I hereby certify that the following agenda
was posted at least 72 hours prior to the time
of the meeting so noticed below at
24251 Los Alisos Boulevard, Lake Forest, California.

DENNIS P. CAFFERTY, Secretary of the
El Toro Water District and the Board of
Directors thereof

AGENDA

EL TORO WATER DISTRICT

REGULAR MEETING OF THE
BOARD OF DIRECTORS
ENGINEERING COMMITTEE MEETING
AND
FINANCE AND INSURANCE COMMITTEE MEETING

October 19, 2020

7:30 a.m.

This Meeting is being conducted in accordance with Governor Newsom's Executive Order N-29-20 (Paragraph 3) and the conditions specified therein which waive certain provisions of the Brown Act.

In an effort to protect public health and prevent the spread of COVID-19 (Coronavirus), and in accordance with the Governor's Executive Order N-29-20, **there will be no public location for attending in person.**

The Order allows all Board Members to participate telephonically in the Meeting from remote locations. As such, Directors Monin, Gaskins, Vergara, Freshley and Havens will be participating telephonically.

Members of the public who wish to comment on any item within the jurisdiction of the District or on any item on the agenda, may observe and address the Meeting by joining at this link: https://us02web.zoom.us/j/84328349848. (Meeting ID: 843 2834 9848). Members of the public who wish only to listen to the telephonic meeting may dial in at the following numbers (669) 900-6833 or (346) 248-7799 with the same Meeting ID noted above. Please be advised the Meeting is being recorded.

CALL TO ORDER – President Monin

PLEDGE OF ALLEGIANCE – Director Havens

ORAL COMMUNICATIONS/PUBLIC COMMENTS

Members of the public may address the Board at this time or they may reserve this opportunity with regard to an item on the agenda until said item is discussed by the Board. Comments on other items will be heard at the times set aside for "COMMENTS REGARDING NON-AGENDA ENGINEERING COMMITTEE ITEMS" or for "COMMENTS REGARDING NON-AGENDA FIC ITEMS." The public may identify themselves when called on and limit their comments to three minutes.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Determine need and take action to agendize item(s) which arose subsequent to the posting of the Agenda. (ROLL CALL VOTE: Adoption of this recommendation requires a two-thirds vote of the Board members present, or, if less than two-thirds of the Board members are present, a unanimous vote of those members present.)

ENGINEERING COMMITTEE

CALL MEETING TO ORDER – Director Freshley

1. Consent Calendar

(All matters under the Consent Calendar will be approved by one motion unless a Board member or a member of the public requests separate action or discussion on a specific item)

a. Consider approving the minutes of the September 21, 2020 Engineering Committee meeting. (Minutes Included)

   Recommended Action: The Board will be requested to approve the subject minutes.

APPROVAL OF ITEMS REMOVED FROM TODAY'S ENGINEERING COMMITTEE CONSENT CALENDAR

The Board will discuss items removed from today's Engineering Committee Consent Calendar requiring further discussion.

Recommended Action: The Board will be requested to approve the items removed from today's Engineering Committee Consent Calendar.

ENGINEERING ACTION ITEMS

There are no action items.

ENGINEERING GENERAL INFORMATION ITEMS

2. El Toro Water District Capital Project Status Report
(Reference Material Included)

Staff will review and comment on the El Toro Water District Capital Project Status Report.

3. MWDOC Economic Benefits Study (Reference Material Included)

Staff will review and comment on the proposed Economic Benefits Study being considered for approval of contract award by the Municipal Water District of Orange County.

4. Engineering Items Discussed at Various Conferences and Meetings
(Oral Report)

The Committee will discuss any pertinent Engineering items discussed at Conferences.

COMMENTS REGARDING NON-AGENDA ENGINEERING COMMITTEE ITEMS

CLOSE ENGINEERING COMMITTEE MEETING

FINANCE AND INSURANCE COMMITTEE MEETING

CALL MEETING TO ORDER – Director Vergara

5. Consent Calendar

(All matters under the Consent Calendar will be approved by one motion unless a Board member or a member of the public requests separate action or discussion on a specific item)

a. Consider approving the minutes of the September 21, 2020 Finance and Insurance Committee meeting (Minutes Included)

Recommended Action: The Board will be requested to approve the subject minutes.

