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

February 16, 2017 at 9:00 AM

Posted February 14, 2017 at 10:00 am

Call to Order

Adoption of Agenda

Information Items

1. Discuss of Water Production with Groundwater/Imported Water Chart
   - Revised Water Production Projections for FY 17/18
2. Award of Contract for Construction for the 8-inch Water Main on the 4300-4400 blocks of Pennsylvania Ave., Project E-972
3. Award of Contract for Inspection Services for the Replacement of 8-inch Water Transmission Main and Slope Restoration for the Lower Pickens Canyon Crossing, Project E-957
4. Discussion of the 10-year Capital Improvement Project Program
5. Discussion of Administrative Consultants for the FY 17/18 Budget

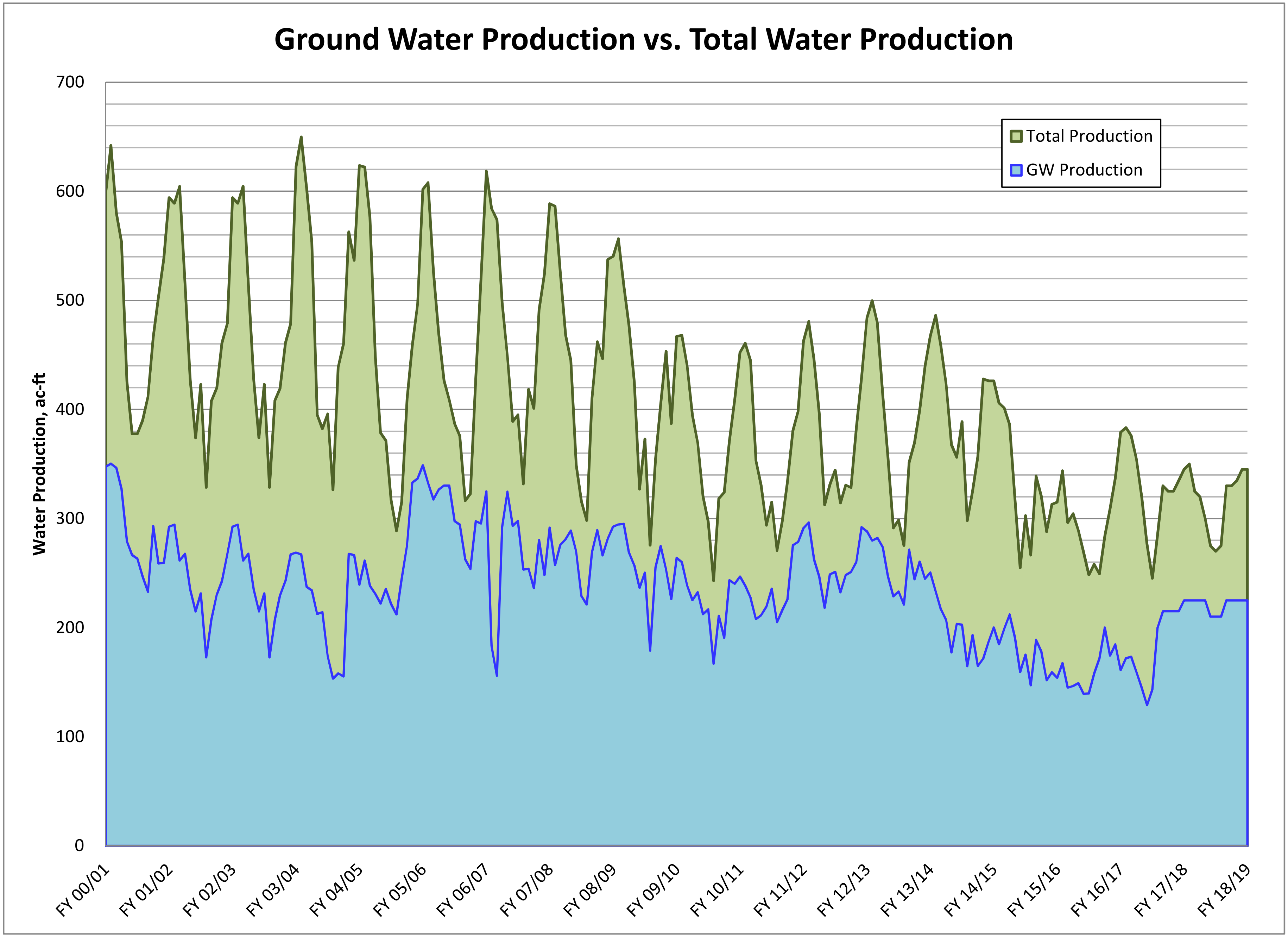
Public Comments

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 – March 16, 2017

Adjournment


Ground Water Production vs. Total Water Production
Water Production, ac-ft
0
100
200
300
400
500
600
700
Total Production
GW Production
FY 00/01
FY 01/02
FY 02/03
FY 03/04
FY 04/05
FY 05/06
FY 06/07
FY 07/08
FY 08/09
FY 09/10
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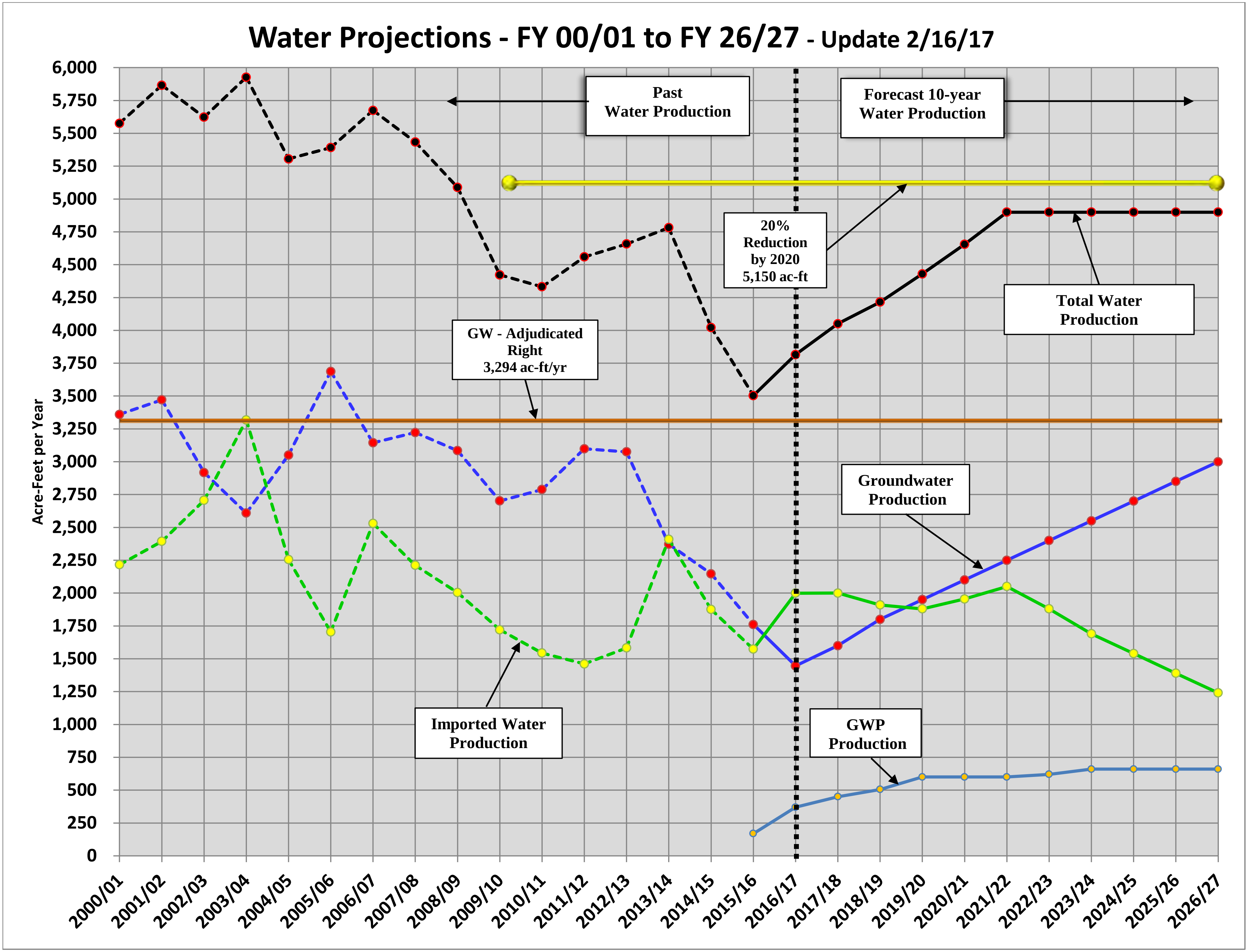
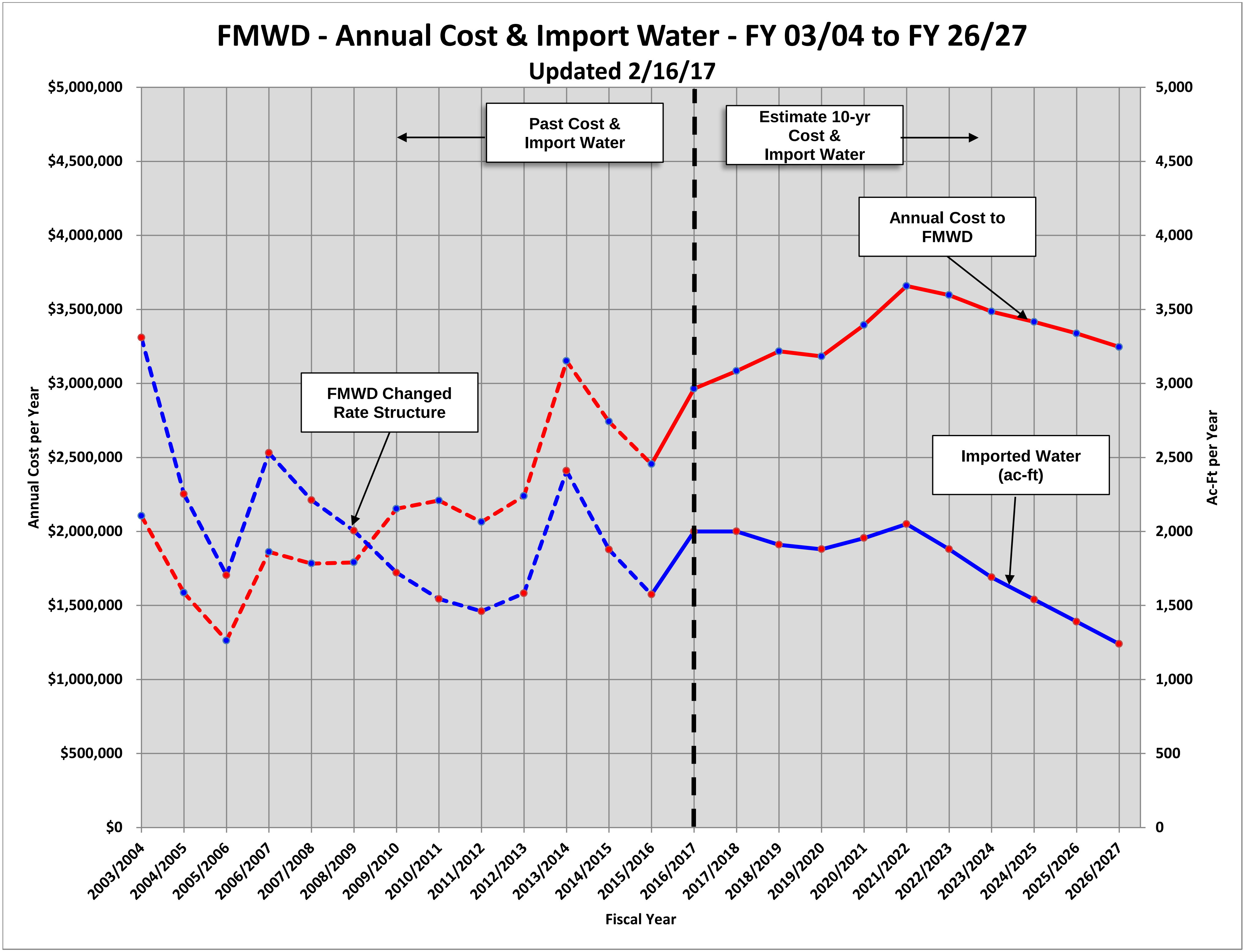
FY 15/16
FY 16/17
FY 17/18
FY 18/19


