

CRESCENTA VALLEY WATER DISTRICT

**2700 Foothill Boulevard
La Crescenta, California**

**Agenda for the
Adjourned Regular Meeting of the Board of Directors
of the Crescenta Valley Water District
to be held on Tuesday, May 28, 2019 at 7:00 p.m.**

Posted: May 24, 2019 at 3:00 p.m.

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

Call to Order and Determination of Quorum

Pledge of Allegiance

Adoption of Agenda

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

Foothill Municipal Water District Report

1. Report on activities at Foothill Municipal Water District.

Consent Calendar

1. Consideration and approval of Minutes of the Regular Meeting on May 14, 2019.
2. Consideration and approval of Minutes of the Budget Workshop on May 21, 2019.
3. Ratification of disbursements for April 2019.

Action Calendar

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

1. **Public Financing Options** – Presentation by Mr. Julio Morales of Urban Futures, Inc. on various finance options available to the District.
2. **FY 2019/20 Water and Wastewater Budgets** – Review of Draft FY 2019/20 Water and Wastewater Budgets.
3. **Valve Replacement and Appurtenances on Pennsylvania Ave, Project E-1003** – Consideration and motion to authorize the General Manager to award a contract to Toro Enterprises, Inc. for installation of 12-inch valve on Pennsylvania Ave as part of the City of Glendale Pavement Restoration Project at a cost of \$80,000 and establish a contingency amount of \$8,000 (10% of contract) to cover the cost of unforeseen or additional work.
4. **Pump Replacement and Casing Rehabilitation of Wells 1 & 7, Project E-999** – Consideration and motion to authorize the General Manager to amend the contract with General Pump Company, Inc. for repair of the casing at Well 7 at a cost of \$5,672 to cover the cost of unforeseen or additional work

5. **TTHM Mitigation and Disinfection Process Upgrades, Project E-995**
- a) Consideration and motion to amend the action of the Board on September 25, 2018 to transfer \$500,000 (not \$410,000) from the MTBE reserve fund for the operation and maintenance costs necessary for the conversion to chloramines.
 - b) Consideration and motion to waive the Bid Procurement and Purchasing Policy per Article 18.01 of CVWD's Rules and Regulations and allow the General Manager to select and negotiate with consultants and contractors for the operations and maintenance for the new chloramination systems at a cost not to exceed \$90,000.
 - c) Discussion and update of CVWD's TTHM study and disinfection process upgrades

Information Items

Written Communications to District/Board

General Manager's Report

Attorney Report

Reports of Committees

- **Engineering Committee**
- **Finance Committee**
- **Employee Relations Committee**
- **Policy Committee**
- **Community Relations/Water Conservation Committee**
- **Emergency Planning Committee**

Director's Oral Reports

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

Closed Session

Conference with Labor Negotiators - \$54957.6

- District negotiators: Nem Ochoa, Ron Mitchell, and James Lee
- Employee organization: AFSCME

Board Members' Request for Future Agenda Items

Adjournment

CRESCENTA VALLEY WATER DISTRICT

REGULAR MEETING, BOARD OF DIRECTORS

May 14, 2019

Pursuant to the order of the Board of Directors of the Crescenta Valley Water District, made at the Adjourned Regular Meeting of April 23, 2019, a Regular Meeting was held on May 14, 2019 at 7:00 p.m. at the District office at 2700 Foothill Blvd., La Crescenta, California, with President James D. Bodnar presiding.

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

Directors:	James D. Bodnar Michael L. Claessens Kerry D. Erickson Kenneth R. Putnam Judy L. Tejeda
Attorney:	Thomas S. Bunn
General Manager:	Nem Ochoa
Secretary-Treasurer:	Ron L. Mitchell
District Engineer:	David S. Gould
Others Present:	Wendy Holloway, Customer Service Supervisor Dennis Maxwell, Operation & Maintenance Mgr. James Lee, Finance & Accounting Manager Arturo Montes, Accountant Brook Yared, Senior Engineer

PLEDGE OF ALLEGIANCE

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

ADOPTION OF AGENDA

It was moved by Director Putnam, seconded by Director Erickson and carried by a 5-0 vote that the Agenda for the Regular Meeting of May 14, 2019, be amended to add a personal matter to the Closed Session that came up after the posting of the agenda and required immediate action.

PUBLIC COMMENT – On behalf of the Board, President Bodnar presented a Resolution of Appreciation to Director Claessens for his years of service and wished him well in his future endeavors.

FOOTHILL MUNICIPAL WATER DISTRICT REPORT – No Report

CONSENT CALENDAR

It was moved by Director Erickson, seconded by Director Tejeda and carried by a 5-0 vote to approve the Minutes of the Adjourned Regular Board meeting held on April 23, 2019.

ACTION CALENDAR

Graphical Information Systems (GIS) Services, Project M-1001 – Mr. Gould reported that one of the Engineering Department's goals is to update the GIS system with current staff as time allowed. However,

due to the number of new developer projects and O&M projects that have increased over the year, staff has not been able to fully concentrate on the detailed work necessary to update the GIS system. Staff has met with Miller Spatial Services (Miller) which provides GIS support who provided a proposal with a scope of work that includes reviewing CVWD's existing GIS system, data hosting, updating the base information and integration with the District's CIS system. This item was reviewed with the Engineering Committee on April 26, 2019 and the Committee recommended award of the project to Miller Spatial at a cost of \$31,175 with a contingency amount of \$3,117 (10% of contract).

Following discussion:

It was moved by Director Putnam, seconded by Director Erickson and carried by a 5-0 vote to authorize the General Manager to enter into an agreement with Miller Spatial Services, LLC to provide GIS support services to upgrade CVWD's GIS system at a cost of \$31,175 and establish a contingency amount of \$3,117 (10% of contract) to cover the cost of additional work.

TTHM Study and Disinfection Process Upgrades, Project E-995 – Mr. Gould reported that the concrete vault was delivered on May 3, 2019 and the crews completed the installation on the same day. They have also installed a 14-inch valve and piping and our field crews are continuing with the installation of the new chlorine analyzers. Staff met with WQTS on May 8, 2019 and put together the tasks for the submittal to DDW for amending our permit. Mr. Gould reported that the TTHM levels have gone up in the past week due to the FMWD main break and that the dead-end main flushing by ValveTek was completed on May 3, 2019.

Advanced Metering Infrastructure (AMI) Consulting Services, Project E-998 – Mr. Gould reported on April 9, 2019 UtiliWorks gave a presentation for the AMI business case and the Board requested staff look into making the overall project scalable. Staff spoke with UtiliWorks and asked that a Request for Proposal (RFP) to vendors for the procurement and installment of the AMI communications network be prepared but not sent out. Staff wants to have it ready to be sent out to vendors, but is waiting for final discussion and Board approval regarding CIP and how far we are going to proceed with the AMI program. UtiliWorks has given staff a proposal in the amount of \$28,900 to do this work. Staff is trying to have this completed by the end of July 2019.

Following discussion:

It was moved by Director Bodnar, seconded by Director Claessens and carried by a 5-0 vote to authorize the General Manager to enter into an agreement with UtiliWorks Consulting, LLC to provide consulting services for the procurement of the AMI communications network as part of the District's AMI program at a cost of \$28,900 and establish a contingency amount of \$2,890 (10% of contract) to cover the cost of additional work.

Installation of New Standby Emergency Electrical Generator, Project C-933 – Mr. Yared reported that on May 1, 2019 staff sent a request for quotes for the installation of a new diesel generator at the main office to replace the portable emergency generator with a new stationary emergency generator. A mandatory pre-bid meeting was held on May 7, 2019, which was attended by two (2) contractors. On May 10, 2019 staff opened the bids and found that Affordable Generator Services, Inc. was the lowest bidder at a cost of \$80,337, with a contingency amount of \$8,033 (10% of contract) to cover the cost of

unforeseen or additional work. Staff also asked the Board to find this project exempt from the provisions of the California Environmental Quality Act (CEQA).

Following discussion:

It was moved by Director Claessens, seconded by Director Putnam and carried by a 4-0-1 (Tejeda abstained) vote to authorize the General Manager to award a contract to Affordable Generator Services for the installation of a new stand-by emergency electrical generator at CVWD's office for a cost of \$80,337, establish a contingency amount of \$8,033 (10% of contract) to cover the cost of unforeseen or additional work, and to find said project exempt from the provisions of the California Environmental Quality Act (CEQA).

FY 2019/20 Water & Wastewater Budgets – Director Bodnar requested to have a Budget Workshop on May 21, 2019 at 6:30 p.m.

Transfer of MTBE Funds – Mr. Ochoa reported on the ways MTBE Funds have been used in the past starting in 2014/2015 by moving it into the General Fund. These funds were used to fund the District's CIP program and to pay down OPEB liabilities. Each time this had to be approved by the Board of Directors for the transfer. By transferring the MTBE fund to the General Fund it will show a positive impact on the water reserve balance.

Following discussion:

It was moved by Director Bodnar, and seconded by Director Putnam to authorize staff to transfer the remaining MTBE Reserve funds of approximately \$3.75 million into the Water Reserve fund.

Following further discussion:

Director Bodnar amended the motion and carried by a 3-1 (Erickson) – 1 (Claessens abstained) vote to transfer the balance of the MTBE Fund of \$3.75 million to the Water Reserve Fund and stipulate that these funds will not be taken out the Water Reserve Fund without prior Board approval.

Director Recruitment – The Board discussed the process for the interviews for the Board opening and decided to hold interviews on May 23, 2019 at 6:30 p.m. and on May 29, 2019 at 6:30 p.m. The Board also reviewed the questions to be asked.

INFORMATION ITEMS – CV Weekly – CVWD Proposes Raising Rates and Signatures needed to submit comments to CVWD.

WRITTEN COMMUNICATIONS TO DISTRICT – Letter from La Canada Irrigation District thanking CVWD for providing water to LCID customers during FMWD's main break.

REPORTS OF PERSONNEL

GENERAL MANAGER- Mr. Ochoa reported that Director Bodnar had contacted the office regarding his meter stating he didn't think it was working properly. Staff went out and found the meter was not working. Staff replaced the meter and found the meter had roots inside the meter.

Mr. Gould reported on the water production for April 2019 saying that we produced 107.9 MG for this time period, with an average use of 5.6% greater than 2018 and 1.2% greater than the 5-year average.

Rainfall is 0.19” for April and the total for the Rainfall year 2018/19 is 29.67”.

For the projects, Oak Creek #1 and #2 are completed. Well #1 is complete and on Well #7 has been pulled. On Well #2, staff has been working with DDW for approval and today we received the draft permit for review. At the ACWA Conference last Thursday, we were nominated for the Clair A. Hill award, but we finished in second place. Also, the City of Glendale wants to put retractable bollards on Honolulu Avenue.

ATTORNEY- No Report

REPORTS OF COMMITTEES

Engineering Committee – Director Erickson reported that the Committee met on April 26, 2019 at 3:30 p.m. and reviewed the Status of Groundwater Wells and Well Capacity, GIS Upgrades, AMI Project update, and the FY 19/20 CIP Program.

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

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

Policy Committee – Director Claessens reported that the Committee had not met; however, a meeting will be scheduled as needed.

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

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

Executive Committee – Director Bodnar reported that the Committee met on May 3, 2019 and discussed the schedule for the budgets and Proposition 218, the recruitment of a new Board member, and an update on the General Manager goals and objectives.

DIRECTORS ORAL REPORT

Director Bodnar reported he attended the Crescenta Valley Hometown Country Fair on April 27th, and gave his appreciation to staff for a job well done.

Director Claessens reported that this is his last Board meeting and it has been a pleasure. It has been extremely enjoyable experience and he has enjoyed working with the directors, staff and legal counsel.

Director Tejeda reported she attended the JPIA portion of the ACWA Conference last week and one of the sessions was on sexual harassment prevention. They discussed bullying, harassment, and not to be a bystander, but to intervene if necessary and report it.

Director Putnam reported on an article in CV Weekly regarding water quality issues. He said the article stated that CVWD does not have the problem due to CV wells being below bedrock.

Director Erickson thanked the other directors for letting him attend the ACWA Conference. He attended many sessions including one on water finance rates and regulatory trends. The presenter said that the California average rate increases was 6% over the last 10 years. Other session were on success of getting the message out to support increases, grants for AMI, pension & vested rights, social networks, and ethics training.

CLOSED SESSION – No reportable action

ADJOURNMENT

There being no other business to come before the Board, at 9:55 p.m. it was moved by Director Tejada, seconded by Director Erickson and carried by a 5-0 vote that the meeting be adjourned in honor of Director Claessens to May 28, 2019 at 7:00 p.m.

APPROVED:

James D. Bodnar
President

Ron L. Mitchell
Secretary-Treasurer

CRESCENTA VALLEY WATER DISTRICT

WATER AND WASTEWATER BUDGET WORKSHOP

May 21, 2019

A Budget Workshop was held regarding the Water/Wastewater Budgets for FY 2019/20 on May 21, 2019 at 6:30 p.m. at the District office located at 2700 Foothill Blvd., La Crescenta, California, with President James D. Bodnar presiding.

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

Directors:

James D. Bodnar
Kerry D. Erickson
Kenneth R. Putnam (arrived late)
Judy L. Tejeda

Attorney:

Andrew Turner

General Manager:

Nem Ochoa

Secretary-Treasurer:

Ron L. Mitchell

District Engineer:

David S. Gould

Others Present:

Mark Hass, IT Manager
Christy Scott, Program Specialist
Wendy Holloway, Customer Service Supervisor
James Lee, Accounting & Finance Manager
Dennis Maxwell, Operations & Maintenance Manager
Arturo Montes, Accountant
Brook Yared, Senior Engineer

ADOPTION OF AGENDA

It was moved by Director Erickson, seconded by Director Tejeda and carried by a 3-0 vote that the Agenda for the Water and Wastewater Budget Workshop of May 21, 2019, be adopted as presented.

ACTION CALENDAR

FY 2019/20 Water and Wastewater Budget – Mr. Ochoa opened the meeting by reviewing an outline of the presentation for the FY 2019/20 Water and Wastewater Budgets. Mr. Lee gave a presentation on the FY 2018/19 financial trends and how the projected year-end revenues, expenses, and reserves project to finish. He then began discussing the FY 2019/20 Budget for each department showing increases and decreases to expenses and providing explanations to help the Board understand the changes from the previous fiscal year.

Mr. Gould gave a presentation of the CIP projects and how they are prioritized as A (highest), B, or C (lowest). The Board directed staff to include only the “A” projects in the budget. The Board discussed the overall water budget with staff and requested them to reduce the O & M budget by another 10%.

ADJOURNMENT

There being no other business to come before the Board, at 9:16 p.m. it was moved by Director Erickson, seconded by Director Tejeda and carried by a 4-0 vote that the Budget Workshop be adjourned.

APPROVED:

James D. Bodnar
President

Ron L. Mitchell
Secretary-Treasurer

CASH DISBURSEMENTS LIST

APRIL 2019



<u>Check#</u>	<u>Check Date</u>	<u>Payable To</u>	<u>Description</u>	<u>Water Amount</u>	<u>Wastewater Amount</u>
0	4/25	CalPERS	Contributions for 03/2019	24,121.45	14,385.54
0	4/9	Los Angeles County Public Works	Excavation permit for 5846 Freeman	535.00	
0	4/24	Southern California Edison	Purchased power - 3/2019	12,865.08	234.40
0	4/24	Los Angeles County Public Works	Excavation permit for various locations	2,675.00	
0	4/30	Los Angeles County Public Works	Excavation permit for 2547 Mayfield	535.00	
39062	4/9	ACV Systems, LLC	Rebuild pressure reducing valve @ Markridge Booster station	1,647.66	
39063	4/9	ACWA Joint Powers Ins Authority	Group Health for 05/2019	38,444.10	24,979.58
39064	4/9	ACWA/JPIA	Workers Comp - 10/01/18 to 12/31/18	8,369.47	5,579.64
39065	4/9	ADS, LLC	Monthly sewer monitoring 03/2019		1,750.00
39066	4/9	Affordable Generator Services, Inc.	Generator rental for main office 2/21/19 to 3/31/19	922.42	307.48
39067	4/9	Airgas National Carbonation	Carbon Dioxide cylinder rental Well 2 03/2019	55.00	
39068	4/9	Airgas USA, LLC	Monthly cylinder rental 03/2019	225.38	225.37
39069	4/9	All American Landscape Co.	Monthly landscape office 04/2019	262.50	87.50
39070	4/9	American Water Works, Inc	Misc tools	205.05	68.35
39071	4/9	Ameripride Uniform Services, Inc	Uniform rentals 03/2019	746.90	248.97
39072	4/9	Anawalt Lumber & Materials Co.	Misc Hardware 03/2019	703.65	5.58
39073	4/9	Apex Manufacturing Solutions	E-995 - Programming for SCADA	12,187.50	
39074	4/9	Aqua - Metric Sales, Co.	3 - 1.5" Omni C2 meters	4,806.70	
39075	4/9	ARC	Monthly MPS billing 03/2019	830.53	276.84
39076	4/9	AT&T	Voice communication 03/2019	286.82	95.60
39077	4/9	Acorn Tree Service	Well #7, clear weeds and remove tree branches	1,454.37	125.63
39078	4/9	BC Laboratories, Inc	Water analysis	9,219.75	
39079	4/9	BC Laboratories, Inc	Water analysis	3,695.00	
39080	4/9	CCS Interactive, Inc.	Monthly website hosting 04/2019	78.75	26.25
39081	4/9	Cerdant, Inc.	Network security 04/2019	206.25	68.75
39082	4/9	Jay Chong	Refund Check	100.00	
39083	4/9	City of Glendale	Well 16 lease and water purchase for June 2018	11,989.91	
39084	4/9	City of Glendale Water & Power	Power purchased At Dunsmore Reservoir 03/2019	268.09	

<u>Check#</u>	<u>Check Date</u>	<u>Payable To</u>	<u>Description</u>	<u>Water Amount</u>	<u>Wastewater Amount</u>
39085	4/9	City of LA Bureau Sanitation	Sewerage facilities changes Jan/Feb 2019		4,021.84
39086	4/9	Core & Main	3" Octave meter for stock	1,497.89	
39087	4/9	Cortech Engineering	E-995 - Liquid ammonia sulfate skid	32,685.75	
39088	4/9	Dataprose LLC	Printing & Postage Control 1-4 03/2019	1,474.81	1,474.82
39089	4/9	Dell Financial Services	Lease contract 05/2019	727.71	242.57
39090	4/9	Dell Financial Services	Software renwal for 2019	10,457.49	3,485.82
39091	4/9	Do-it Center	Misc hardware 03/2019	852.64	43.48
39092	4/9	Eurofins Eaton Analytical Inc.	Water analysis	826.00	
39093	4/9	Eurofins Eaton Analytical Inc.	Water analysis	4,660.00	
39094	4/9	Fire Master, Dept. 1019	Hydro test 2 extinguishers	85.29	28.43
39095	4/9	First Choice	Coffee service Plant & Office 04/2019	213.09	213.08
39096	4/9	Grainger	E-995 - Materials, Pro press adapters and elbows	165.95	
39097	4/9	Gsolutionz Professional Services	Landline support 04/2019	330.84	110.27
39098	4/9	Harper & Associates Eng, Inc	E-970 - Services through 01/2019	13,963.00	
39099	4/9	Home Depot Credit Services	Misc hardware for 03/2019	479.51	
39100	4/9	Impact LA LLC	Cost for copies 03/2019	9.82	9.81
39101	4/9	Industrial Metal Supply Co	E-995 - Steel pipe & caps for vaults	1,432.50	
39102	4/9	J's Maintenance	Janitorial service 03/01/19 to 03/31/19	793.50	264.50
39103	4/9	KR Nida Companies	Unit #45 - Install back up camera	961.32	320.43
39104	4/9	James Lee	Reimbursement for GFOA Training Academy	1,547.43	515.80
39105	4/9	Logan Supply Co. Inc	Misc. shop supplies	407.69	407.69
39106	4/9	Newegg, Inc.	Security system hardware	2,907.77	969.20
39108	4/9	O'Reilly Auto Parts	Misc supplies 03/2019	199.05	71.33
39109	4/9	Office Depot - Credit Plan	Misc supplies 03/2019	516.08	332.69
39110	4/9	Paper Cuts, Inc	Paper shredding 03/2019	26.88	26.87
39111	4/9	Ramco	Crushed misc base and mixed bobtail 03/2019	1,559.26	
39112	4/9	Robert Brkich Const. Corp	E-982 - Final payment	47,937.99	
39113	4/9	Chloe Roland	Refund Check	18.10	
39114	4/9	Royal Industrial Solutions-Chatsworth	E-995 - Electrical equipment	969.38	
39115	4/9	Simpler Systems	Monthly maintenance fee 04/2019	375.00	125.00
39116	4/9	Spencer Simpson	Refund Check	8.38	
39117	4/9	Southland Pipe Corp.	D-16-82 & D-17-61 - 4" pipe 10 gauge with weld bells	3,974.86	
39118	4/9	Spectrum Business	Data Communications 03/2019 Mills Plant	2,204.45	734.82
39119	4/9	Spectrum Business	Data Communications 03/2019 Office	2,138.78	712.92
39120	4/9	Stemar Equipment & Supply Co.	E-995 - SCADA equipment	1,583.40	

