

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

June 21, 2018 at 9:00 AM

Posted June 20, 2018 at 9:00 AM

Call to Order

Adoption of Agenda

Information Items

1. Status of Groundwater Wells and Well Capacity
 - Well Levels
 - Well Capacity
 - Water Production
2. FY 17/18 CIP - Project Status:
3. FY 18/19 CIP - 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

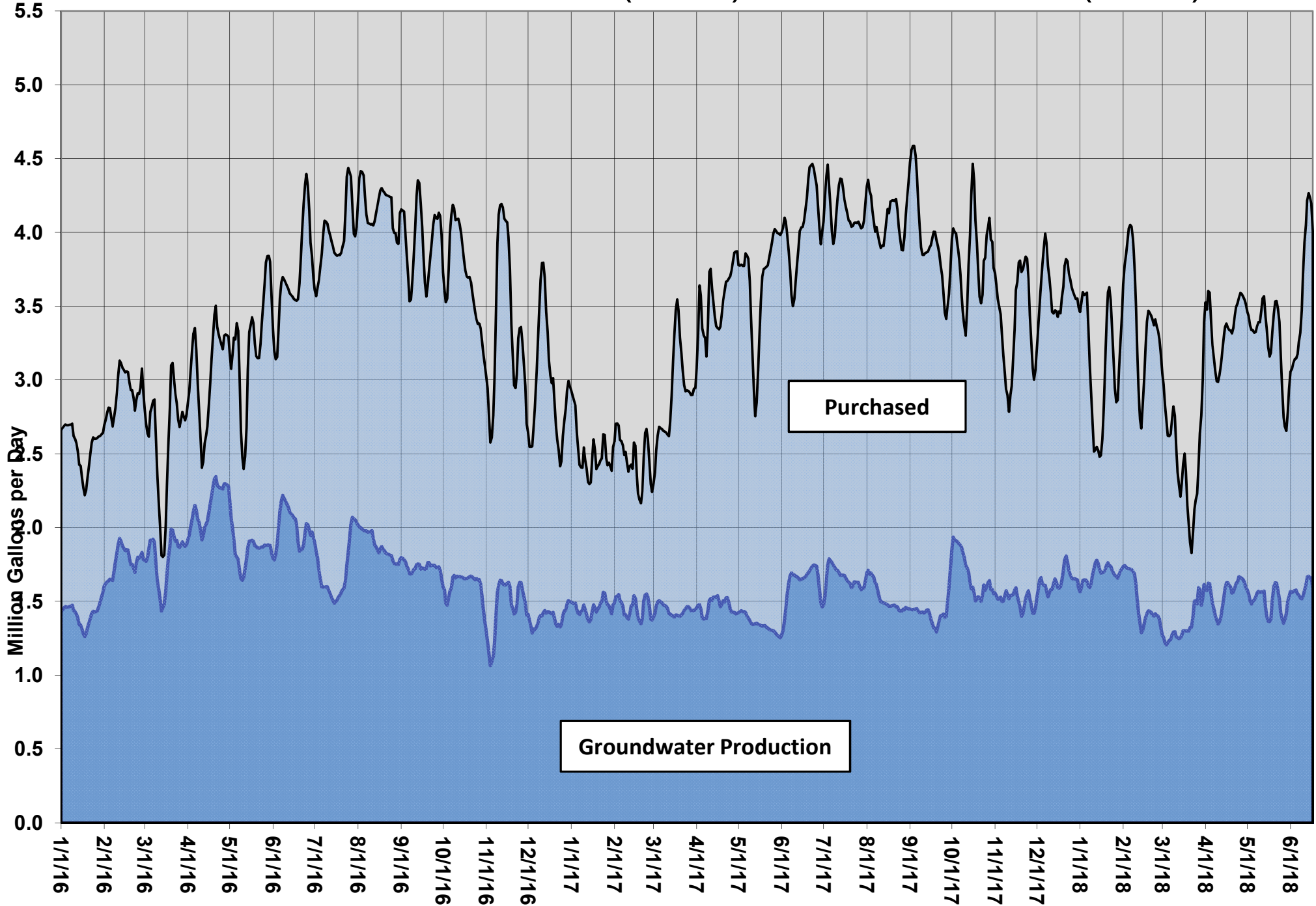
Next Engineering Committee Meeting – July 19, 2018