APPROVAL OF ITEMS REMOVED FROM TODAY'S FINANCE AND INSURANCE COMMITTEE CONSENT CALENDAR

The Board will discuss items removed from today's Finance and Insurance Committee Consent Calendar requiring further discussion.

Recommended Action: The Board will be requested to approve the items removed from today's Finance and Insurance Committee Consent Calendar.

FINANCIAL ACTION ITEMS

6. **Quarterly Insurance Report** (Reference Material Included)

Staff will review and comment on the Quarterly Insurance Report for the period July 1, 2020 through September 30, 2020.

Recommended Action: Staff recommends that the Board Receive and File the Quarterly Insurance Report for the period of July 1, 2020 through September 30, 2020.

7. **Financial Package - Authorization to Approve Bills for Consideration dated October 19, 2020 and Receive and File Financial Statements as of September 30, 2020** (Reference Material Included)

The Board will consider approving the Bills for Consideration dated October 19, 2020 and Receive and File Financial Statements as of September 30, 2020.

Recommended Action: Staff recommends that the Board 1) approve, ratify and confirm payment of those bills as set forth in the schedule of bills for consideration dated October 19, 2020, and 2) receive and file the Financial Statements for the period ending September 30, 2020.

8. **El Toro Water District OPEB GASB 75 Actuarial Valuation** (Reference Material Included)

Staff will review and comment on the ETWD Actuarial Valuation Update as of Measurement Date June 30, 2019 prepared by Bartel Associates. This is an update to the full actuarial valuation completed in 2019 for measurement date June 30, 2018.

Recommended Action: Staff recommends that the Board Receive and File the ETWD Actuarial Valuation Update as of Measurement Date June 30, 2019.

9. **El Toro Water District Staffing & Succession Plan** (Reference Material Included)

Staff will provide an update on current and projected short-term future staff changes and projections of future staffing and organization chart impacts.

Recommended Action: Staff recommends that the Board of Directors consider authorizing a temporary exceedance of the head count defined in the 2020/21 Budget to facilitate the implementation of current succession planning efforts.

FINANCIAL INFORMATION ITEMS

10. Tiered Water Usage and Revenue Tracking (Reference Material Included)

Staff will review and comment on monthly and year to date Tiered Water Usage and Revenue tracking.

COMMENTS REGARDING NON-AGENDA FIC ITEMS

CLOSE FINANCE AND INSURANCE COMMITTEE MEETING

ATTORNEY REPORT

CLOSED SESSION

At this time the Board will go into Closed Session as follows:

1. At this time, the Board will go into Closed Session pursuant to Government Code Section 54956.9 (d) (1) to consult with legal counsel and staff on a matter of pending litigation. *El Toro Water District v. Rossmoor Sanitation, Inc et al and Does 1through 50 inclusive- Orange County Superior Court- Case No. 30-2020-01152257-CU-OR—CJC.*

2. At this time, the Board will go into Closed Session pursuant to Government Code Section 54956.9 (d) (1) to consult with legal counsel and staff on a matter of pending litigation. [Class Action] *Kessner et al. v. City of Santa Clara, et al. (Santa Clara County Superior Court - Case No. 20 CV 364054*).

3. At this time the Board will go into Closed Session pursuant to Government Code Section 54956.9 (d) (1) to consult with legal counsel and staff on a matter of pending litigation. *The People of the State of California, acting by and through the Department of Transportation. Plaintiff, vs. Laguna Hills Investment Company, L.P., a Delaware Limited Liability Company, et al., inclusive of El Toro Water District and Does 1 through 20, inclusive. Defendants- Orange County Superior Court- Case No. 30-2020-01140132-CU-EI-CXC.*

REGULAR SESSION

REPORT ON CLOSED SESSION (Legal Counsel)

Mr. Granito will provide an oral report on the Closed Session.

ADJOURNMENT TO 7:30 a.m., Monday, November 23, 2020.

The agenda material for this meeting is available to the public at the District's Administrative Office, which is located at 24251 Los Alisos Blvd., Lake Forest, Ca. 92630. If any additional material related to an open session agenda item is distributed to all or a majority of the board of directors after this agenda is posted, such material will be made available for immediate public inspection at the same location.

