

CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

Agenda for the Meeting of the Engineering Committee
of the Crescenta Valley Water District

To be held on

January 17, 2019 at 9:00 AM

Posted January 15, 2019 at 11:00 AM

Call to Order

Adoption of Agenda

Information Items

1. Status of Groundwater Wells and Well Capacity
2. Final Completion - 8-inch Water Main Replacement on the 2700, 3000 & 3100 Blocks of Brookhill Ave., Project E-982
3. Project Update
 - TTHM Study and Upgrades to Disinfection System, Project E-995
 - Well Rehabilitation of Wells 1 & 7, Project E-999
 - Automated Meter Infrastructure Program, Project E-998
 - Oak Creek Reservoir Rehabilitation, Project E-970
 - Stormwater Capture Project, Project E-985

Public Comments

At this time, members of the public shall have an opportunity to address the Committee on items of interest that are within the subject matter jurisdiction of this Committee. This opportunity is non-transferable and speakers are limited to three (3) minutes each.

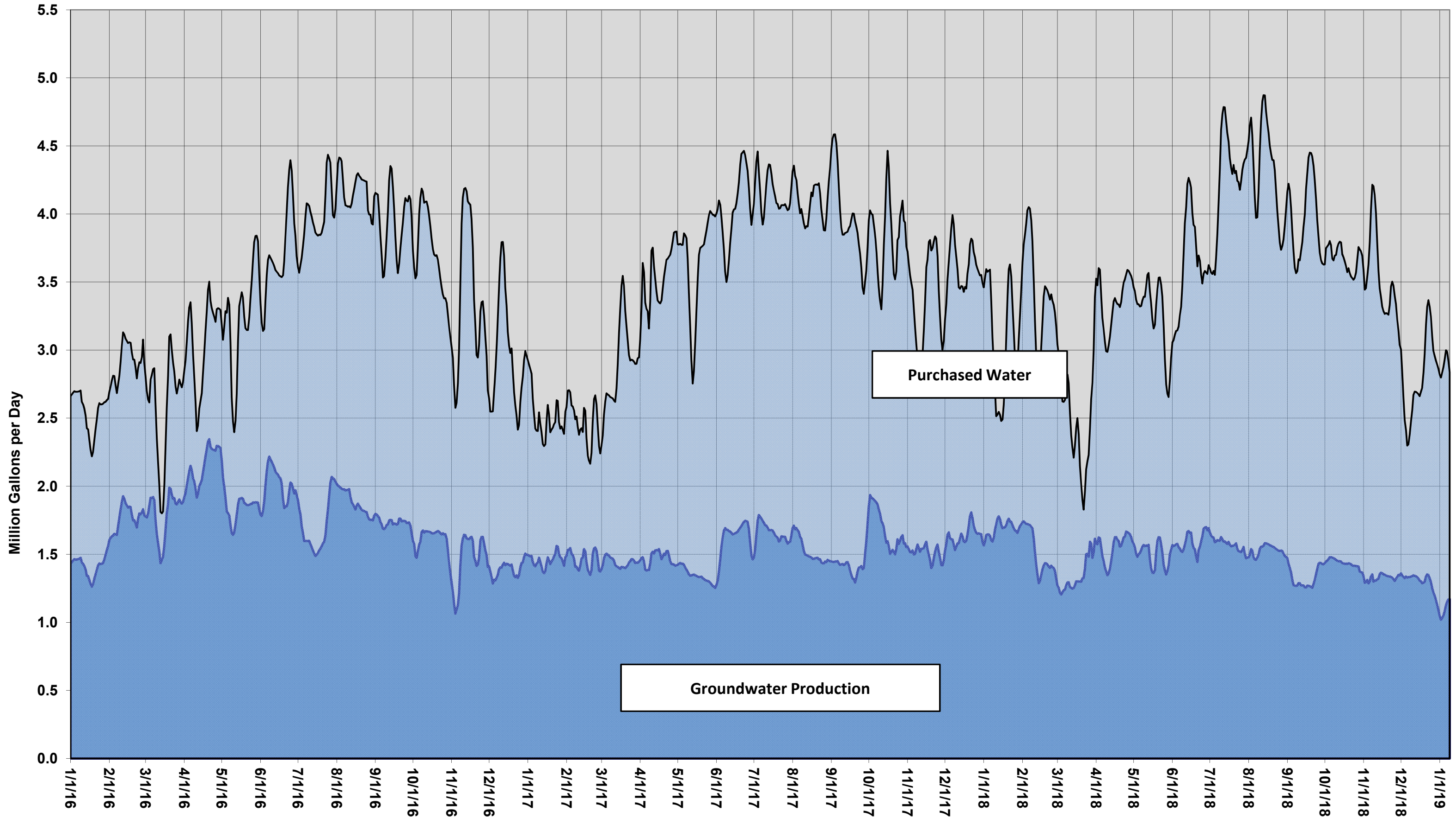
Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – February 21, 2019

Adjournment

Water Production Chart 2016 - 2019

■ Groundwater Production (MGD) ■ Total Water (MGD)



CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 2

January 17, 2019

To: Engineering Committee

From: Brook Yared, P.E. – Senior Engineer

Subject: **Amendment to Contract - Construction of 8-inch Water Main on the 2700, 3000 and 3100 blocks of Brookhill Street and the 5000 block of La Crescenta Avenue, Project E-982**

INFORMATION ITEM:

CVWD's 8-inch Water Main Construction on Brookhill Street, Project E-982 – Discussion of final project cost and unforeseen changes that increased the overall cost of the subject project by an estimated cost of \$141,100.

BACKGROUND:

The District's on going goal is to replace a minimum of 2,000 linear feet of pipeline that are 50 years or older per year, which was included as part of the FY 17/18 CIP budget. The pipelines that were replaced as part of E-982 are on the 2700, 3000, 3100, & 3200 Blocks of Brookhill Ave and the 5000 Block of La Crescenta Ave. These pipelines were undersized (4-inch pipe), located within the parkway, experienced numerous leaks over the last 5 years, and were installed in 1946 and 1947. The project started in March 2018 and completed in December of 2018.

DISCUSSION:

Over the course of this project, several unforeseen construction activities arose that were not part of the original contract, which resulted in additional costs that are listed below:

- Los Angeles County inspector changing backfill permit requirements after construction began (No crushed miscellaneous base allowed): Increase - \$30,070 –\$39,593 (Under negotiations)
- Waterline extension & tie-overs on the 3200 block of Brookhill to avoid the City of Glendale paving project on Pennsylvania Ave: Increase - \$45,026
- Change 11 water services from Zone 6 to Zone 7 with new pressure regulator to avoid installation of pipeline over Quail Creek Channel and additional waterline easements: Increase - \$2,960
- Damaging to an unmarked 2-inch gas main – Increase - \$14,575 (Claim recovered from SCG)
- Unforeseen Obstructions (i.e. large rocks, abandoned storm drain culvert, other permit restrictions): Increase: \$32,761 – \$38,947 (Under negotiations)

Staff has been working with Brkich construction to review and finalize all change orders as outlined in the Contract Specifications. The total change order amount ranges from \$125,392 to \$141,100. Staff is still waiting for documentation from Brkich to finalize the change order amount.