<u>Check#</u>	<u>Check Date</u>	<u>Payable To</u>	<u>Description</u>	<u>Water Amount</u>	<u>Wastewater Amount</u>
39121	4/9	The Gas Company	Gas purchased 03/2019 Plant & Mills house	157.01	52.34
39122	4/9	Tri-Xecutex Corp	Repair alarm system at Mills House	352.69	117.56
39123	4/9	Underground Service Alert/SC	Underground notifications for 03/2019	170.85	56.95
39124	4/9	Valvetek Utility Services, Inc	E-995 - Dead-end main line flushing 03/11 to 03/15/19	17,930.00	
39125	4/9	Waste Management - Sun Valley	Disposal service 04/2019 Plant & Office	865.96	288.65
39126	4/9	Western Water Works	Stock - Misc materials, meter boxes and lids	3,168.97	62.96
39127	4/9	Wood Environment & Infrastructure	M-980 - Service through 03/01/2019	3,448.00	
39128	4/23	ACV Systems, LLC	Well #10 - Rebuild pressure sustaining valve	3,626.33	
39129	4/23	ACWA/JPIA	Workers Comp for 01/2019 to 03/2019	9,468.29	6,312.20
39130	4/23	Advanced Industrial Serv. Inc	E-970 - Progress payment #3	55,550.00	
39131	4/23	Affordable Generator Services, Inc.	Emergency generator for main office 01/24/19 to 02/21/19	922.42	307.48
39132	4/23	Aflac	Employee paid insurance 04/2019	1,707.21	
39133	4/23	Henrik Aghaberyan	Refund Check	23.74	
39134	4/23	Airgas USA, LLC	Welding tools	174.71	174.70
39135	4/23	Allen Pipeline, Inc.	D-19-21 - Welding services at 4823 Briggs	2,229.60	
39136	4/23	AT&T Mobility	Cell phone service 04/2019	1,311.66	437.22
39137	4/23	Best Best & Krieger	ULARA legal services through 03/2019	87.17	
39138	4/23	Breakthru Glass	Refund Check	9.85	
39139	4/23	Campbell's Automotive Service	Unit #6 -Replaced starter	238.92	79.64
39140	4/23	Cargill, Inc - Salt Division	25 tons of solar salt	5,408.61	
39141	4/23	Choice Pest Control	Monthly service Well 9 & Mills 04/2019	96.75	13.25
39142	4/23	City of Glendale	Well 16 lease and water purchase for July 2018	11,920.71	
39143	4/23	City of Glendale Water & Power	Power purchased 03/2019	30,740.59	37.48
39144	4/23	City of Los Angeles	Capital and O & M installment #5		183,590.00
39145	4/23	Core & Main	4" water meter and companion flange	3,660.61	
39146	4/23	CV Strategies	Services through 03/2019	562.50	562.50
39147	4/23	Cypress Ancillary Benefits	Group Dental 05/2019	2,200.41	1,466.95
39148	4/23	Dunn-Edwards Corporation	Paint for Nitrate Plant and reservoirs	185.32	
39149	4/23	Foothill Municipal Water	Purchased water delivery 03/2019	166,958.50	
39150	4/23	Grainger	Nitrate Plant - push button lock out panel, eyewash station, gloves for sewer cleaning, misc items for stock	1,480.14	478.70
39151	4/23	Graybar Electric Co., Inc.	E-995 - Mills - back-up panels and enclosures for analyzers	14,168.37	
39152	4/23	Great America Leasing Corp.	Kyocera copier lease 04/2019	767.60	767.59
39153	4/23	Harper & Associates Eng, Inc	E-970 - Services through 02/2019	14,344.00	
39154	4/23	Harrington Ind Plastics LLC	E-995 - Various PVC, elbows, adapters	676.47	

<u>Check#</u>	<u>Check Date</u>	<u>Payable To</u>	<u>Description</u>	<u>Water Amount</u>	<u>Wastewater Amount</u>
39155	4/23	Hazen and Sawyer	E-995 Services though 02/2019	15,916.20	
39156	4/23	HD Supply Construction & Industrial	E-995 - Misc tools and materials	448.16	102.87
39157	4/23	Industrial Metal Supply Co	E-995 - Misc equipment, parts and fittings	1,092.07	
39158	4/23	John Robinson Consulting, Inc.	E-995 - Services through 03/2019	2,430.00	
39159	4/23	John Robinson Consulting, Inc.	M-965 - Services through 03/2019	3,600.00	
39160	4/23	LA Dept Water and Power	Power purchased 04/2019	49.70	
39161	4/23	Lagerlof, Senecal, Gosney & Kr	Legal services 03/2019	4,321.88	1,440.62
39162	4/23	Lincoln Financial Group	Life & Disability Insurance 05/2019	946.55	631.04
39163	4/23	McCall's Meter Sales & Service	Well #8 & Well #5 - replacement registers for flow meter	902.57	
39164	4/23	Newegg, Inc.	Hard drives for servers	390.30	130.10
39165	4/23	Penhall Company	E-995 - Core drilling at Glenwood and Mills	950.00	
39166	4/23	Plumbers Depot Inc	6 - Pipe thread couplings		77.92
39167	4/23	Pryor Learning Solitions	Developing Emotional Intelligence training class for staff	222.75	74.25
39168	4/23	Quinn Power Systems	Unit #54 -Install thumb cylinder valves	372.63	124.21
39169	4/23	Royal Industrial Solutions-Chatsworth	E-995 - Electrical equipment	55.58	
39170	4/23	Sawyer Petroleum	Red diesel fuel	2,660.58	886.86
39171	4/23	Shell	Gas purchased 04/2019	1,543.23	514.41
39172	4/23	Shell	Gas purchased 04/2019	15.00	5.00
39173	4/23	Spectrum Business	Data Communications 04/2019 Office	269.96	89.98
39174	4/23	St Water Resource Control Brd.	Renewal Grade T2 - Jacob Whittaker	60.00	
39175	4/23	Sully-Miller Contracting Co.	6.14 Tons of cold mix (temp patch)	615.15	
39176	4/23	T.T. Technologies, Inc	Rebuild boring machine	1,775.65	1,775.64
39177	4/23	Toro's Lawnmower & Garden	5 Gallon diesel cans	68.34	68.32
39178	4/23	Underground Service Alert/SC	Cal state fee for regulatory costs - 04/2019	109.24	36.41
39179	4/23	Western Water Works	4x24 brass nipple for meter installation	329.87	
39180	4/23	Whittier Fertilizer Co	Top soil	336.50	
39181	4/23	Chris Wilding	Refund Check	29.99	
39182	4/23	Judi Woo-Sato	Remove bees from meter boxes at 3429 El Caminito & 2446 Rockdell	300.00	
39183	4/23	Yardley Orgill Company, Inc.	D-17-61: Materials	8,495.87	
39184	4/24	United States Postal Service	Postage for Prop 218 notices	1,297.65	1,297.65
39185	4/30	California Water Environment	Collection Sys Maint Grade 1 renewal - Morgen DuRose	87.00	
39186	4/30	Colonial Life & Accidents Ins.	Employee paid insurance 04/2019	228.67	
39187	4/30	Core & Main	2 - Hydrant meters for construction	1,516.23	
39188	4/30	Alan Dearman	Refund Check		83.15
39189	4/30	Fire Master, Dept. 1019	Service call to recharge fire extinguisher	26.25	8.75

<u>Check#</u>	<u>Check Date</u>	<u>Payable To</u>	<u>Description</u>	<u>Water Amount</u>	<u>Wastewater Amount</u>
39190	4/30	Catalina Hwang	Refund Check	48.02	
39191	4/30	Roland Khodaverdian	Refund Check	97.30	
39192	4/30	Office Depot - Credit Plan	Misc supplies 04/2019	357.72	357.71
39193	4/30	Reliable Road Service, Inc.	Unit #18 - Repaired hydraulic leak	237.40	79.14
39194	4/30	Royal Industrial Solutions-Chatsworth	E-995 - Electrical materials	77.25	
39195	4/30	Scotty's Industrial Products	Repair Bosch hammer drill	67.48	67.47
39196	4/30	South Coast Air Quality	AQMD Fee - July 2018 to June 2019	132.98	
39197	4/30	Sterling Water Technologies, LLC	Well 2 - 50 lb pail CP-70	203.80	
39198	4/30	Sully-Miller Contracting Co.	Temporary - cold mix	839.25	
39199	4/30	The Gas Company	Gas purchased Office 04/2019	69.14	23.04
39200	4/30	Vision Service Plan Co-(CA)	Group Vision for 05/2019	278.46	185.64
39201	4/30	Vulcan Materials Company	3/4" crushed base	806.97	
39202	4/30	Waste Management - Sun Valley	Disposal service at Plant & Office for 04/2019	865.96	288.65
39203	4/30	Wells Fargo Card Services	Gould: AWWA Spring Conf (hotel, meals), Engineering Dept lunch, delivery charge for grant application	1,105.46	368.49
39204	4/30	Wells Fargo Card Services	Hass: Monthly recurring charges, computer hardware, wireless headset for customer service dept, upgrade video system	2,496.99	329.98
39205	4/30	Wells Fargo Card Services	Maxwell: Wash Unit #51, leak meal for crews, CWEA Conf (reg), misc supplies for E-995, EZ up	1,240.61	447.48
39206	4/30	Wells Fargo Card Services	Mitchell: Board dinner, lunch for employees (training event)	303.07	101.03
39207	4/30	Wells Fargo Card Services	Scott: Board dinner, cups/treats for Special Olympics event	251.96	48.94
39208	4/30	Wells Fargo Card Services	SCADA remote access for developers	891.00	297.00
39209	4/30	Western Water Works	Stock - Fire hydrant materials	414.90	
39210	4/30	Cory Whitman	Reimbursement for safety shirts	73.89	24.63
39211	4/30	Judi Woo-Sato	Remove bees from meter box at 3100 Alabama & 5227 Ramsdell	300.00	
Subtotals				\$ 692,666.08	\$ 267,349.40
Total Disbursements for April 2019				\$ 960,015.48	

<u>Check#</u>	<u>Check Date</u>	<u>Payable To</u>	<u>Description</u>	<u>Water Amount</u>	<u>Wastewater Amount</u>
<u>Payroll Report</u>					
		Directors			\$ 1,350.00
		Office Regular Payroll			\$ 130,428.00
		Office OT			\$ 1,280.00
		Plant Regular Payroll			\$ 115,456.00
		Plant OT & Standby			\$ 10,237.00
		Employer Payroll Taxes			\$ 19,126.00
		Payroll Service Charges			\$ 366.00
		Total Payroll for April 2019			<u><u>\$ 278,243.00</u></u>

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No.1

May 28, 2019

To: Honorable President and Members of the Board of Directors

From: Nemesciano Ochoa, General Manager

Subject: Debt Financing Discussion

ACTION ITEM:

Present to the Board debt finance options and consider engagement with Urban Futures, Inc. on a contingency basis to serve as the District's Financial Advisor for a potential debt financing.

DISCUSSION:

Debt financing is used by water and wastewater agencies for a variety of reasons including to: 1) fund large or multiyear capital improvement plans today rather than tomorrow to realize projects benefits now and to minimize cost inefficiencies from delaying – e.g. inflation factor for construction; 2) provide intergenerational equity by having both current and future ratepayers pay for the share of infrastructure they respectively use; and 3) manage budgetary needs and cash balances.

Should the Board seek debt financing as a potential option in the near future, it is advisable to hire a financial advisor because the financial advisor serves as a fiduciary to the District by advising on the best financing alternative and because the financial advisor assembles and evaluates the fees and technical expertise of the financing team needed for a financing.

Based on the discussion during the April 23, 2019 board meeting, the District has invited Urban Futures, Inc. (UFI) to provide a presentation regarding the current interest-rate market and what the District's best alternatives are with respect to a potential debt financing. UFI is a leading financial advisory in California. Mr. Julio Morales will represent UFI, and he will provide a presentation and be available to answer questions.

A notice-to-proceed for UFI would mean that UFI would begin monitoring the interest-rate market with respect to the District's needs and assembling the financing team through a proposal process. The contract would be on a contingency basis, which means that UFI and any other members of the financing team would be compensated only in the event of a successfully closed financing. Thus, it is in the interest of the District to engage a financial advisor if it feels there is a reasonable chance of pursuing a financing within the calendar year.

RECOMMENDATION:

Present and discuss debt finance options and consider engagement with Engage Urban Futures, Inc. on a contingency basis to serve as the District's Financial Advisor for a potential debt financing.

Prepared by:



Nemesciano Ochoa, General Manager

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 2
May 28, 2019

To: Honorable President and Members of the Board of Directors
From: Ron L. Mitchell, Secretary-Treasurer
Subject: FY 2019-20 Budget Update

ACTION ITEM

1. Discuss any updates, questions, or future requests related to the proposed budget.

DISCUSSION

Staff and the Board have discussed the proposed budget in regularly scheduled board meetings and workshops held on March 26th, April 9th, April 23rd, May 14th, and May 21st. Staff has updated the Wastewater Cash Flow Model to reflect recent changes to fees collected by the City of Los Angeles for conveyance and treatment of CVWD wastewater flows, which amount to a net increase of \$342,578 for FY 2017/18. The updated model and budget impact will be brought to the board meeting for discussion.

RECOMMENDATION

Discuss any questions or future requests related to the proposed budget.

Prepared by:



Ron L. Mitchell, Secretary-Treasurer

Submitted by:



Nemesciano Ochoa, General Manager

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 3

May 28, 2019

To: Honorable President and Members of the Board of Directors

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

Subject: Valve Replacement and Appurtenances on Pennsylvania Ave, Project E-1003

ACTION ITEM:

Valve Replacement and Appurtenances on Pennsylvania Ave, Project E-1003 – Consideration and motion to authorize the General Manager to award a contract to Toro Enterprises, Inc. for replacement of 12-inch valve on Pennsylvania Ave, relocation of a fire hydrant and adjusting valve cans and manholes to grade as part of the City of Glendale Pavement Restoration Project at a cost of \$80,000 and establish a contingency amount of \$8,000 (10% of contract) to cover the cost of unforeseen work.

BACKGROUND:

The City of Glendale reached out to CVWD starting in 2015 regarding pavement rehabilitation on Pennsylvania Ave from the 210 Freeway to Markridge Road. Generally, during the design phase of projects such as this, CVWD staff would be contacted well before a project by the City of Glendale, Public Works Department to coordinate the construction activity. This would afford CVWD, which has underground infrastructure in the area, adequate time to make any necessary adjustment, replacements or repairs. This coordination is necessary because after the rehabilitation of the roadway is complete, there is a 5-year construction moratorium preventing any future excavation in the road. Staff had scheduled several pipeline replacement projects on Pennsylvania Avenue in preparation for this 5-year moratorium.

At some point in 2017 or 2018, the City of Glendale made significant design changes to the paving project by adding bump-outs to the curb and gutters at all of the intersections. CVWD became aware of these design changes from the Los Angeles County Inspector ten minutes prior to the planned pre-construction meeting for this project. Staff learned at the pre-construction meeting that the City of Glendale had stopped communicating design changes with CVWD because they erroneously determined that the water and wastewater infrastructure on Pennsylvania was the property of Los Angeles Department of Water and Power and Los Angeles County Department of Public Works, respectively.

Since discovering this, CVWD and City of Glendale have been collaborating together on design and construction changes to make this project a success. After staff's thorough review and with several minor design modifications, there was one existing fire hydrant and associated hydrant valve that needed to be relocated to accommodate the addition of bump-outs on Pennsylvania Ave.

In addition, the City of Glendale requires that CVWD pay for the tops of the sewer manholes and valve cans be adjusted to grade after the final placement of the pavement at the contractor's unit price, which was Toro Enterprises (Toro) Inc for this project.

DISCUSSION:

Raising Facilities to Grade

It is incumbent on the District to pay for the cost of restoring our facilities to grade after all paving rehabilitation is complete. In the past, staff has established cost sharing agreements with the City of Glendale so their selected contractor can perform the work restoring CVWD's valve cans and manholes to grade without altering their schedule. CVWD entered into this agreement with the City of Glendale on March 9, 2019. CVWD owns 105 valves and 31 manholes in the area. CVWD will reimburse the City of Glendale approximately \$30,100, based on Toro's unit bid price.

Fire Hydrant and Hydrant Valve Relocation and Replacement

One of the proposed bump-outs near the intersection of Pennsylvania Ave and Orange Ave would have placed the fire hydrant valve in the center of the concrete gutter. General water pipeline design principals is to avoid locating a valve can within a concrete gutter as the valve cans fill with debris very quickly during rain events when placed in the gutter.

In order to expedite the project, Staff included the work to relocate the valve as part of the cost sharing agreement with the City of Glendale. This allowed Toro to schedule and perform the work in a way that best fit the construction schedule, while keeping CVWD crews free to complete work associated with the conversion to chloramines project.

CVWD was still responsible for performing the shutdown prior to the replacement occurring. This work was completed by Toro on March 19, 2019 at a cost of \$15,158.

Unforeseen Work – Replacement of 12-inch Valve

While performing the shutdown for the fire hydrant replacement, an existing 12” butterfly valve (Valve 7-44) broke in the closed position. Broken valves in the system can result in serious hydraulic issues which greatly reduce water system capacity and reliability. At this point in time, the City of Glendale already had scheduled a start date for installing the new asphalt in early April. Due to the limited amount of time in the schedule, the City of Glendale requested that the District contract directly with CVWD to replace the broken valve.

Staff developed a scope of work and contracted with Toro by April 10, 2019 to install a new 12-inch valve. CVWD crews performed a successful shutdown on April 16, 2019, and the valve replacement work was completed that same day as well. This work was performed by Toro at a cost of \$31,690. Toro completed paving of the area on Pennsylvania Ave, under contract with the City of Glendale, on April 17, 2019.

RECOMMENDATIONS:

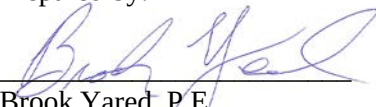
It is staff's recommendation to approve said contract with Toro. Typically, staff will make this request before the beginning of construction. However, with the delay in coordination with the City of Glendale and the tight construction schedule, staff proceeded with the project. Therefore, staff is recommending to authorize the General Manager to award a contract to Toro Enterprises, Inc. for replacement of a 12-inch valve on Pennsylvania Ave, relocation of a fire hydrant and adjusting valve cans and manholes to grade as part of the City of Glendale Pavement Restoration Project at a cost not to exceed \$80,000 and establish a contingency amount of \$8,000 (10% of contract) to cover the cost of unforeseen or additional work.

FUNDING AVAILABILITY:

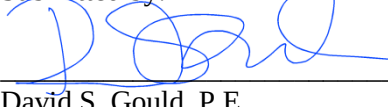
The funds for the cost sharing agreement and valve replacement contract were not included in the FY 18/19 budget, as staff was not made aware of the design changes until well after CVWD's FY 18/19 CIP budget was approved. Below is staff's recommendation for funding the work associated with the project.

Account Description	Amount
FY 18/19 - Water Distribution	\$426,700
Request for Transfer from Water Fund Reserves	\$88,000
Revised FY 18/19 - Water Distribution	\$514,700
Actual Cost – Raising Facilities to Grade	<\$30,100>
Actual Cost – Fire Hydrant Relocation and Replacement	<\$15,158>
Actual Cost – Replacement of 12-inch Valve	<\$31,690>
Unforeseen or additional work	<\$8,000>
Total Cost Requested	<\$84,950>
Amount Remaining in Water Distribution	\$429,750

Prepared by:


Brook Yared, P.E.
Senior Engineer

Submitted by:


David S. Gould, P.E.
District Engineer

Attachment:

1. Cooperative Agreement for the Pennsylvania Avenue Rehabilitation Project
2. Toro Enterprises – Bid #9703 - Revised

COOPERATIVE AGREEMENT FOR THE PENNSYLVANIA AVENUE REHABILITATION PROJECT

This Agreement is made by and among the CRESCENTA VALLEY WATER DISTRICT ("CVWD") and CITY OF GLENDALE ("Glendale") (collectively referred to as the "Parties").

1. Purpose

The Parties agree that the best interests of the Parties, as well as the public in general, will be served by entering into this Agreement providing for the sharing of the costs for adjustment of water valves, manhole frame and covers to finished grade, relocation of an existing water valve, and replacing existing fire hydrant with a new fire hydrant assembly located at the southeast corner of Pennsylvania and Orange Street, which belong to CVWD, as part of the Pennsylvania Avenue Rehabilitation Project (hereinafter referred to as the "Work") and attached hereto as Exhibit "A".

2. Responsibilities and Costs

- A. The Work shall be done by Glendale pursuant to plans, drawings, and specifications approved by the City Council of the City of Glendale or by some other body or employee exercising discretionary authority to give such approval for the plans, drawings, and specifications prepared in conformity with standards previously approved by the Glendale City Council, other body, or employee of the City of Glendale. The Work shall be done in compliance with all applicable sections of the 2015 Edition of the Standard Plans and Specifications for Public Works Construction (the "Green Book") and 2015 Edition of CALTRANS Standard Plans and Specifications, except for those sections that have been amended by the City of Glendale. In the event that the Work is not done by employees of Glendale, Glendale represents and warrants that it will pay prevailing wages if required to do so under either state or local law.
- B. CVWD shall pay an amount not to exceed \$50,000 as its portion of the cost of the Work. Invoices shall be based on Cost Proposal received by the City for the actual quantities of work completed, and all invoices shall be payable 30 days upon receipt and after inspection and acceptance of the Work by CVWD as provided in Section 4.

The cost of CVWD's portion of the Work cannot exceed \$50,000 without its prior written consent. Glendale shall provide documentation for the costs of the Work to CVWD. The material required for the said work shall be provided by CVWD.

- C. Upon acceptance of the work as described in Section 4 below, the parties shall separately own and maintain their respective improvements and utilities.

3. Indemnity and Insurance

- A. It is understood and agreed that pursuant to Government Code Section 895.4, Glendale shall fully defend and indemnify and hold CVWD harmless from any liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by Glendale under or in connection with the Work.
- B. It is understood and agreed that, pursuant to Government Code Section 895.4, CVWD shall fully defend and indemnify and hold Glendale harmless from any liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by CVWD under or in connection with the Work.
- C. Workers' Compensation claims shall be paid by the employer of the injured worker, and subrogation rights against any Party to this Agreement are expressly waived.
- D. CVWD shall be named as additional insured on any comprehensive general liability insurance policy issued that relates to the Work. The additional insured endorsement shall be in a form approved by CVWD.
- E. Both CVWD and Glendale represent that they are each self-insured and maintain the following limits: General Liability \$2,000,000; Automobile Liability \$2,000,000; Worker's Compensation Liability \$2,000,000. Each of the parties warrant that the limits of their self-insurance coverage meet or exceed the requirements and obligations as set forth, and to the extent permitted by the State law.

4. Inspection and Acceptance

CVWD shall, upon notice of completion of the Work by the City of Glendale, inspect the work within

ten (10) calendar days from the date of the notice of completion. Upon inspection of the work, CVWD shall have ten (10) calendar days to either accept or reject the Work. If the Work is rejected, Glendale shall have thirty (30) calendar days to correct the Work and request re-inspection. The same time periods noted for inspection shall apply to any re-inspection. Upon acceptance of the Work, CVWD shall have thirty (30) calendar days to pay the invoice submitted by Glendale.

