 tons of AC material will be removed from the private street area. The cost differential is about \$200.

Staff contract De Sigio Construction about the issue of disposal of the AC material with the Petromat. They commented that they have not encountered any issues with disposal in the past except for being charged a higher price to dump the material. De Sigio indicated that they would work with the District if any issue arrived from disposal of the AC pavement with Petromat.

# Petromat<sup>®</sup>

## Introduction



The Petromat<sup>®</sup> System extends the life of new asphalt concrete (AC) pavements and AC overlays. The Petromat System consists of Propex's Petromat non-woven polypropylene fabric which is field saturated with an asphalt cement tack coat. When placed between pavement layers, the Petromat system becomes an integral part of the roadway section, forming a barrier to water infiltration and absorbing stresses to reduce reflective and fatigue cracking of the new AC surface layer. Since 1965, the economical Petromat System has had an outstanding record of improving pavement performance while reducing maintenance and roadway life-cycle costs. Paving fabric systems are currently being used at a rate of over 15,000 equivalent lane miles per year in North America alone.



## Benefits

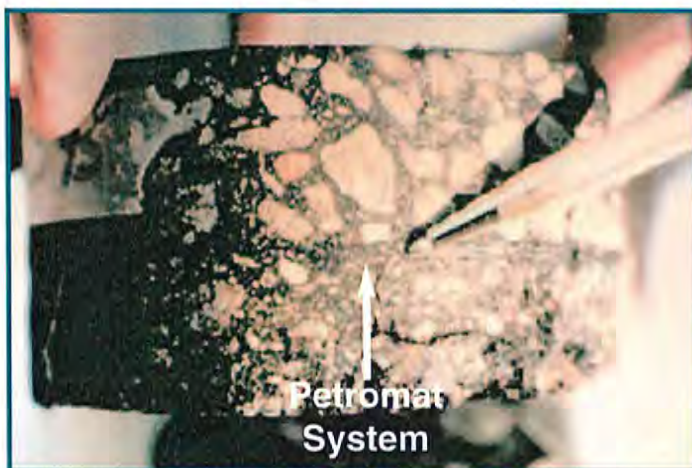
### Moisture Barrier

**Function:** The greatest source of damaging water in road structural sections is precipitation infiltration through pavements. Most pavements do not have adequate drainage systems to quickly remove infiltrated water. If a pavement base is saturated as little as 10% of the time, the useful life of that pavement will be reduced by 50%. The Petromat fabric, when saturated with the asphalt cement tack coat, becomes a moisture barrier in the pavement, minimizing surface water infiltration. The American Association of Highway and Transportation Officials (AASHTO) 1993 flexible pavement design methodology gives a substantial structural credit to unbound roadbase materials when they are well drained and not allowed to become saturated. By minimizing water infiltration, the Petromat System moisture barrier will keep the road base more well drained and will therefore maximize the structural strength of unbound roadbase materials.

In rehabilitation of an existing pavement, capping the surface with the Petromat System can be a much more efficient and cost effective way to control moisture problems than retrofitting edge drain systems to typically poor draining road bases.



**Performance:** Both laboratory and field testing have shown pavements to be 10 to 1000 times less permeable when the Petromat System is incorporated as an interlayer. A complete treatise on the need for pavement moisture control and the effectiveness of paving fabric systems as moisture barriers may be found as a Transportation Research Board (TRB) Circular and is summarized as Tech Note 4, by Propex Fabrics Inc.. The electronic circular, EC006, may be found on the TRB web site as an online publication at "<http://gulliver.trb.org/publications/circulars/ec006.html>". Also shown in the referenced paper is the need for a uniform application of the proper amount of asphalt cement tack coat for the Petromat System to achieve the desired very low permeabilities.



### Stress Absorbing Interlayer

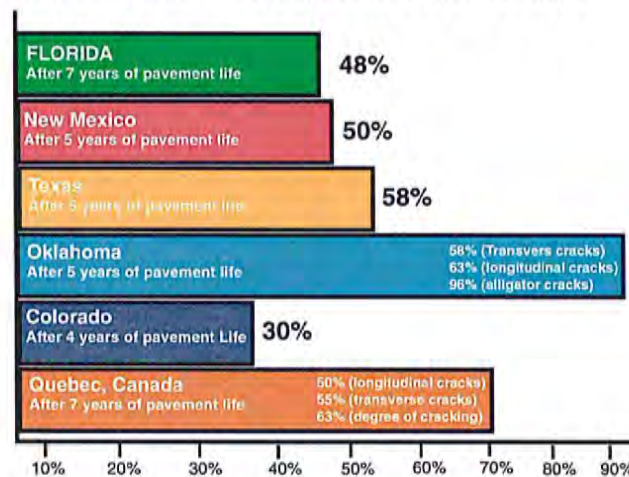
**Function:** Petromat paving fabric, saturated with asphalt cement, forms a substantial interlayer media within which stresses can be absorbed. Stresses associated with limited movement along cracks and joints in existing AC or Portland cement concrete (PCC) pavements are absorbed within the paving fabric system and therefore, are not translated, or reflected, up into the asphalt concrete layer over the system. If there is excessive movement of existing cracks or joints, there are more robust membrane interlayer-