Staff also re-designed the project and made adjustments to avoid the costly Quail Creek channel crossing and reduce the number of fire hydrants in the area while still adhering to all fire and safety regulations in order to reduce construction costs. These design changes reduced the project cost by \$33,118.

Considering the cost savings from the reduction to the scope of work, the total construction amount of the Project, originally \$742,800, has increased by \$107,982. The Board had approved a 10% contingency for the project of \$74,280, which brought the approved construction costs to \$817,080.

As shown in the table below, the final project cost comes to \$850,782, which is \$33,702 above the amount approved by the Board.

RECOMMENDATION

It is staff's recommendation to request at the next Board meeting to authorize the General Manager to amend the construction contract with Brkich Construction to cover the additional project costs of \$33,702 above the approved contract amount of \$817,080.

FUNDING AVAILABILITY:

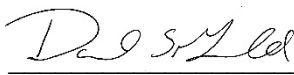
There are sufficient funds available in the following account for the project:

Account Description	Amount
FY 17/18 Water CIP– Water Distribution	\$760,000
Transfer funds from Water Fund Reserves	\$175,000
Revised Budget Amount	\$935,000
Contractor Cost	(\$742,800)
Unforeseen or additional work (10% contingency)	(\$74,280)
Additional costs such as material purchase by CVWD, soils engineer, engineering & inspection labor costs	(\$95,000)
Total Construction Costs	(\$912,080)
Amount Remaining in Water CIP – Distribution System	\$22,920
Contractor - Original Bid	\$742,800
Unforeseen or additional work (10% contingency)	\$74,280
Amount Approved by Board	\$817,080
Contractor - Original Bid	\$742,800
Change Order Request	\$141,100
Cost Reduction Measures (Design & Quantity Adjustment)	(\$33,118)
Revised Contract Amount	\$850,782
Request Amounted for Approval for Construction Contract	\$33,702

Prepared by:


Brook Yared, P.E.
Senior Engineer

Submitted by:


David S. Gould, P.E.
District Engineer

Attachments: Original Bid Summary

g:\engineering committee\2019 ec memo\01-17-19 ecm - e-982 2700-3200 block of brookhill co summary.docx

CRESCENTA VALLEY WATER DISTRICT

Title: 8-inch Water Main on the 2700, 3000, 3100 blocks of Brookhill Avenue

BID LOCATION: CVWD's Office

E-Job No: E-982

TIME: 2:00 PM

Engineer's Estimate: \$686,400

DATE: 12/6/17

Project Manager: Christina Olmedo

BY: CO CHECKED: DSG

DATE: 12/6/17

			Engineers Estimate		Brkich Construction		Toro Enterprises		GRFCO		JA Salazar		Dominguez	
ITEM	DESCRIPTION	QUANTITY	UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT
1	Excavation and Backfill	4,000 LF	\$55.00	\$220,000.00	\$96.00	\$384,000.00	\$57.00	\$228,000.00	\$75.00	\$300,000.00	\$72.00	\$288,000.00	\$100.00	\$400,000.00
2	Resurfacing Trench	12,000 SF	\$10.00	\$120,000.00	\$14.00	\$168,000.00	\$9.50	\$114,000.00	\$5.00	\$60,000.00	\$9.00	\$108,000.00	\$15.00	\$180,000.00
3	8" CML & CMC Steel Pipe	2,700 LF	\$55.00	\$148,500.00	\$24.00	\$64,800.00	\$89.00	\$240,300.00	\$78.00	\$210,600.00	\$92.00	\$248,400.00	\$70.00	\$189,000.00
4	6" Fire Hydrant Assembly	7 EA	\$5,000.00	\$35,000.00	\$2,500.00	\$17,500.00	\$5,010.00	\$35,070.00	\$4,000.00	\$28,000.00	\$12,000.00	\$84,000.00	\$14,000.00	\$98,000.00
5	1-inch Water Services	73 EA	\$1,450.00	\$105,850.00	\$900.00	\$65,700.00	\$1,860.00	\$135,780.00	\$1,800.00	\$131,400.00	\$1,800.00	\$131,400.00	\$2,000.00	\$146,000.00
6	2-inch Blow-off	1 EA	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$4,000.00	\$4,000.00	\$2,000.00	\$2,000.00	\$7,200.00	\$7,200.00	\$6,000.00	\$6,000.00
7	Channel Crossing	1 EA	\$27,500.00	\$27,500.00	\$25,000.00	\$25,000.00	\$27,500.00	\$27,500.00	\$80,000.00	\$80,000.00	\$40,000.00	\$40,000.00	\$30,000.00	\$30,000.00
8	Zone Valve Connection	1 EA	\$12,500.00	\$12,500.00	\$6,000.00	\$6,000.00	\$35,500.00	\$35,500.00	\$6,000.00	\$6,000.00	\$15,000.00	\$15,000.00	\$5,000.00	\$5,000.00
9	Air Release	1 EA	\$3,500.00	\$3,500.00	\$3,200.00	\$3,200.00	\$4,900.00	\$4,900.00	\$1,000.00	\$1,000.00	\$9,000.00	\$9,000.00	\$5,000.00	\$5,000.00
10	Sample Station	1 EA	\$2,000.00	\$2,000.00	\$2,600.00	\$2,600.00	\$3,400.00	\$3,400.00	\$1,000.00	\$1,000.00	\$9,000.00	\$9,000.00	\$1,000.00	\$1,000.00
11	Traffic Control	1 LS	\$8,050.00	\$8,050.00	\$2,500.00	\$2,500.00	\$25,500.00	\$25,500.00	\$40,000.00	\$40,000.00	\$12,000.00	\$12,000.00	\$3,000.00	\$3,000.00
12	Replace Valve	2 EA	\$2,000.00	\$4,000.00	\$4,500.00	\$9,000.00	\$7,000.00	\$14,000.00	\$4,000.00	\$8,000.00	\$15,000.00	\$30,000.00	\$100.00	\$200.00
			EE	\$686,400.00	LOW	\$742,800.00	2ND	\$853,950.00	3RD	\$860,000.00	4TH	\$952,000.00	4TH	\$1,063,000.00

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 3
January 17, 2019

To: Engineering Committee
From: David S. Gould, P.E. – District Engineer
Subject: **Project Status - FY 18/19 - Capital Improvement Project Program**

FY 18/19 – CIP Project Schedule & Cost Estimate - The FY 18/19 Capital Improvement Project (CIP) program includes the following projects which are summarized below:

1. **TTHM Study and Chloramine Disinfection, Project E-995** – Staff has updated the project schedule based on the lead-time for the ammonia skids and the precast concrete vault provided by the vendors. The ammonia tank for Mills Plant should be delivered around the end of January 2019, the ammonia skids should be delivered around the week of February 4, 2019 and the precast concrete vault should be delivered around the week of March 4, 2019. CVWD's crews will first work on installing the ammonia equipment at the Mills Plant, which should be completed towards the end of February 2019. The work at the Glenwood Plant will start in early March 2019 and completed by early April 2019.