Adjournment

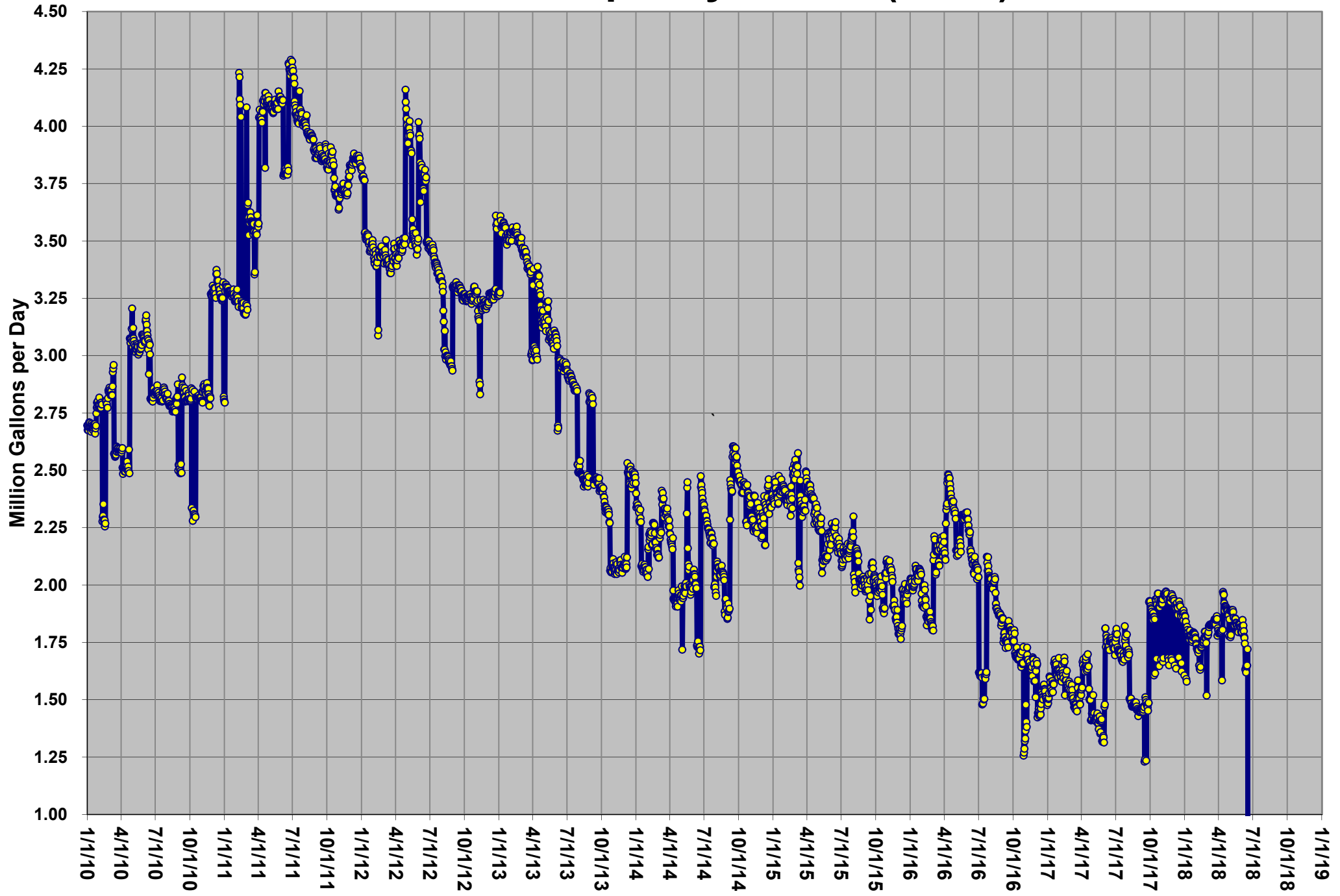
Water Production Chart 2016 - 2018

■ Groundwater Production (MGD)

□ Total Water (MGD)

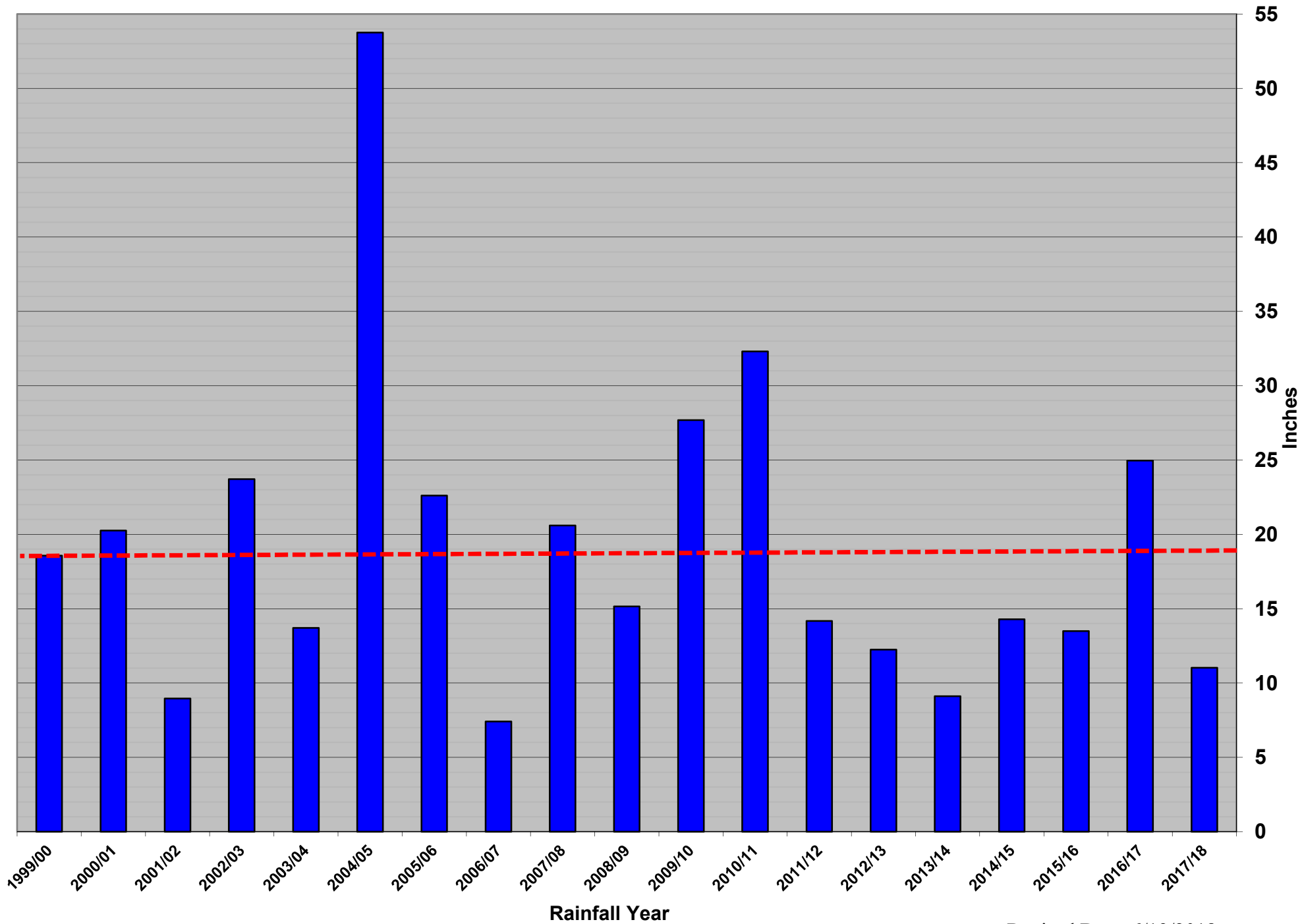


Crescenta Valley Water District 2010-18 Well Capacity Status (MGD)