5. Term

This Agreement shall become effective when executed by the Parties and shall remain operative and effective until terminated by either of the Parties to this Agreement or until the Work has been completed, accepted, and paid for by CVWD. The provisions of Section 3 shall survive the expiration or termination of this Agreement.

6. Termination Provisions

- A. This Agreement may be terminated upon sixty (60) calendar days written notice by either party.
- B. Upon termination of this Agreement, all outstanding costs are to be paid in accordance with Section 2. B.

7. All notices and correspondence between the Parties to this Agreement regarding provisions within said agreement shall be addressed as follows:

For CVWD:

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

For Glendale:

Public Works Director
City of Glendale
633 E. Broadway, Room No. 205
Glendale, CA 91206

8. The parties agree to meet and confer concerning all claims, disputes or other matters in

question between the parties arising out of or relating to this Agreement or breach thereof prior to the institution of any litigation. In the event any claim or dispute is subject to litigation, the Parties agree that each shall pay their own costs, including all court costs and attorney's fees.

9. Nothing under this Agreement shall be construed to give any rights or benefits to any party other than the Parties hereto. Neither of the Parties shall assign any right or interest in this Agreement, nor delegate any duty owed, without the other's prior written consent. This Agreement shall be binding on the heirs, executors, administrators, successors, and assigns of the respective Parties.

10. Neither Party shall be considered in default in the performance of its obligations hereunder or any of them, if such obligations were prevented or delayed by any cause, existing or future beyond the reasonable control of such Party which include but are not limited to acts of God, labor disputes, civil unrest, water supply deficiencies, mechanical failure, interruption in electrical energy, natural disaster, drought, and regulatory issues.

11. This Agreement represents the entire integrated agreement between the Parties, and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by both Glendale and CVWD.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed and attested by the proper officers thereunto duly authorized, their official seals to be heretofore affixed.

Date: 4/9/19

Approved as to Form
District Attorney

CRESCENTA VALLEY WATER DISTRICT

By: Nemesciano Ochoa

By: Ron Mitchell

Name: Nemesciano Ochoa

Attest
~~Office of the City Clerk~~
Secretary - Treasurer

Title: General Manager

Date: 5/9/19

Approved as to Form
Michael J. Garcia, City Attorney

CITY OF GLENDALE

By: [Signature]

Name: Yasmin K. Beers

By: MIAT YUN, Sr. Assistant City Attorney

Attest
Office of the City Clerk

Title: City Manager

EXHIBIT "A"

PENNSYLVANIA AVENUE REHABILITATION PROJECT

Scope of Work:

- Adjustment of water valves, manhole frame and covers to finished grade throughout the project; and,
- Relocation of an existing water valve and replacing existing fire hydrant with a new fire hydrant assembly at the south-east corner of Pennsylvania Avenue and Orange Avenue.

Cost for Performing the Work:

<u>Item No.</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Amount</u>
1	Adjust Water Valve Box Cover and Box Set	105	\$ 75/Each	\$ 7,875
2.	Adjust Manhole Frame and Cover Set	31	\$720/Each	\$22,320
3.	Relocate Existing Water Valve and replace existing fire hydrant with a new fire hydrant Assembly at the Southeast corner of Pennsylvania Avenue and Orange Avenue	1	\$15,158/Job	\$ 15,158
SUBTOTAL				\$45,353
10 % CONTINGENCY				\$ 4,535
TOTAL				\$49,888
NOT TO EXCEED				\$50,000



Proposal and Contract

Toro Enterprises, Inc.

P.O. Box 6285

Oxnard, CA. 93031

P: 805-483-4515

F: 805-483-2001

04/10/2019

www.toroenterprises.com

License No. 710580 A

CA DIR #1000002410

Toro Enterprises, Inc. Is an
Equal Opportunity Employer

QUOTE CVWD - REPAIR 12" GATE VALVE
BID #9703 - REVISED
TO BROOK YARED
CRESCENTA VALLEY WATER DISTRICT

Client #	Description	Quantity	U/M	Unit Price	Ext Price
1	REPLACE EX. 12" GATE VALVE- CVWD- TO SUPPLY ALL WATER MATERIALS AND TORO WILL SUPPLY BACKFILL MATERIALS.	1.000	EA	\$9,850.00	\$9,850.00
2	INSTALL LINE STOP ON 12" WATERLINE-WELD AN 8" NOZZLE TO EX. 12" STEEL LINE & INSTALL LINE STOP FOR SHUTDOWN. LINE STOP TO REMAIN IN PLACE.	1.000	EA	\$21,840.00	\$21,840.00
Grand Total:					\$31,690.00

ESTIMATOR: BRIAN B.

Date: _____ Accepted By: _____

Important Bid Note:

Prices in Toro's bid for this project are based in part on labor and materials cost that were in effect on the date of Toro's final bid. Due to dynamic market conditions, labor & materials cost are expected to rise during the life of this project. Therefore, by entering into Contract with Toro, project Owner and/or GC agree to pay Toro for price escalation in labor and/or materials that occurred during the life of this project. In such cases, the burden of proof to demonstrate escalated cost of labor and/or materials shall rest solely on Toro, and it shall consist of proving

documented difference between labor and/or materials prices on final bid date vs. prices at any given date during the life of the project. Payment to Toro for escalated prices of labor and/or materials shall be limited to actual proven cost increase, without any markup.

In case that actual number of Mobilizations per specific discipline and/or phase exceed the number stipulated in Toro's Bid, then each additional mobilization for such discipline and/or phase shall be paid to Toro as an extra at unit price stipulated in the Bid. One continued operation per period in specific discipline and/or phase counts for one mobilization in that discipline and/or phase.

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 4
May 28, 2019

To: Honorable President and Members of the Board of Directors
From: David S. Gould, P.E. – District Engineer
Subject: Recommendation to Award Contract for the Rehabilitation of Wells 1 & 7

ACTION ITEM:

Pump Replacement and Casing Rehabilitation of Wells 1 & 7, Project E-999 – Consideration and motion to authorize the General Manager to amend the contract with General Pump Company, Inc. for the rehabilitation of Wells 1 and 7 at a cost of \$15,179 to cover the cost of unforeseen or additional work.

BACKGROUND:

Work at Well 1 was completed and the well was returned to service on May 6, 2019. The well is currently pumping between 85-90 gpm, as staff projected. There was a small amount of additional unforeseen work associated with Well 1. Change order #1 was approved on April 8, 2019, which added additional work and equipment for the mechanical development of Well 1 at a cost of \$3,255.

Well 7 is one of the District's oldest production wells. It was originally installed in 1930 with a liner having been installed in the 1960s in order to extend the life of the well casing. Well 7 was last rehabilitated in 2005. General Pump Company (GPC) completed the removal of Well 7 pump and motor assembly on May 9, 2019. After the pump was removed from service, a well casing inspection video was performed by Water Well Redevelopers on May 10, 2019 to assess the condition of the casing and determine the best approach for rehabilitation.

The video camera inspection revealed minor scaling on the casing wall with a large increase in the amount of sediment collected at the bottom of the well, which was expected. GPC proceeded with removing the debris at the bottom of the well and wire brushing the well casing. At the start of wire brush operations, GPC noticed that there were large holes in the upper 20' to 30' of the casing. The wire brushing operation was discontinued at this time as falling debris may have caused the brushing tool to become stuck.

DISCUSSION:

A second video inspection was performed by Water Well Redevelopers on May 20, 2019. The video inspection revealed large holes in the top portion of the casing varying in size from 2-inch to 8-inch in diameter.



Staff has concerns that if there is no steel casing supporting the aquifer formation, then it would be easier for loose soils and rocks to fall into the well, which could damage the pump equipment and column piping.

GPC also reviewed the video inspection and presented staff with two (2) options for the repair of Well 7 casing.

- **Option 1:** Patch the upper 20' to 30' section of the casing, not perform the remaining rehabilitation such as chemical treatment, and install the new pump and motor assembly. However, the work to repair this section would be costly and no additional well rehabilitation to improve the operation of the well could continue. At this time, this solution maybe temporarily as the issue of the deteriorating 12" casing liner will still need to be addressed. GPC provided a quote of \$28,379 to complete this work.

- **Option 2:** Install a new 10-inch diameter stainless steel, wire-wrapped screen well liner to support the existing well casing. This option would extend the life of Well 7 by as much as 20 - 30 years by some estimates. However, each time a new liner is installed, the diameter of the well becomes smaller, which would restrict the size of equipment that could be placed down the well in the future and reduce the overall well production capacity. In addition, the new pump to be installed is a submersible pump, which has a higher probability of overheating when placed in small diameter wells. It also would restrict inserting vital monitoring equipment into the well casing. GPC provided a quote of \$81,767 to complete this work.
- **Option 3:** There is also the remaining option of performing no additional work and reinstalling the pump. Staff does not advise this option because the loose debris from the top of the casing has a high likelihood of falling into the well and damaging the column piping or pump assembly.

If Option 1 is selected, staff expects to conclude work at Well 7 by mid July 2019. Option 2 requires a slightly longer lead time for designing and ordering of the 10-inch liner. If Option 2 is selected, staff expects work to be completed at Well 7 by early August 2019.

RECOMMENDATION:

It is staff's recommendation to authorize the General Manager to amend the construction contract with General Pump Company to proceed with Option 1, which includes patching of the upper section of casing and the installation of the new pump and motor assembly at an additional cost of \$28,379. The cancelation of other planned work under the contract will reduce the contract amount by \$13,200.

This contract amendment totals an increase at total of \$18,434 from the original approved contract, which includes the amount for Change Order #1 for a total amount of \$146,054.

ENVIRONMENTAL REVIEW:

N/A

FUNDING AVAILABILITY:

There are sufficient funds available in the water supply accounts for the project:

Account Description	Amount
E-999 - Amended Construction Contract	
Construction Contract	\$127,620
Change Order #1 – Mechanical Development – Well 1	\$3,255
Change Order #2 – Well Casing Structural Repairs – Well 7	\$28,379
Change Order #3 – Deducted Construction Items – Well 7	(\$13,200)
Amended Construction Costs	\$146,054
FY 18/19 Water Supply - Well Rehabilitation	\$150,000
Amended Construction Costs	\$146,054
Amount Remaining in FY 18/19 Water Supply - Well Rehabilitation	\$3,946

Prepared by:


Brook Yared, P.E.
Senior Engineer

Submitted by:


David S. Gould, P.E.
District Engineer

Attachments:

1. GPC Quote dated 5/24/19 - CVWD Well #7 Repair Options

g:\management\board meeting staff reports\2019\05-28-19 board memo - e-999 wells 1 & 7 co.docx



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Crescenta Valley Water District
2700 Foothill Blvd.
La Crescenta, CA 91214
Attn: Brook Yared

May 24, 2019

Subject: CVWD Well #7 Repair Options

General Pump Company has removed the pump from the well and completed a video survey log of the well. The video survey revealed several significant holes, along with a greatly deteriorated upper liner casing, from a depth of ~3 ft to approximately 21 ft. The integrity of the remaining casing length is largely unknown but should be assumed worn given the age of the original 12" liner was installed 58 years ago (1961). The production areas of the well also show some plugging from mineral encrustation induced from scaling.

General Pump Company understands the need for CVWD to conserve its monetary resources when considering the two options listed below to repair the well, but we strongly recommend that Option II be chosen so that much of the risk involved in preserving the well is avoided.

We are pleased to provide our estimate for two options to repair the well.

Option I-Patch Well Casing

- Provide equipment and manpower to furnish and install several patches in the well casing from 3' to 23' in depth. Please note, this may only temporarily provide a solution to the major issue at hand which is a deteriorated 12" casing liner.

Option I Estimate Cost ***\$28,379.00***

Option II-Furnish and Install 10" Casing Liner

- Mobilize crew and equipment to site, set up rig, install 10" stainless steel wire-wrapped screen, and gravel pack annular space with glass beads. This option eliminates much of the risk involved with conducting downhole activities within a deteriorated casing for many years to come. This new liner will allow aggressive procedures to redevelop your well in the future.

Option II Estimate Cost ***\$81,767.00***

Given that at this time CVWD as elected to not conduct chemical treatment using acids and dispersants per Line Item No. 4 of contracted Project E-999, then please except the cost of the line item as a credit.

GPC Contract Credit ***\$5,950.00***



GPC's Standard Terms and Conditions apply and all invoices. Warranty for work and materials are restricted to parts and materials replaced as part of this project.

General Pump Company, Inc. appreciates the opportunity to assist with this project. If you have any questions regarding the technical aspects of this project, please do not hesitate to give us a call.

Sincerely,

GENERAL PUMP COMPANY, INC.

Luis Busso

Luis Busso, P.G.
Sr. Project Geologist

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 5
May 28, 2019

To: Honorable President and Members of the Board of Directors
From: David S. Gould, P.E. – District Engineer
Subject: TTHM Mitigation and Disinfection Process Upgrades, Project E-995

ACTION ITEM:

TTHM Mitigation and Disinfection Process Upgrades, Project E-995

- a) Consideration and motion to amend the action of the Board on September 25, 2018 to transfer \$500,000 (not \$410,000) from the MTBE reserve fund for the operation and maintenance costs necessary for the conversion to chloramines.
- b) Consideration and motion to waive the Bid Procurement and Purchasing Policy per Article 18.01 of CVWD's Rules and Regulations and allow the General Manager to select and negotiate with consultants and contractors for the operations and maintenance for the new chloramination systems at a cost not to exceed \$90,000.
- c) Discussion and update of CVWD's TTHM study and disinfection process upgrades

DISCUSSION:

At the May 14, 2018 Board meeting, Director Erickson pointed out that the September 25, 2018 Board meeting minutes indicated that there was a \$410,000 transfer from the MTBE reserves and this amount was not reflected correctly in the May 14, 2018 staff report. Staff indicated that they would review past staff reports and meeting minutes to accurately reflect the requested amount transferred from the MTBE reserves.

- At the September 25, 2018 Board meeting, staff requested a motion to waive the Bid Procurement and Purchasing Policy per Article 18.01 of CVWD's Rules and Regulations and allow the General Manager to select and negotiate with consultants and contractors for the installation of chloramination systems at the Glenwood and Mills Plants at a cost not to exceed \$410,000 (see attached Staff Report dated 9/25/18). In addition, the 9/25/18 staff report provide funding options for the additional cost either through transfer of funds from the MTBE reserves or reduction of the FY 18/19 CIP program. The staff report requested a transfer of \$561,470 from the MTBE reserve fund for the installation of chloramination systems at the Glenwood and Mills Plants, but the actual motion was to transfer \$410,000. This appears to have been an oversight.
- At the November 20, 2018 Board meeting, staff requested an additional transfer of \$500,000 from the MTBE Reserves for the costs for design and installation of six (6) new chlorine analyzers and water main flushing as part of the operations and maintenance of the water distribution system after conversion to chloramines. The total transfer amount should have been \$1,061,470 from the MTBE Reserves, however, \$1,000,000 was shown in the cost estimate in the November 20, 2018 staff report (see attached Staff Report dated 11/20/18) and each subsequent staff report.

Staff reviewed this information with legal counsel and Mr. Bunn suggested to amend the September 25, 2018 action to transfer \$500,000 from the MTBE reserve fund for the operation and maintenance costs necessary for the conversion to chloramines to accurately reflect the \$1,000,000 budget that staff has been using.

In addition, staff is recommending to waive the Bid Procurement and Purchasing Policy per Article 18.01 of CVWD's Rules and Regulations and allow the General Manager to select and negotiate with consultants and contractors for the operations and maintenance for the new chloramination systems at a cost not to exceed \$90,000 (\$500,000 - \$410,000) that was not authorize on 9/25/18.

Update of CVWD's TTHM and Disinfection Process Upgrades

The District uses chlorine as a disinfectant to treat drinking water. Chlorine can create disinfection by-products during treatment, known as Total Trihalomethanes or TTHMs as chlorine reacts with naturally occurring organic matter in imported water. CVWD's imported water is supplied by FMWD/MWD from either the Colorado River (CRW) or the State Water Project (SWP). Typically, the water supply blend for CVWD is 60% groundwater and 40% imported water. With the on-going localized drought and groundwater levels not fully recovered, CVWD's water supply blend has shifted to 40% groundwater and 60% imported water over the past 8 to 12 months.

This, coupled with additional chlorine needed for breakpoint chlorination in the system, has caused an increase in TTHMs in the distribution system.

Operational Changes:

Water system operational changes including reducing the amount of water storage and chlorination have resulted in lower TTHM levels as shown on the attached charts. The TTHM levels have generally remained stable or reduced as the water system was brought back into normal operations after the FMWD water main break and replacement of the 14-inch valve on Ramsdell.

Construction – Chloramine Conversion:

The following are tasks planned for the next few weeks by staff and its consultants:

- o Field crews will continue installation of the new chlorine analyzers at Shields, Goss Canyon and Cresta Heights Reservoirs. Staff anticipates completion of the chlorine analyzers by the end of June 2019.
- o Staff is completing the design and getting bids to upgrading the chlorination system at Pickens Tunnel.
- o Staff and WQTS are working on the submittal to DDW for amending permit.

PROJECT SCHEDULE:

Project Schedule – Conversion to Chloramines:

Staff has reviewed the TTHMs mitigation option decision tree provided by WQTS, which discusses converting to chloramines based on compliance TTHM levels as required by DDW. The next compliance sampling date is set for June 2019, which will be an average of April, May and June TTHM at the compliance locations.

The weekly TTHM levels at the majority of the reservoir sites are below the target level of 64 ug/L and the levels in pressure zones 8 through 10 are at or above the target level of 64 ug/L. Staff added in the header of the charts, which site is a compliance point (Dunsmore, Oak Creek, Shields and Edmund #2 Reservoirs).

Staff is watching carefully the weekly and monthly average TTHM levels at the compliance points to see if the running annual average (RAA) levels, which is an average of the previous four (4) quarters are near the MCL level of 80 ug/L. As shown on the attached compliance point charts, the RAA for each site is below the MCL.

Staff and its consultants are working with the Division of Drinking Water (DDW) to amend the District's permit to operate. Staff plans to submit permit request with supporting data to DDW shortly and amendment to the permit completed by the end of June 2019.

Past Actions:

- o August 14, 2018
 - Discussion by Dr. Issam Najm of WQTS on TTHMs and Chloramines.
 - Awarded contract to WQTS for \$10,000 for initial study and evaluation.
- o August 28, 2018
 - Awarded contract to WQTS for \$99,800 for chloramine conversion, public outreach, staff and operator training, Department of Drinking Water (DDW) permitting support, development of necessary mitigation plans, and preparation of 30% design plans.
 - Awarded contract to Hazen and Sawyer for \$9,971 to perform bench testing of CVWD's source water to determine proper breakpoint chlorination and formation of TTHMs.
- o September 11, 2018
 - Staff, worked with WQTS and CV Strategies to mail out public information brochures with a list of frequently asked questions.
 - Staff posted information on website and articles in the CV Weekly and Glendale Newspress.
- o September 15, 2018 – Public Workshop at the Glenwood Plant
- o September 25, 2018
 - Authorized General Manager to select and negotiate with consultants and contractors for the installation of chloramination systems at the Glenwood and Mills Plants for \$410,000.
 - Award contract to John Robinson Consulting (JRC) for \$45,225 for contract and construction administration for the new ammonia injection system.
 - Amended contract to WQTS for \$44,240 for additional design work by Carollo Engineers.
- o October 9, 2018
 - Office & field staff trained on the nitrification and chloramines processes.
 - Carollo Engineers submitted preliminary 30% design plans for review.

o October 23, 2018

- Site walk at Glenwood and Mills Plants to determine location of ammonia injection skids, ammonia injection conduits, and SCADA and electrical conduits.
- JRC prepared and sent out a request for quote for purchase of two (2) ammonia injection pump skids.
- Grace Environmental Services (Grace) provided a proposal for a system operator to assist staff during the chloramine conversion process in the distribution system.
- Site visit from Apex Manufacturing Solution (APEX), on the design and installation of SCADA equipment and integration at Glenwood and Mill Plants
- Met with Hazen and Sawyer on design and installation of new chlorine analyzers at six (6) locations to provide additional monitoring after conversion to chloramines

o November 6, 2018

- Field crews potholed the 14-inch water main at the Glenwood Plant for depth and location for the ammonia injection concrete vault.
- Awarded contract and ordered the concrete vault from Jensen Precast for \$36,775 at the Glenwood Plant and estimated delivery is 8 – 10 weeks after approval of shop drawings.
- Awarded contract and ordered ammonia injection pump skids from Cortech Engineering for \$29,850 and estimated delivery in 8 – 10 weeks after approval of shop drawings.
- 30% design plans were reviewed and sent back to Carollo Engineers for final edits.
- Awarded contract to BrikArt Construction for \$7,011 to install concrete pad at Mills Plant.
- Awarded contract to APEX for \$47,725 for the design and integration of SCADA equipment at Glenwood and Mill Plants.

o November 20, 2018

- Authorized General Manager to select and negotiate with consultants and contractors for the operations and maintenance for the new chloramination systems at a cost not to exceed \$500,000.
- BrikArt Construction completed the concrete pad at the Mills Plant.
- Awarded contract to Hazen and Sawyer for \$53,255 for design services for the installation of six (6) new chlorine analyzers.
- Awarded contract to Core-Rosion and ordered a 405-gal tank with level indicator sensor at Mills Plant for \$7,153.
- Awarded contract to ValveTek Utility Services (Valvetek) to perform dead-end water main flushing for \$131,000.
- Awarded contract to Hopkins Technical Products to upgrade seven (7) existing ProMinent chlorine analyzers for \$32,870.
- Awarded a contract to Hach, Inc for new seven (7) new chlorine analyzers and upgrade five (5) existing chlorine analyzers for \$91,560.

o December 12, 2018

- Shop drawings from Cortech Engineering for the two (2) ammonia skids and from Core-Rosion for the 405-gal ammonia tank reviewed by JRC and sent back with comments.
- Staff provided comments on the Nitrification Monitoring & Control Plan to WQTS.
- JRC submitted plans to Glendale Fire Department for permits for Glenwood and Mills Plants.
- Staff met with Medora Corp to discuss installing new mixers in reservoirs to maintain chloramine residual and portable chlorine injection systems.
- Field crews started working on upgrading/repairing blow-offs for dead-end water main flushing.

o January 8, 2019

- Delivery of concrete vault from Jensen Precast delayed due to shop drawing revisions and current workload at Jensen Precast. Anticipated delivery date – late March 2019.
- Staff and WQTS met to discuss updating CVWD's water quality distribution sampling plan for submittal to DDW for approval.
- Staff met for a kick-off meeting with Hazen and Sawyer on the design of six (6) new chlorine analyzers.
- Glendale Fire Department determined no permits are required for the installation of the ammonia injection system and will issue a refund fees.
- Field crews continued working on upgrading/repairing blow-offs for dead-end water main flushing
- Finalized shop drawings for ammonia skids with Cortech Engineering.