Request for Disability-Related Modifications or Accommodations

If you require any disability-related accommodation, including auxiliary aids or services, in order to participate in this public meeting, please telephone the District's Recording Secretary, Polly Welsch at (949) 837-7050, extension 225 at least forty-eight (48) hours prior to said meeting. If you prefer, your request may be submitted in writing to El Toro Water District, P.O. Box 4000, Laguna Hills, California 92654, Attention: Polly Welsch.

MINUTES OF THE REGULAR MEETING
& OF THE
ENGINEERING COMMITTEE MEETING

September 21, 2020

At approximately 7:30 a.m. President Monin called the regular meeting to order via Zoom

Director Vergara led the Pledge of Allegiance to the flag.

Committee Members JOSE F. VERGARA, MARK MONIN, KATHRYN FRESHLEY, MIKE GASKINS, and KAY HAVENS participated.

Also participating were DENNIS P. CAFFERTY, General Manager, JUDY CIMORELL, Human Resources Manager, GILBERT J. GRANITO, General Counsel, RICK OLSON, Operations Superintendent, BOBBY YOUNG, Principal Engineer, RORY HARNISCH, Project Engineer, CAROL MOORE, Laguna Woods City Councilmember, GRANT SHARP, DR. ERIC STEIN, CINDY RIVERS, AARN PORESKY, STEVE WEISBERG, BRYAN PASTOR, KRIS TANIGUCHI, AMANDA CARR, and POLLY WELSCH, Recording Secretary.

Oral Communications/Public Comments

There were no comments.

Items Received too Late to be Agendized

President Monin asked if there were any items received too late to be agendized. Mr. Cafferty replied no.

Director Freshley called the Engineering Committee Meeting to order at 7:33 a.m.

Consent Calendar

Director Freshley asked for a Motion.

Motion: President Monin made a Motion, seconded by Vice President Gaskins, and unanimously carried across the Board to approve the Consent Calendar.

Roll Call Vote:

President Monin	aye
Vice President Gaskins	aye
Director Vergara	aye
Director Freshley	aye
Director Havens	aye

South Orange County Environmental Flows Study

Mr. Cafferty introduced Grant Sharp with the Orange County Public Works who, along with his colleagues, gave a presentation on the South Orange County Environmental Flows Study.

President Monin stated that he would like to see a storm water project on our agenda sometime in the future. He then asked what streams are affected in our service area. Mr. Sharp replied Aliso Creek and possibly some portions of the Oso Creek watershed are directly impacted within El Toro Water District's service area.

Director Havens stated that the infrastructure in the stream bed is sensitive, and asked if this will be taken into account. She further asked about the detection and quantification markers for these studies. Mr. Sharp replied that they have done an enormous amount of data collection and they have accounted for existing infrastructure on in-stream diversions throughout the watershed management area. He further stated

that existing flood control infrastructure also impacts the water balance and the hydrology has been an important element of these studies.

Director Havens stated that there are pipelines running under some of the streams, and asked if they can be put in a safer situation without significant cost to the District. Mr. Sharp replied that this study is an opportunity to review such areas where rehabilitation and stream restoration could potentially provide benefit to the biological condition of the stream and also protect and improve the underlying infrastructure.

Mr. Poresky added that the study focuses on the water balance priority and stream erosion during wet weather, and there is a separate study that the County is initiating looking at high priority stream erosions and conceptual alternatives for mitigating the erosion that is occurring.

Director Vergara stated that regarding dry weather runoff, he is aware of two large projects; one in Santa Monica that collected dry weather runoff and treated the water, and the second is the San Diego creek that collects lots of dry weather runoff where they have biological treatment which favors the environment of the Newport back bay. He further stated that years ago ETWD wanted to do a project in Aliso Creek, which was essentially a desalination project, but the study showed we didn't have enough water to support a project there. He further stated that if these studies can provide information on how we can obtain more water in Aliso Creek, then the ETWD would be interested in the project.

Director Freshley stated that one infrastructure issue is at Santiago creek where the Santiago Aqueduct Commission is already committed to spend $1 million to lower the Baker pipeline because it has been uncovered through erosion. She further stated that our share of the cost is approximately $50,000. Mr. Cafferty stated that we have

had similar projects; one was an 18” and 24” waterline crossing that we had to fix on two separate occasions, so we are constantly looking at infrastructure issues in the creek.