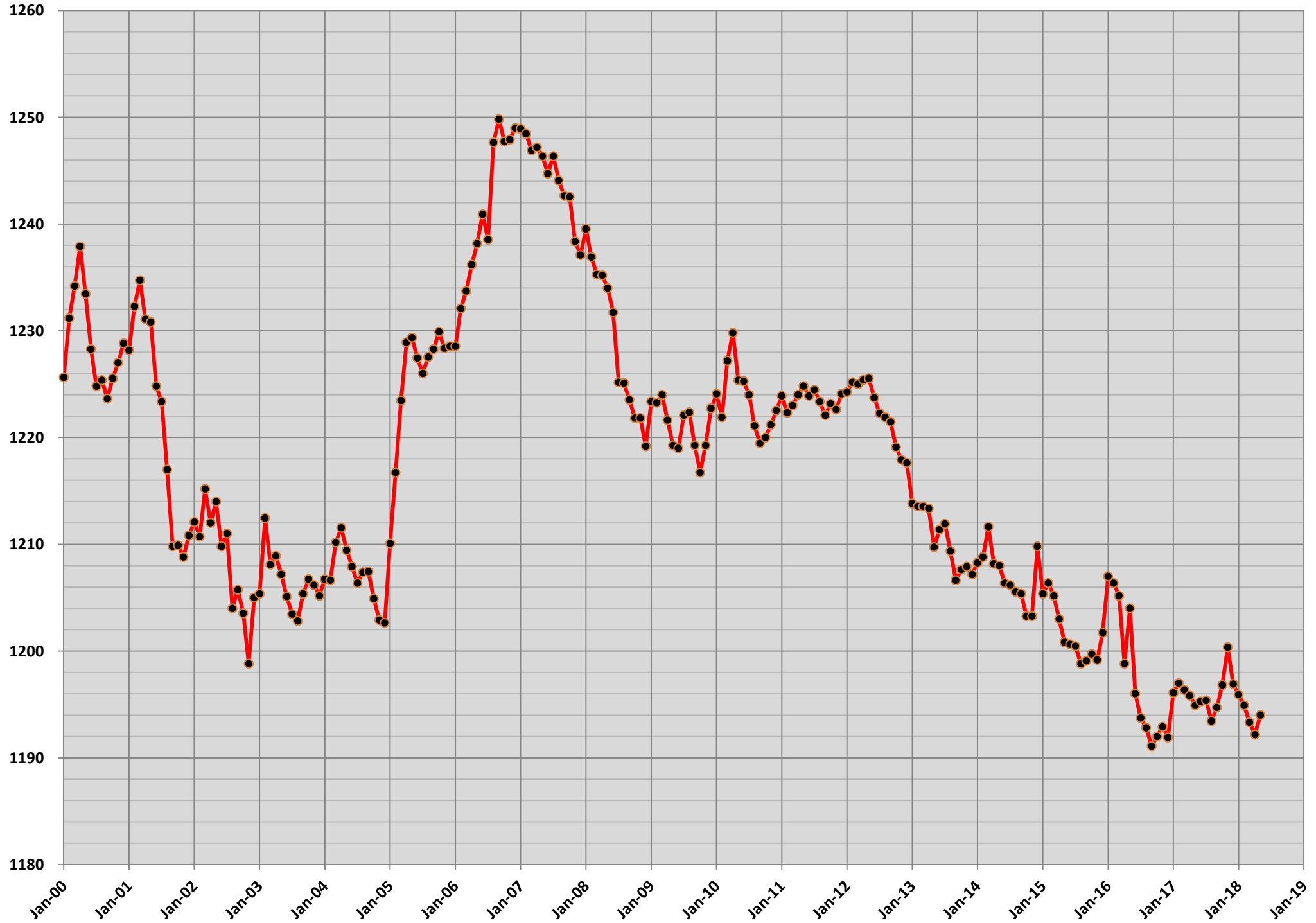


Crescenta Valley Water District

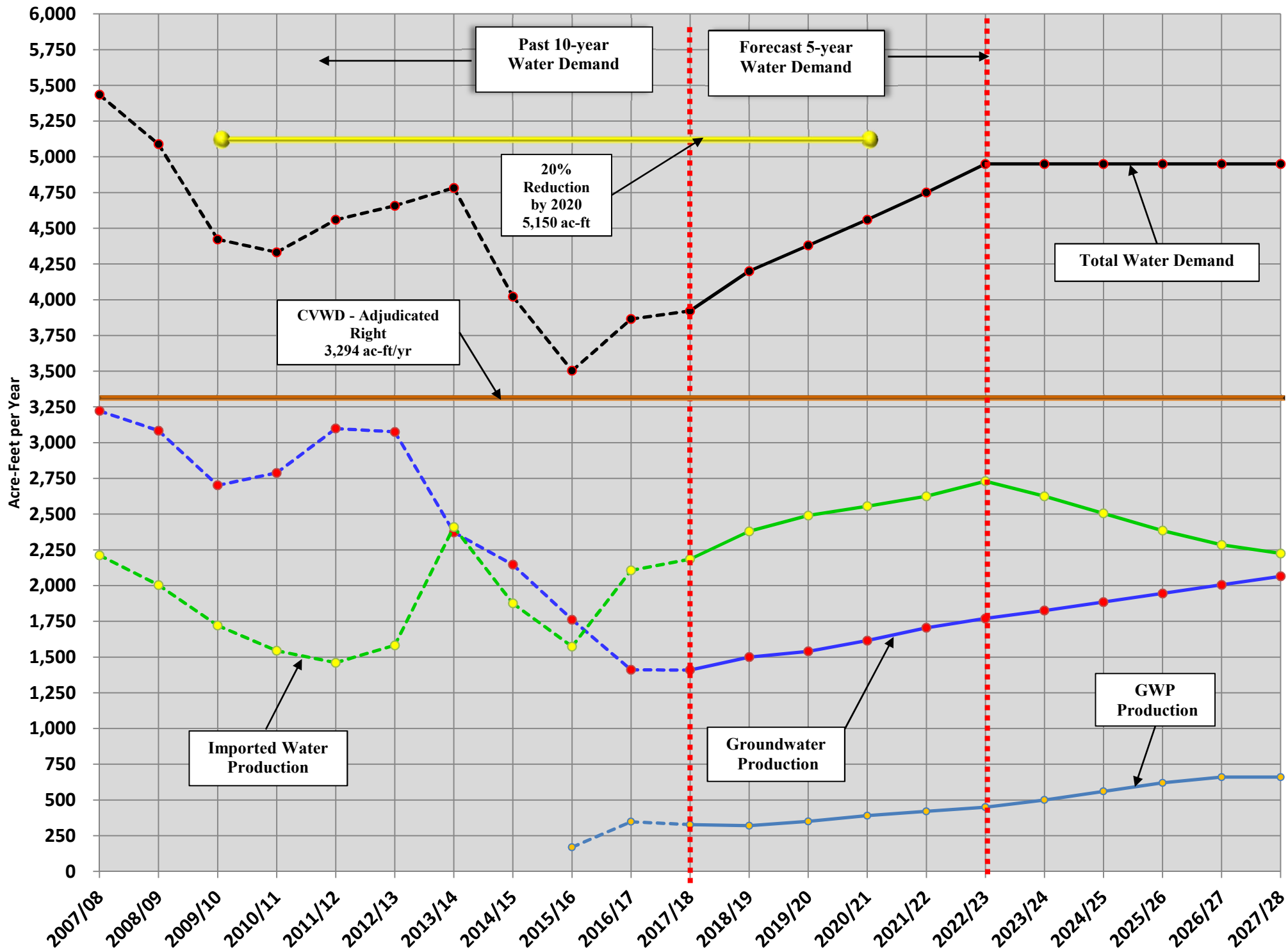
Annual Average Rainfall - 1999/00 to 2016/17 = 19.16"



CVWD - Groundwater Wells - Average Static Water Elevation 2000 - 2018



Water Demand Projections - FY 07/08 to FY 27/28 - Update 6/19/18



Capital Improvement Project Program FY 18-19 Budget - Update 6/19/18				Budget FY 16/17	Recorded FY 16/17	Carryover from FY 16/17 to FY 17/18	Budget FY 17/18	Total Project Budget FY 17/18 with FY 16/17 Carryover	Projected FY 17/18	Project Budget FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24
1. Water Supply															
A. Groundwater															
i. Well Rehabilitation															
	Well 7 Rehabilitation	\$ 60,000	\$ -	\$ -											
	Well 8 Rehabilitation	\$ -	\$ 44,385	\$ -											
	Well 5 Rehabilitation						\$ 60,000	\$ 60,000	\$ 69,388						
	Well 10 Rehabilitation						\$ 85,000	\$ 85,000	\$ 77,800						
	Well 7 Rehabilitation								\$ 75,000						
	Well 14 Rehabilitation								\$ 75,000						
	Well Rehabilitation (2 Wells per year)										\$ 150,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
ii. New Wells															