Staff and its consultants are also working with the Division of Drinking Water (DDW) to amend the District's permit to operate. Staff is planning to submit a permit amendment request with supporting data to DDW in late February 2019 and the amendment to the permit should be completed by the end of March 2019.

As staff continues monitoring the trends in the TTHM levels over the next few months, it's believed that the levels will stay near or below the target level of 64 ug/L. However, staff still has concerns that TTHM levels will rise during the summer of 2019 due to high demands, temperature and reduced groundwater. Staff is in discussion on a start date for the conversion to chloramines and is tentatively looking at early May 2019, prior to the 2nd quarter compliance sampling.

01/17/19 Project Update:

- Equipment ordered and waiting on delivery
- Construction at Mills Plant – February 2019
- Water Main – Dead-End Flushing starting in February 2019
- Construction at Glenwood Plant – March 2019
- DDW approval – anticipated in Late March 2019
- Installation of Chlorine Analyzers at 6 sites – April 2019
- Tentative Date – Conversion to Chloramines – May 2019

2. **Rehabilitation of Wells 1 & 7, Project E-999** – The FY 18/19 Capital Improvement Project (CIP) budget included the rehabilitation of Wells 1 and 7 as part of the District's on-going well rehabilitation program. The design and specification were completed in early December and was sent out to pump contractors that perform this type of work. The construction cost estimate for this project was \$153,000.

01/17/19 Project Update:

- Pre-Bid Meeting – 1/9/19 – 4 contractors attended
- Bid Opening – 1/16/19
- Award Contract – 1/22/19
- Construction – Well 1 – Start - Late February 2019
- Construction – Well 7 – Start - Late April 2019

3. **Automated Meter Infrastructure Program, Project E-998** – Staff met with the team from UtiliWorks from January 15 – 17, 2019 to begin the assessment of CVWD’s AMI program. UtiliWorks will be using information to prepare a baseline business case study for CVWD for AMI including a cost-benefit analysis for the installation and implementation of the program, an estimation of costs to complete the project and funding options including available grant funding.

01/17/19 Project Update:

- Project Kickoff Meetings – 1/15/19 to 1/17/19
 - Review in operations, technology and customer service information
 - Prepare preliminary Business Case Report for Engineering Committee – 3/21/19
 - Presentation to Board of Directors – 4/9/19
4. **Steel Reservoir Rehabilitation at Oak Creek Reservoir #2, Project E-970** – The District has two (2) 1.6 MG steel tanks at its Oak Creek Reservoir site which were built in 1958 and 1961. The Oak Creek Reservoirs were re-coated and seismic structural upgrades in 2001. In 2005 and 2011, the reservoirs were again inspected and the report stated that there was increased corrosion on the roof and rafters above the water line. Oak Creek Reservoir #1 was completed in May 2018 and Oak Creek Reservoir #2 was postponed until November 2018.

01/17/19 Project Update:

- Oak Creek Reservoir #2 – 11/5/18 with structural upgrades & bottom coating removal
 - Oak Creek Reservoir #2 – 1/7/19 with interior coating removal and re-coating
 - Oak Creek Reservoir #2 – Anticipated completion date – 3/1/19
5. **Stormwater Capture Project, Project E-985** – John Robinson Consulting (JRC) has been assisting CVWD and their consultant, Greg Hamer from Wood Group (formally Foster Wheeler) with developing conceptual plans to depict the planned facilities at CVC Park that will include:
- Infiltration galleries beneath the ball field area and parking areas including piping from the Verdugo Wash
 - Conversion of the southern end of Dunsmore Avenue to a “green street” including improved drainage, bioswales, and other improvements,
 - Park improvements to ball field, basketball court and picnic areas
 - Native plant demonstration garden in the southeast end of the park.

In addition, the County of Los Angeles Department of Parks & Recreation (DPR) have identified through a needs assessment a number of items including adding lighting at the dog park, additional trails, picnic shelters and fitness zones.

The next steps will be to complete the conceptual plan and then meet with County of Los Angeles Department of Parks & Recreation and Department of Public Works, City of Glendale, and CV Town Council to get input and comments.

01/17/19 Project Update:

- Preliminary Conceptual Plan – Under design
- Meet with Stakeholders for input and comment
- Develop a preliminary cost estimate for review
- Develop a project schedule for design, review, approvals and construction
- Develop potential project funding
- Presentation to Board of Directors

6. **CVWD's Well 2 and Related Facilities, Project E-956** – APTwater completed the testing phase of the project including water quality testing to reduce nitrates. The AroNite Verification Report was sent to DDW on 12/21/18 for their review and comments. DDW has requested additional information on the construction of the facility and methodology for nitrate reduction. Staff is waiting on comments from DDW and hopefully DDW will issue the amendment to the permit by the middle of February 2019. Well 2 started out pumping at 150 gpm in September 2018 and now it is running at about 100 gpm. The AroNite treatment system has shown nitrate reduction from 45 mg/L as N to 7 mg/L inside the system and 24 mg/L as N when blended with untreated Well 2 water.

Prepared & Submitted by:



David S. Gould, P.E.
District Engineer

Attachments:

1. E-995 – Project Schedule
2. E-998 – AMI Strategic Planning Presentation
3. E-985 – Green Infrastructure Options at CVC Park