- Staff purchased SCADA equipment from Royal Industrial Solutions
- Staff and APEX continue meeting on SCADA integration for the new disinfection process
- o January 22, 2019
 - JRC finalizing costs with Univar for supplying liquid ammonia sulfate in both mini-bulk deliveries for Mills Plant and in 330-gallon containers at Glenwood Plant.
 - Ammonia Tank for Mills Plant delivered at the end of January 2019.
 - Finalized shop drawings for concrete vault. Anticipated delivery date – mid April 2019.
 - Ammonia skids from Cortech Engineering – Anticipated delivery date – February 25, 2019.
 - Staff and APEX continue meeting on SCADA integration for the new disinfection process.
- o February 12, 2019
 - Awarded contract to APEX for \$32,090 for SCADA design and integration for new chlorine analyzers.
 - Staff completed review of Hazen & Sawyer 30% design submittal for the six (6) new chlorine analyzers.
 - Staff and WQTS met to finalize submittal to DDW for amending permit.
- o February 26, 2019
 - Field crews completed upgrades and repairs of blow-offs prior to dead-end water main flushing
 - Hazen and Sawyer submitted 75% design for the six (6) new chlorine analyzers
 - Staff and ValveTek met on February 19 to discuss the project schedule.
- o March 12, 2019
 - Ammonia skids delivered on February 28, 2019
 - Valvetek performed a public demonstration near the Glenwood Plant on March 5, 2019
 - Staff finalized 75% design for the six (6) new chlorine analyzers
 - APEX completed 75% SCADA design, which was reviewed by Operation's staff
- o March 26, 2019
 - Crews installed ammonia skid with new concrete base at Glenwood Plant
 - Crews installed ammonia skid at Mills Plant
- o April 9, 2019
 - Field crews complete installation of new chlorine analyzer at Dunsmore Reservoir
 - Field crews completed the installation of conduits and chlorine analyzers at Mills and Glenwood
 - Finalized purchase of SCADA equipment from Royal Industrial Solutions
- o April 23, 2019
 - Vault delivered and installed including, static mixer, 14-inch valve and piping at Glenwood
 - Replaced 14-inch valve installed at Ramsdell & Sycamore after existing 1960's butterfly valve broke in the closed position
 - Installed ammonia feed and electrical conduits to the vault
 - APEX on-site for installation of new SCADA equipment, coordination of disinfection injection sequencing and SCADA monitoring of chlorine levels at Mills and Glenwood Plants and Dunsmore Reservoir.
- o May 14, 2019
 - Field crews continued working on installation of new chlorine analyzer at Shields, Goss Canyon and Cresta Heights Reservoirs.

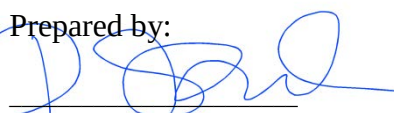
Updated Cost Estimate:

Account Description	Amount - 5/14/19	Amount - 5/28/19	Difference
Transfer from MTBE Reserve Fund (9/25/18)	\$410,000	\$500,000	\$90,000
Transfer from MTBE Reserve Fund - (11/20/18)	\$500,000	\$500,000	\$0
Total Estimated Cost for Project	\$910,000	\$1,000,000	\$90,000
Consultants - Planning, Design & Construction Admin			
WQTS - Planning	\$4,500	\$4,500	\$0
WQTS - Design (Estimate on final cost)	\$130,000	\$130,000	\$0
Hazen & Sawyer - Water Quality	\$11,971	\$11,971	\$0
John Robinson Consulting - Project Management	\$45,225	\$45,225	\$0
Grace Environmental Services (3 months part-time service) (Estimate)	\$0	\$0	\$0
Apex Manufacturing Solution - SCADA programing and integration	\$54,165	\$54,165	\$0
New Chlorine Analyzers - 6 locations - Hazen and Sawyer - Design	\$45,455	\$45,455	\$0
Public Notification - CV Strategies , Printing & Mailing	\$11,168	\$11,168	\$0
WQ Sampling - 7/1/18 to 4/30/19	\$78,759	\$95,079	\$16,320
WQ Sampling - 5/1/19 to 6/30/19 (Estimate)	\$24,480	\$13,260	(\$11,220)
Subtotal	\$405,723	\$410,823	\$5,100
Construction			
Ammonia Injection Skids (2)	\$41,166	\$41,166	\$0
SCADA - Equipment (RTU's, Communication, cabinets, etc..) (Estimate)	\$14,642	\$14,642	\$0
Concrete Pad & Grading at Mills	\$7,727	\$7,727	\$0
Ammonia Inject Vault at Glenwood	\$48,233	\$48,233	\$0
Ammonia Tank at Mills	\$6,922	\$6,922	\$0
Static Mixer & Ammonia Injection System	\$9,658	\$9,658	\$0
Conduits/Wiring/Electrical Materials (Estimate)	\$19,466	\$19,466	\$0
Upgrade Chlorine Analyzers (Mills & Glenwood)	\$18,647	\$18,647	\$0
Safety - Eye Wash, Containment, etc.. (materials only) (Estimate)	\$8,570	\$8,570	\$0
On-site Welding (Estimate)	\$4,249	\$4,249	\$0
Misc	\$0	\$0	\$0
Subtotal	\$179,280	\$179,280	\$0
Operations & Maintenance			
Upgrade Chlorine Analyzers - 4 locations Equipment (Hach)	\$27,494	\$27,494	\$0
Upgrade Chlorine Analyzers - 7 locations Equipment (ProMinent)	\$36,372	\$36,372	\$0
New Chlorine Analyzers - 6 locations - APEX SCADA Programing	\$37,365	\$37,365	\$0
New Chlorine Analyzers - 6 locations - SCADA Equipment (Estimate)	\$45,156	\$45,156	\$0
New Chlorine Analyzers - 6 locations - Equipment (HACH)	\$58,819	\$58,819	\$0
Dead-ends Water Main Flushing - Valvetek	\$162,583	\$154,624	(\$7,959)
Misc	\$0	\$0	\$0
Subtotal	\$367,789	\$359,830	(\$7,959)
Total Cost	\$952,792	\$949,933	(\$2,859)
Amount Remaining	(\$42,792)	\$50,067	

RECOMMENDATION:

It is staff's recommendation is to complete the installation of the ammonia injection system, chlorine analyzers and site improvements for conversion to chloramines.

Prepared by:



David S. Gould, P.E.
District Engineer

Attachments:

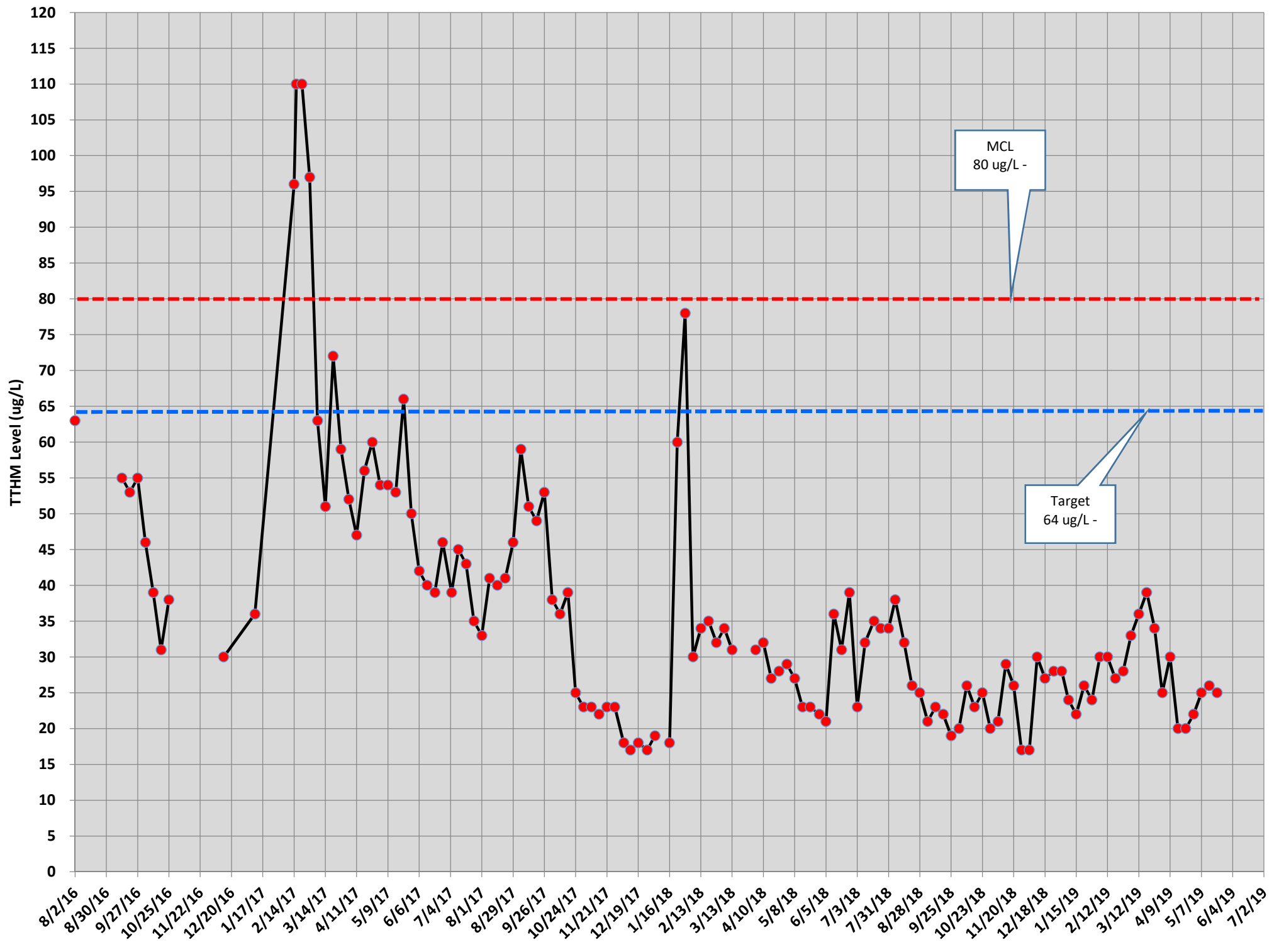
1. TTHM Charts dated 05-21-19
2. 9/25/18 Staff Report
3. 11/20/18 Staff Report

Submitted by:

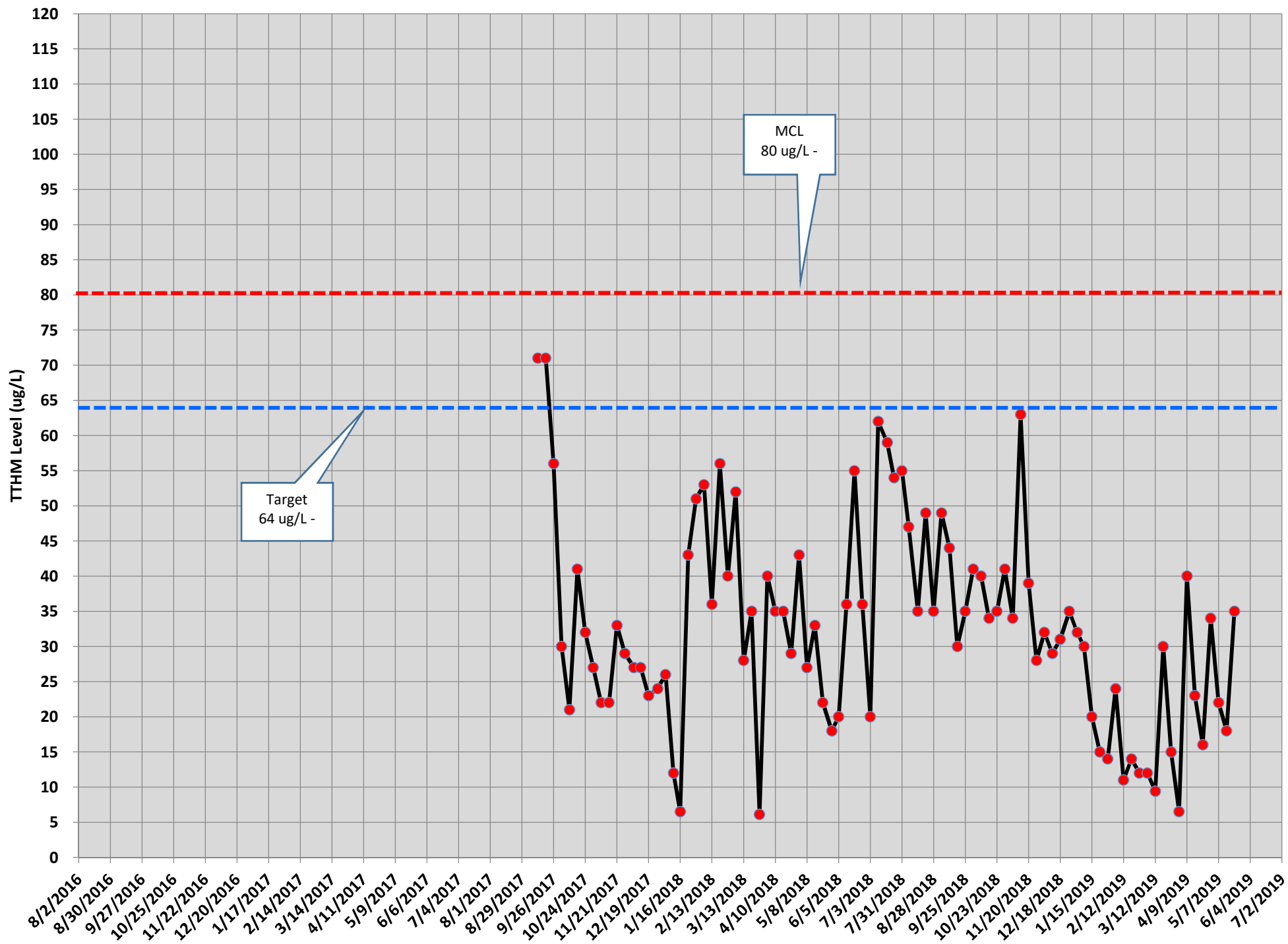


Nem Ochoa
General Manager

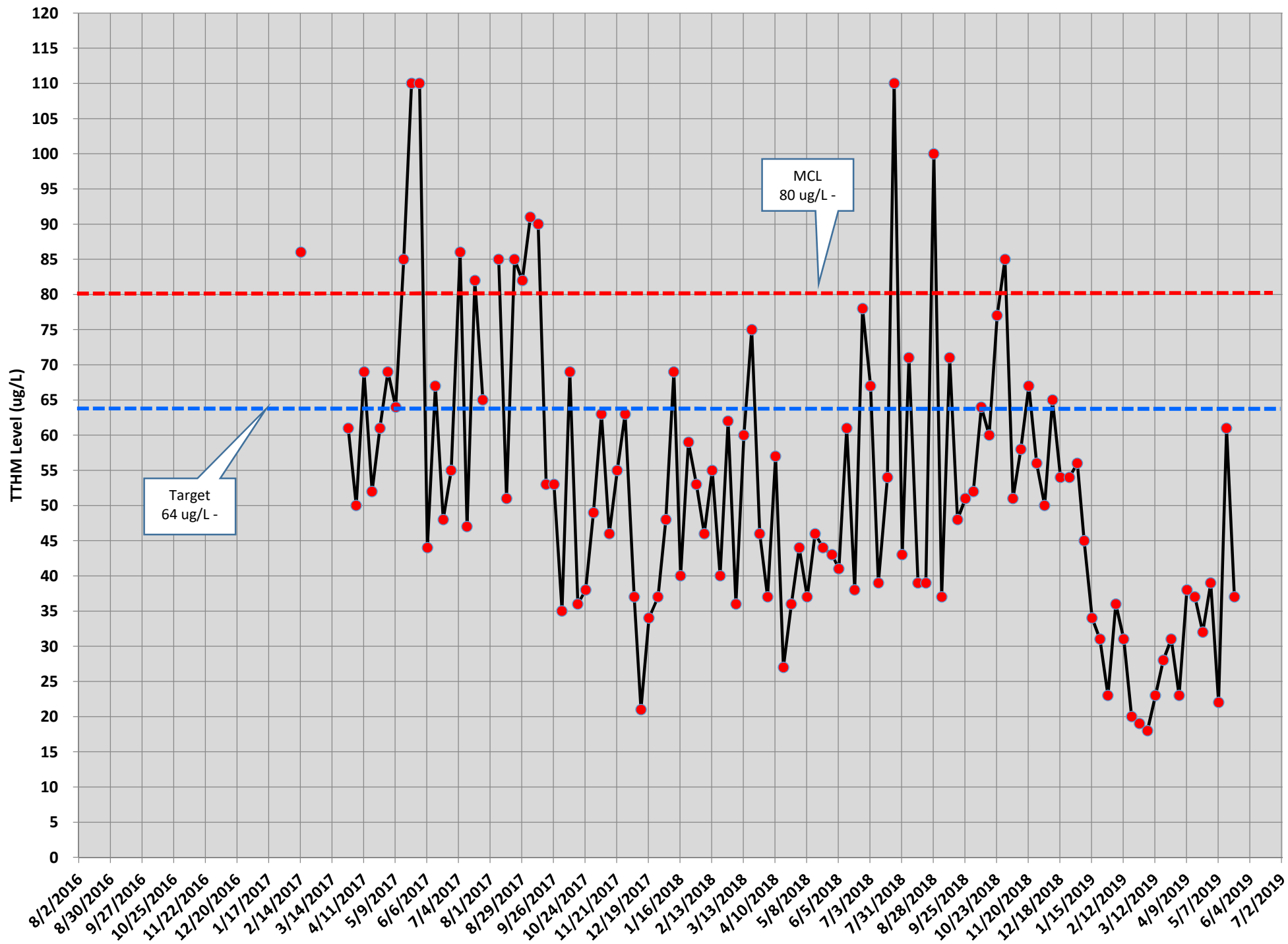
FMWD at Paschall Booster - TTHM's Levels



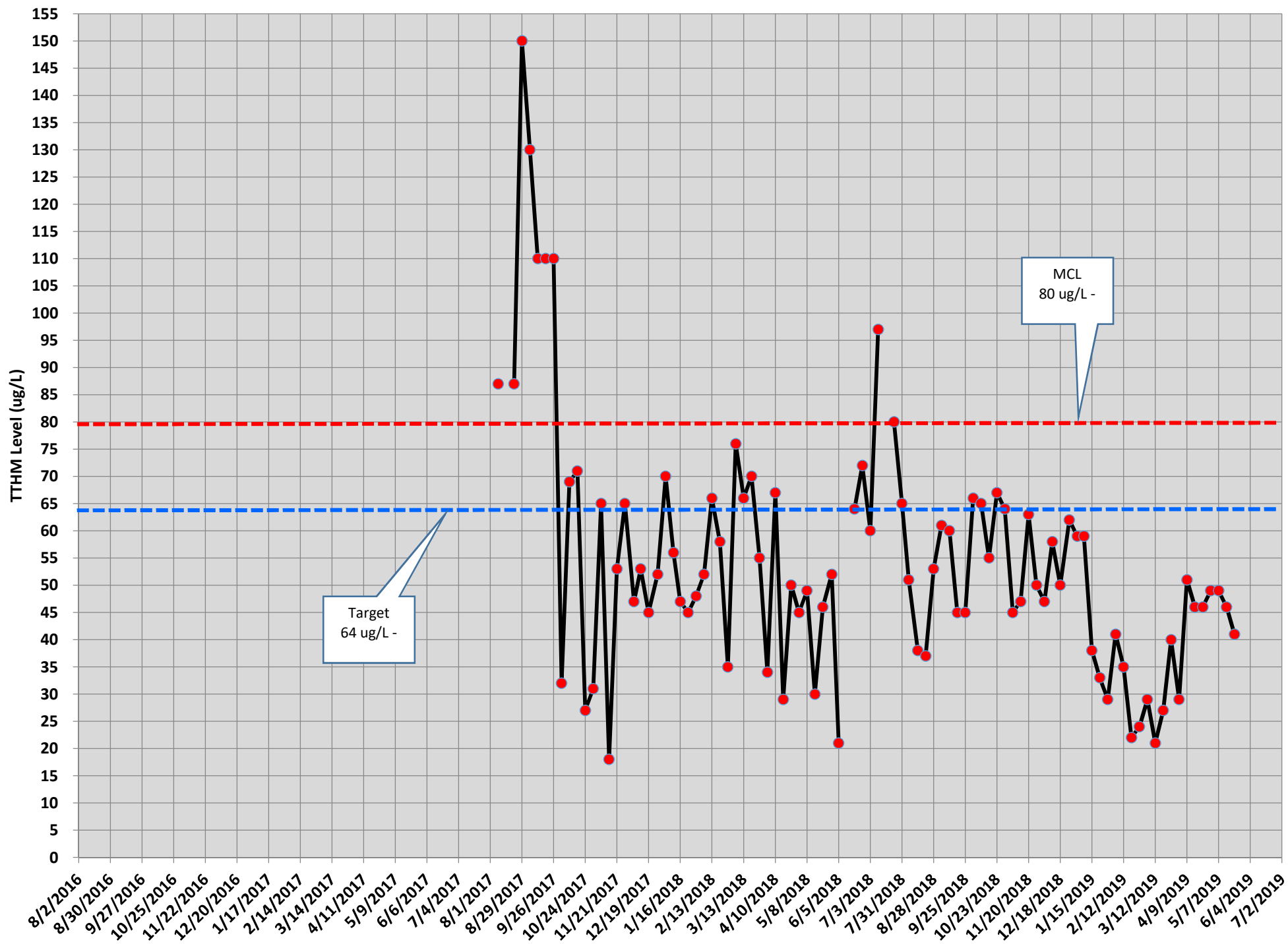
Encinal Reservoir (Zone 1) - TTHMs Levels