	Re-Activate Well 2 - Design	\$ 70,895	\$ 92,891				\$ 160,300	\$ 160,300	\$ 99,746	\$ -					
	Re-Activate Well 2 - Construction	\$ 720,000	\$ 224,776	\$ 495,224			\$ 880,000	\$ 1,375,224	\$ 2,037,020	\$ 385,000					
	Well 18 (Sycamore House) - Design														\$ 175,000
iii. Studies															
	Update Water Well Replacement Study														
B. Imported Water															
	Ocean View Chlorination St (Grant - Matching Funds)	\$ 50,000	\$ 4,464												
	Ocean View - Equip. (Grant - Matching Funds)	\$ 40,000	\$ 40,567												
	Ocean View - Elect (Grant - Matching Funds)	\$ 35,000	\$ 30,356												
	Ocean View - Final		\$ 58,073	\$ -			\$ -	\$ -	\$ 51,200						
C. Groundwater Basin Recharge															
	Storm Water Recharge Study (Grant - Matching Funds)	\$ 151,015	\$ 54,286												
	Stormwater Recharge Project - Design														
D. Recycled Water System															
i. Recycled Water															
ii. Membrane Bioreactor Technology															
WS Total		\$ 1,126,910	\$ 549,798	\$ 495,224			\$ 1,185,300	\$ 1,680,524	\$ 2,335,155	\$ 535,000	\$ 150,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 375,000