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Task ID No.	Project Schedule Updated: 1/9/19	January																																		
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1	Sample Dates																																			
2	Board meetings																																			
3	Carollo Design																																			
4	Permitting - Glendale Fire	Permitting																																		
5	SCADA - APEX	Design																																		
6	Ammonia - Chemical																																			
7	Chloramine - Testing																																			
8	Material List - Review & Order	Order & Receive																																		
9	Glenwood - Vault - Pothole for 14" OD; Shoring																																			
10	Ammonia Skids	Delivery - 6 Weeks																																		
11	Glenwood Vault																																			
12	Glenwood - Vault - Shoring/Mixer & Sample port																																			
13	Glenwood - Install Conduits/Welding/Water/Eye Wash	Install Conduits/Wiring/Water/Eye Wash																																		
14	Glenwood - Chlorine Analyzer (Hach)																																			
15	Glenwood - SCADA - RTU Equipment	Design							Order																											
16	Glenwood - Paving																																			
17	Mills - Concrete Pad - Site Visit/RFQ																																			
18	Ammonia Skids	Delivery - 6 Weeks																																		
19	Ammonia Tank	Delivery - 4 Weeks																				Delivery to Mills														
20	Mills - Inject & Sample port , Welding, Water & Eye Wash	Install Conduits/Welding/Water/Eye Wash																																		
21	Mills - Chlorine Analyzer (Hach)																																			
22	Mills - SCADA - RTU Equipment	Design							Order																											
23	Mills - Paving																																			
24	Additional Chlorine Analyzers - 6 sites																																			
25	SCADA - Design and Install																																			
26	Upgrade Chlorine Analyzers - 11 sites (Hach & Prominent)	Delivery to Site														Design																				
27	Flush out - Dead ends																																			
28	Safety Training - Ammonia																																			
29	Nitrification Mitigation Plan	Final Plan																																		
30	Update Reservoir and Distribution Sampling Plan																																			
31	SOP - Convert to Chloramines																																			
32	DDW - Amend Permit																																			
33	Pickens Tunnel - Chlorine & Ammonia System																																			
34	Reservoir - monitoring and mixing																																			
35	Chlorine - Boosting System																																			

Task ID No.	Project Schedule Updated: 1/9/19	February																																											
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10	Ammonia Skids	Delivery		Deliver - GW																																									
11	Glenwood Vault	Delivery - 8 Weeks																																											
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13	Glenwood - Install Conduits/Welding/Water/Eye Wash	Install Conduit, etc.																																											
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18	Ammonia Skids	Delivery		Install Skid, Elec & Tele																																									
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29	Nitrification Mitigation Plan												Submittal - DDW																																
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31	SOP - Convert to Chloramines																																												
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33	Pickens Tunnel - Chlorine & Ammonia System	Design - New Chlorination Plan																											DDW - Review																
34	Reservoir - monitoring and mixing				Order???																																								
35	Chlorine - Boosting System																																												

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10	Ammonia Skids				Install Ammonia Skid/Elec/Tele																																		
11	Glenwood Vault	Delivery - 8 Weeks																	Install Vault																				
12	Glenwood - Vault - Shoring/Mixer & Sample port												Shoring					Install Mixer, Welder & Plant Shutdown																					
13	Glenwood - Install Conduits/Welding/Water/Eye Wash											Conduit to Analyzer																											
14	Glenwood - Chlorine Analyzer (Hach)																									Install Analyzer													
15	Glenwood - SCADA - RTU Equipment																												Install (2) RTU										
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32	DDW - Amend Permit	DDW - Review																DDW Permit																					
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34	Reservoir - monitoring and mixing																																						
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Task ID No.	Project Schedule Updated: 1/9/19	April																													
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24	Additional Chlorine Analyzers - 6 sites	Installation - 6 Chlorine Analyzers																													
25	SCADA - Design and Install	SCADA -Programing & Integration																													
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35	Chlorine - Boosting System																														

Task ID No.	Project Schedule Updated: 1/9/19	May																														
		W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S					
		1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	Sample Dates																															
2	Board meetings			SR				B									SR				B											
3	Carollo Design						Convert to Chloramines																									
4	Permitting - Glendale Fire																															
5	SCADA - APEX																															
6	Ammonia - Chemical																															
7	Chloramine - Testing																															
8	Material List - Review & Order																															
9	Glenwood - Vault - Pothole for 14" OD; Shoring																															
10	Ammonia Skids																															
11	Glenwood Vault																															
12	Glenwood - Vault - Shoring/Mixer & Sample port																															
13	Glenwood - Install Conduits/Welding/Water/Eye Wash																															
14	Glenwood - Chlorine Analyzer (Hach)																															
15	Glenwood - SCADA - RTU Equipment																															
16	Glenwood - Paving																															
17	Mills - Concrete Pad - Site Visit/RFQ																															
18	Ammonia Skids																															
19	Ammonia Tank																															
20	Mills - Inject & Sample port , Welding, Water & Eye Wash																															
21	Mills - Chlorine Analyzer (Hach)																															
22	Mills - SCADA - RTU Equipment																															
23	Mills - Paving																															
24	Additional Chlorine Analyzers - 6 sites																															
25	SCADA - Design and Install																															
26	Upgrade Chlorine Analyzers - 11 sites (Hach & Prominent)																															
27	Flush out - Dead ends																															
28	Safety Training - Ammonia																															
29	Nitrification Mitigation Plan																															
30	Update Reservoir and Distribution Sampling Plan																															
31	SOP - Convert to Chloramines																															
32	DDW - Amend Permit																															
33	Pickens Tunnel - Chlorine & Ammonia System																															
34	Reservoir - monitoring and mixing																															
35	Chlorine - Boosting System																															

Convert to Chloramines



Crescenta Valley Water District (CVWD) AMI Strategic Planning and Roadmap Development Kick-Off Meeting