Water Projections - FY 00/01 to FY 26/27 - Update 2/16/17
Acre-Feet per Year
6,000
5,750
5,500
5,250
5,000
4,750
4,500
4,250
4,000
3,750
3,500
3,250
3,000
2,750
2,500
2,250
2,000
1,750
1,500
1,250
1,000
750
500
250
0
Past Water Production
Forecast 10-year Water Production
20% Reduction by 2020 5,150 ac-ft
Total Water Production
GW - Adjudicated Right 3,294 ac-ft/yr
Groundwater Production
Imported Water Production
GWP Production
2000/01
2001/02
2002/03
2003/04
2004/05
2005/06
2006/07
2007/08
2008/09
2009/10
2010/11
2011/12
2012/13
2013/14
2014/15
2015/16
2016/17
2017/18
2018/19
2019/20
2020/21
2021/22
2022/23
2023/24
2024/25
2025/26
2026/27

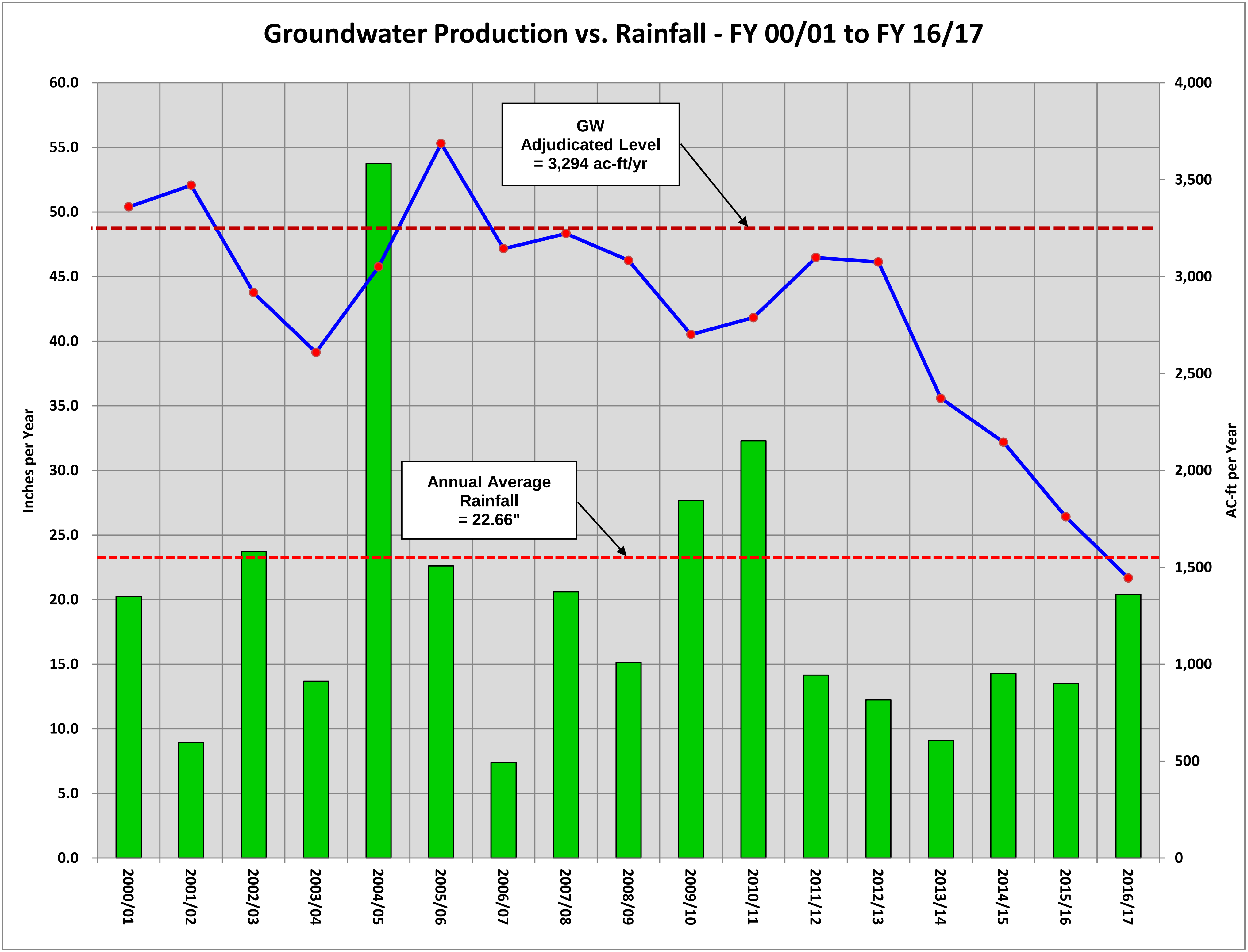
<u>10-year Water Production Estimate Based on:</u>
Slow Recovery of Verdugo Basin (150 ac-ft/yr)
Includes Well 2 in FY 17/18
Increase in FMWD until FY 18/19; Decreases following years
4% to 6% annual increase in total water production over next 3 years
5% annual increase in water production over the following 2 years
Estimate 4,900 ac-ft/yr over the following 5 years (5% less than 2020 goal of 5,150 ac-ft)

Fiscal Year	Groundwater (ac-ft)	GWP (ac-ft)	FMWD (ac-ft)	Total Water Production (ac-ft)	Percent Increase or Decrease	Estimate FMWD Cost
2013/14	2,372	0	2,410	4,782	2.7%	$3,151,636
2014/15	2,146	0	1,876	4,022	-15.9%	$2,742,335
2015/16	1,761	169	1,573	3,504	-12.9%	$2,454,524
Estimate 2016/17	*1,445*	*370*	*2,000*	*3,815*	*8.9%*	*$2,963,910*
2017/18	**1,600**	**450**	**2,000**	**4,050**	**6.2%**	**$3,084,074**
2018/19	**1,800**	**505**	**1,910**	**4,215**	**4.1%**	**$3,217,292**
2019/20	**1,950**	**600**	**1,880**	**4,430**	**5.1%**	**$3,182,786**
2020/21	**2,100**	**600**	**1,955**	**4,655**	**5.1%**	**$3,394,731**
2021/22	**2,250**	**600**	**2,050**	**4,900**	**5.3%**	**$3,657,991**
2022/23	2,400	620	1,880	4,900	0.0%	$3,596,748
2023/24	2,550	660	1,690	4,900	0.0%	$3,485,455
2024/25	2,700	660	1,540	4,900	0.0%	$3,415,563
2025/26	2,850	660	1,390	4,900	0.0%	$3,337,769
2026/27	3,000	660	1,240	4,900	0.0%	$3,246,239