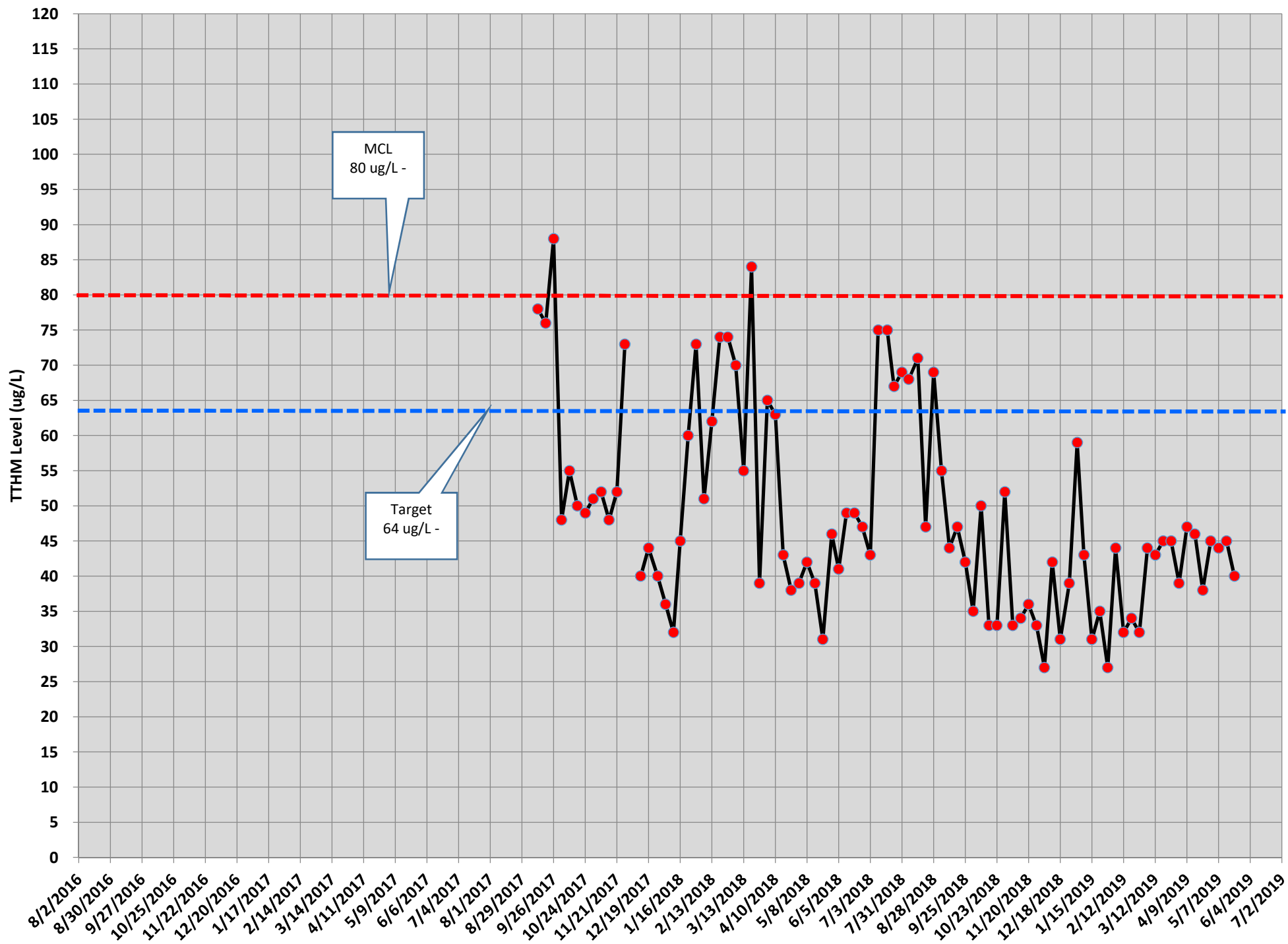
Williams Reservoir (Zone 2) - TTHMs Levels



Ordunio Reservoir (Zone 2) - TTHMs Levels

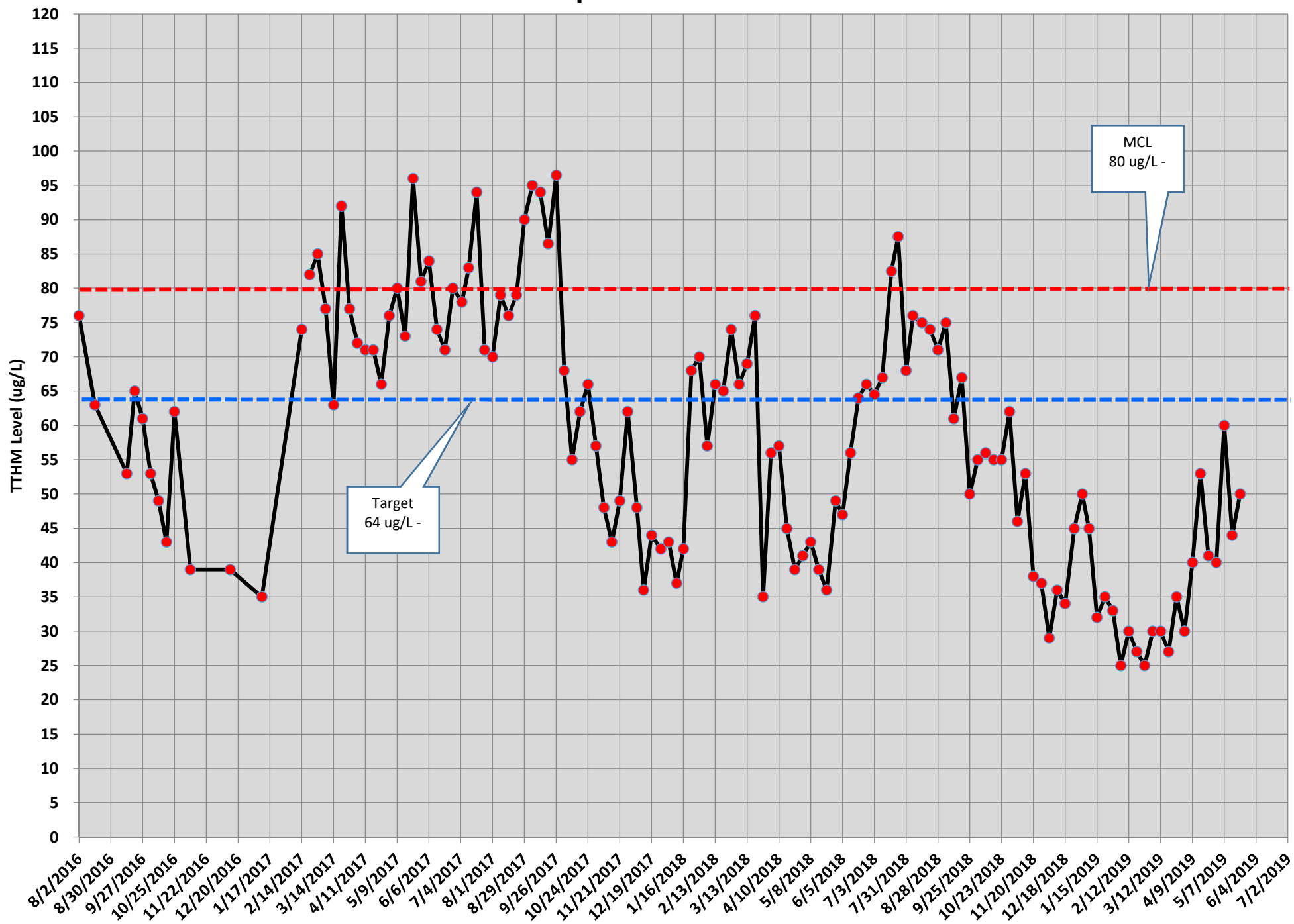


Rosemont Reservoir (Zone 3) - TTHMs Levels

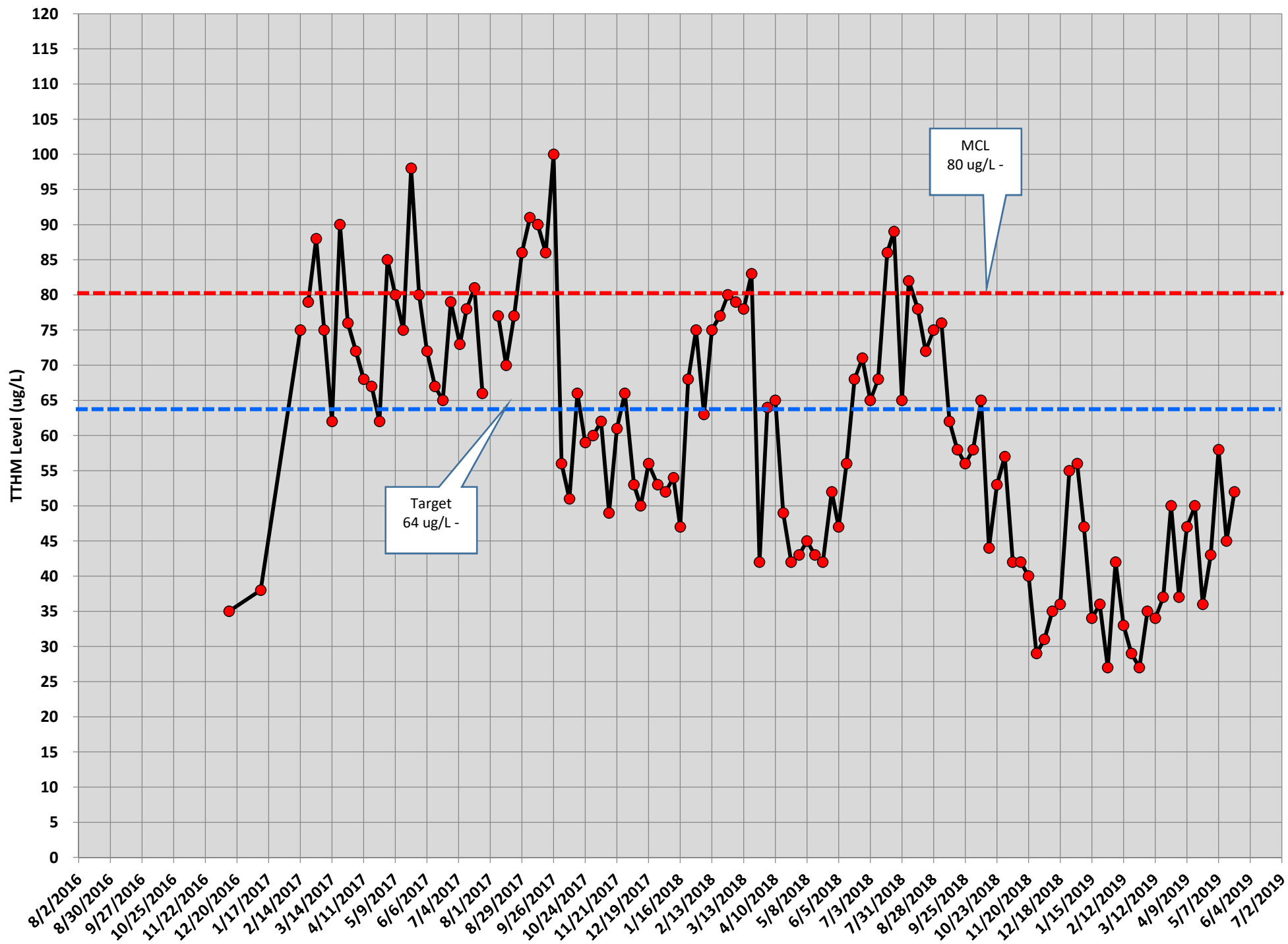


Oak Creek Reservoir (Zone 4) - TTHMs Levels

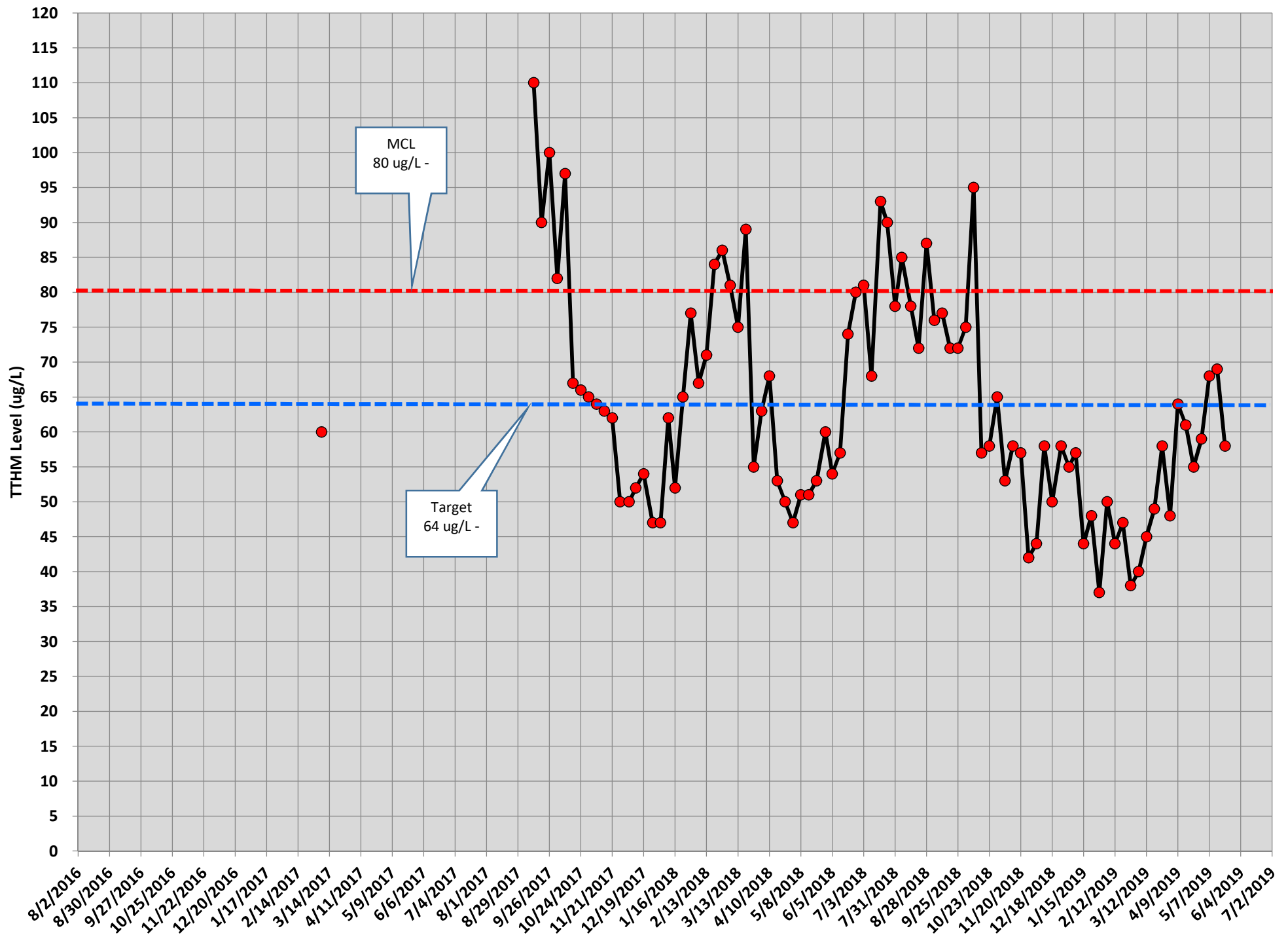
Compliance Location



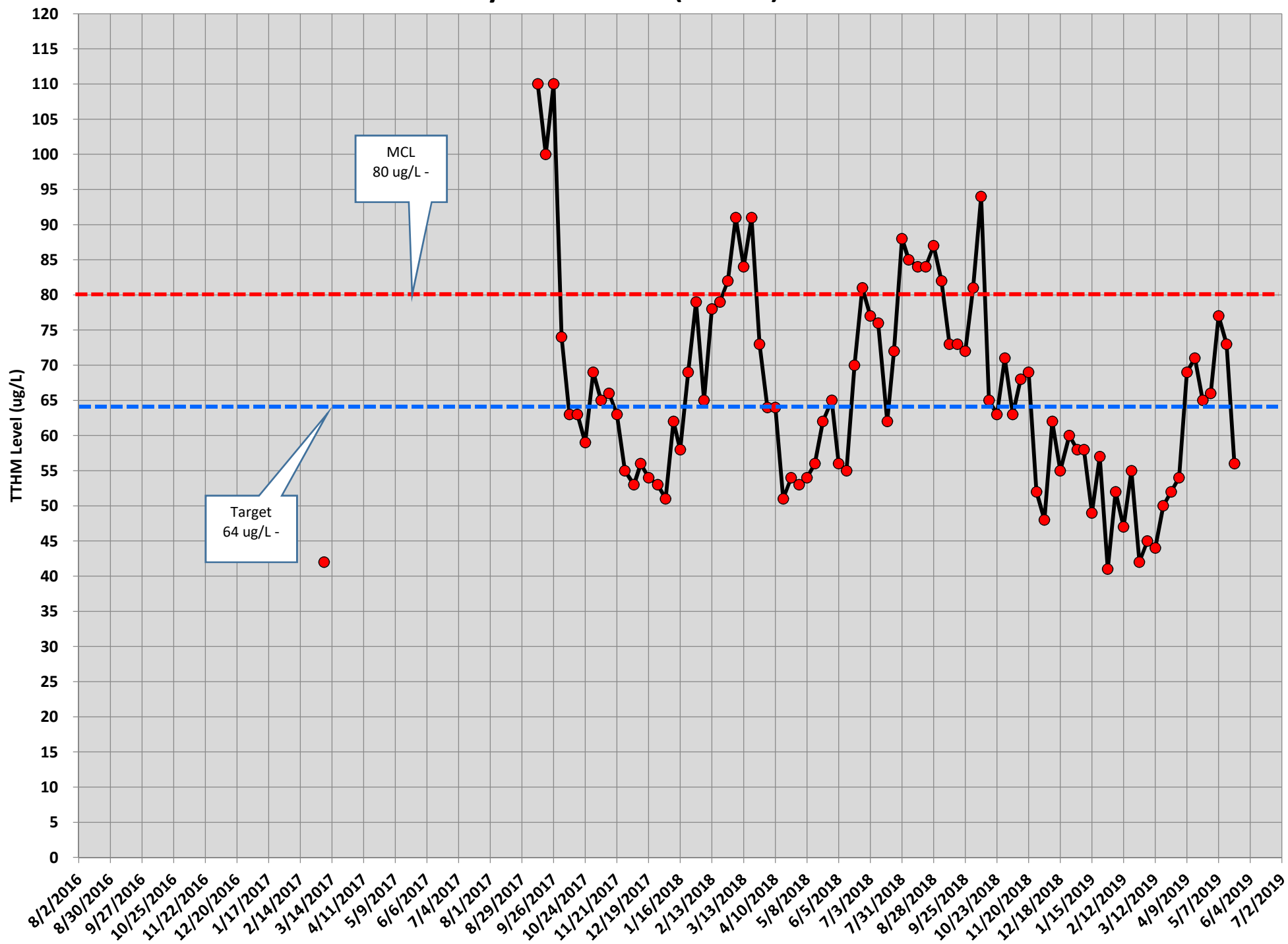
Markridge Reservoir (Zone 5) - TTHMs Levels