January 15, 2019

UtiliWorks™

Agenda

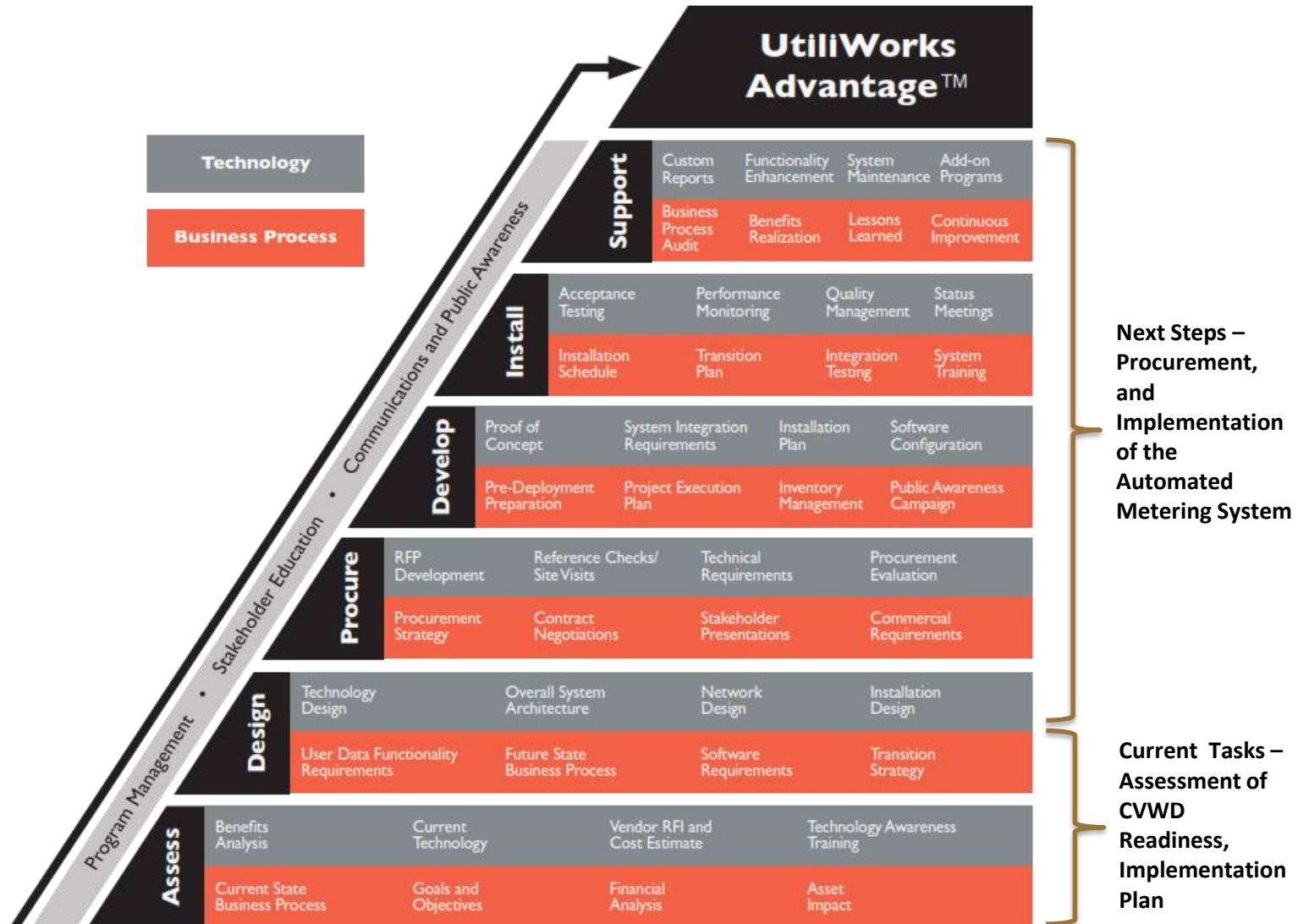
- Introductions
- Background - UtiliWorks Consulting
- Project Team
- Project Overview
 - Project Timeline
 - Task Review
- Communications
- Status and Next Steps
- Open Q&A

Consultant Support

- Started in 2005 to address the municipal advanced metering and related technologies market
 - This is the exclusive focus of our company
- Corporate office in Baton Rouge, LA with associates around the U.S.
- No vendor affiliations
 - Our recommendations are based on the best fit for your unique environment
- Recognized nationally as an industry expert
 - Regularly engaged as subject matter experts for speaking events
- Over 85 Past and Current AMR/AMI Clients



Consultant Support



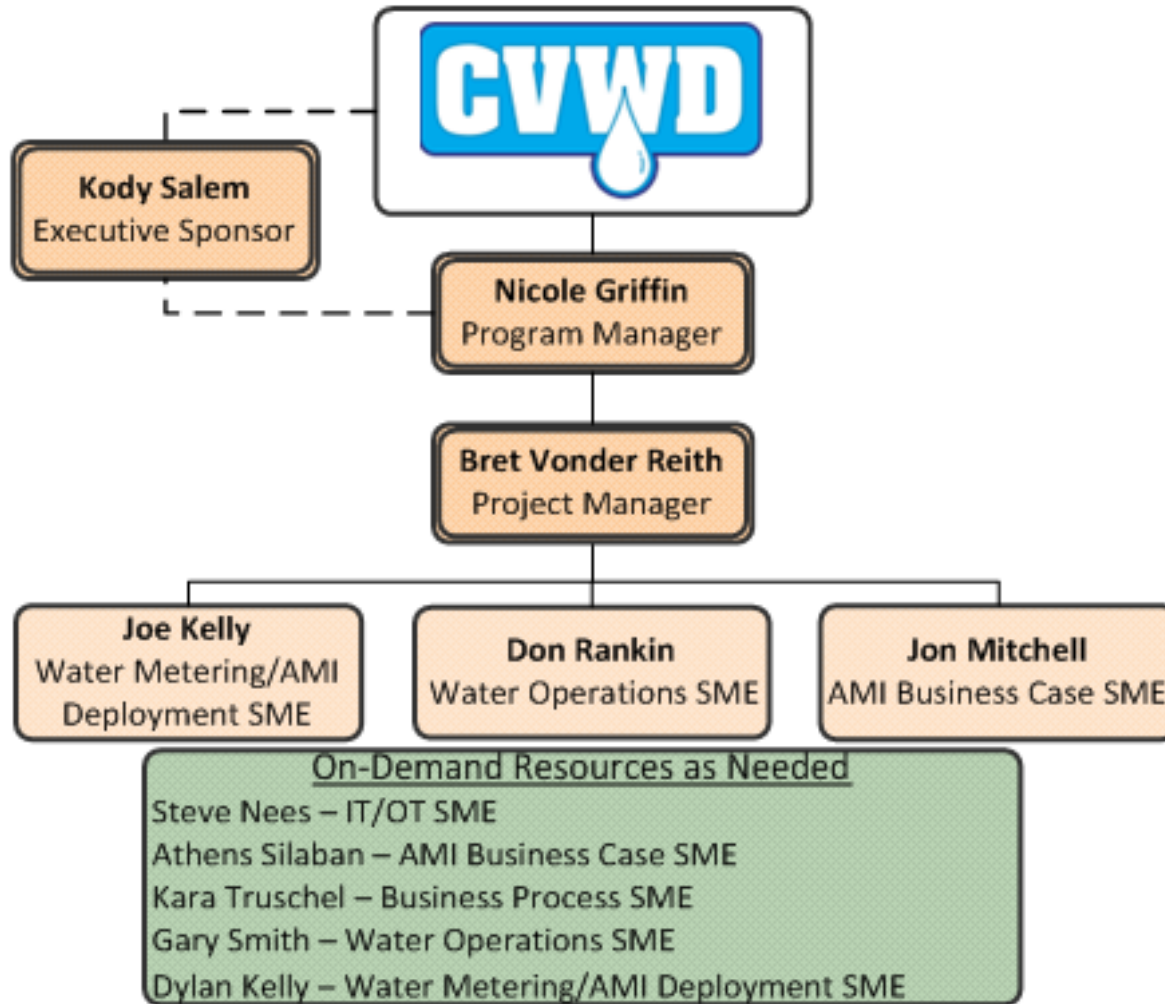
Advanced Metering Systems Subject Matter Areas