Date: 2/14/2017



FMWD - Annual Cost & Import Water - FY 03/04 to FY 26/27
Updated 2/16/17
Past Cost & Import Water
Estimate 10-yr Cost & Import Water
Annual Cost to FMWD
FMWD Changed Rate Structure
Imported Water (ac-ft)
Annual Cost per Year
Ac-Ft per Year
$5,000,000
$4,500,000
$4,000,000
$3,500,000
$3,000,000
$2,500,000
$2,000,000
$1,500,000
$1,000,000
$500,000
$0
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2003/2004
2004/2005
2005/2006
2006/2007
2007/2008
2008/2009
2009/2010
2010/2011
2011/2012
2012/2013
2013/2014
2014/2015
2015/2016
2016/2017
2017/2018
2018/2019
2019/2020
2020/2021
2021/2022
2022/2023
2023/2024
2024/2025
2025/2026
2026/2027
Fiscal Year



Groundwater Production vs. Rainfall - FY 00/01 to FY 16/17
GW
Adjudicated Level
= 3,294 ac-ft/yr
Annual Average
Rainfall
= 22.66"
Inches per Year
AC-ft per Year
60.0
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2000/01
2001/02
2002/03
2003/04
2004/05
2005/06
2006/07
2007/08
2008/09
2009/10
2010/11
2011/12
2012/13
2013/14
2014/15
2015/16
2016/17

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Action Item No. 2

To: Engineering Committee February 16, 2017

From: David S. Gould. P.E. – District Engineer

Subject: **Award of Construction - 8-Inch Water Main Replacement on the 4300 & 4400 Blocks of Pennsylvania Ave., Project E-972**

ACTION ITEM:

Award of Contract for 8-inch Water Main Replacement on the 4300 & 4400 Blocks of Pennsylvania Ave., Project E-972 Recommendation to award the contract to the lowest responsible bidder, ________. for the water main replacement or the construction of the pipeline replacement on the 4300 & 4400 Blocks of Pennsylvania Ave. at a cost of $XXX,XXX and establish a contingency amount of $XX,XXX (10% of contract) to cover the cost of unforeseen or additional work.

PROJECT DESCRIPTION:

Staff previously discussed that one of the two 8-inch water mains on Pennsylvania Ave, which delivers water from the Mills Plant to the Paschall Booster station, has had three (3) major main breaks within the last year. These pipelines on Pennsylvania were installed in 1938 and 1947 and are under high (over 200 psi) pressure. These pipelines are the main water transmission mains which bring groundwater from the Mills Plant into the water distribution system (See attached project location map):

DISCUSSION:

On December 6, 2016, the Board authorized the General Manager to advertise for bids for the subject project. A mandatory pre-bid meeting was held on February 8, 2017, which was attended by eight (8) contractors. CVWD specifications indicate that only contractors who attend this meeting are allowed to bid on the project.

On February 15, 2017, at 2:00 PM, the District opened and read the following bid proposals for this project:

	Bidder	**Total Bid Amount**
Low		
2		
3		
4		
5		
6		
7		
8		

_______ of ______ was the apparent lowest responsible bidder for the project with a bid of $________and the low bid was ____% ____ than the engineer's estimate of $320,000.

Ms. Christina Olmedo will be the project manager and Mr. Cory Whitman will provide field inspection. The construction estimate for the project is $XXX,XXX and the entire project costs including materials, soils engineer, staff engineering and inspection, and contingencies are estimated at $410,000.

RECOMMENDATION:

It is staff's recommendation to award the contract for the subject project to the lowest responsible bidder, ________ at a cost of $_______.

A pre-construction meeting will be set as soon as the contract is awarded, the agreement is signed, and insurance documents have been delivered. We anticipate construction beginning in late March 2017 at the intersection of Encinal Ave and Pennsylvania Ave and the project concluded by early May 2016.

A major issue with this project will be the traffic detours around the construction area, which will affect local traffic and the west-bound 210 Freeway off ramp for Pennsylvania Ave. Prior to the start of construction, staff will be performing a public outreach program which will include:

- Sending letters to the residents in the area notifying them of the upcoming project and traffic delays
- Holding a Community meeting on March 8, 2017 at the job site to explain the project and traffic delays
- Coordinating with Caltrans on traffic at the 210 west off-ramp and Caltrans current construction project on the 210 freeway
- Meeting with the local newspapers about publishing an article about the upcoming construction project
- Monthly announcements at the CV Town Council meeting
- Posting traffic and construction updates on CVWD's website and CV Town Council website

ENVIRONMENTAL REVIEW:

N/A

FUNDING AVAILABILITY:

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

Account Description	Amount
FY 16/17 Water CIP– Water Distribution	$600,000
Engineer's Cost Estimate for Contractor	<$XXX,XXX>
Unforeseen or additional work	<$XX,XXX>
Additional costs such as material purchase by CVWD, soils engineer, engineering & inspection labor costs & contingency	<$90,000>
Total Engineer's Cost Estimate	**<$410,000>**
Amount Remaining in Water CIP – Distribution System	**$190,000**

Prepared & Submitted by:

David S. Gould, P.E.
District Engineer

Attachments:

1. Project Location Map
2. Bid Summary

CRESCENTA VALLEY WATER DISTRICT
STAFF REPORT

Action Item No. 3

To: Engineering Committee — February 16, 2017

From: David S. Gould. P.E. – District Engineer

Subject: **Award of Contract for Quality Control Inspection Services for Lower Pickens Canyon Pipeline Crossing Repair, Project E-957**

ACTION ITEM:

Lower Pickens Canyon Pipeline Crossing Repair, Project E-957 – Recommendation to enter into an agreement with DMc Engineering (DMc) and AMEC Foster Wheeler (AMEC) to provide quality control inspection services related to the Lower Pickens Canyon pipeline replacement and slope repair project at a total cost of $38,265.

BACKGROUND:

On February 7, 2017, a contract was awarded to E & R Construction, Inc for the replacement of the 8-inch Water Transmission Main and Slope Restoration for the Lower Pickens Canyon Crossing. This project is time sensitive and needs to be completed within the next sixty (60) days.

DISCUSSION:

Staff needs assistance in provide construction management and quality control inspection during the project. Staff requested proposed from AMEC to provide on-site observation and inspection for the slope restoration portion and DMc to provide pipeline inspection and construction management services as shown below:

- AMEC - on-site observation and inspection services — $22,685
- DMc - pipeline inspection and construction management services — $17,880

Total — $40,565

RECOMMENDATION:

It is staff's recommendation to enter into agreements with AMEC and DMc for quality control inspection and construction management services at a total cost of $40,565 to staff with expediting this project.