Director Havens stated that as a major water recycler we have concerns regarding the human pathogen health risk prong of the WQIP, and she stated that she is concerned about the markers being used in the study because some of the runoff in our area may be from irresponsible or unintended dry season flows, or recycled water and the markers could be confusing to the public. Mr. Sharp appreciated the concerns over the markers and realizes the importance on the use of recycled water to establish a reliable and resilient local water supply.

Each of the Board members thanked Mr. Sharp and his team for preparing and presenting today’s study.

At approximately 8:40 a.m. Mr. Sharp and his colleagues left the meeting.

Engineering Action Items

Capital Projects Status Report

Oso Lift Station Improvement Project

Mr. Young stated that there was a Change Order which the Board approved previously leading to a slight delay which will cause the contractor to show up on site later and which pushed off the start date into October.

Phase II Recycled Water Distribution System Expansion Project

Mr. Young stated that we continue to convert sites and have 6 meters or 2 sites left to convert for the Phase II A sites. He further stated that for the Phase II B sites we continue to discuss with the Department of Drinking Water (DDW) on the public health protection safety measures and testing prior to moving forward.

Cal trans

Mr. Young stated that on the Cal trans project we continue to move forward, and there have been several meetings and discussions with SCE who are moving some power poles. He further stated that the latest remaining disputed liability is $16,981. Mr. Cafferty stated that there is one fire hydrant and one water meter that we still need to decide what to do about, and he has received communication that Cal Trans is reviewing the letter provided by the District outlining the District's position.

Vehicle Replacements

Mr. Young stated that there are some delays in the vehicle purchases but deliveries are still expected in October.

Project Schedule

Mr. Young stated that the projects to note are the WRP projects which have been pushed to have a construction window in springtime such as the aeration basin which would not be wise to have under construction during winter months.

Engineering Items Discussed at Various Conferences and Meetings

There were no comments.

Comments Regarding Non-Agenda Engineering Committee Items

Director Freshley stated that she met with the President of Third Mutual who made a comment that our pond near the Executive Golf Course is emitting a strong odor, and she asked if it is possible that because we are now using recycled water, have we created an issue in the pond. Mr. Cafferty replied that staff has not been made aware of an issue at the pond, but our effluent holding pond is secondary effluent and has no odor there.

Director Havens stated that as far as pond ecology goes, it is common this time of year as the water heats up if there is any nitrogen sometimes the bottom of the pond can go anaerobic and if it's not aerated enough the hydrogen sulfide will build up in the bottom of the pond and bubble out.

Mr. Cafferty stated that Ms. Moore is asking how much of the water is recycled water in percentage. He further replied that if the question is how much of supply is recycled water, it's between 15% & 20%, but if the question is how much of the wastewater is recycled water versus going to the ocean, then it's between 35% - 40%.

Adjournment

At approximately 8:55 a.m. the Engineering Committee meeting was adjourned.

Respectfully submitted,

_____
POLLY WELSCH
Recording Secretary

APPROVED:

_____
MARK L. MONIN, President
of the El Toro Water District and the
Board of Directors thereof

_____
DENNIS P. CAFFERTY, Secretary
of the El Toro Water District and the
Board of Directors thereof

STAFF REPORT

TO: BOARD OF DIRECTORS **MEETING DATE: October 19, 2020**

FROM: Bobby Young, Principal Engineer

SUBJECT: Capital Project Status Report

I Oso Lift Station Improvement Project

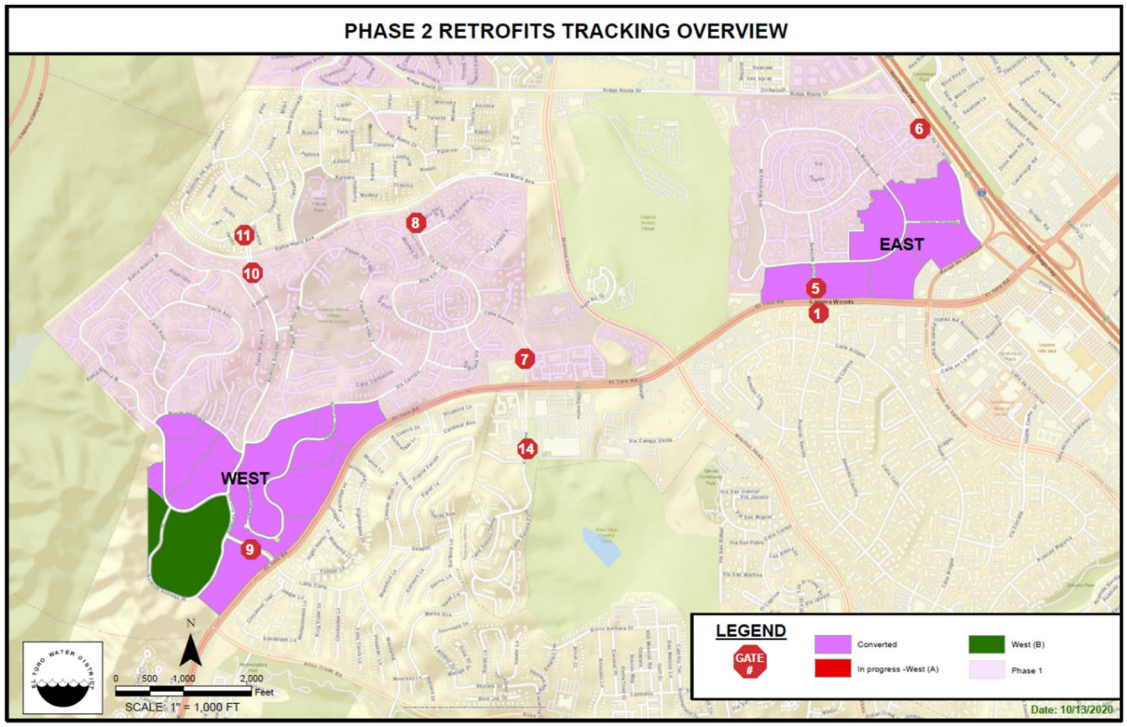
A Pre-Construction meeting was held on October 13 and the Contractor will begin mobilizing equipment and materials on-site. The first phase of work includes temporary site fencing and demolition. The current project completion date is June 2021.

II Phase II Recycled Water Distribution System Expansion Project

The Phase II West (A) site testing was completed in September and the Contractor completed conversions in early October. The Contractor is completing final punch list items and then a Notice of Completion will be issued. The on-site retrofit project is summarized below:

	East	West (A)	West (B)
Sites Completed	6	11	
Meters Converted	18	32	
Demand Converted	121 AF	147 AF	
Sites Remaining			4
Meters Remaining			14
Demand Remaining			47 AF

The Phase II project now has 48 recycled water meters in service. The District has delivered 80 acre-feet (26 million gallons) of recycled water to users through the Phase II distribution system.



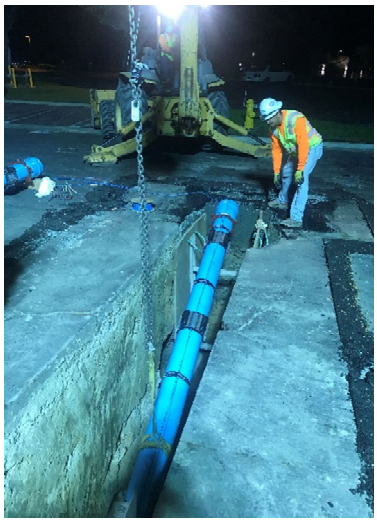
For the remaining Phase II West (B) sites, staff continues to work with a consultant to prepare a Supplemental Engineering Report, which will be submitted to the State of CA Department of Drinking Water (DDW) for review and approval. Staff met with DDW and the consultant at the sites to clarify what is needed in the report. During the site walkthroughs, staff determined that minor modifications will need to be made to the existing irrigation systems – both VMS common areas and resident restricted areas. Upon DDW final approval, staff will evaluate contracting options for the retrofit construction work.

III Caltrans I-5 Widening Project

Caltrans continues to implement the I-5 Freeway Widening Project between El Toro Road and the 73 Toll Road. The portion of the project between Los Alisos Boulevard and El Toro Road will necessitate certain utility relocations.