er products available, such as, Petrotac<sup>®</sup>, Pro-Guard<sup>®</sup>, or PetroGrid<sup>®</sup>, for pavement treatment. Also, asphalt concrete flexible pavement will eventually develop fatigue cracking due to tensile stresses while flexing. The inclusion of the Petromat System interlayer results in a layered pavement with greatly reduced tensile stresses compared to monolithic pavements with no interlayer. The result is a dramatic increase in the fatigue life of new pavements or overlays.

**Performance:** Laboratory simulation of comparable pavements both with and without the Petromat System indicated a 100 to 1000% increase in the number of pavement loadings before fatigue or reflective cracking appeared over the Petromat System. Field performance indicates a 50 to 150% increase in overlay life before fatigue or reflective cracking occurs in overlays over the Petromat System versus the same thickness control sections with no fabric. A comprehensive study, Maxim Technologies (1997), examined available paving fabric research and empirical evidence to find that properly applied paving fabric systems, such as the Petromat System, equate to an additional 0.1 to 0.15 foot (3 to 4.4 cm) thickness of AC overlay for the retardation of reflective

cracking. The study, which may be viewed at "<http://www.gmanow.com>", cited both the moisture barrier environmental benefits and the stress absorbing interlayer functions as the reasons for success of paving fabric systems. The study is also summarized in Case Histories 10 and 11 as found on our website at "[www.geotextile.com](http://www.geotextile.com)". Widespread field evaluations have verified the effectiveness of the Petromat System as shown below:

Reduction In Overlay Reflective Cracking With The Petromat System Compared To Control Sections With No Fabric



## Petromat, Number One In The Business

Petromat, the original paving fabric, is the most widely used paving fabric in the world for the following reasons:

### Petromat is Designed Specifically For Pavement Application:

- a heat set side on top to minimize asphalt cement tack coat bleed-through and to protect against damage from construction traffic,
- a special blend of fiber sizes to promote rapid, uniform tack coat saturation and to give the interlayer stability while holding the asphalt cement in place indefinitely, and
- an engineered amount of stretch to ease installation while maintaining stability.

**Choice of Styles:** Petromat styles 4598 and 4599 are the most widely recommended and used paving fabrics. Style 4598 meets the requirements of AASHTO guideline specification M 288.

**Cost-effective:** The installed cost of the Petromat System (fabric and asphalt cement tack coat) is typically less than half the cost of 0.1 foot of AC. For extending pavement life, the Petromat System is therefore much less expensive than placing additional asphalt concrete to get the same performance or increasing roadway maintenance. Use of paving fabrics generally yields a savings in pavement rehabilitation system costs of more than \$7,000 per lane mile.

**Versatile:** The Petromat System is effective within new AC pavements, below AC overlays over rigid and flexible pavements, and below surface treatment(chip-seal) pavements. It can improve the performance of highways, city streets, parking areas, airport pavements, bridge decks and other pavement surfaces.

## Installation

Detailed information on the installation of Petromat paving fabrics may be found in the Petromat Installation Guide, also located on our website at "www.geotextile.com".

## Project Planning Help

We have software available called "**Roadways And Civil Engineering (R.A.C.E.)** with Geotextiles". The software presents easy-to-use- unpaved road and flexible pavement design methodologies. The third module of the software, Pavement Rehabilitation, allows the user to identify the type of pavement distress and then using a decision tree format, helps the user identify whether or not a geosynthetic interlayer will provide a longer lasting rehabilitation project. The recommendations help the user decide which geosynthetic interlayer would be most applicable and is based on many years of experience with the products such as Petromat. A copy of the **R.A.C.E.** software may be obtained from any of our distributors. You may locate your local distributor of our products on our website at [www.geotextile.com](http://www.geotextile.com) or by calling (800) 445-7732.

## Published Reports

Majidzadeh, K., *A Laboratory Investigation of Use of Petromat for Optimization of Pavement Performance*, Ohio State University, Nov 1976.