Eagle Canyon Reservoir (Zone 5) - TTHMs Levels

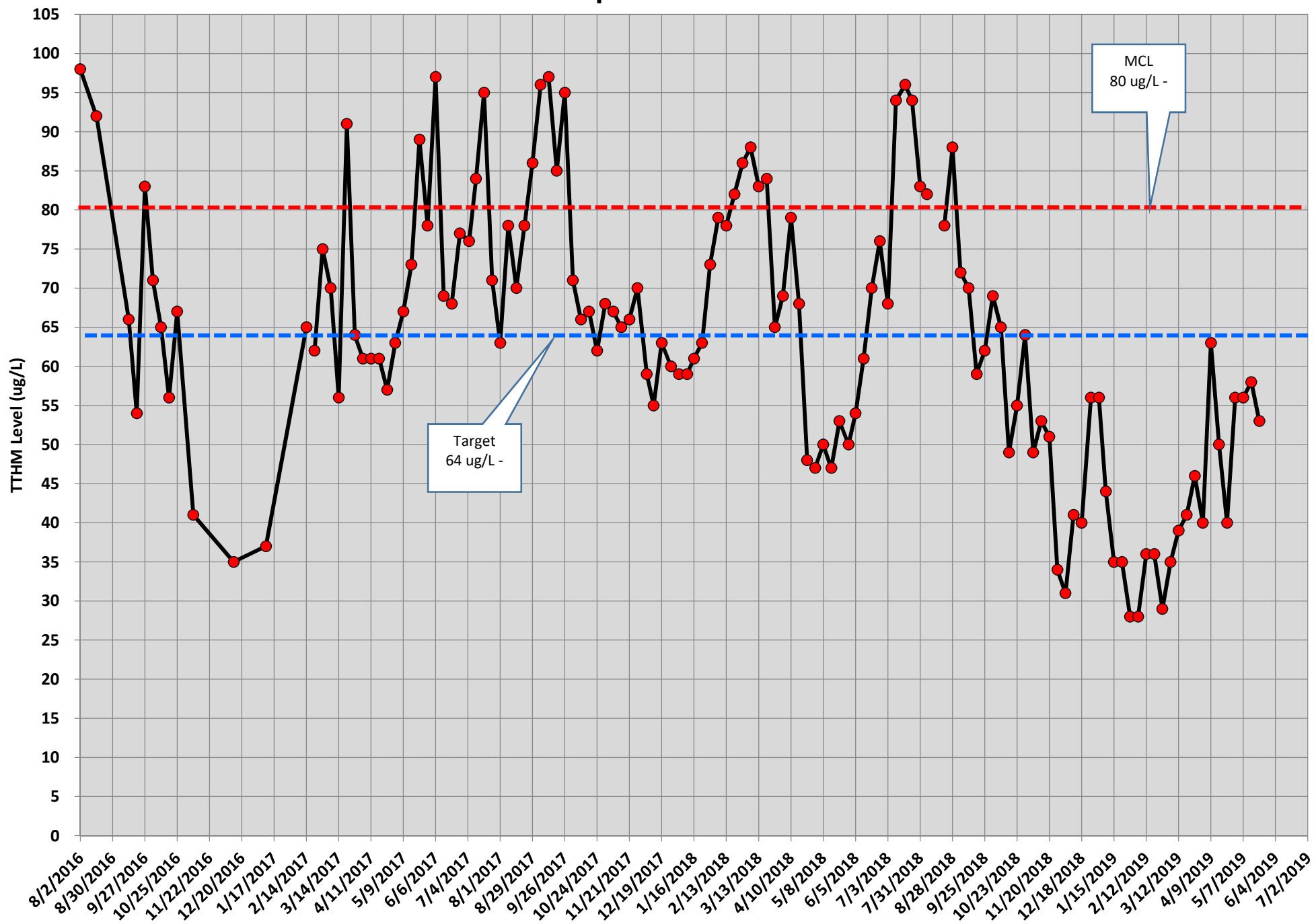


Goss Canyon Reservoir (Zone 6) - TTHMs Levels

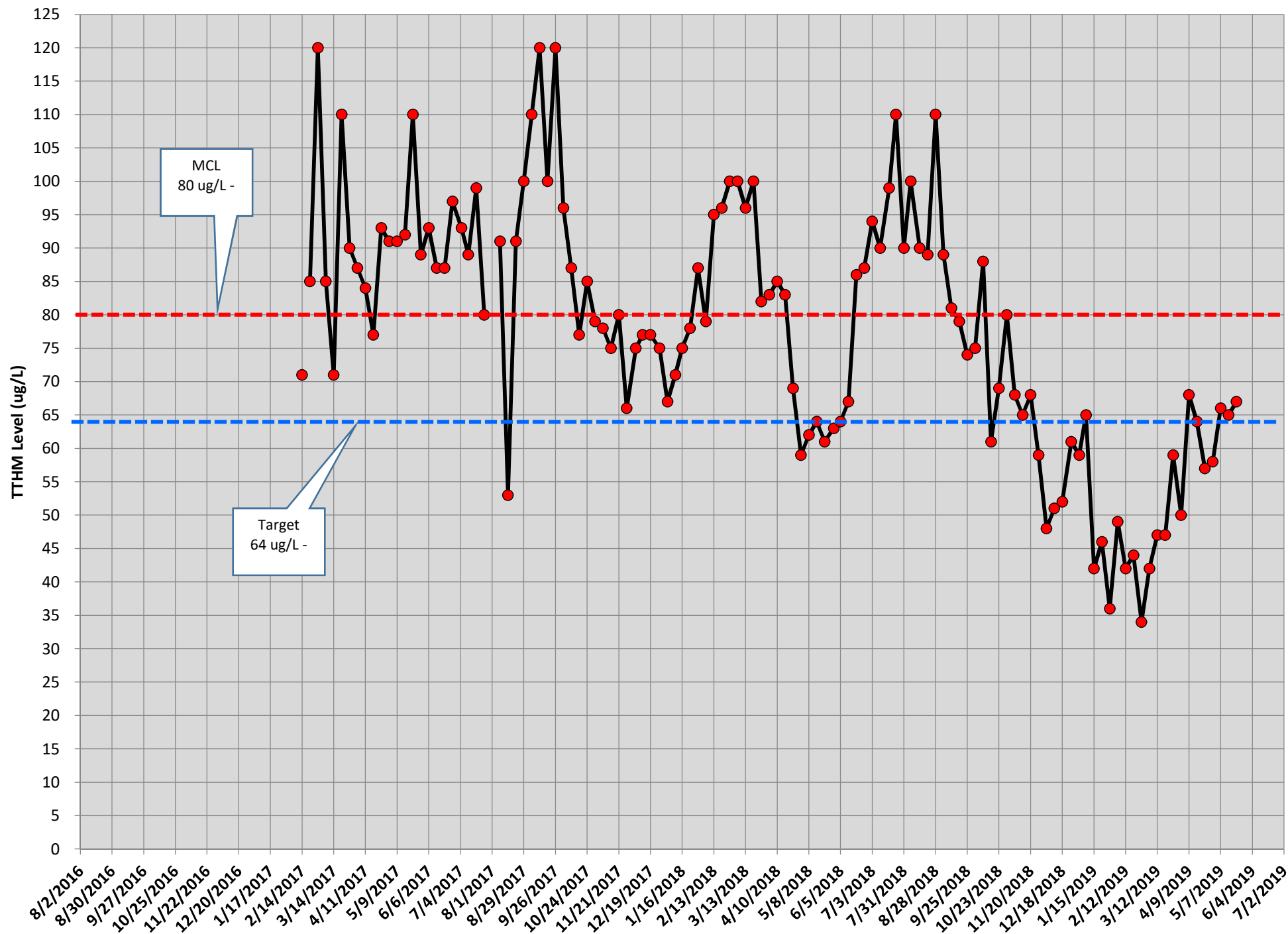


Dunsmore Reservoir (Zone 7) - TTHMs Levels

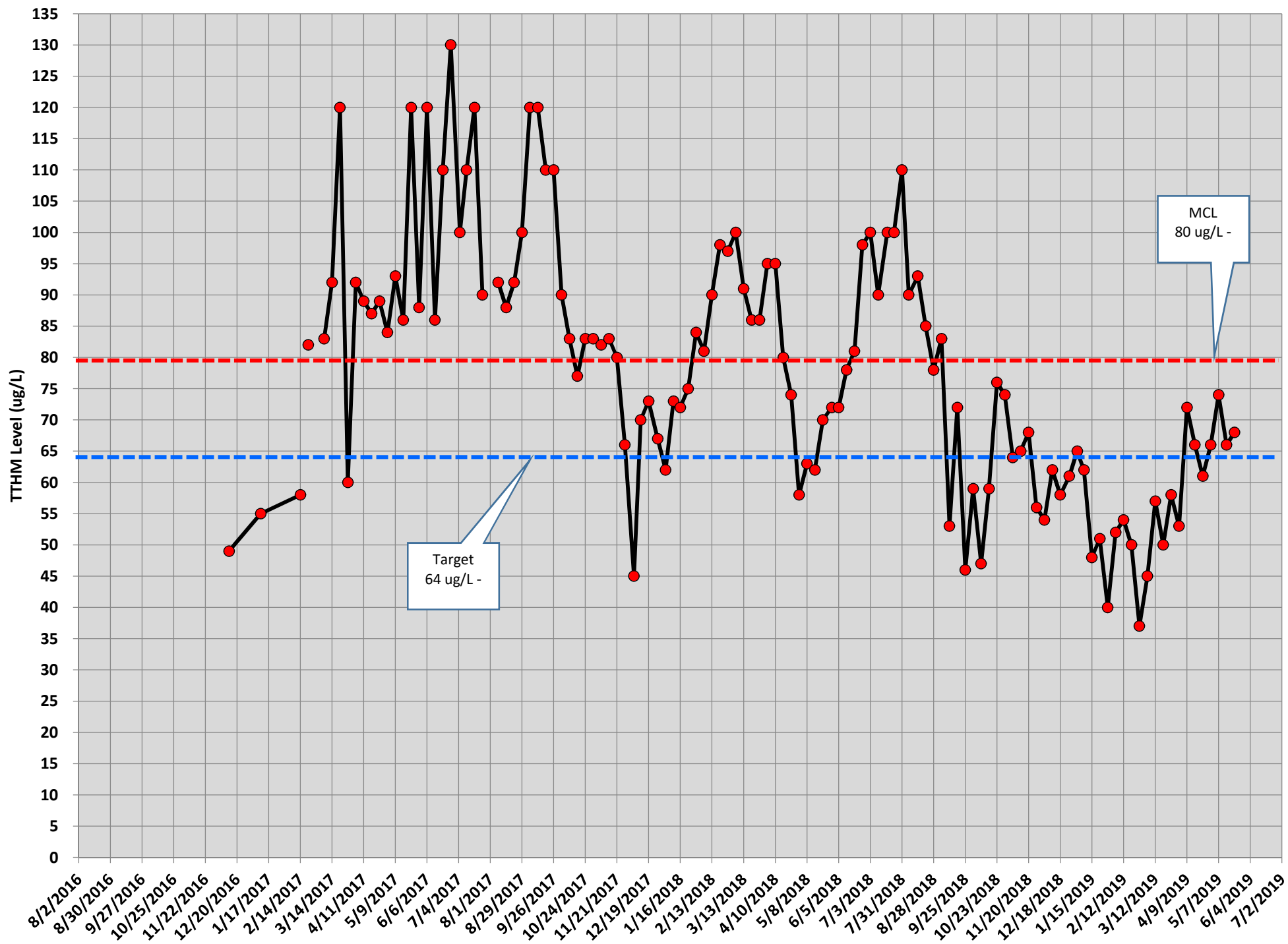
Compliance Location



Cresta Heights Reservoir (Zone 8) - TTHMs Levels

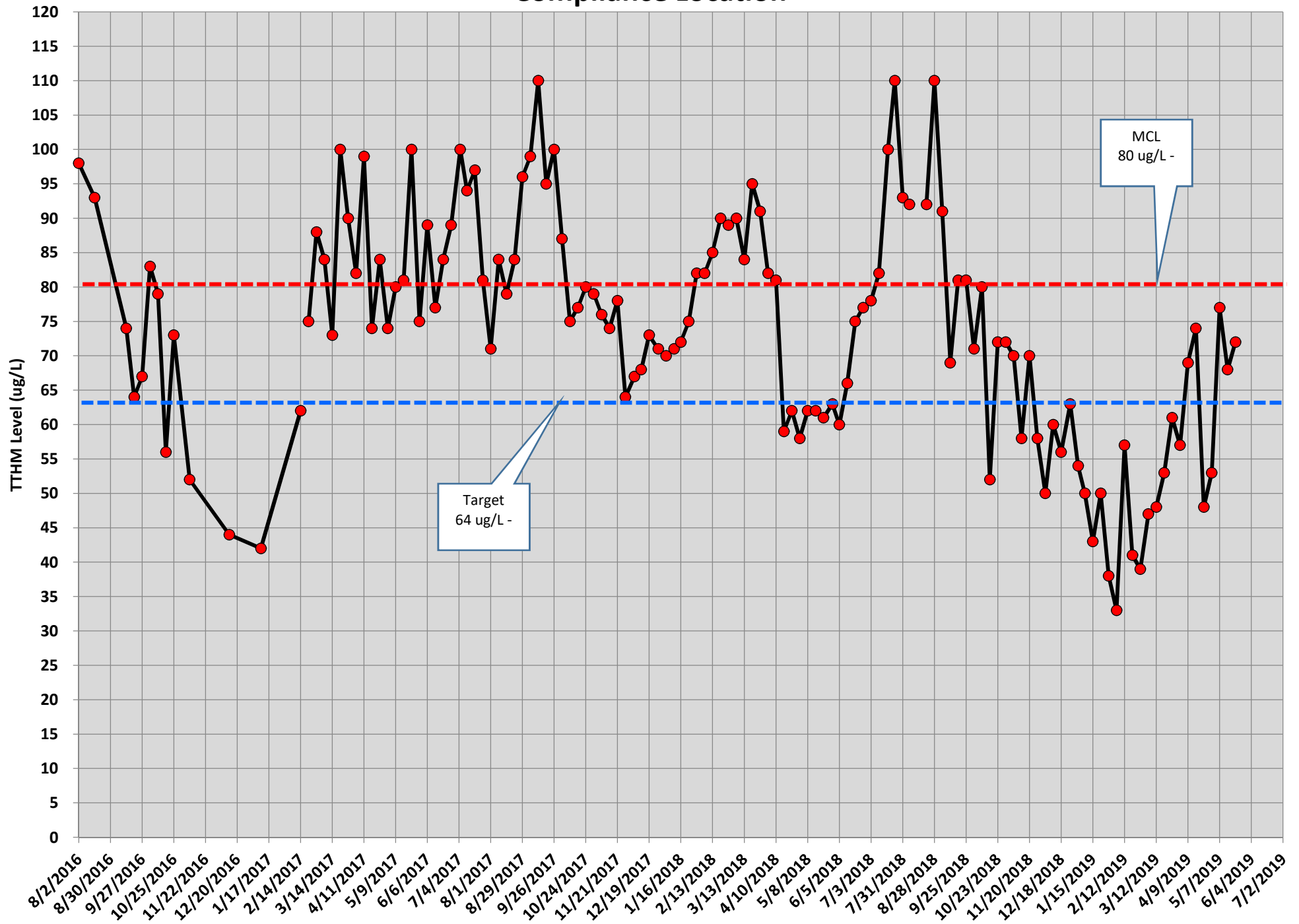


Edmund No. 1 Reservoir (Zone 9) - TTHMs Level



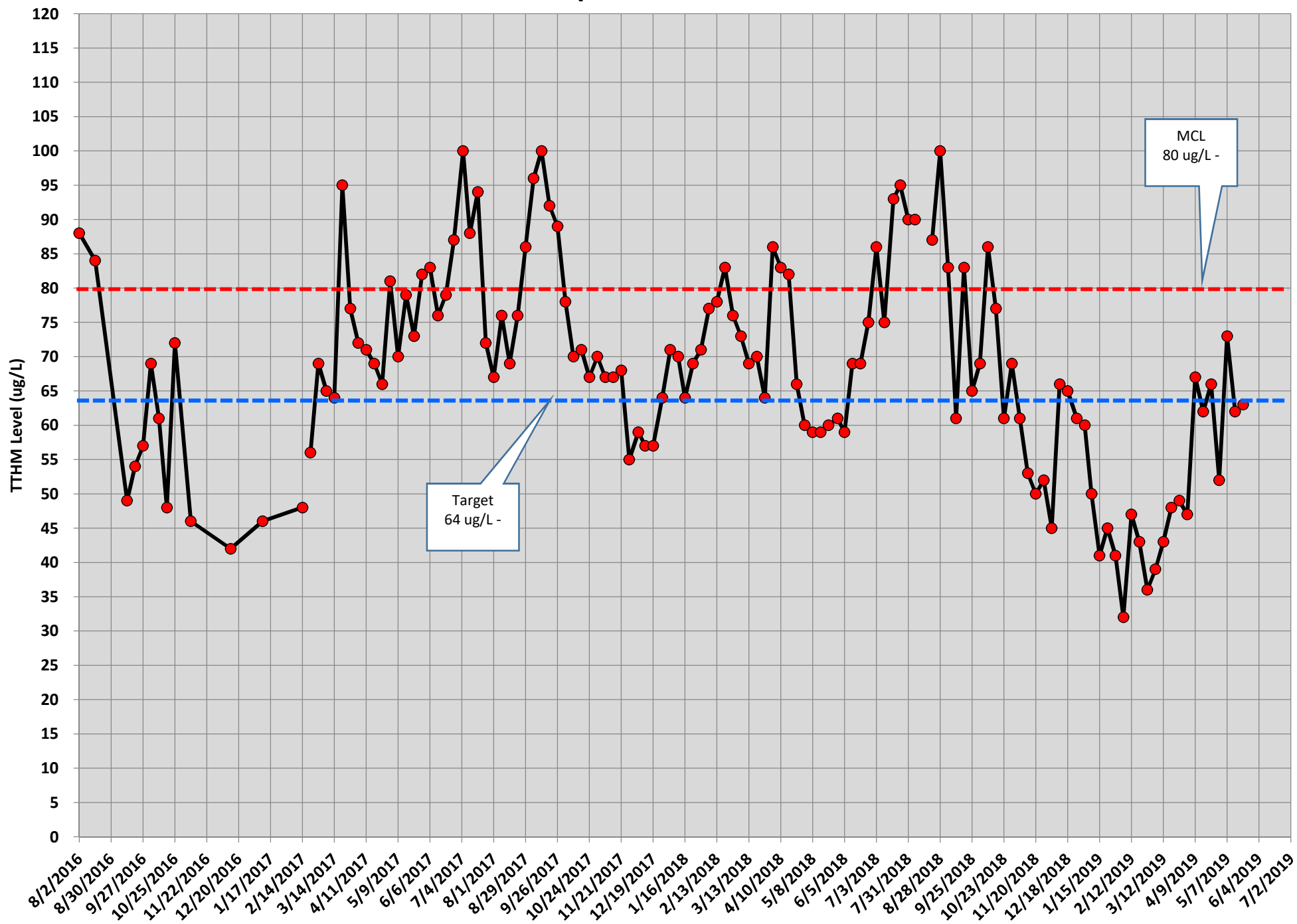
Edmund No. 2 (Zone 9) - TTHMs Levels

Compliance Location

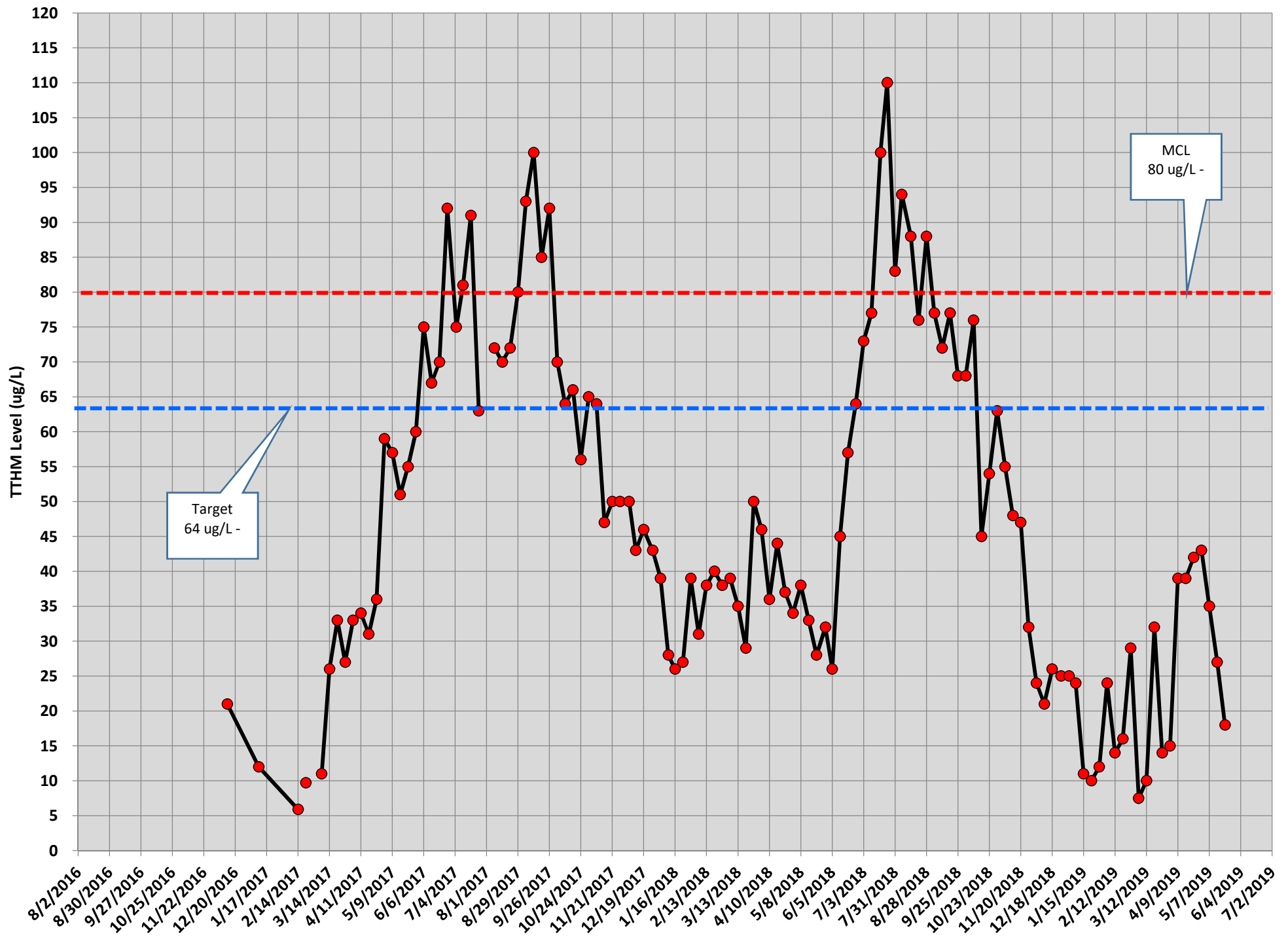


Shields Reservoir (Zone 10) - TTHMs Levels

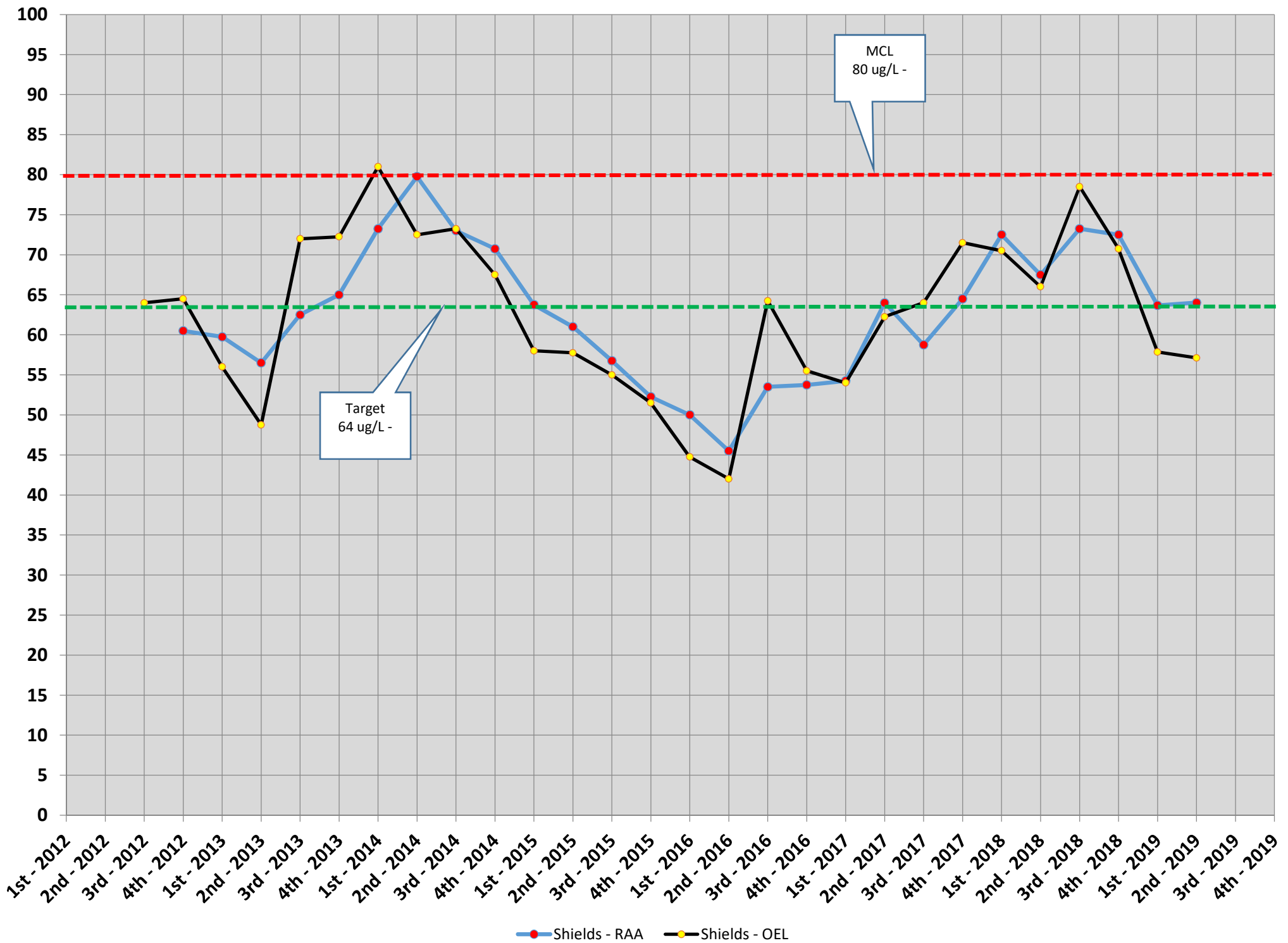
Compliance Location



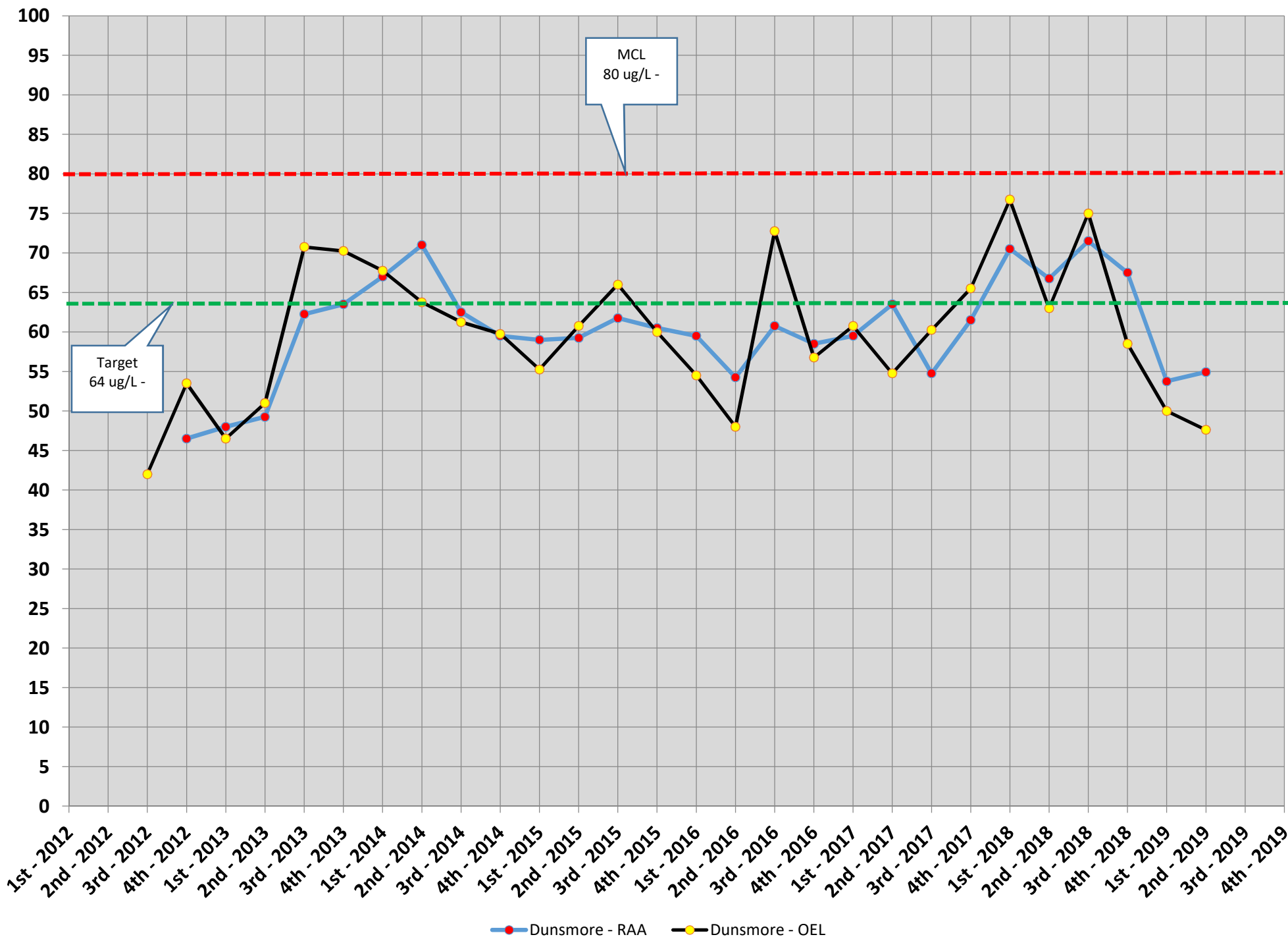
Pickens Reservoir (Zone 11) - TTHMs Levels



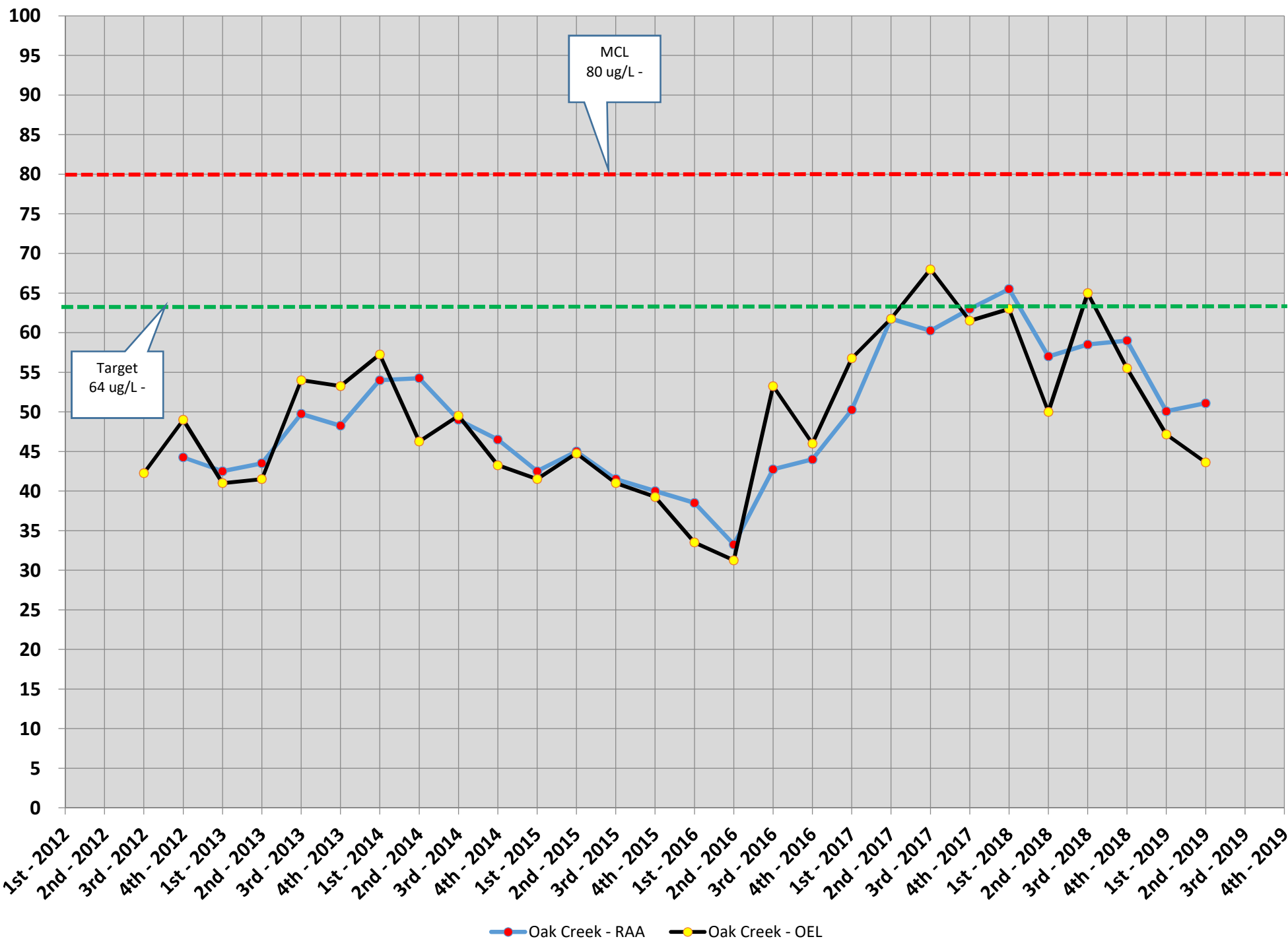
Shields - Quarterly TTHM - Running Annual Average 2012 - 2019



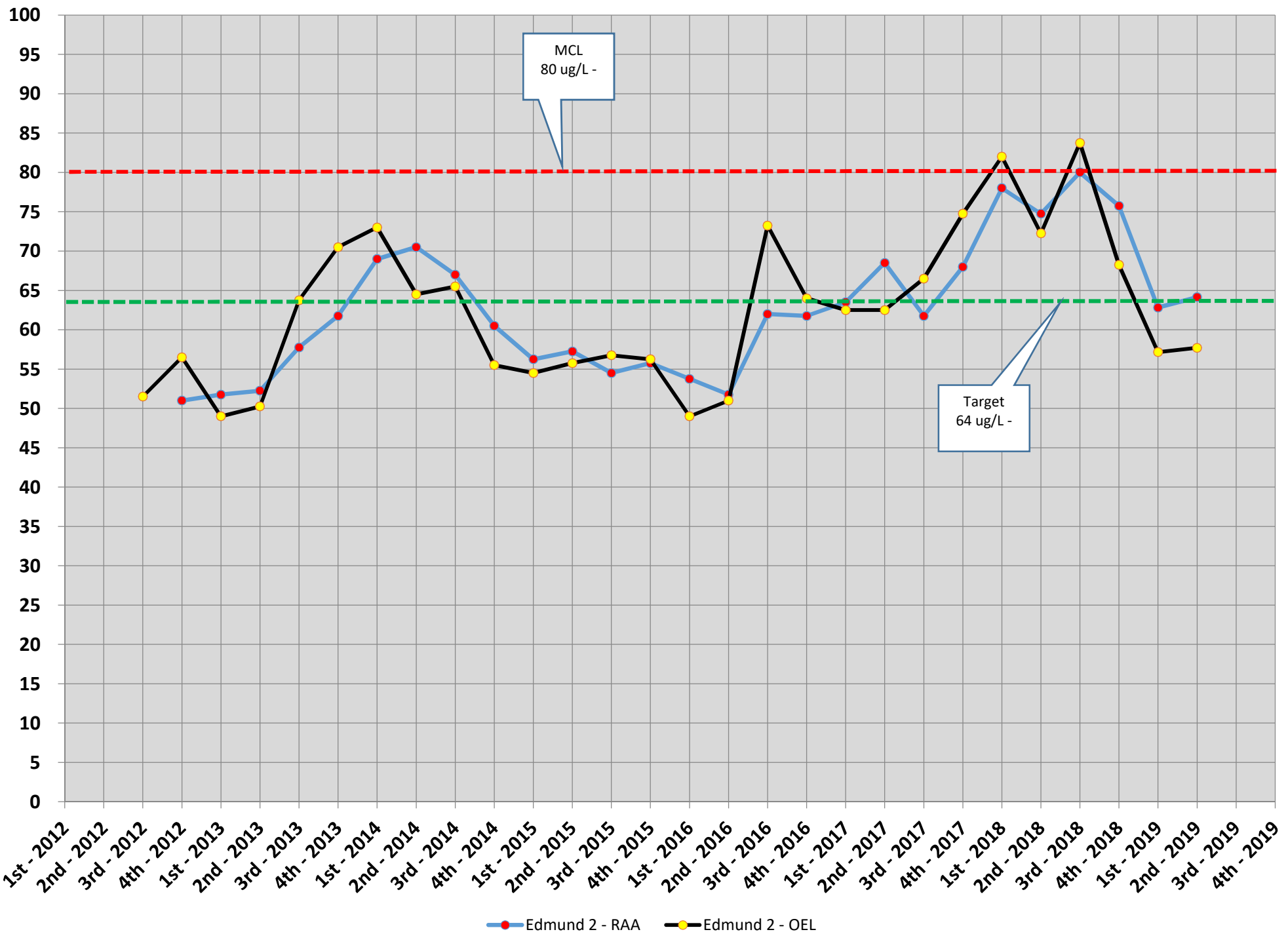
Dunsmore - Quarterly TTHM - Running Annual Average 2012 - 2019



Oak Creek - Quarterly TTHM - Running Annual Average 2012 - 2019



Edmund II - Quarterly TTHM - Running Annual Average 2012 - 2019



CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 1
September 25, 2018

To: Honorable President and Members of the Board of Directors
From: David S. Gould, P.E. – District Engineer
Subject: TTHM Mitigation and Disinfection Process Upgrades, Project E-995

ACTION ITEM:

TTHM Mitigation and Disinfection Process Upgrades, Project E-995 - Consideration and motion to waive the Bid Procurement and Purchasing Policy per Article 18.01 of CVWD's Rules and Regulations and allow the General Manager to select and negotiate with consultants and contractors for the installation of chloramination systems at the Glenwood and Mills Plants at a cost not to exceed \$410,000 and to find said project exempt from provisions of the California Environmental Quality Act (CEQA).

BACKGROUND:

The District uses chlorine as a disinfectant to treat drinking water. Chlorine can create disinfection by-products during treatment, known as total Trihalomethanes or TTHMs, as it reacts with naturally occurring organic matter in untreated water from imported water supplied by FMWD/MWD from either the Colorado River (CRW) or the State Water Project (SWP). The typical water supply blend for CVWD is 60% groundwater and 40% imported water. The water supply blend is now closer to 30% groundwater and 70% imported water.

CVWD has seen a steady rise in the concentration of TTHMs because CVWD is using more imported water as groundwater levels have not yet recovered from the latest drought. The increase in imported water, coupled with the additional chlorine required to maintain a chlorine residual in the system has led to an increase in TTHMs in the distribution system.

Past Actions:

- o August 14, 2018 – discussion by Dr. Issam Najm of WQTS on TTHMs and Chloramines. Staff awarded a \$10,000 consulting services contract to WQTS for initial study and evaluation.
- o August 28, 2018 – awarded a contract to WQTS for \$99,800 for chloramine conversion, public outreach, staff and operator training, Department of Drinking Water (DDW) permitting support, development of necessary mitigation plans, and preparation of 30% design plans.
- o August 28, 2018 – Staff awarded a contract to Hazen and Sawyer for \$9,971 to perform bench testing of CVWD's source water to determine proper breakpoint chlorination and formation of TTHMs.
- o Staff, WQTS and CV Strategies finalized the brochure and a list of frequently asked questions. Mailed out the brochure, which were received by customers starting on September 10, 2018.
- o Staff posted website information and a press release was sent to CV Weekly and Glendale Newspress.
- o Staff met with WQTS and Carollo Engineering to review the design scope of work and installation for the chloramination system as a design/build project.

DISCUSSION:

Staff and its consultants have been working on two options to bring the TTHM levels to below the target level of 64 ug/L and the following is a summary of tasks and actions taken to date.

Option 1 - Operational changes: Staff focused on three (3) factors that form TTHM in CVWD reservoirs

- 1) Water Age
- 2) Chlorine residual levels
- 3) Water temperature

Operations staff over the last two weeks has performed the following adjustments to the distribution system:

- 1) Water Age – Reduced the amount of water stored in each reservoir. The current water storage available is based upon the ultimate demand requirements for the system, which is shown in Table 1 and Table 2 attached.
- 2) Chlorine residual levels – Reduced the amount of chlorine injected at the Mills and Glenwood Plant to maintain a chlorine level of 1.0 mg/L after breakpoint chlorination. This also based on information provided from the Bench Testing performed by Hazen and Sawyer that is shown in the attached technical memorandum.

- 3) Water Temperature – the Bench Testing performed by Hazen and Sawyer showed that higher temperatures (about 30° C or 86° F) increases the TTHM formation in the water over time.

The results of these changes are shown on the attached TTHM charts for each reservoir site. Overall, the TTHM levels have reduced, however, the upper zones are still above the target level of 64 ug/L.