Capital Improvement Project Program FY 18-19 Budget - Update 6/19/18	Budget FY 16/17	Recorded FY 16/17	Carryover from FY 16/17 to FY 17/18	Budget FY 17/18	Total Project Budget FY 17/18 with FY 16/17 Carryover	Projected FY 17/18	Project Budget FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24
2. Water Storage												
A. Reservoir Rehabilitation												
i. Steel Reservoir Re-Coating/Roof/Vents Rehabilitation												
Oak Creek #1 & #2 - Roof/Air Vents/Recoat	\$ 320,000	\$ 13,689	\$ -	\$ 900,000	\$ 900,000	\$ 503,898	\$ 514,800					
Markridge - Roof/Air Vents/Recoat								\$ 600,000				
Rosemont - Roof/Air Vents/Recoat										\$ 600,000		
Eagle Canyon - Roof/Air Vents/Recoat											\$ 600,000	
ii. Concrete Reservoir Rehabilitation												
Encinal Reservoir - Concrete Rehabilitation								\$ 175,000				
iii. Corrosion Protection												
iv. Overflow & Drain System Upgrade												
Overflow/Drain System Assessment Study												\$ 85,000
B. Reservoir Water Quality												
i. Water Mixing System												
Reservoir Water Quality & Mixing System Study												\$ 125,000
C. New Reservoir Water Storage												
Ocean View #2 Reservoir (Top of Ocean View) - Feasibility Study												\$ 75,000
WS Total	\$ 320,000	\$ 13,689	\$ -	\$ 900,000	\$ 900,000	\$ 503,898	\$ 514,800	\$ 175,000	\$ 600,000	\$ -	\$ 600,000	\$ 810,000
3. Water Distribution												
A. Pipeline Replacement												
2600 Block - Harmony Place - 450 LF	\$ 151,800	\$ 47,080	\$ -									
3900 Block - Park Place - 450 LF	\$ 151,800	\$ 47,080	\$ -									
3900 Block - Glenwood - 650 LF	\$ 151,800	\$ 47,080	\$ -									
2800 Block - Prospect & 4400 Block - Glenwood - 800 LF	\$ 76,435	\$ 121,259	\$ -									
Lower Pickens Canyon Crossing & Slope - 600 LF	\$ 500,000	\$ 534,110	\$ 60,000	\$ -	\$ 60,000	\$ 92,784						
4200 - 4400 Block - Penn - 1,450 LF	\$ 600,000	\$ 176,460	\$ 80,000	\$ 145,000	\$ 225,000	\$ 236,896						
2700 Block - Brookhill - 800 LF				\$ 220,000	\$ 220,000	\$ 198,412	\$ 94,600					
5100 Block of La Crescenta - 400 LF				\$ 100,000	\$ 100,000	\$ 90,190	\$ 42,900					
3000 Block of Brookhill - 800 LF				\$ 220,000	\$ 220,000	\$ 198,412	\$ 94,600					
3100 Block of Brookhill - 800 LF				\$ 220,000	\$ 220,000	\$ 198,412	\$ 94,600					
3200 & 3300 Blocks of Brookhill - 1,600 LF								\$ 640,000				
2400 & 2500 Block of Janet Lee - 1,200 LF								\$ 485,000				
Annual Pipeline Replacement - 3,000 LF									\$ 1,250,000	\$ 1,500,000	\$ 1,500,000	\$ 1,600,000

Capital Improvement Project Program FY 18-19 Budget - Update 6/19/18	Budget FY 16/17	Recorded FY 16/17	Carryover from FY 16/17 to FY 17/18	Budget FY 17/18	Total Project Budget FY 17/18 with FY 16/17 Carryover	Projected FY 17/18	Project Budget FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24
C. Booster Pump System												
i. Annual Pump /Motor Replacement												
Booster 12 at Markridge	\$ 50,000	\$ 31,086	\$ -									
Boosters - Encinal B & C				\$ 45,000	\$ 45,000	\$ 28,000						
Boosters - Glenwood 32 & 33							\$ 75,000					
Boosters - Paschall B								\$ 75,000				
Boosters - Booster 26 at CH									\$ 75,000			
Boosters - Ocean View B & Booster 25 at Markridge										\$ 85,000		
Annual Booster Replacement - 2 Boosters											\$ 75,000	\$ 90,000
ii. Pump Station Upgrade												
Upgrade Paschall Booster Station - Design & Construction	\$ 75,000								\$ 85,000	\$ 450,000		
iv. MCC Replacement												
MCC upgrade at Paschall - - Design & Construction	\$ 75,000								\$ 85,000	\$ 450,000		
D. Pressure Reducing Stations												
E. Miscellaneous Projects												
i. Water Surge Control												
Rehabilitation Surge Tank at Glenwood	\$ 65,000	\$ -						\$ 65,000				
Rehabilitation Surge Tank at Mills Plant								\$ 75,000				
iii. Misc.												
Repairs to Ramsdell Mixing Station		\$ 34,288	\$ 51,000	\$ -	\$ 51,000	\$ 20,000	\$ 205,000					
Mills Plant - Aeration Tower Rehabilitation								\$ 75,000				
WD Total	\$ 1,896,835	\$ 1,038,443	\$ 191,000	\$ 950,000	\$ 1,141,000	\$ 1,063,106	\$ 606,700	\$ 1,415,000	\$ 1,495,000	\$ 2,485,000	\$ 1,575,000	\$ 1,690,000

Capital Improvement Project Program FY 18-19 Budget - Update 6/19/18				Budget FY 16/17	Recorded FY 16/17	Carryover from FY 16/17 to FY 17/18	Budget FY 17/18	Total Project Budget FY 17/18 with FY 16/17 Carryover	Projected FY 17/18	Project Budget FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24
4. Water Treatment															
A. Nitrate Removal															
i. Glenwood															
ii. Mills															
iii. Ordunio															
<i>Replace Bio Remediation AroNite Media at Ordunio</i>															
B. Chlorine Disinfection															
<i>New Chlorination Station at Pickens Canyon Reservoir</i>															
<i>Paschall - New Chlorine Analyzer</i>															
<i>New Chlorination Station at Markridge Reservoir</i>															
C. Convert to Chloramines															
<i>Conversion to Chloramination Disinfection Feasibility</i>															
D. Federal and State Regulations															
<i>TTHM Removal - In-Tank Aeration - Shields & Edmund 2 Reservoirs</i>															
WT Total				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 225,000	\$ 110,000	\$ -	\$ 85,000	\$ 200,000	\$ -
5. Technology															
B. Supervisory Control and Data Acquisition (SCADA) System															
<i>SCADA RTU Replace - Equipment & Integration</i>															
TECH Total				\$ 200,000	\$ 140,054	\$ 61,000	\$ -	\$ 61,000	\$ 21,600	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -
6. Public Safety/Emergency Response															
A. Emergency Electrical Generators															
<i>New Emergency Electrical Generator - Mills Plant</i>															
<i>New Emergency Electrical Generator - Field</i>															
B. Water Storage															
<i>Dunsmore/Pickens - Seismic Sensors & Valve Actuators</i>															
<i>Ordunio - Seismic Sensors & Valve Actuators</i>															
<i>Oak Creek #1 & #2 - Seismic Sensors & Valve Actuators</i>															
<i>Encinal & Ocean View - Seismic Sensors & Valve Actuators</i>															
SF/ER Total				\$ 75,000	\$ 71,886	\$ 25,000	\$ -	\$ 25,000	\$ 1,000	\$ -	\$ 100,000	\$ 205,000	\$ -	\$ 175,000	\$ -