Separate Notices to Proceed were issued to the District's Contractor to begin work on the items associated with the executed Utility Agreements. The first phase of the work included relocation of an existing 8" water line to accommodate the proposed Caltrans retaining wall. Steel casings were added to both the relocated 8" and existing 16" waterlines for protection under the proposed Caltrans retaining wall. The current phase work also

included a new 8" sewer alignment due to a conflict with a proposed SCE power pole. A new 10" sewer line has also been installed but stubbed out for a subsequent phase connection to straighten the existing 10" sewer under the freeway Construction is nearly complete for the current phase. Staff continues to work closely with the Caltrans Inspector, the commercial office building property management group, and SMWD's Contractor to coordinate construction activities.



Staff continues discussions with Caltrans regarding the final two conflicts including one fire hydrant and one water meter. Both parties continue to contend that the remaining conflicts should be the liability of the other.

The approximate cost allocation of the utility relocations for which Caltrans has agreed to pay and the costs for those that are still in dispute are summarized as follows:

Total Contract Bid Amount	**$769,777**
Approved Caltrans Liability	$563,089
Scope Deletion (S-4)	($169,003)
ETWD Accepted Liability	$20,704
Remaining Disputed Liability	$16,981

IV WRP Sludge Truck Tractor Replacement

The WRP Sludge Truck Tractor was received on October 13. Following inspection and outfitting with District equipment and logos by the District's Senior Mechanic, the truck was placed into service on October 15.

V Dump Truck / Traffic Control Truck Replacement

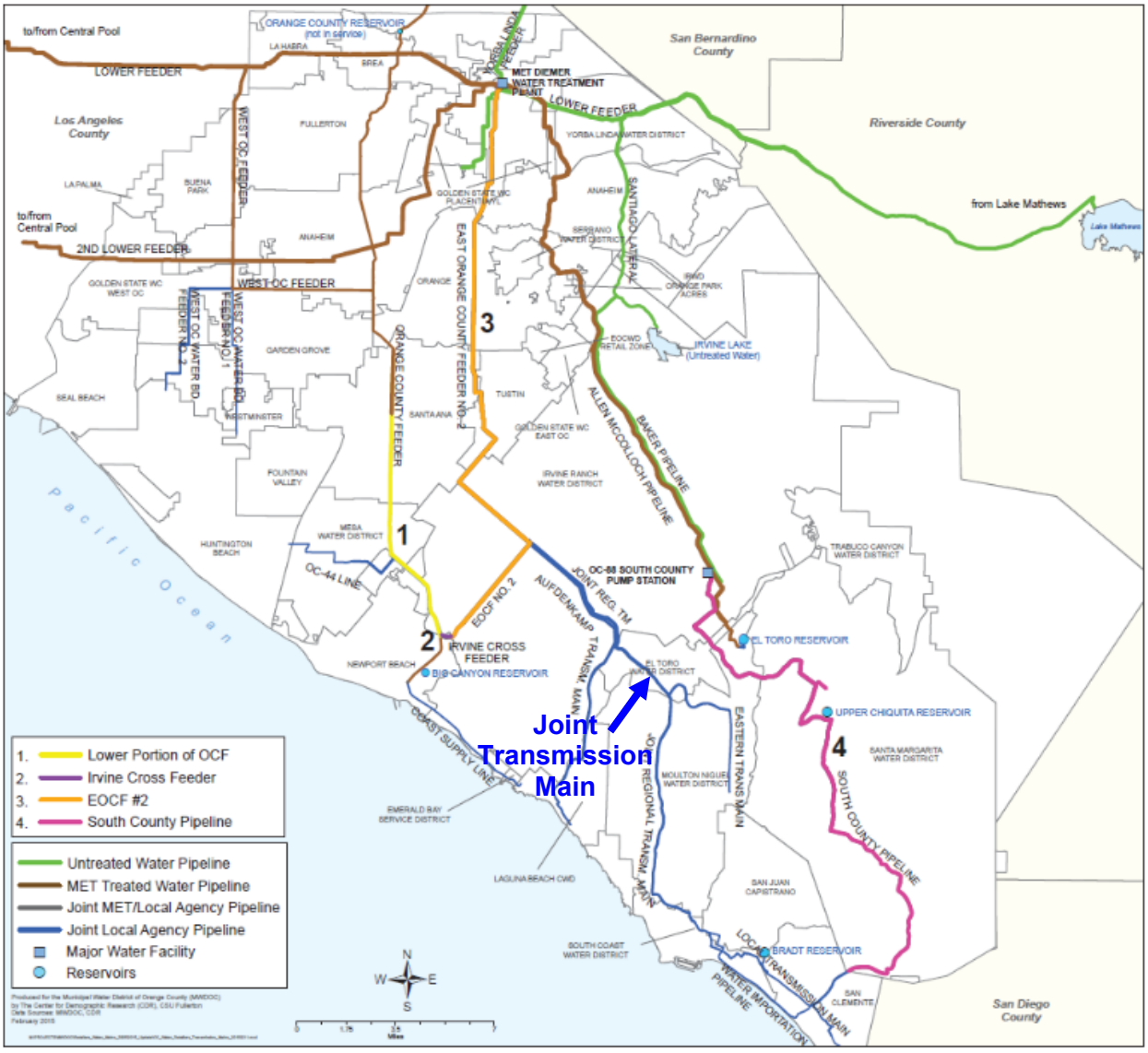
A Purchase Order for the Dump / Traffic Control Truck has been issued. The cab / chassis anticipated delivery date is October 20. Once received, the cab / chassis will immediately be passed along to the bed builder to complete final components with an expected delivery date 30 days later.