Staff has discussed with Hazen about the installation of a water aeration system inside Oak Creek Reservoir No. 1 & No. 2 (See Figure 1). Hazen indicated that they have designed these types of systems for various agencies and have seen a TTHM reduction of 30% to 40%. Staff has requested a preliminary proposal for the design of this system from Hazen.

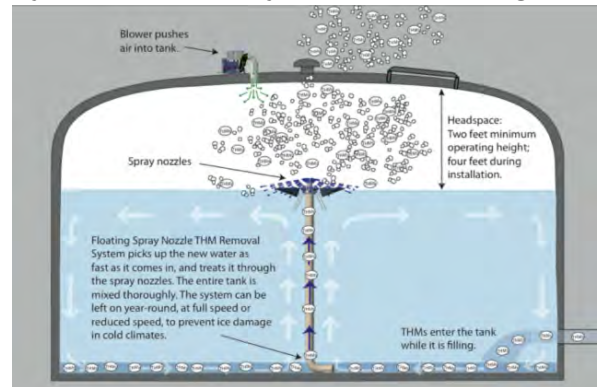


Figure 1
Typical Aeration System inside a reservoir

Option 2 - Chloramine Conversion:

The following is an update of tasks completed by staff and consultants:

- o Office & field staff training on the use of chloramines and anticipated questions from the community
- o Public workshop at the Glenwood Plant on September 15, 2018
- o System Operations training for conversion to chloramines and preventing nitrification of reservoirs including attendance at an AWWA –CA-NV Section - chloramines, colorimeters and sample collection workshop
- o WQTS and staff working on Nitrification Monitoring & Control Plan for submittal to DDW.

Staff had been working with WQTS & Carollo Engineers on a design/build contract to install the new ammonia system at the Mills and Glenwood plants. However, the proposed cost estimate for design/build contract was higher than anticipated.

Staff looked into completing the work by utilizing CVWD staff to coordinate purchasing of equipment & material and coordinating sub-contractors such as an electrical contractor for installation of the electrical system and a system integrator for the SCADA equipment. However, with staff's current workload, a consultant will be needed to assist with contract and construction administration for the chloramine conversion.

Staff requested a proposal from John Robinson Consulting (JRC) to provide contract administration based on the 30% design from Carollo Engineers. Tasks include assistance with the purchase of the ammonia metering pump system, coordinating the electrical work, coordinating the SCADA programming and integration, and assistance with ordering material, coordinating with CVWD crews for installation of on-site piping and project start up. Attached is the proposal from John Robinson Consulting that includes the anticipated hours at a reduced hourly rate for \$45,225.

WQTS provided an amended proposal for the additional design work by Carollo Engineers based on the site visit on September 5, 2018. The attached amendment proposal is requesting an additional \$44,240 for a buildable plan set.

Engineering Committee Recommendation:

Staff discussed the request for additional fees for consultants and the preliminary cost estimate to complete the conversion of the distribution system from free chlorine to chloramines with the Engineering Committee on September 20, 2018. It was the recommendation of the Engineering Committee to provide an overall cost estimate for chloramine conversion project to the Board of Directors. It was suggested by the Committee that the Board provide authorization to the General Manager, a not-to-exceed cost to select and negotiate with consultants and contractors for the installation of chloramination systems at the Glenwood and Mills Plants, thereby allowing the project to continue without the lag time of waiting for Board approval. Staff prepared a preliminary cost estimate as shown below.

Preliminary Cost Estimate:

The table below shows a cost summary of previously approved costs and preliminary cost estimate for the conversion to chloramines for discussion with the Board.

Cost Summary - Previously Approved	
<u>Consultants - Planning, Design & Construction Admin</u>	Cost
WQTS - Planning	\$10,000
WQTS - Design	\$99,800
Hazen & Sawyer	\$9,970
Total - Consultants	\$119,770
<u>Public Notification</u>	
CV Strategies	\$3,500
Printing	\$1,500
Mailing	\$1,500
Total - Public Notification	\$6,500
<u>Sampling</u>	
WQ Sampling - From 7/1/18 to Present	
210 Samples X \$60/EA	\$12,600
24-hr Surcharge - 100%	\$12,600
Total Sampling	\$25,200
Total Cost to Date - Previously Approved	\$151,470

Cost Estimate for Chloramination System Improvements	
<u>Consultants - Planning, Design & Construction Admin</u>	Estimate Cost
WQTS - Design - Additional	\$44,240
John Robinson Consulting (Estimate)	\$45,225
Total - Consultants	\$89,465
<u>Sampling</u>	
Samples - 9/18 to 12/31/18 - 14 Weeks – 238 samples	\$14,280
24-hr Surcharge - 100%	\$14,280
Total Sampling	\$28,560
<u>Glenwood - Ammonia Station</u>	Estimate Cost
Ammonia metering pump skid	\$50,000
Electrical Upgrade	\$15,000
SCADA - Integration/wiring/conduits	\$15,000
Chlorine Analyzer	\$5,000
Ammonia Tank	\$2,500
On-site Piping	\$8,000
Vault	\$5,000
Misc + Welder	\$17,000
Subtotal	\$117,500
<u>Mills - Ammonia Station</u>	Estimate Cost
Ammonia metering pump skid	\$50,000
Electrical Upgrade	\$15,000
SCADA - Integration/wiring/conduits	\$15,000
Chlorine Analyzer	\$5,000
Ammonia Tank	\$2,500
On-site Piping	\$8,000
Misc + Welder	\$17,000
Subtotal	\$112,500
Total Cost Estimate for Ammonia Systems	\$230,000
20% Contingency	\$46,000
Total Cost Estimate for Construction	\$276,000
Misc. Costs (i.e. Chemical)	\$16,415
Total for Chloramination System Improvements	\$410,000
Total Costs and Estimated Cost for Project	\$561,470

Project Schedule:

The attached Table 3 shows the project schedule based on meeting the October 1 deadline of reducing TTHM levels below 64 ug/L. The schedule shows that the new ammonia equipment could be installed by the end of 2018. However, it is dependent on the lead time for procurement of the equipment, which is estimated to be 6 – 8 weeks.