Capital Improvement Project Program FY 18-19 Budget - Update 6/19/18	Budget FY 16/17	Recorded FY 16/17	Carryover from FY 16/17 to FY 17/18	Budget FY 17/18	Total Project Budget FY 17/18 with FY 16/17 Carryover	Projected FY 17/18	Project Budget FY 18/19	Forecast FY 19/20	Forecast FY 20/21	Forecast FY 21/22	Forecast FY 22/23	Forecast FY 23/24
7. Facilities & Planning												
A. Main Office												
Expansion with New Roof with Solar Panels										\$ 125,000		
D. Reservoir Site Improvements												
Ocean View - Site Improvements										\$ 105,000		
Roof for Old Encinal - Storage Bldg								\$ 150,000			\$ 250,000	
Pickens - Access Road Improvements											\$ -	\$ 125,000
6. District Planning												
F & P Total	\$ -	\$ 68,368	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ 230,000	\$ 250,000	\$ 125,000
Capital Improvement Projects - Total	\$ 3,618,745	\$ 1,882,238	\$ 772,224	\$ 3,035,300	\$ 3,807,524	\$ 3,924,758	\$ 2,081,500	\$ 2,100,000	\$ 2,500,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000

FY 18/19 Capital Improvement Project Summary

1. Water Supply	\$ 1,126,910	\$ 549,798	\$ 495,224	\$ 1,185,300	\$ 1,680,524	\$ 2,335,155	\$ 535,000	\$ 150,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 375,000
2. Water Storage	\$ 320,000	\$ 13,689	\$ -	\$ 900,000	\$ 900,000	\$ 503,898	\$ 514,800	\$ 175,000	\$ 600,000	\$ -	\$ 600,000	\$ 810,000
3. Water Distribution	\$ 1,896,835	\$ 1,038,443	\$ 191,000	\$ 950,000	\$ 1,141,000	\$ 1,063,106	\$ 606,700	\$ 1,415,000	\$ 1,495,000	\$ 2,485,000	\$ 1,575,000	\$ 1,690,000
4. Water Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 225,000	\$ 110,000	\$ -	\$ 85,000	\$ 200,000	\$ -
5. Technology	\$ 200,000	\$ 140,054	\$ 61,000	\$ -	\$ 61,000	\$ 21,600	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -
6. Public Safety/Emergency Response	\$ 75,000	\$ 71,886	\$ 25,000	\$ -	\$ 25,000	\$ 1,000	\$ -	\$ 100,000	\$ 205,000	\$ -	\$ 175,000	\$ -
7. Facilities & Planning	\$ -	\$ 68,368	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ 230,000	\$ 250,000	\$ 125,000
Capital Improvement Projects - Total	\$ 3,618,745	\$ 1,882,238	\$ 772,224	\$ 3,035,300	\$ 3,807,524	\$ 3,924,758	\$ 2,081,500	\$ 2,100,000	\$ 2,500,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000

Account Description	Grant Cost Breakdown	Updated Cost Breakdown	Amount Over/Under Budget
Greater Los Angeles County IRWM 2015	\$1,825,000	\$1,825,000	
<i>Amount reimbursed from Grant (39%)</i>	<i>\$705,775</i>	<i>\$705,775</i>	
<i>CVWD Costs (61%)</i>	<i>\$1,119,225</i>	<i>\$1,119,225</i>	
Breakdown of Project Costs			
Approved Contract – Engineering Services - SA Associates	\$197,000	\$276,500	(\$79,500)
Approved Contract – APTwater for ARoNite Nitrate Treatment System	\$625,000	\$691,821	(\$66,821)
Approved Contract – Royal Wholesale Electric for MCC & Switch Board	\$98,547	\$102,737	(\$4,190)
Approved Contract - Construction - CBEC	\$1,245,501	\$1,245,501	\$0
Approved Contract - Construction - 10% Contingency	\$124,550	\$194,997	(\$70,447)
Approved Contract - Quality Control Inspection Services - Cannon	\$141,475	\$141,475	\$0
Quality Control Inspection Services (Additional Services)	\$82,000	\$132,000	(\$50,000)
Approved Contract - SCADA system upgrades - Tesco Controls	\$32,920	\$32,920	\$0
Soil inspection, permitting fees, construction staking, & miscellaneous costs	\$10,007	\$118,992	(\$108,985)
Total Estimated Cost for Design & Construction	\$2,557,000	\$2,936,943	(\$379,943)
Amount Remaining for Well 2 Project	(\$732,000)	(\$1,111,943)	
Transfer of funds from Pipeline Replacement	\$235,000	\$235,000	
Transfer of Funds from CVWD's MTBE Reserves	\$500,000	\$500,000	
FY 18/19 - Well 2 Project Funding		\$385,000	
Remaining Funds	\$3,000	\$8,057	