VI South Orange County Supply and System Reliability Projects

A. East Orange County Feeder No. 2 / Joint Transmission Main Turnout

Following the acquisition of the private water utility by the El Toro Water District in 1983 it became apparent that there were certain areas being served by ETWD that were actually in the Moulton Niguel Water District service area. To correct that issue, with the support of ETWD, MNWD and the Associations representing the affected residents, LAFCO adopted a reorganization in 1986 that detached approximately 640 acres from the MNWD service area and annexed those areas into the ETWD service area. Part of the reorganization included transferring 2 cfs capacity in the Joint Transmission Main from MNWD to ETWD.

The Joint Transmission Main (JTM), operated by the South Coast Water District, runs through the western portion of the ETWD service area.



There are several significant benefits of making use of the District's existing capacity in the Joint Transmission Main.

- Reliability – Diversification of Import Supply Pipelines in Emergency Conditions
- Reliability – Alternative Source of Supply During AMP or R-6 Reservoir Maintenance
- Water Quality – Reduces Water Age in the Western Portion of the Distribution System
- Future Supply Projects – Provides Access to Another Regional Pipeline that May Provide Access to Future Regional Supply and Reliability Projects

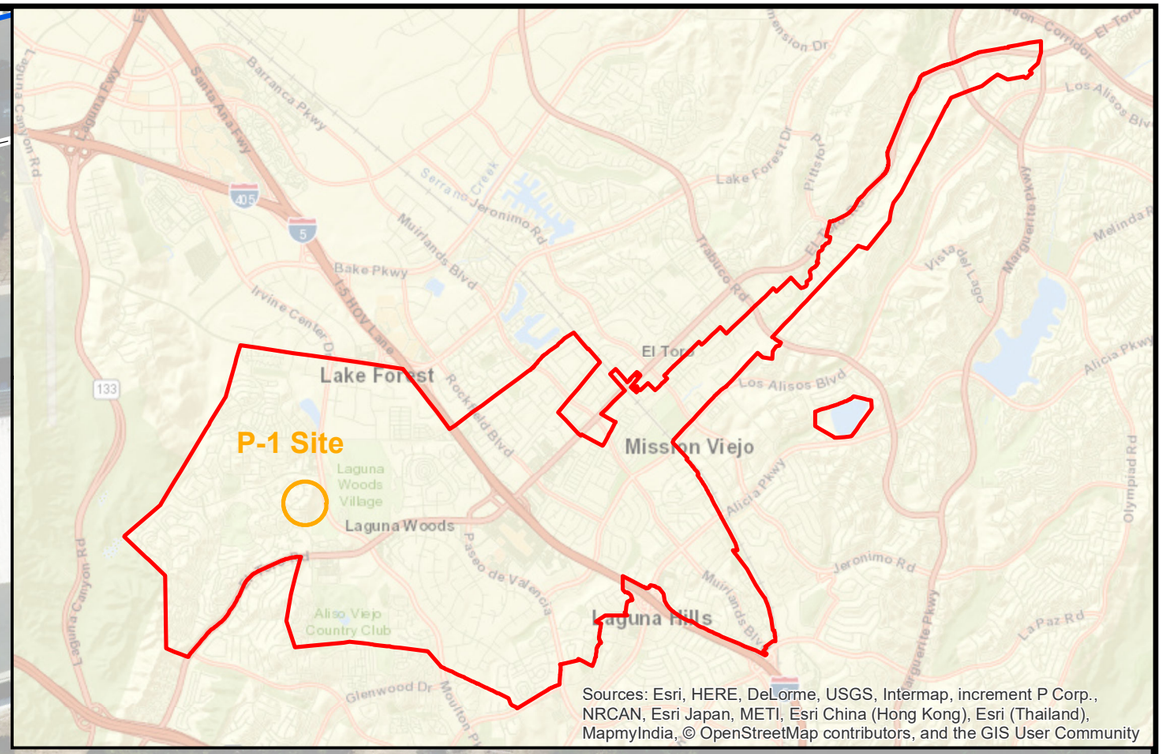
While the District has a metered connection to the JTM at the site of the existing P-1 Pump Station and R-1 and R-2 Reservoirs, the District does not currently make regular use of its owned capacity in the JTM. The hydraulic grade in the JTM pipeline is less than the pressure requirements of the ETWD pressure zones in the area of the connection. Staff has been considering the construction of a small booster pump station to enable the use of the JTM capacity and the realization of the above noted water quality and supply reliability benefits.