The attached Table 4 shows the project schedule, if the TTHM levels are not below the target of 64 ug/L on October 1, 2018. The schedule includes operational training to shift to 100% imported water, meeting with FMWD on the amount of water needed and the duration, sampling intervals in critical locations to determine if nitrification is occurring, dead-end main flush out schedule and duration, and schedule for boosting chlorine in critical areas.

RECOMMENDATION:

It is staff's recommendation to concur with the Engineering Committee to authorize the General Manager to select and negotiate with consultants and contractors for the installation of chloramination systems at the Glenwood and Mills Plants for a not-to-exceed cost of \$410,000.

ENVIRONMENTAL REVIEW:

This project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301, Existing Facilities, of the CEQA Guidelines. This project is a Class 1, which consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the determination.

FUNDING AVAILABILITY:

The following are options for providing funding for further discussion with the Board:

Option 1: Utilize MTBE reserve fund:

MTBE Reserve Fund Balance as of 7/1/18	\$ 5,300,000
Transfer - Rate Stabilization (\$150k) & OPEB (\$400k)	\$ (550,000)
Revised MTBE Reserve Fund Balance as of 9/21/18	\$ 4,750,000
Additional Funding Required	\$ 561,470
Projected MTBE Reserve Fund Balance	\$ 4,188,530

Option 2: Reduce FY 18/19 CIP Budget and utilizing MTBE fund reserve for the remainder:

Capital Improvement Project Program	Budget FY 18/19	Revised Budget FY 18/19
1. Water Supply (<i>Defer rehabilitation of 3 wells</i>)	\$ 635,000	\$ 410,000
2. Water Storage	\$ 514,800	\$ 514,800
3. Water Distribution	\$ 326,700	\$ 326,700
4. Water Treatment	\$ -	\$ -
5. Technology	\$ -	\$ -
6. Public Safety/Emergency Response	\$ -	\$ -
7. Facilities & Planning	\$ -	\$ -
Capital Improvement Projects - Total	\$ 1,476,500	\$ 1,251,500
CIP Reduction		\$ (225,000)
Total Cost Estimate for Chloramine Conversion		\$ 561,470
Additional Funding Required		\$ 336,470
MTBE Reserve Fund Balance as of 7/1/18		\$ 5,300,000
Transfer - Rate Stabilization (\$150k) & OPEB (\$400k)		\$ (550,000)
Revised MTBE Reserve Fund Balance as of 9/21/18		\$ 4,750,000
Additional Funding Required		\$ (336,470)
Projected MTBE Reserve Fund Balance		\$ 4,413,530

| Prepared by:



David S. Gould, P.E.
District Engineer

Submitted by:



Nem Ochoa
General Manager

Attachments:

1. TTHM charts for each reservoir site
2. Table 1 - Water Storage - ultimate demand requirements
3. Table 2 – Water Storage – reduced reservoir capacity
4. Hazen and Sawyer – Draft Technical Memorandum
5. John Robinson Consulting Proposal dated September 17, 2018
6. WQTS Amendment Proposal dated September 20, 2018
7. Table 3 – Project Schedule
8. Table 4 – Alternative Project Schedule

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CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 1
November 20, 2018

To: Honorable President and Members of the Board of Directors
From: David S. Gould, P.E. – District Engineer
Subject: TTHM Mitigation and Disinfection Process Upgrades, Project E-995

ACTION ITEM:

TTHM Mitigation and Disinfection Process Upgrades, Project E-995

- a) Consideration and motion to transfer \$500,000 from the MTBE reserve fund for the operation and maintenance costs necessary for the conversion to chloramines.
- b) Consideration and motion to waive the Bid Procurement and Purchasing Policy per Article 18.01 of CVWD's Rules and Regulations and allow the General Manager to select and negotiate with consultants and contractors for the operations and maintenance for the new chloramination systems at a cost not to exceed \$500,000.

BACKGROUND:

The District uses chlorine as a disinfectant to treat drinking water. Chlorine can create disinfection by-products during treatment, known as total Trihalomethanes or TTHMs, as chlorine reacts with naturally occurring organic matter in imported water supplied by FMWD/MWD from either the Colorado River (CRW) or the State Water Project (SWP). Typically, the water supply blend for CVWD is 60% groundwater and 40% imported water. With the on-going localized drought, CVWD's water supply blend has shifted to 37% groundwater and 63% imported water. CVWD has seen a rise in the concentration of TTHMs because CVWD is using more imported water as groundwater levels have not yet recovered from the latest drought. This, coupled with additional chlorine needed for breakpoint chlorination in the system, has led to an increase in TTHMs in the distribution system.

Past Actions:

- o August 14, 2018
 - Discussion by Dr. Issam Najm of WQTS on TTHMs and Chloramines.
 - Awarded a \$10,000 consulting services contract to WQTS for initial study and evaluation.
- o August 28, 2018
 - Awarded a contract to WQTS for \$99,800 for chloramine conversion, public outreach, staff and operator training, Department of Drinking Water (DDW) permitting support, development of necessary mitigation plans, and preparation of 30% design plans.
 - Awarded a contract to Hazen and Sawyer for \$9,971 to perform bench testing of CVWD's source water to determine proper breakpoint chlorination and formation of TTHMs.
- o September 11, 2018
 - Staff, working with WQTS and CV Strategies, mailed out public information brochures with a list of frequently asked questions.
 - Staff posted information on website and articles in the CV Weekly and Glendale Newspress.
- o September 15, 2018 – Public Workshop at the Glenwood Plant
- o September 25, 2018
 - Authorized General Manager to select and negotiate with consultants and contractors for the installation of chloramination systems at the Glenwood and Mills Plants for \$410,000.
 - Award contract to John Robinson Consulting (JRC) for \$45,225 for contract and construction administration for the new ammonia injection system.
 - Amended contract to WQTS for \$44,240 for additional design work by Carollo Engineers.
- o October 9, 2018
 - Office & field staff trained on the nitrification and chloramines processes
 - Carollo Engineers submitted preliminary 30% design plans for review
- o October 23, 2018
 - Site walk at Glenwood and Mills Plants to determine location of ammonia injection skids, ammonia injection conduits, SCADA and electrical conduits.
 - JRC prepared and sent out a request for quote for purchase of two (2) ammonia injection pump skids.

- Grace Environmental Services (Grace) provided a proposal for a system operator to assist staff during the chloramine conversion process in the distribution system.
- Site visit from Apex Manufacturing Solution (APEX), on the design and installation of SCADA equipment and integration at Glenwood and Mill Plants.
- Met with Hazen and Sawyer on design and installation of new chlorine analyzers at six (6) locations to provide additional monitoring after conversion to chloramines.
- o November 6, 2018
 - Field crews potholed the 14-inch water main at the Glenwood Plant for depth and location for the ammonia injection concrete vault.
 - Awarded a contract and ordered the concrete vault from Jensen Precast for \$36,775 at the Glenwood Plant and estimated delivery is 8 – 10 weeks.
 - Awarded a contract and ordered the ammonia injection pump skids from Cortech Engineering for \$29,850 and estimated delivery 8 – 10 weeks.
 - 30% design plans were reviewed and sent back to Carollo Engineers for final edits.
 - Awarded a contract to BrikArt Construction for \$7,011 to install the concrete pad at the Mills Plant.
 - Awarded contract to APEX for \$47,725 for the design and installation of SCADA equipment and integration at Glenwood and Mill Plants.

DISCUSSION:

Operational Changes:

Staff continued with water system operational changes to lower the TTHM levels to the target level 64 ug/L and below the MCL limit of 80 ug/L as shown on the attached charts. The TTHM levels shown are slightly higher this week, as the District increased the amount of water storage in response to the high wind warnings and possible wildfires in the area.

Staff also performed TTHM sampling at the four (4) reservoirs (Oak Creek, Dunsmore, Shields and Edmund No. 2) for the 2018 4th quarter TTHM compliance. The results as shown on the attached charts show that the annual running average level and the operational exceedance level are below the MCL limit of 80 ug/L.

Construction – Chloramine Conversion:

Installation of Ammonia Injection System for Chloramine Conversion:

The following are a list of tasks planned for the next few weeks by staff and its consultants:

- o JRC working with ammonia chemical suppliers (Hill Brothers Chemical Company and Univar) on the type of ammonia (liquid ammonia sulfate), containment units, transportation, delivery and costs.
- o JRC received a quote from Poly Processing Company for the 405 gallon tank at Mills Plant of \$3,000.
- o JRC scheduling a meeting with Glendale Fire Department to review the design and obtain permits.
- o APEX provided a list of SCADA equipment that CVWD will purchase through Royal Industrial Solutions with an estimate cost of \$15,200.
- o Staff met with a representative from HACH online analyzers for chlorine and ammonia monitoring.
- o Staff met with a representative from ValveTek Utility Services about performing water main flushing.
- o WQTS and staff continued working on Nitrification Monitoring & Control Plan for submittal to DDW.

Operations & Maintenance:

Additional Monitoring for Nitrification after Conversion to Chloramines:

Staff has been working with WQTS and Hazen and Sawyer on planning for the conversion to chloramines and water quality issues. A major concern is the possibility of nitrification in CVWD's reservoirs, which can result in a reservoir being taken out of service and water being wasted. Currently, we have chlorine analyzers at eleven (11) of the reservoir sites and we will need an additional six (6) chlorine analyzers to monitor for total chlorine, total ammonia and nitrite. Nitrite is a pre-cursor for nitrification and monitoring these levels will give staff advanced notification if nitrification is going to occur at a reservoir.

Upgrade Existing Chlorine Analyzers:

Staff met with HACH to discuss upgrading CVWD's existing chlorine analyzers from measuring free chlorine to total chlorine at five (5) sites and adding new total ammonia analyzers at the Glenwood and Mills plants. In addition, staff will be meeting with representatives from Prominent Analyzers, where we have eight (8) Prominent chlorine analyzers in the system. The estimated cost for the upgrade at the Glenwood and Mills plants is \$64,500, and the estimated cost for the other sites is \$53,420.

New Chlorine Analyzers:

Staff met with Hazen and Sawyer to discuss a scope of work for engineering services for the installation of the six (6) chlorine analyzers at Cresta Heights Reservoir, Dunsmore Reservoir, Eagle Canyon Reservoir, Goss Canyon Reservoir, Paschall Booster Station, and Shields Reservoir.

- Scope of work included visits to each site to determine the ideal location of the chlorine analyzers to get representative chlorine samples, prepare design plans and specifications for construction at each site, project management, and meetings. The proposal cost from Hazen and Sawyer was \$53,255, which is about \$9,200 per site.
- Staff met with HACH regarding providing equipment for six (6) new chlorine analyzers that will measure total chlorine and pH levels. The estimated cost for these six sites is \$52,080.
- The estimated costs for purchasing new SCADA equipment, programming and integration into CVWD's SCADA system is about \$17,000 per site for a total cost of \$102,000.

Water Distribution Flushing:

Another water quality issue will be the possibility of nitrification occurring in the distribution system, which could result in positive total coliform results and additional flushing or wasting water. It has been suggested to perform water flushing of the entire distribution system to remove any biofilm that may react with the ammonia.

Staff met with Valvetek Utilities Services (Valvetek) about performing water main flushing for the 95 miles of CVWD's pipelines. Valvetek discussed the use of their no-discharge flushing truck which is called NO-DEC Flushing. Valvetek proposed using a system that will connect to one fire hydrant, pump the water through a filtration system and then put the water back into the distribution system. This technology eliminates wasting water to the storm drain system and obtaining a NPDES permit for discharging. Valvetek provided a preliminary quote to perform these services for about \$94,000, and the work should take about 8 weeks.

As an alternative, staff looked into utilizing CVWD crews and lost water to compare the costs. Staff estimated that with a 2-man crew working 3 days a week, the water distribution system will be flushed within 12 – 15 weeks (if no other emergencies occur during that period). The water lost is estimated to be about 7.5MG, and the total estimated cost for lost water and labor is estimated to be \$105,000.

PROJECT SCHEDULE:

Project Schedule - Installation of Ammonia Injection System:

Staff has updated the project schedule based on the lead time for the ammonia skids and the precast concrete vault provided by the vendors. Cortech Engineering and Jensen Precast both indicated that shop drawings should be submitted to CVWD within the next 2-3 weeks, and the estimated delivery will be in 6-8 weeks. It is anticipated that delivery will be around January 11, 2019. CVWD's crews will install the ammonia equipment after arrival, and it is anticipated that it will be completed in early February 2019. Staff is also working with State Water Resources Control Board, Division of Drinking Water (DDW), and it is anticipated to be completed by the middle of February.

Project Schedule – Conversion to Chloramines:

Staff has reviewed the TTHMs Mitigation Option Decision Tree that was provided by WQTS, which set specific dates for converting to chloramines based on TTHM levels in the reservoirs.

As shown in the attached TTHM charts, the TTHM levels have been reduced and are in compliance for the 2018 4th quarter sampling for TTHMs. The next compliance sampling will be in February 2019 for the 2019 1st quarter sampling. Staff believes that the TTHM levels will remain below the MCL limit of 80 ug/L during this period as a result of the low winter demands and lower temperatures,

Staff still has concerns that TTHM levels will rise during the spring and summer of 2019 due to high demands, temperature and reduced groundwater. Staff is looking at this period to start the disinfection conversion to chloramines and the ammonia injection systems.

Preliminary Cost Estimate:

The table below shows updated estimated and final costs for planning, design, construction and operations & maintenance for the conversion to chloramines.

Account Description	Amount
Transfer from MTBE Reserve Fund (9/25/18)	\$500,000
Transfer from MTBE Reserve Fund - Request 11/20/18	\$500,000
Total Estimated Cost for Project	\$1,000,000
Consultants - Planning, Design & Construction Admin	
WQTS - Planning	\$10,000
WQTS - Design	\$144,040
Hazen & Sawyer - Water Quality	\$9,970
John Robinson Consulting - Project Management	\$45,225
Grace Environmental Services (3 months part-time service)	\$15,000
Apex Manufacturing Solution - SCADA programing and integration	\$47,525
Public Notification - CV Strategies , Printing & Mailing	\$11,168
WQ Sampling - 7/1/18 to 10/30/18	\$50,124
WQ Sampling - 11/1/18 to 12/31/18 (Estimate)	\$21,948
Subtotal	\$355,000
Construction	
Ammonia Injection Skids (2)	\$29,850
SCADA - Equipment (RTU's, Communication, cabinets, etc..) (Estimate)	\$15,200
Concrete Pad & Grading at Mills	\$7,011
Ammonia Inject Vault at Glenwood	\$34,690
Ammonia Tank at Mills	\$4,532
Conduits/Wiring/Electrical Materials (Estimate)	\$7,000
Upgrade Chlorine Analyzers (Mills & Glenwood)	\$64,500
Safety - Eye Wash, Containment, etc.. (materials only) (Estimate)	\$3,200
On-site Welding (Estimate)	\$9,000
Misc (Estimate)	\$5,017
Subtotal	\$180,000
Operations & Maintenance	
Upgrade Chlorine Analyzers - 13 locations Equipment (Estimate)	\$53,420
New Chlorine Analyzers - 6 locations - Hazen and Sawyer - Design	\$53,255
New Chlorine Analyzers - 6 locations - SCADA Programing & Equipment (Estimate)	\$102,000
New Chlorine Analyzers - 6 locations - Equipment (Estimate)	\$52,080
Flushing - Water Distribution System including Dead-ends (Estimate) (8 weeks)	\$94,000
Misc (Estimate)	\$5,245
Subtotal	\$360,000
Total Cost	\$895,000
Amount Remaining	\$105,000

Update of MTBE reserve fund:

MTBE Reserve Fund	
Account Description	Amount
MTBE Reserve Fund Balance as of 7/1/18	\$5,300,000
Transfer - Rate Stabilization (\$150k) & OPEB (\$400k)	(\$550,000)
Revised MTBE Reserve Fund Balance as of 9/21/18	\$4,750,000
Additional Funding Transferred – 9/25/18	(\$500,000)
Revised MTBE Reserve Fund Balance as of 10/01/18	\$4,250,000
Request for Additional Funding Transfer	(\$500,000)
Projected MTBE Reserve Fund Balance	\$3,750,000

RECOMMENDATION:

It is staff's recommendation to transfer \$500,000 from the MTBE reserve fund for the operation and maintenance costs necessary for the conversion to chloramines. In addition, staff is recommending that the Board authorize the General Manager to select and negotiate with consultants and contractors for the operation and maintenance of \$500,000.

Prepared by:



David S. Gould, P.E.
District Engineer

Submitted by:



Nem Ochoa
General Manager

Attachments:

1. TTHM Charts dated 11-13-18
2. Information on No-Des discharge technology



SANTA MARGARITA WATER DISTRICT SELECTED FOR 2019 CLAIR A. HILL AGENCY AWARD FOR EXCELLENCE

BY MATT VEEH MAY 9, 2019 WATER NEWS

ACWA presented the prestigious 2019 Clair A. Hill Water Agency Award for Excellence to the Santa Margarita Water District (SMWD) for its Lake Mission Viejo Advanced Treated Water Facility project. The award, sponsored by Jacobs, was presented during ACWA's 2019 Spring Conference & Exhibition in Monterey where more than 1,500 local water officials are gathered through Friday for programs and panel discussions on a variety of key water issues.

SMWD formed a unique public-private partnership to fast-track, finance and build an Advanced Treated Water Facility in just eight months. The result is that Lake Mission Viejo is now the first swimming and recreational lake in California to use recycled water instead of drinking water for lake refill. The facility takes traditional tertiary treated recycled water and produces purified effluent for direct discharge and use in Lake Mission Viejo. Switching to Advanced Treated Water for lake refill ended a nearly 40-year practice of using up to 350 Acre-Feet of potable water annually to maintain water levels in the 125-acre Orange County lake, saving 114 million gallons of water per year.

"The Lake Mission Viejo Advanced Treated Water Facility is a wonderful example of a local water agency collaborating with private and public partners to build an innovative water treatment and supply project that provides multiple regional benefits," said ACWA President Brent Hastey.

The other finalist for this year's award was the **Crescenta Valley Water District**, which undertook a project to reactivate one of its wells at the Ordunio Reservoir and install an ARoNite biological nitrate removal treatment facility. The project will increase CVWD's ability to pump its adjudicated rights within the Verdugo Basin, utilize a local water source, and reduce CVWD's dependence on imported water. The project was a joint venture with APTwater and resulted in one of the first bio-remediation systems with the ability to remove nitrates to be built in California.

ACWA's Clair A. Hill Water Agency Award for Excellence is an annual award program that recognizes outstanding achievements by public water agencies. The winning agency has the honor of awarding a \$5,000 scholarship to a deserving student in the name of Clair A. Hill, founder of the consulting engineering firm CH2M, now Jacobs.

For more information about ACWA's awards programs, please visit www.acwa.com/about/awards.

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CRESCENTA VALLEY WATER DISTRICT

General Manager Report

To: Honorable President and Members of the Board of Directors
From: Nem Ochoa, General Manager
Subject: **General Manager Report**

GM Report
May 28, 2019

General Managers Report Topics:

- GM Activities

The following are some highlights in this month's report:

- Directors' stipend report

STAFFING

One (1) employee has a work anniversary in May. Kellen Boyce – 17 years.

As of May 24th the District has gone 1,809 days without a lost time accident.

GENERAL MANAGER ACTIVITIES

Meetings:

Labor Negotiations meeting	- May 15 th
Management staff meetings	- May 20 th , May 27 th
Special Board Meeting – Budget Workshop	- May 21st
Special Board Meeting - Interviews	- May 23rd

Submitted by:



Nem Ochoa
General Manager

Crescenta Valley Water District
Director Stipend/Expense Reimbursement Report
May 2019

Name	Meeting Date	Meeting/ Event	Items Discussed	Meeting Compensation	Expense Reimbursement
Director Bodnar	05/03/19	Executive Committee	Budgets, Prop 218, recruitment for Board	\$ 90.00	
	05/14/19	Board Meeting		\$ 90.00	
	05/21/19	Budget Workshop	Setting budgets and CIP for FY 2019/20	\$ 90.00	
	05/23/19	Special Board Meeting	Board candidate interviews	\$ 90.00	
	05/28/19	Board Meeting		\$ 90.00	
	05/29/19	Special Board Meeting	Board candidate interviews	\$ 90.00	
Director Claessens	05/14/19	Board Meeting		\$ 90.00	
Director Erickson	05/03/19	Executive Committee	Budgets, Prop 218, recruitment for Board	\$ 90.00	
	05/08/19	ACWA Spring Conf	at ACWA Spring Conference (5/8 - 5/10)	\$ 270.00	
	05/14/19	Board Meeting		\$ 90.00	
	05/21/19	Budget Workshop	Setting budgets and CIP for FY 2019/20	\$ 90.00	
	05/23/19	Special Board Meeting	Board candidate interviews	\$ -	
	05/28/19	Board Meeting		\$ -	
	05/29/19	Special Board Meeting	Board candidate interviews	\$ -	
Director Putnam	05/14/19	Board Meeting		\$ 90.00	
	05/21/19	Budget Workshop	Setting budgets and CIP for FY 2019/20	\$ 90.00	
	05/23/19	Special Board Meeting	Board candidate interviews	\$ 90.00	
	05/28/19	Board Meeting		\$ 90.00	
	05/29/19	Special Board Meeting	Board candidate interviews	\$ 90.00	
Director Tejeda	05/06/19	ACWA/JPIA Meetings	at ACWA/JPIA meeting (5/6 - 5/7)	\$ 180.00	
	05/14/19	Board Meeting		\$ 90.00	
	05/21/19	Budget Workshop	Setting budgets and CIP for FY 2019/20	\$ 90.00	
	05/23/19	Special Board Meeting	Board candidate interviews	\$ 90.00	
	05/28/19	Board Meeting		\$ 90.00	
	05/29/19	Special Board Meeting	Board candidate interviews	\$ -	