State of California, *Evaluation of Paving Fabric Test Installations in California*, Report No. FHWA/CA-90/02, CALTRANS, Department of Transportation, Feb. 1990.

State of Florida, *Reduction of Reflective Cracking in Bituminous Overlays, Payne's Prairie Experimental Project*, Florida Department of Transportation, Office of Materials & Research, Research Report 176-A, State Project No. 26260-8426, June 1977.

State of New Mexico, *New Mexico Study of Interlayers Used in Reflective Crack Control*, New Mexico State Highway Department, Research Report MB-RR-84/1, Sept. 1984.

State of Oklahoma, *The Evolution of Non-Woven Fabrics*, Oklahoma Department of Transportation, Research & Development Division, Report No. FHWA/OK 82(6), May 1982.

State of South Carolina, *Evaluation of Petromat When Used With Bituminous Surface Treatment*, South Carolina Department of Highways & Public Transportation, Research & Materials laboratory, In-House Study 82-5, Dec. 1990.

State of Texas, *Overlay Construction and Performance Using Geotextiles*, Texas Transportation Institute, Texas A&M University System, Paper No. 880424, Jan. 1989.

State of Virginia, *Control of Reflection Cracking in a Fabric-Reinforced Overlay on Jointed Portland Cement Concrete Pavement*, Virginia Highway & Transportation Research Council, VHTRC 83-R8, Aug. 1982.

City of Verdun, Quebec Canada, *Paving Fabric Repairs Road in Severe Canadian Climate*, Oct. 1995.

Maxim Technologies, Inc., *"Nonwoven Paving Fabrics Study"* for Industrial Fabrics Association International, Oct. 1997.

<http://www.gmanow.com>  
Märienfeld, M.L. and Baker, T.L., *Paving Fabric Interlayer System as a Pavement Moisture Barrier*, Transportation Research Board Paper # 9881112, 1998,  
<http://www.nas.edu/trb/publications/ec006.html>

Märienfeld, M.L. and Baker, T.L., *Field Installation Guidelines for Paving Fabrics*, Geosynthetic Institute Conference 15, December 2001

### Propex Fabrics Inc.

260 The Bluffs

Austell, GA 30168

770-941-1711 800-445-7732

770-944-4584 - fax

email address:

[geotextiles@propexfabrics.com](mailto:geotextiles@propexfabrics.com)

<http://www.geotextile.com>

Note: This brochure is believed to be an accurate representation of information available from public sources; however, because the conditions in which such information may be used are beyond the control of Propex Fabrics Inc., Propex does not guarantee the suggestions and recommendations contained herein. Propex assumes no responsibility for the use of information presented herein and hereby disclaims all liabilities which may arise in connection with such use. Final determination of suitability of information and suggested uses is the sole responsibility of the user.

Petromat is a registered trademark of paving fabrics manufactured by Propex Fabrics Inc..

(c) Copyright 2000 Propex Fabrics Inc.  
Code 2000-150/10,000/2-2000

## Ron Mitchell

---

**From:** Tom Bunn [TomBunn@lagerlof.com]  
**Sent:** Thursday, February 14, 2013 4:00 PM  
**To:** Ron Mitchell  
**Cc:** Jenny Kim  
**Subject:** Conflict of interest  
**Attachments:** Memo re Conflict of Interest.docx

Ron,

Attached is a memo prepared in our office concerning the two potential conflicts of interest discussed at the last board meeting.

As to repaving private streets, the memo concludes that it is not "reasonably foreseeable" that a decision on repaving Santa Carlotta will have a material financial effect on those board members who live on private streets, and therefore there is no conflict of interest.

As to the exemption from tiered rates for large lots, the memo concludes that if it is reasonably foreseeable that the exemption will save the affected board member at least \$250 in any 12-month period, the board member is disqualified from participating in the decision. Contrary to my recollection at the last board meeting, the board member should announce the conflict and leave the room while the matter is being discussed.

Would you please put copies of this e-mail and the attached memo in the board package. Thanks.

Tom

—  
Thomas S. Bunn III  
Lagerlof, Senecal, Gosney & Kruse, LLP  
(626) 793-9400  
[TomBunn@lagerlof.com](mailto:TomBunn@lagerlof.com)  
[www.lagerlof.com](http://www.lagerlof.com)

## MEMORANDUM

To: Tom Bunn

From: Jenny Kim

Date: February 14, 2013

Re: CVWD – Conflict of Interest as applicable to public officials

---

**ISSUE 1:** Whether a district board member should be barred from participating in a decision concerning the repaving of a private street when that board member resides on a private street that is similar to but is not the exact private street that is the subject of the decision.