E-970 - Oak Creek Reservoir - Cost Breakdown

Account Description	Original Amount	FY 16/17	FY 17/18	FY 18/19	Total
FY 16/17 Water CIP– Water Storage - Original Budget	\$900,000.00				
Construction Cost includes Contingency Cost for Alternative Bid	(\$869,600.00)	\$0.00	\$392,207.50	\$432,392.50	\$824,600.00
Specialty Quality Control Inspection Services	(\$80,000.00)	\$0.00	\$76,455.00	\$68,845.00	\$145,300.00
CVWD Construction Administration costs	(\$10,000.00)	\$5,709.42	\$21,415.00	\$13,500.00	\$40,624.42
Engineering Design Services	(\$21,800.00)	\$7,980.00	\$13,820.00	\$0.00	\$21,800.00
Total Cost Estimate	(\$981,400.00)	\$13,689.42	\$503,897.50	\$514,737.50	\$1,032,324.42
Transfer from Water Fund Reserves	\$90,000.00				
Amount Remaining in Water CIP – Water Storage	\$8,600.00			5.2%	(\$50,924.42)

E-982 - 2700, 3000 & 3100 Blocks of Brookhill - Breakdown

ID No.	Location	Total Budget	Percent of Project	FY 17/18 - Cost		ID No.	Location	Percent of Project	FY 18/19 - Cost	Total Cost	
1	2700 Brook	\$270,657.89	29%	\$198,411.88		1	2700 Brook	29%	\$94,577	\$292,989	
2	5000 La Cres	\$123,026.32	13%	\$90,187.22		2	5000 La Cres	13%	\$42,989	\$133,177	
3	3000 Brook	\$270,657.89	29%	\$198,411.88		3	3000 Brook	29%	\$94,577	\$292,989	
4	3100 Brook	\$270,657.89	29%	\$198,411.88		4	3100 Brook	29%	\$94,577	\$292,989	
Total		\$935,000.00	100%	\$685,422.87					\$326,720	\$1,012,143	
Budget Breakdown		\$760,000.00									
Water Reserves		\$175,000.00									
Total Budget		\$935,000.00	Percent over budget						8%	\$1,012,143	

Crescenta Valley Water District

FY 18/19 Capital Improvement Project Program Cost Estimate and Funding Levels

Capital Improvement Project Program	Budget FY 18/19	Category	Priority A, B, & C	Priority Level	Cumulative Costs	Project Description
<i>Well 7 & 14 Rehabilitation</i>	\$ 150,000	Water Supply	A	1	\$ 150,000	Remove & Inspect Well Pump & Casing, Chemical Treatment Well Casing, Pump Test, New Pump & Motor Increase Well Capacity for 2 wells
<i>Re-Activate Well 2 - Construction</i>	\$ 385,000	Water Supply	A	2	\$ 535,000	Re-activate Well 2 with Nitrate Removal Treatment System - Costs to complete final phase of project
<i>Oak Creek #2 - Roof/Air Vents/Recoat</i>	\$ 514,800	Water Storage	A	3	\$ 1,049,800	Reservoir Rehabilitation - Revised costs to complete Oak Creek #2 during low demand (Winter) season
<i>2700, 3000, 3100 Blocks of Brookhill</i>	\$ 326,700	Water Distribution	A	4	\$ 1,376,500	Water Main Replacement - Revised costs to complete the pipeline project
FY 18/19 - Preliminary Budget - Projects 1 - 4 - 6.9%						
<i>Repairs to Ramsdell Mixing Station</i>	\$ 205,000	Water Distribution	A	5	\$ 1,581,500	Install a New Pressure Control Valve and Vault - improve water quality and chlorination
<i>New Chlorination Station at Pickens Canyon Reservoir</i>	\$ 75,000	Water Quality	A	6	\$ 1,656,500	Install new Sodium Hypochlorite disinfection system for Pickens Canyon Tunnel with chlorine analyzer
<i>Boosters - Glenwood Booster 32 & 33</i>	\$ 75,000	Water Distribution	A	7	\$ 1,731,500	Replace Glenwood Booster 32 & 33 with a new 800 gpm pump assembly and 40 HP motor
<i>Water Aeration System - Shields and Edmund 2 Reservoirs</i>	\$ 150,000	Water Quality	A	8	\$ 1,881,500	Install In-Tank Aeration System for TTHM Removal at Shields & Edmund 2 Reservoirs
<i>SCADA RTU Replace - Equipment & Integration</i>	\$ 200,000	Technology	A	9	\$ 2,081,500	Replacement of SCADA System - Replacement of RTU/PLC Equipment
FY 18/19 - Preliminary Budget - Projects 1 - 9						
<i>Rehabilitation Surge Tank at Glenwood Plant</i>	\$ 65,000	Water Distribution	B	10	\$ 2,146,500	Rehabilitation surge tank including replacement of piping & appurtenances and recoating of interior
<i>Paschall - New Chlorine Analyzer</i>	\$ 40,000	Water Quality	B	11	\$ 2,186,500	Install New Chlorine Analyzer at Paschall to aid in monitoring breakpoint chlorination
<i>3200 & 3300 Blocks of Brookhill - 1,600 LF</i>	\$ 640,000	Water Distribution	B	12	\$ 2,826,500	Replace 71 year old 4" pipeline with 8 leaks in the last 7 years with a new 8-inch water main with new fire hydrants - 1,600 LF
<i>2400 & 2500 Block of Janet Lee - 1,200 LF</i>	\$ 485,000	Water Distribution	B	13	\$ 3,311,500	Replace 67 year old 6" pipeline with new 8-inch water main and replace water services with yoke assemblies (part of water meter replacement program) - 1,150 LF
<i>Installation of New Surge Tank at Mills Plant</i>	\$ 75,000	Water Distribution	B	14	\$ 3,386,500	Installation of new surge tank including piping & appurtenances
<i>Ordunio - Seismic Sensors & Valve Actuators</i>	\$ 100,000	Public Safety/ Emerg. Resp.	B	15	\$ 3,411,500	Install New Seismic Sensor & Valve Actuator on Ordunio Reservoir Inlet/Outlet Valves
<i>Encinal Reservoir - Concrete Rehabilitation</i>	\$ 175,000	Water Storage	B	16	\$ 3,561,500	Inspection and rehabilitation of Concrete Reservoir - Work during winter season. Last rehabilitation - 1983
<i>Upgrade Paschall Booster Station & MCC upgrade - Design</i>	\$ 170,000	Water Distribution	C	17	\$ 3,731,500	Design Services for upgrading the Paschall Booster Station and replacement/upgrade of Motor Control Center
<i>Stormwater Recharge Project - Design</i>	\$ 150,000	Water Supply	C	18	\$ 3,881,500	Preliminary Design, Grant Application and Coordination with stakeholders for Proposed Stormwater Recharge Project at CVC Park
<i>Ocean View - Site Improvements - Design</i>	\$ 105,000	Facilities & Planning	C	19	\$ 3,986,500	Design services for improvements for site drainage, street accessibility and use for storage
<i>Roof for Old Encinal - Storage Bldg - Design & Construction</i>	\$ 150,000	Facilities & Planning	C	20	\$ 4,136,500	Design and construction of new roof and appurtenances to convert old reservoir to storage facility.
Projects Postponed until FY 19/20 or Later						