- AMI Hardware and Software
- AMI/MDM Procurement
- Backhaul Design
- Business Analysis
- C&I Program Management
- Conservation Programs
- Customer/Community Engagement
- Cyber Security Implementation
- Data Analytics Design
- Field Deployment/Installation
- Hydraulic Modeling
- Kiosk Implementation
- Leak Detection
- MDMS Implementation
- Meter Data Mapping
- Meter Specification & Configuration
- Organizational Transition
- Prepay Implementation
- Pressure Monitoring
- Remote Disconnect Policy
- Revenue Assurance
- SCADA Systems
- Systems Engineering
- Theft Deterrent Program
- Vendor Contract Negotiations
- Web-Portal Implementation
- Education & Training

Supporting Resources

- Business Process Engineer
- Contract Administrator
- Data Analyst
- Field Engineer
- Project Coordinator
- Project Management
- Public Relations Specialist
- Senior Consultants
- Systems Architect
- Systems Integrator
- Quality Control Specialist

Introductions - UWC Project Team



Introductions - UWC Project Team

- Kody Salem is your UtiliWorks' Executive Sponsor
- Nicole Griffin is the Program Manager for UtiliWorks
- Bret Vonder Reith is the Project Manager (PM)
- The PM is assisted by additional staff with required experience and skills:
 - Jon Mitchell, AMI Business Case SME
 - Joe Kelly, Manager/ Deployment
 - Don Rankin, Water Utility Management
 - Steve Nees, IT/OT SME
 - Athens Silaban, AMI Business Case SME
 - Gary Smith, Water Operations SME
 - Kara Truschel - Business Process SME
 - On Demand Resources/Other Subject Matter Experts (SMEs) as needed

Introductions - CVWD

		Direct Line			
	Person	818-236-XXXX	Title	AMI - Role	email
1	Brook Yared	4117	Senior Engineer	Capital Improvements	byared@cvwd.com
2	Arturo Montes	4105	Accountant Clerk	Accounts Receivable - Billing	amontes@cvwd.com
3	Christy Scott	4110	Project Specialist	Public Information Officer	cjscott@cvwd.com
4	David Gould	4119	District Engineer	Project Manager	dgould@cvwd.com
5	Nem Ochoa	4114	General Manager	General Manager	nochoa@cvwd.com
6	James Lee	4104	Finance & Accounting Manager	Billing/Springbrook	jlee@cvwd.com
7	Mark Hass	4111	Technology Manager	Everything IT	mhass@cvwd.com
8	Pam Leddy	4106	Administrative Assistant	Accounts Billing & Letters to Residents	plededy@cvwd.com
9	Ron Mitchell	4112	Administration Services Manager	Revenues	rmitchell@cvwd.com
10	Wendy Holloway	4108	Customer Service Supervisor	Accounts/Springbrook billing	wholloway@cvwd.com
11	Bryan Jones	4135	Construction Supervisor	Water meter replacement	bjones@cvwd.com
12	Dave Spain	4134	System Operator Supervisor	Water Demand/SCADA	dspain@cvwd.com
13	Dennis Maxwell	4134	Operations & Maintenance Manager	Oversee Operations	dmaxwell@cvwd.com
14	Raymond Dodge	4133	Electrical/Telemetry Technician	SCADA	rdodge@cvwd.com
15	Darlene Telles	4132	Plant Coordinator	Shipping/Receiving	dtelles@cvwd.com

Project Timeline

ID	Crescenta Valley Water District High-Level Project Schedule	Duration	Start	Finish	2018		2019			
					Nov	Dec	Jan	Feb	Mar	Apr
1	Overall Project Management - Task 4	83d	1/4/2019	4/30/2019						
2	Task 1 - Review and Status of CVWD's Automated Meter Infrastructure Program	64d	12/3/2018	2/28/2019						
3	Milestone: Notice to Proceed	0d	12/3/2018	12/3/2018						
4	Task 1.1. - Project Kickoff and Mobilization	3d	1/15/2019	1/17/2019						
5	Task 1.2 - Technology Review/Education	22d	1/18/2019	2/18/2019						
6	Task 1.3 - Current State of Operations	15d	1/4/2019	1/24/2019						
7	Task 1.4 - AMI Recommendations Report	25d	1/25/2019	2/28/2019						
8	Task 2 - Prepare and Present Business Case for Implementation of CVWD's AMI Program	60d	2/1/2019	4/25/2019						
9	Task 3 - Implementation Planning for AMI Program	42d	4/26/2019	6/24/2019						

- AMI Strategic Planning and Roadmap Development will run for four months from January 2019 to end of April 2019
- Capable of proceeding to implementation (Procurement RFP development and Vendor selection) May 2019
- Engineering Committee Business Case Presentation:
- Board Business Case Presentation:

Task 1- Review and Status CVWD AMI Program

- Project Kick-Off
- State of the Industry presentation
- Current State surveys/workshops (1/15/19 - 1/17/19)
- Technology Review, Research and Recommendations
- AMI Recommendations Report

UTILITY PROGRAMS & SYSTEMS			
Priority Hi/Med/Low	Program/System	Description	Notes
	Accounting/Financial/Purchasing	replace / enhance Accounting/Financial/Purchasing	
	Acoustic leak detection	Identify and minimize leaks in the system	
	AMI - Advanced Metering Infrastructure	Institute a fully automated meter reading solution	
	AMR - Automated Meter Reading	Institute a drive by meter reading solution	
	Asset Management System	replace / enhance asset management system	
	Automatic Vehicle Location (AVL) System	Install / replace / enhance Automatic Vehicle Location (AVL) System	
	Business Process Design	For any major technology project, current business processes will change and new ones will be developed	
	Change Management	For any major technology project, organizational change management is a priority	
	CIS - Customer Information System	Install / replace / enhance CIS	
	Communications	Install / replace / enhance existing Communications	
	Customer Web Portal	Online bill pay and retrieval, usage history, interval usage history, rate comparison functionality, etc.	
	GIS - Geospatial Information System	Install / replace / enhance GIS	
	Interactive Voice Response (IVR) System	Install / replace / enhance Interactive Voice Response (IVR) System	
	Kiosks	Customer bill pay option	
	MDMS - Meter Data Management System	Deploy a fully integrated meter data management system	
	Mobile Workforce Management System	Install / replace / enhance work management system	
	Prepay	Enable customer to pay in advance for utility services	
	Pressure sensors	Identify pressure discrepancies and optimize distribution system flow	
	Remote connect/ disconnect	Remotely connect/ disconnect water meters without manual intervention in the field	
	SCADA	Install / replace / enhance SCADA	
	Street Lighting	Automate streetlighting and control via a network	
	Water Conservation Program	Water use restrictions and/or conservation programs	
	Work Order Management System	replace / enhance work order management system	

Task 2- Prepare/Present Business Case for AMI Implementation

- Review of Previous Assessments
- IT/OT Survey/Requirements Definition
 - Systems
 - Integrations
 - Personnel
- Engineering Committee presentation
- Water Board Business Case presentation