The CVWD board is determining whether the district should pay for the repaving of a private street that lies above a pipeline which will be replaced by the district. One of the board members owns property on a private street similar to the private street that is the subject of the board's decision. There is a possibility that if the board decides to pay for the repavement, the board will create a precedent in which all private streets are repaved at the cost of the district in the future. The question is whether this presents a conflict of interest that necessitates that board member to recuse himself from the decision making process.

A district board member is a local public official who cannot make, participate in making or in any way attempt to use his official position to influence a government decision in which he has a financial interest. (Gov. Code § 87100.) A public official has a "financial interest" if it is reasonably foreseeable that the decision will have a material financial effect on the official and such effect is distinguishable from its effect on the public generally. (Gov. Code § 87103.) This is a three-part test requiring that the decision has a material financial effect on the official and the material financial effect is reasonably foreseeable. However, despite affirmative findings on the first two requirements, a public official does not have a disqualifying conflict of interest in a governmental decision if the decision affects the official's financial interest in a manner which is indistinguishable from its effect on the public generally. (Gov. Code § 87103; Cal. Code Regs. tit. 2, § 18707.)

For decisions that affect a public official's economic interest in his or her real property, such effects are measured in terms of the overall dollar amount of the increase or decrease in the value of the property. (CCR § 18707.1(b)(2)(A).) Typically, the owners of property on a private street are responsible for maintaining their private street, including costs of road repavements. It is unclear what the overall dollar amount of the increase in value of a property would be if the private street on which it sits is repaved. However, it can be safely assumed that a property owner financially benefits in some dollar amount if a district incurs the costs of the repavement rather than the property owner.

Whether a board's decision has the potential of having a "material financial effect" is determined by various materiality standards promulgated in Title 2 of the California Code of Regulations (CCR). The CCR distinguishes real property that is directly involved in a governmental decision from those that are indirectly involved. If a decision solely concerns repairs, replacement, or maintenance of existing

streets, water, sewer, storm drainage or similar facilities, the real property in which a public official has an interest is deemed to be indirectly involved. (CCR § 18704.2(b).) Under the materiality standard for such indirectly involved real property, there is a presumption that no material financial effect on the public official exists. (CCR § 18705.2(b).) This presumption, however, can be rebutted with proof that there are specific circumstances regarding the governmental decision, its financial effect, and the nature of the real property in which the public official has an economic interest, which make it reasonably foreseeable that the decision will have a material financial effect on the real property in which the public official has an interest. (Id.) Examples of specific circumstances that can be considered include, but are not limited to, circumstances where the decision affects the character of the neighborhood, such as effects on traffic, view, privacy, intensity of use, noise levels, air emissions, or similar traits of the neighborhood. In this instance, the property owners on the private street will receive a financial benefit if the district decides to bear the costs of repavement because a new, paved road arguably adds to the character of the neighborhood. In the future, if the private street on which the board member resides needed repaving due to pipeline maintenance by the district, this could be a specific circumstance that has a financial effect on the real property in which the board member has an interest.

Next, a material financial effect is considered “reasonably foreseeable” if there is a substantial likelihood that such effect will occur, and while certainty is not required, if an effect is only a mere possibility, it is not reasonably foreseeable. (Smith v. Sup. Ct (1994) 31 Cal. App. 4th 205, 212.) Other factors that contribute to the foreseeability of a material financial effect on a board member’s interest in real property include, among other things, the scope of the governmental decision in question, and the extent to which the occurrence of the material financial effect is contingent upon intervening events. (CCR § 18706(b).)

Here, the property owners of the private street have requested that the district pay for the costs of repavement because the district must replace water pipelines underneath their street. Private roads consist of less than 10% of all roads within the district boundary. Over 90% of all roads within the district are public roads for which the district is not responsible for costs of repavement regardless of whether the underlying water pipelines need to be replaced. Therefore, even if the district decides to bear the costs of repavement of this particular private road, this decision would be very limited in scope as most roads within the district are public roads that will never require the district to repave. Moreover, several intervening events would have to occur before it is reasonably foreseeable that the board member who owns property on a separate private road would receive a material financial benefit from the board’s decision. For example, the pipelines underlying the private road on which the board member resides would need replacing, which would then necessitate the repavement of his private road. It is unclear how often these pipelines need replacing. The board would also have to decide whether the district will pay for costs of that repavement in order to stay consistent with its decision to repave the first private road. Thus, the chances that the specific private road on which the board member resides will need repaving appear slim. Although a possibility exists that the board member can receive a material financial benefit from this decision, a mere possibility does not rise to the level of substantial likelihood. Therefore, it is likely that the board member is not legally bound to recuse himself from the decision making process because any potential financial effect on the board member is tenuous and not reasonably foreseeable.