ENVIRONMENTAL REVIEW:

N/A

FUNDING AVAILABILITY:

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

Account Description	Amount
FY 16/17 Water CIP– Water Distribution – Lower Pickens Canyon Pipeline	$500,000
Remaining from 8-inch Water Main on Penn. Ave, Project E-972	$190,000
Revised amount for Lower Pickens Canyon Pipeline	**$690,000**
Contractor's cost with Contingency – Installation of Pipeline and Slope Repair	<$480,700>
Additional costs such as inspection and construction management services	<$40,565>
Professional Engineering and Geotechnical Services	<$57,020>
Total Project Cost Estimate	**<$578,285>**
Amount Remaining in Project	**$111,715**

Prepared & Submitted by:

David S. Gould, P.E.
District Engineer

Attachments:

1. AMEC Proposal dated 2/14/17
2. DMc Engineering Proposal dated 2/14/17

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DMc Engineering

CIVIL ▪ SURVEYING ▪ PLANNING ▪ CONSTRUCTION

February 14, 2017

JN1245-05
Addendum 1
Revised

Mr. David Gould, PE
District Engineer
Crescenta Valley Water District
2700 Foothill Blvd.
La Crescenta, CA 91214

SUBJECT: CRESCENTA VALLEY WATER DISTRICT, LOWER PICKENS CANYON PIPELINE CROSSING PROJECT E-957: CONSTRUCTION MANAGEMENT

Dear David:

In accordance with your request in an email dated February 13, 2017, DMc Engineering is pleased to provide you and Crescenta Valley Water District with this Addendum 1 to provide construction management services for the above referenced subject project.

We appreciate the opportunity to once again work with you and the Crescenta Valley Water District. Upon acceptance, it is our understanding we will receive authorization in the form of a Purchase Order. In the interim, should you have any questions, please do not hesitate to call.

Sincerely,

DMc Engineering

Derek J. McGregor, PE, PLS
Principal

DJM:cg

I:\JOB FILES\1245-05 Crescenta Valley WD_Lower Pickens_Survey-Mapping-Eng\CONTRACT\ADDENDUMS

SCOPE OF WORK

LOWER PICKENS CANYON PIPELINE CROSSING PROJECT E-597

Client (Crescenta Valley Water District) and Consultant (DMc Engineering) for mutual consideration herein set forth, agree as follows:

Consultant agrees to perform the following services:

A. CONSTRUCTION MANAGEMENT SERVICES

1. DMc Engineering will assist Client in the setup and conducting of a Pre-Construction Meeting with selected Contractor.

2. DMc Engineering will assist in providing Construction Management Services. These services will include field observation of the contractor's daily activities, construction schedule monitoring and/or site related issues. This also includes preparation of daily reports, pay applications, obtaining response to RFI's, RFC's, Shop Drawings, Change Order Requests, and project closeout. DMc will provide assistance in scheduling the appropriate geotechnical inspections.

3. DMc Engineering will assist Client on an as-needed basis for services that are not a part of the scope of work.

JN1245-05
ADDENDUM 1
FEE SCHEDULE
LOWER PICKENS CANYON PIPELINE CROSSING PROJECT E-597

Client agrees to compensate consultant for the services as noted below:

A. CONSTRUCTION MANAGEMENT SERVICES	**PM (170)**	**CM (100)**	**FEE $**
1. Assist with Pre-Construction Meeting	4	4	1,080
2. Provide Construction Management Oversight		160 (1)	16,000
3. Assist Client on an As-Needed Basis		8 (2)	800
PROFESSIONAL FEE			17,880
REIMBURSABLE EXPENSES			(3)
TOTAL PROFESSIONAL FEE			**$17,880 +(3)**

(1) This assumes 8 weeks of construction at 20 hours per week.
(2) This assumes a budget amount of 8 hours.
(3) Reimbursable costs are estimated to be 10% of the professional fee.

Should you have any questions or concerns regarding the above, please do not hesitate to contact our office.

These Consultant Services were not included in our original Scope of Work for the above project. Therefore, we request your approval of an additional **Fee of $17,880 plus** the cost of reproductions, computer plotting, copying, and messenger services.

ADDENDUM APPROVED BY:

SIGNATURE: ____________________________________

PRINT NAME: ____________________________________

TITLE: ____________________________________

DATE: ____________________________________

February 14, 2017

Project # 92310080

Mr. David Gould, PE
Crescenta Valley Water District
2700 Foothill Blvd
La Crescenta, CA 91214

Re: Pickens Canyon Project – Field Observation: Upcoming Slope and Pipeline Work

Dear Mr. Gould:

Per our recent communications, we understand that Amec Foster Wheeler (Amec) is to provide a field technician to observe field work by the contractor that CVWD selected for the Pickens Canyon pipeline section replacement and slope repair. This letter is our scope and cost estimate for that work. We will perform the work on a time-and-materials basis.

We understand that the contractor has indicated that the work would take 60 calendar days (~$8^1/_2$ weeks or 43 working days) to complete. As we discussed, Amec can provide support for the entire period, however, CVWD would like an estimate for Amec to provide observation services for half of the work period (estimated 22 work days). For purposes of this proposal, we estimate 160 hours of technician time.

An Amec senior field technician will be on site each day to observe the contractor's work and to document the work performed. Our technician will notify CVWD promptly if there are concerns expressed by the property owners adjacent to the worksite or nearby. He will take photographs of the contractor's work and keep a daily field record of the work performed including:

- Work start and stop times,
- Contractor and other personnel on site and when they arrive and depart the site,
- Visitors to the site, including when they arrive and depart,
- General work conditions,
- Work performed,
- Any work performed outside the general work area limits, including those near the bottom of the slope,
- Concerns or issues that may be of interest to CVWD.

Field records will be submitted to CVWD by email by noon each following day.

AMEC Foster Wheeler Environment & Infrastructure, Inc.
121 Innovation Drive, Suite 200
Irvine, CA
USA 92617-3094
Tel (949) 642-0245
Fax (949) 642-4474
www.AMECfw.com

We assume that, including travel time to and from the site from our LA office, work will be 11 hours per day. After the project is finished, we will provide our photographs of the work to CVWD. Our scope of work does not include a summary report, however. We understand that this is a prevailing wage job. Table 1 below summarizes the estimated costs. Our estimated total cost is $22,685.

Table 1. Estimated Costs

Labor Category	Number of Hours	Hourly Rate	Labor Total	Non-Labor Cost (mileage/ expenses)	Total Estimated Cost
Principal/Project Manager	8	$220.00	$1,760	$100	$1,860
Senior Technician	160	$115.00	$18,400	$2,200	$20,600
Administrative Support	3	$75.00	$225	$0	$225
TOTAL					**$22,685**

In the event that the observation work requires more than 11 hours per day of Amec time or the work extends beyond 22 work days, we will notify CVWD as soon as possible regarding modification of the project scope of work and budget.