Information Systems Q & A		
Question	Answer	Notes
Systems		
Is third party software hosting an option for AMI?		
Other systems that are hosted?		
What is the extent of disaster recovery?		
What degree/levels of cyber security are in place?		
What are the SWBNO/organizations hosted requirements?		
Data Security requirements		
Preferred server hardware vendor?		i.e. Dell Blade Servers
Preferred server operating system?		i.e. Microsoft Server 2014, RedHat Linux EE n.n
Preferred database platform?		i.e. Microsoft SQL Server, Oracle
Support		
Extent of IT support staff?		
Is IT or aspects of IT outsourced to a third party?		
Database / network administrator on staff?		
Shared IT resources across the SWBNO/organization?		
IT resources available to operate/support an AMI/MDM system?		
Communications		
FIBER OPTIC		
Fiber Network Architecture that may be leveraged for AMI?		
Is it all lit up? Dark fibers? Qty?		
Owned by the SWBNO/organization or leased?		
Does the SWBNO/organization lease strands to outside parties?		
Overhead/Underground split?		
Extent of network drop/tie-in locations		
Any expansion plans?		
CELLULAR BACKHAUL		
Primary SWBNO/organization vendor ATT and/or Verizon?		
Do we need to use both for coverage?		
What existing applications use Cellular?		
Preference of modem vendor?		

Task 3- Implementation Planning for AMI Program

- UtiliWorks will Prepare Initial Draft of the Implementation Plan
- The implementation timeline will include:
 - RFP Development and administration
 - Vendor selection and contract negotiation
 - Alpha and Beta Deployment Phasing to ensure appropriate milestones are in place to ensure project progress
 - Integration Testing
 - Training
 - Customer Communication and Engagement
 - Business Process Re-Engineering
 - Full Deployment Timeline
- UtiliWorks will propose a high-level plan that will allow for an implementation between 24 and thirty months

Task 4 - Project Management and Services

- Project Charter
- Microsoft Project Plan
- SharePoint site for document collaboration (shared workspace)
- Weekly status calls as required

Communications

- The UWC team is committed to providing top of the line professional services throughout this project
- We ask that the CVWD team respond to data and information requests in a timely fashion
- We ask that the team review and provide feedback on all intermediate and final deliverables in a timely fashion
- In the event of an issue that requires attention, do not hesitate to escalate

Communications Continued...

- Bret Vonder Reith will facilitate day-to-day communications throughout this project
 - MS Outlook calendar invitations for scheduling meetings
 - We will use GoToMeeting to facilitate meetings
 - We will use SharePoint as the project management workspace
 - Calendar to note key activities, delivery and meeting dates
 - Folder set up for CVWD to upload data/information
 - Store interim working documents and final deliverables for all project participants to access

Communications Continued...

Office 365 | SharePoint

BROWSE PAGE

CVWD

Utiliworks Team Site Client Portal Internal Projects Internal Portal

Crescenta Valley Water District

Pictures

- Project Photos

Libraries

- Project Documents

Lists

- Calendar
- Milestone Tracking
- Action Items
- Contacts
- Project Task Log
- Issue Log
- Change Log
- Risk Log

Discussions

- Team Discussion

Site contents

Announcements

There are currently no active announcements. To add a new announcement, click "Add new announcement".

+ Add new announcement

Calendar

January 2019

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19

Strategic Planning Kickoff/Workshops (Onsite)

- Those team members previously provided will receive SharePoint access. Athens Silaban is your administrator and can be reached at asilaban@utiliworks.com

Your Role

- Responding to data requests
- In-person meetings/workshops with the project team
- Adherence to schedules
- Assist with development of requirements
- Review documentation
- Other tasks upon request
- Managers - provide staff resources

Status and Next Steps

- Kick-off meetings occurring 1/15, 1/16 and 1/17
- Setup accounts for CVWD team members needing SharePoint accounts (UWC)
- Feedback for Current State worksheet(s) - (received 1/11/19, Thank you!)
- Feedback for Financial Model Data Collection worksheet(s) - (received 1/11/19, Thank you!)
- Service Area map (received 12/21/18, Thank you!)
- Team member roster received

Next Steps for UtiliWorks:

- Provide Business Case report DRAFT v1
- Provide Implementation Plan report DRAFT v1

Q&A

Thank You!

Bret Vonder Reith
Senior Associate
UtiliWorks Consulting, LLC.
bvonderreith@utiliworks.com
(760) 579-1679

wood.



Green Infrastructure Options at Crescenta Valley Community Regional Park

Yvana Hrovat, PE

Marty Spongberg, PhD, PE, PG

woodplc.com

Crescenta Valley Community Regional Park

▶ ~40 acres

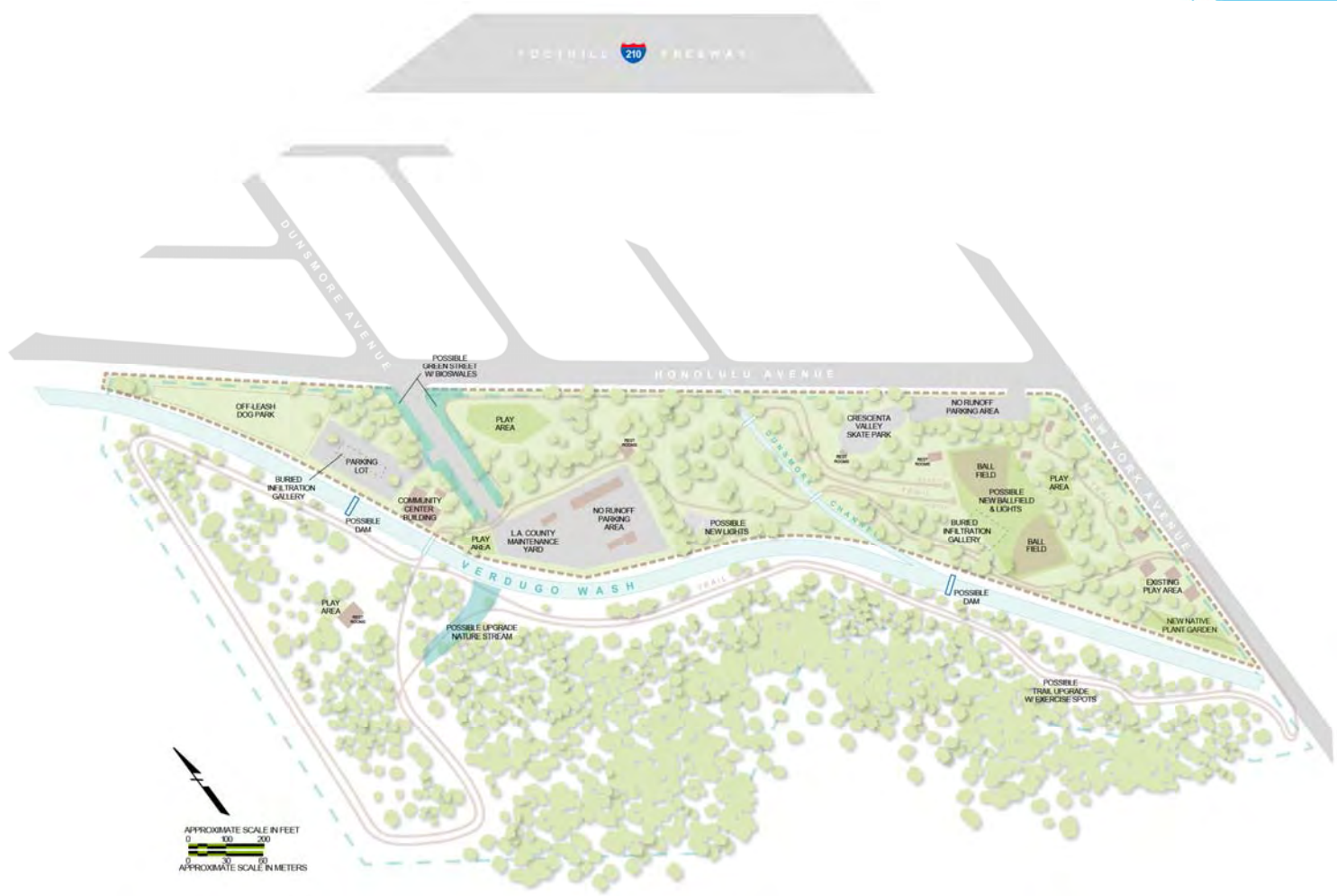
▶ Amenities:

- ▶ Baseball fields
- ▶ Basketball Courts
- ▶ Children's Play Areas
- ▶ Community Centers
- ▶ Dog Parks
- ▶ Restrooms
- ▶ Amphitheaters
- ▶ Barbecue
- ▶ Fitness Par Courses
- ▶ Hiking Trails
- ▶ Picnic Tables
- ▶ Softball Fields
- ▶ Skate Parks
- ▶ Fitness Zones
- ▶ Horseshoe Pits

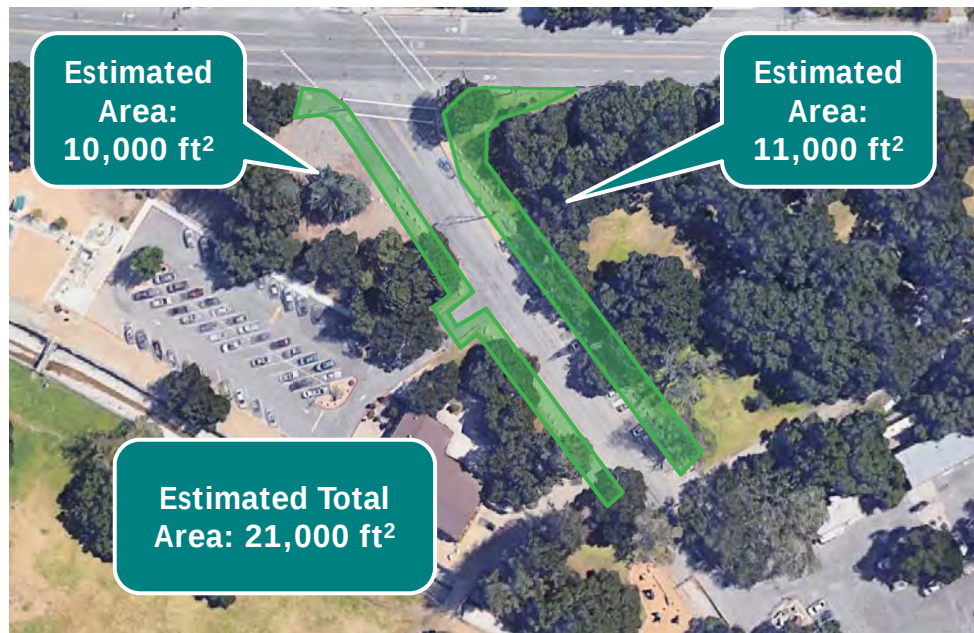


Proposed Green Infrastructure (GI) BMPs

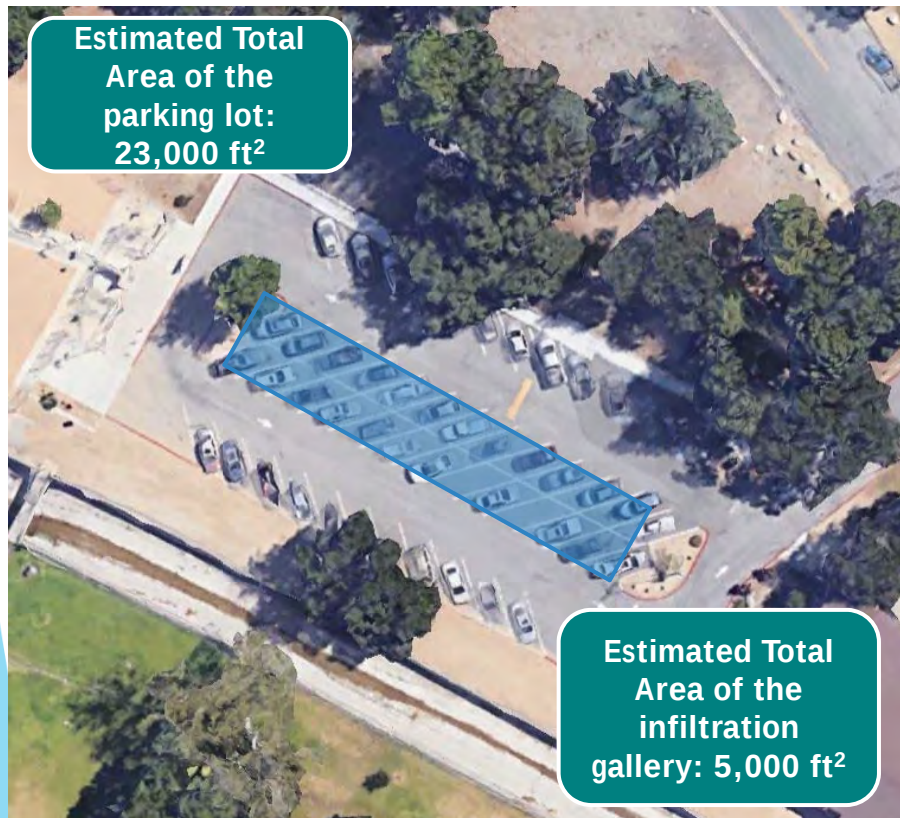
- ▶ GI BMPS proposed to provide treatment prior to groundwater recharge



Available Area for Green Streets/Bioswales



Proposed Buried Infiltration Galleries



Proposed Upgraded Nature Stream