However for purposes of analysis, in the event that a material financial effect is found to be reasonably foreseeable, such effect must be found indistinguishable from its effect on the public

generally. If an indistinguishable effect is found, the public official will not have a disqualifying conflict of interest. A financial effect on a board member's interest in real property is indistinguishable from its effect on the public generally if the decision also affects i) 10% or more of all property owners or all residential property owners within the district, or ii) 5,000 property owners or residential property owners. (CCR § 18707.1(b)(1).) Here, private roads make up less than 10% of all roads within the district. Using this figure, it cannot be conclusively determined that the percentage of property owners on a private road make up less than 10% of all property owners within the district because there may be a disproportionately high number of properties on all private roads within the district as compared to properties on public roads. It is also unclear if there are at least 5,000 property owners who own residences on a private road. However, assuming that there is a proportionate number of properties on both private and public roads or there are less than 5,000 properties on private roads, the percentage of property owners on private roads would be less than 10% of all property owners within the district, and thus, are not considered a significant segment of the public. Therefore, the effect of the board's decision to repave this private road would affect the financial interest of the board member in a distinguishable manner as it would affect the public generally, and prohibit the board member from participating in the decision making process.<sup>1</sup>

Ultimately, however, whether the board member should recuse himself from the board's decision hinges on whether it is reasonably foreseeable that the decision will have a material financial effect on the board member. It is likely that the board member does not have a disqualifying conflict of interest because any material financial effect on the board member is not reasonably foreseeable due to the limited scope of the board's decision and the multiple intervening events that would have to occur in order for the board member to receive a material financial benefit.

---

<sup>1</sup> In other scenarios where the material financial effect on a public official is found to be indistinguishable from the public generally, the analysis continues. The next step would require a showing that the public official is affected by the governmental decision in "substantially the same manner" as other persons or real property in the applicable significant segment. If the answer is "yes", then the public official may participate in the decision. If the answer is "no", the public official may not participate in the governmental decision unless one of the special rules set forth in 2 Cal. Code Regs. sections 18707.2 through 18707.10 applies to each person or real property triggering the conflict of interest. (CCR § 18707(b)(4).)

**ISSUE 2:** Whether a board member should recuse himself from the decision making process where the board's decision concerns changes to the water rate structure which would benefit owners of large lots and the board member owns a large lot within the district.

The board is considering changing the current water rate structure to a tiered rate structure at the request of certain large land owners within the district. A tiered rate structure would in effect lower the cost of water for those owning larger lots. The question is whether a board member who owns a large lot within the district should refrain from participating in the board's decision.

The similar conflict of interest rule as applied in the first issue applies here. A public official cannot participate if it is reasonably foreseeable that the decision will have a material financial effect on the official, and such effect is distinguishable from its effect on the public generally. When determining whether a governmental decision has a material financial effect on a public official's economic interest in his or her personal finances, the effect is material if it is at least \$250 in any 12-month period. (CCR § 18705.5(a).) With effects concerning a public official's economic interest in his or her personal finances, a financial effect on the value of real property owned directly or indirectly by the official is not considered. (Id.) Thus, whether the tiered rate structure will have a material financial effect on the board member owning the large lot depends on whether he will save at least \$250 in water rates in a given 12-month period.

If it is reasonably foreseeable, or substantially likely, that the change to the rate structure will lower the rates for the board member during any 12-month period, the board member must refrain from participating in the decision if this financial effect is distinguishable from the effect on the public generally. For decisions that affect the personal expenses of a public official, the decision also affects a significant segment of the public if i) 10% percent or more of the population in the jurisdiction of the district the official represents is affected, or ii) 5,000 individuals who are residents within the district are affected. (CCR § 18707.1(b)(1)(A).) Currently there are approximately 130 land owners of large lots out of a total 8000 land owners, which means that ratepayers owning large lots within the district are not a significant segment of the public. Thus, the material financial effect on the board member is distinguishable from the public generally because the tiered rate structure would affect only small minority, 1.6%, of the public.

Therefore, assuming that it is reasonably foreseeable that the tiered rate structure will provide a rate decrease for the board member of at least \$250 in a 12-month period, the board member must refrain from participating in the decision.