We anticipate starting work on or about February 23, 2017. Please contact me at 949-574-7093 or via email if you have questions.

Sincerely,
Amec Foster Wheeler Environment & Infrastructure, Inc.

W. Greg Hamer

W. Greg Hamer, P.G., C.E.G.
Principal Hydrogeologist

Direct Tel.: 949 574-7093
E-mail: greg.hamer@amecfw.com

CRESCENTA VALLEY WATER DISTRICT
STAFF REPORT

Action Item No. 4
February 16, 2017

To: Engineering Committee

From: David S. Gould. P.E. – District Engineer

Subject: **Ten Year – Draft Capital Improvement Project Program**

ACTION ITEM:

Ten-Year CIP Draft Report – "Draft 10-year Capital Improvement Project (CIP) program for review and discussion

DISCUSSION:

Attached is a Draft Ten-Year Capital Improvement Project (CIP) plan listing projects which are contemplated for completion over the next ten years. Most of the identified projects involve the repair, rehabilitation or replacement of aging infrastructure based on staff's assessment of each assets condition using available information. The asset condition, criticality, consequence of failure and future replacement/rehabilitation costs have been considered with other factors in prioritizing and scheduling over the ten year period.

The confidence in the necessity and estimated costs is highest for the projects scheduled for completion in the next few years. All projects identified in the Ten Year CIP are reviewed at least annually and when additional relevant information is available.

Prepared & Submitted by:

David S. Gould, P.E.
District Engineer

Attachments:

1. Draft 10-year CIP Projected Costs

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Capital Improvement Project Program 10-year CIP Budget	Projected FY 16/17	Budget FY 17/18	Forecast FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
1. Water Supply											
A. Groundwater											
i. Well Rehabilitation											
Well 7 Rehabilitation	$ -										
Well 10 Rehabilitation		$ 85,000									
Well 7 Rehabilitation		$ 85,000									
Well 14 Rehabilitation		$ 85,000									
Well 9 Rehabilitation			$ 85,000								
Well 12 Rehabilitation			$ 85,000								
Well 1 Rehabilitation				$ 85,000							
Well 11 Rehabilitation				$ 85,000							
Well 5 Rehabilitation					$ 90,000						
Well 14 Rehabilitation					$ 90,000						
Well 10 Rehabilitation						$ 90,000					
Well 12 Rehabilitation						$ 90,000					
Well Rehabilitation (2 Wells per year)							$ 200,000	$ 200,000	$ 210,000	$ 210,000	$ 220,000
ii. New Wells											
Re-Activate Well 2 - Design	$ 71,000	$ 100,000									
Re-Activate Well 2 - Construction	$ 209,200	$ 1,270,900	$ 50,000								
Well 18 (Sycamore House) - Design			$ 175,000								
Well 18 (Sycamore House) - Construction				$ 1,575,000							
Well 19 - Design						$ 185,000					
Well 19 - Construction							$ 1,665,000				
Well 20 - Design								$ 195,000			
Well 20 - Construction									$ 1,755,000		
Well 21- Design										$ 195,000	
Well 21 - Construction											$ 1,755,000
iii. Studies											
Groundwater Source Water Protection Study			$ 45,000								
Update Water Well Replacement Study				$ 100,000							
Pilot Hole Study (Drill 5 pilot holes)					$ 315,000						
B. Imported Water											
CVWD/LADWP Inter. at Ordunio (Grant - Matching Funds)											
Ocean View Piping & Vaults (Grant - Matching Funds)											
Ocean View Chlorination St (Grant - Matching Funds)	$ 33,600										
Ocean View - Equip. (Grant - Matching Funds)	$ 27,900										
Ocean View - Elect (Grant - Matching Funds)	$ 32,000										
Ocean View - Final	$ 26,000										

Capital Improvement Project Program 10-year CIP Budget	Projected FY 16/17	Budget FY 17/18	Forecast FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
C. Groundwater Basin Recharge											
Storm Water Recharge Study (Grant - Matching Funds)	$ 80,700										
Stormwater Recharge Project - Design		$ 125,000									
Stormwater Recharge Project - Construction			$ 1,500,000	$ 1,500,000							
Storm Water Recharge Study - Debris Basins					$ 125,000						
Storm Water Recharge Study - Debris Basins/Design						$ 150,000					
Storm Water Recharge Study - Debris Basins/Construction							$ 1,500,000	$ 1,500,000			
D. Recycled Water System											
i. Recycled Water											
Recycled Water System Study	$ 15,600			$ 35,000			$ 45,000				$ 50,000
ii. Membrane Bioreactor Technology											
Membrane Bioreactor Technology Feasibility Study				$ 25,000			$ 35,000				$ 45,000
WS Total	$ 496,000	$ 1,750,900	$ 1,940,000	$ 3,405,000	$ 620,000	$ 515,000	$ 3,445,000	$ 1,895,000	$ 1,965,000	$ 405,000	$ 2,070,000
2. Water Storage											
A. Reservoir Rehabilitation											
i. Steel Reservoir Re-Coating/Roof/Vents Rehabilitation											
Edmund #1 - Roof/Air Vents											
Oak Creek #1 & #2 - Roof/Air Vents/Recoat	$ -	$ 700,000									
Markridge - Roof/Air Vents/Recoat			$ 400,000								
Eagle Canyon - Roof/Air Vents/Recoat				$ 400,000							
Rosemont - Roof/Air Vents/Recoat					$ 400,000						
Edmund #2 - Roof/Air Vents/Recoat						$ 400,000					
Goss Canyon #1 & #2 - Roof/Air Vents/Recoat							$ 800,000				
Shields - Roof/Air Vents/Recoat								$ 400,000			
Mills Forebay - Roof/Air Vents/Recoat								$ 100,000			
Cresta Hts #1 & 2 - Roof/Air Vents/Recoat									$ 700,000		
Dunsmore - Roof/Air Vents/Recoat										$ 400,000	
Pickens Canyon - Roof/Air Vents/Recoat											$ 400,000
ii. Concrete Reservoir Rehabilitation											
Encinal Reservoir - Concrete Rehabilitation			$ 200,000								
Ocean View Reservoir - Concrete Rehabilitation										$ 200,000	
iii. Corrosion Protection											
Cathodic Protection Inspection & Replacement		$ 110,000				$ 120,000					$ 130,000
iv. Overflow & Drain System Upgrade											
Overflow/Drain System Assessment Study			$ 25,000								