Cash Flows - Water Fund	Recorded	Recorded	Budgeted	Projected	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Revenue										
Water Sales - Service, Fixed ¹	1,985,993	2,305,004	2,690,000	2,730,955	3,015,569	3,269,765	3,530,332	3,811,664	4,115,416	4,443,373
Water Sales - Metered, Variable ²	5,952,066	6,632,864	7,878,000	8,198,000	8,718,098	9,319,646	9,962,702	10,650,128	11,384,987	12,170,551
Interest Income - Water Reserve ³	272,474	180,134	241,000	245,000	165,000	165,000	165,000	165,000	165,000	165,000
Interest Income - MTBE Reserve	103,498	115,000	-	6,575	76,000	76,000	76,000	76,000	76,000	76,000
Other Income - Water ⁴	138,183	132,964	96,374	128,600	96,374	96,374	96,374	96,374	96,374	96,374
Construction Revenues ⁵	872,193	807,081	1,102,241	370,800	849,281	389,281	389,281	389,281	389,281	389,281
Total Revenue:	9,324,407	10,173,047	12,007,615	11,679,930	12,920,321	13,316,066	14,219,689	15,188,448	16,227,058	17,340,580
O&M Expense										
Labor & Benefits	2,706,328	2,970,119	3,048,300	2,987,334	3,233,186	3,237,985	3,242,907	3,247,956	3,253,135	3,258,446
Purchased Water (FMWD)	2,454,524	3,045,346	3,090,000	3,356,400	3,700,900	3,834,600	4,011,350	4,226,250	4,504,500	4,528,125
Purchased Water (GWP)	49,036	150,944	156,000	154,600	160,000	179,375	204,872	226,147	248,358	282,852
Power Purchases	673,699	694,548	697,000	693,000	710,325	728,083	742,645	757,498	772,648	772,648
Operating Expenses	1,930,258	1,766,416	2,174,011	2,122,011	2,333,300	2,393,966	2,456,209	2,520,070	2,585,592	2,652,818
Total O&M Expense:	7,813,844	8,627,373	9,165,311	9,313,345	10,137,711	10,374,009	10,657,983	10,977,921	11,364,232	11,494,889
Debt Service	615,000	615,000	615,000	576,000	550,000	550,000	550,000	550,000	550,000	550,000
Cash Available for Capital	895,563	930,674	2,227,304	1,790,585	2,232,611	2,392,058	3,011,707	3,660,527	4,312,826	5,295,691
Capital, OPEB & Other Commitments										
CIP - PayGo	2,941,096	2,335,400	3,842,500	3,931,700	1,376,500	2,100,000	2,500,000	3,000,000	3,000,000	3,000,000
Capital Outlays & Equipment	26,180	45,177	120,000	120,000	173,800	145,687	155,221	149,178	136,584	141,364
OPEB Commitment	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Total Capital, OPEB & Other Commitments:	3,067,276	2,480,577	4,062,500	4,151,700	1,650,300	2,345,687	2,755,221	3,249,178	3,236,584	3,241,364
Increase (Decrease) to Cash	(2,171,713)	(1,549,903)	(1,835,196)	(2,361,115)	582,310	46,371	256,486	411,349	1,076,242	2,054,327
Effective date of water rates	7/1/15	7/1/16	7/1/17	7/1/17	7/1/18	7/1/19	7/1/20	7/1/21	7/1/22	7/1/23
Historical/projected rate increase	5.7%	5.2%	7.2%	7.2%	6.9%	6.9%	6.9%	6.9%	6.9%	6.9%
Service rates (\$/month for 3/4" meter)	\$19.10	\$20.53	\$23.96	\$23.96	\$25.61	\$27.38	\$29.27	\$31.29	\$33.45	\$35.76
Quantity Charge: (\$/kgal for 1st 10,000 gallons)	\$4.61	\$4.39	\$4.58	\$4.58	\$4.90	\$5.23	\$5.59	\$5.98	\$6.39	\$6.83
Reserve Fund Balances										
Beginning Balance	4,048,384	3,719,947	3,170,820	3,170,820	1,309,705	1,892,015	1,938,386	2,194,873	2,606,222	3,682,464
From MTBE Fund (Transfer In)	2,000,000	1,000,000	500,000	500,000	-	-	-	-	-	-
Re-Payment of MTBE Fund (Transfer Out)			-	-	-	-	-	-	-	-
Ending Balance	3,719,947	3,170,820	1,835,624	1,309,705	1,892,015	1,938,386	2,194,873	2,606,222	3,682,464	5,736,791
Target	3,130,000	3,313,000	3,707,000	3,707,000	3,976,000	4,140,000	4,315,000	4,501,000	4,698,000	4,907,000
Above (Below) Target	589,947	(142,180)	(1,871,376)	(2,397,295)	(2,083,985)	(2,201,614)	(2,120,127)	(1,894,778)	(1,015,536)	829,791