Capital Improvement Project Program 10-year CIP Budget	Projected FY 16/17	Budget FY 17/18	Forecast FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
B. Reservoir Water Quality											
i. Water Mixing System											
Reservoir Water Quality & Mixing System Study			$ 125,000								
iv. Replace common inlet and outlet piping											
Reservoir Piping Technical Study (included with WQ & Mix Study)			$ 50,000								
C. New Reservoir Water Storage											
Ocean View #2 Reservoir (Top of Ocean View) - Feasibility Study				$ 75,000							
WS Total	$ -	$ 810,000	$ 800,000	$ 400,000	$ 400,000	$ 520,000	$ 800,000	$ 500,000	$ 700,000	$ 600,000	$ 530,000
3. Water Distribution											
A. Pipeline Replacement											
2600 Block - Harmony Place - 450 LF	$ 52,300										
3900 Block - Park Place - 450 LF	$ 52,300										
3900 Block - Glenwood - 650 LF	$ 52,300										
2800 Block - Prospect & 4400 Block - Glenwood - 800 LF	$ 110,700										
Lower Pickens Canyon Crossing & Slope - 600 LF	$ 575,000										
4200 - 4400 Block - Penn - 1,450 LF	$ 400,000										
Annual Pipeline Replacement - 5,200 LF		$1,350,000	$1,350,000	$1,450,000	$1,450,000	$1,450,000	$1,500,000	$1,500,000	$1,500,000	$1,650,000	$1,650,000
B. New Pipelines											
Ramsdell - Bridge between Mayfield & Encinal											
C. Booster Pump System											
i. Annual Pump /Motor Replacement											
Booster 12 at Markridge	$ 30,300										
Boosters - Encinal B & C and Glenwood 32		$ 70,000									
Boosters - Paschall B, Booster 26 at CH & Glenwood 33			$ 140,000								
Ocean View B, Glenwood 34 & Booster 25 at Markridge				$ 85,000							
Annual Booster Replacement - 2 Boosters					$ 85,000	$ 90,000	$ 90,000	$ 90,000	$ 95,000	$ 95,000	$ 95,000
ii. Pump Station Upgrade											
Upgrade Paschall Booster Station	$ 15,000	$ 500,000									
Goss Canyon - New Booster Pump Station			$ 75,000	$ 500,000							
Cresta Heights - New Booster Pump Station				$ 75,000	$ 500,000						
Rosemont - New Booster Pump Station					$ 75,000	$ 600,000					
Edmund #2 - New Booster Pump Station						$ 85,000	$ 600,000				
Upgrade Ocean View Booster Pump Station							$ 85,000	$ 600,000			
Upgrade Mills Booster Pump Station								$ 85,000	$ 600,000		
Upgrade Encinal Booster Pump Station									$ 95,000	$ 600,000	
Upgrade Edmund #1 Booster Pump Station										$ 100,000	$ 600,000
iii. VFD Pump Upgrade											

Capital Improvement Project Program 10-year CIP Budget	Projected FY 16/17	Budget FY 17/18	Forecast FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
iv. MCC Replacement											
MCC upgrade at Paschall	$ 15,000	$ 425,000									
MCC upgrade at Goss Canyon			$ 75,000	$ 400,000							
MCC upgrade at Cresta Heights				$ 75,000	$ 400,000						
MCC upgrade at Rosemont					$ 75,000	$ 400,000					
MCC upgrade at Edmund #2						$ 85,000	$ 500,000				
MCC upgrade at Ocean View							$ 85,000	$ 500,000			
MCC upgrade at Mills Plant								$ 85,000	$ 500,000		
MCC upgrade at Encinal									$ 95,000	$ 500,000	
MCC upgrade at Edmund #1										$ 100,000	$ 500,000
D. Pressure Reducing Stations											
Pressure Reducing Station Preliminary Design Study		$ 35,000									
Upgrade PRS - Zone 4 to Zone 3			$ 45,000								
E. Miscellaneous Projects											
i. Water Surge Control											
Rehabilitation Surge Tank at Glenwood	$ 25,000										
Rehabilitation Surge Tank at Mills Plant		$ 75,000									
Surge Analysis Study					$ 150,000						
ii. Street/Utility/ Meter Adjustment & Upgrade											
iii. Misc.											
Repairs to Ramsdell Mixing Station	$ 55,000										
Mills Plant - Aeration Tower Rehabilitation		$ 50,000									
WD Total	$ 1,382,900	$ 2,455,000	$ 1,685,000	$ 2,585,000	$ 2,735,000	$ 2,710,000	$ 2,860,000	$ 2,860,000	$ 2,885,000	$ 3,045,000	$ 2,845,000
4. Water Treatment											
A. Nitrate Removal											
i. Glenwood											
Replace Ion Exchange Resin at Glenwood						$ 500,000					
ii. Mills											
Ion Exchange Plant at Mills - Design					$ 150,000						
Ion Exchange Plant at Mills - Construction						$ 1,750,000					
iii. Ordunio											
Replace Bio Remediation AroNite System at Ordunio						$ 250,000					
B. Chlorine Disinfection											
New Chlorination Station at Pickens Canyon Reservoir		$ 75,000									
New Chlorination Station at Markridge Reservoir			$ 75,000								
Paschall & Pickens - New Chlorine Analyzer		$ 40,000									
Edmund #1 & Shields - Chlorine Analyzers			$ 40,000								
Goss Canyon #1 & #2 - Chlorine Analyzers				$ 40,000							
Cresta Hts #1 & #2 - Chlorine Analyzers					$ 50,000						
Eagle Canyon & Dunsmore - Chlorine Analyzers						$ 50,000					

Capital Improvement Project Program 10-year CIP Budget	Projected FY 16/17	Budget FY 17/18	Forecast FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
C. Convert to Chloramines											
Conversion to Chloramination Disinfection Feasibility Study		$ 35,000									
D. New Federal and State Regulations											
E. Water Quality Studies											
F. MTBE Removal											
MTBE Removal Feasibility Study			$ 75,000			$ 85,000			$ 95,000		
WT Total	$ -	$ 150,000	$ 190,000	$ 40,000	$ 200,000	$ 2,635,000	$ -	$ -	$ 95,000	$ -	$ -
5. Technology											
A. Automated Meter Information (AMI) System											
Conversion of 3/4" & 1" meter	$ -	$ 325,000	$ 325,000								
Conversion of Large Meters & Fire Services	$ -	$ 220,000	$ 220,000								
Install & Integration of AMR & Fix Area Network		$ 495,000	$ 495,000								
B. Supervisory Control and Data Acquisition (SCADA) System											
Wireless (Radio) Network for SCADA			$ 25,000								
SCADA RTU Replace - Equipment & Integration	$ 55,000	$ 400,000	$ 300,000								
C. Graphical Information System (GIS)											
Field Asset Tagging			$ 50,000								
Update GIS System		$ 50,000									
TECH Total	$ 55,000	$ 1,490,000	$ 1,415,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6. Public Safety/Emergency Response											
A. Emergency Electrical Generators											
New Emergency Electrical Generator - Main Office				$ 75,000							
New Emergency Electrical Generator - Mills Plant					$ 150,000						
New Emergency Electrical Generator - Field						$ 35,000					
B. Water Storage											
Dunsmore/Pickens - Seismic Sensors & Valve Actuators	$ 79,300										
Ordunio - Seismic Sensors & Valve Actuators		$ 80,000									
Oak Creek #1 & #2 - Seismic Sensors & Valve Actuators			$ 100,000								
Encinal & Ocean View - Seismic Sensors & Valve Actuators				$ 120,000							
C. Security											
D. Miscellaneous											
SF/ER Total	$ 79,300	$ 80,000	$ 100,000	$ 195,000	$ 150,000	$ 35,000	$ -	$ -	$ -	$ -	$ -

Capital Improvement Project Program 10-year CIP Budget	Projected FY 16/17	Budget FY 17/18	Forecast FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
7. Facilities & Planning											
A. Main Office											
Expansion with New Roof with Solar Panels		$ 75,000									
Needs Assessment Study		$ 25,000									
New Main Office Building			$ 150,000	$ 1,500,000	$ 1,000,000						
B. Glenwood Plant											
Needs Assessment Study			$ 25,000								
C. Mills Plant											
D. Reservoir Site Improvements											
Ocean View - Site Improvements		$ 225,000									
Roof for Old Encinal - Storage Bldg			$ 175,000								
Pickens - Access Road Improvements				$ 100,000	$ 250,000	$ 250,000					
Edmund #2 - Lower Access Road Improvements					$ 120,000	$ 350,000	$ 350,000				
Goss Canyon - Site Improvements				$ 200,000							
Edmund #2 - Upper Access Road Improvements							$ 350,000				
Cresta Heights - Site & Road Improvements					$ 200,000						
Rosemont - Site Improvements						$ 150,000					
Edmund #2 - Site Improvements							$ 250,000				
Shields - Access Road & Site Improvements								$ 250,000			
Dunsmore - Site Improvements									$ 150,000		
Eagle Canyon - Site Improvements										$ 150,000	
Edmund #1 - Site Improvements											$ 100,000
5. Misc. Properties											
6. District Planning											
Asset Management Study			$ 75,000	$ 75,000							
Computer Maintenance Management System (CMMS)					$ 75,000						
F & P Total	$ -	$ 325,000	$ 425,000	$ 1,875,000	$ 1,645,000	$ 750,000	$ 950,000	$ 250,000	$ 150,000	$ 150,000	$ 100,000
Capital Improvement Projects - Total	$ 2,013,200	$ 7,060,900	$ 6,555,000	$ 8,500,000	$ 5,750,000	$ 7,165,000	$ 8,055,000	$ 5,505,000	$ 5,795,000	$ 4,200,000	$ 5,545,000

CRESCENTA VALLEY WATER DISTRICT
STAFF REPORT

Action Item No. 5
February 16, 2017

To: Engineering Committee

From: David S. Gould. P.E. – District Engineer

Subject: **Administrative Consultants for FY 17/18**

ACTION ITEM:

Administrative Consultants for FY 17/18– Discussion of Proposed Studies and Reports for the Administrative Consultants expense for FY 17/18.

DISCUSSION:

The following is a list of Administration Consultants planned for FY 16/17:

FY 16/17 Administration Consultants			
Project Name	**Water**	**Sewer**	**Total**
GIS - Update	$5,000	$5,000	$10,000
Reservoir Site Topo Boundary Survey - Ocean View	$12,500	$0	$12,500
Hydraulic Study	$5,000	$0	$5,000
Grant Proposals	$25,000	$0	$25,000
Solar Power Study	$5,000	$5,000	$10,000
Main Office Seismic Assessment	$10,000	$10,000	$20,000
Water Resources Study Recycled Water Feasibility Study	$22,500	$0	$22,500
Wastewater Master Plan	$0	$9,000	$9,000
Strategic Planning	$15,000	$15,000	$30,000
Source Water Protection Plan	$30,000	$0	$30,000
Total	**$130,000**	**$44,000**	**$174,000**

The following is a list of Administration Consultants to date for FY 16/17:

FY 16/17 Administration Consultants to Date			
Project Name	**Water**	**Sewer**	**Total**
GIS - Update	$5,000	$5,000	$10,000
Reservoir Site Topo Boundary Survey - Ocean View	$12,500	$0	$12,500
Chlorine Assistance	$5,000	$0	$5,000
Grant Proposals	$4,950	$1,200	$6,150
Cost of Service Study	$6,400	$6,400	$12,800
Labor Compliance - Various Projects	$4,500	$0	$4,500
Website Development	$2,100	$2,100	$4,200
Recycled Water Feasibility Study	$6,000	$0	$6,000
UWMP	$500	$500	$1,000
Surge Analysis	$5,935	$5,935	$11,870
Source Water Protection Plan	$30,000	$0	$30,000
Total to Date	**$82,885**	**$21,135**	**$104,020**
Budget - 16/17 - Admin Consultants	**$130,000**	**$44,000**	**$174,000**
Remaining	**$47,115**	**$22,865**	**$69,980**

The following is a list of Administration Consultants to proposed for FY 17/18:

FY 17/18 Administration Consultants			
Project Name	**Water**	**Sewer**	**Total**
GIS - Update	$5,000	$5,000	$10,000
Reservoir Site Topo Boundary Survey	$12,500	$0	$12,500
Grant Admin	$12,500	$0	$12,500
Grant Stormwater Recharge Project	$50,000	$0	$50,000
Chlorine/Chloramination Study	$40,000	$0	$40,000
Wastewater Master Plan	$0	$45,000	$45,000
Pressure Reducing Station Study	$44,000	$0	$44,000
Cathodic Protection Inspection & Study	$50,000	$0	$50,000
Total	**$214,000**	**$50,000**	**$264,000**

RECOMMENDATION:

It is staff's recommendation to enter into agreements with AMEC and DMc for quality control inspection and construction management services at a total cost of $38,265 to staff with expediting this project.

Prepared & Submitted by:

David S. Gould, P.E.
District Engineer

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