The JTM is supplied from the MET System through another regional pipeline known as the East Orange County Feeder No. 2 (EOCF#2) originating at the Diemer Filtration Plant. When the LAFCO reorganization took place in 1986, the transfer of capacity in the JTM was not accompanied by a similar transfer of capacity in the EOCF#2. Prior to further evaluating the possibility of infrastructure improvements necessary to enable the daily use of the District's capacity in the JTM staff initiated discussions with MNWD and MWDOC regarding capacity in the EOCF#2 pipeline. MNWD staff recognizes the disparity of their ownership of 45 cfs in the EOCF#2 but only 43 cfs in the JTM and the similar and corresponding issue of ETWD's ownership of 2 cfs capacity in the JTM with no capacity in the EOCF#2.

MNWD staff is discussing the potential an assignment of 2 cfs capacity in the EOCF#2 to ETWD with its management and Board. Such an assignment of capacity would balance the capacity in both the JTM and the EOCF#2 supply to the JTM for each agency.

Staff will provide further details at the Engineering Committee Meeting in an effort to inform the Board of the current status of the supply reliability opportunity. While there is no action item associated with this project on the Engineering Committee agenda, staff is seeking direction and concurrence from the Board regarding proceeding with the next steps associated with this potential project. These steps would likely include the development of agreement language between MNWD, ETWD and potentially MWDOC to modify the current allocation of capacity of the EOCF#2 pipeline as well as the development and issuance a Request for Proposals for engineering work to perform preliminary design of the proposed booster station in an effort to quantify the capital cost associated with the project.

JTM
(JRWSS)



Potential New
Booster Station Site

N

0 20 40 80

SCALE: 1"=40'

F.Y. 2020/21 CAPITAL REPLACEMENT AND REFURBISHMENT PROGRAM BUDGET ITEMS > $50,000
BOARD APPROVAL SCHEDULE

	Project Description	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Budget Estimate	Board Approved Cost
2020/21 Capital Projects (reference number corresponds with Approved Budget item numbers)															
1	R-2 Reservoir Interior Recoating		E	E	E	E	B	A	C	C				$262,500	
2	R-2 Reservoir Exterior Recoating		E	E	E	E	B	A	C	C				$80,000	
5	4920 Siphon Stabilization											E	E	$150,000	
6	WRP Main Electrical Power Breaker Upgrade	(Deferred due to extended life from Maintenance service)												$80,000	$0
10	Main Office / Field Office HVAC Replacement & Improvement Project	ET	E	E	E	B	A	C	C					$157,500	
2020/21 Capital Equipment (reference number corresponds with Approved Budget item numbers)															
1	La Paz MCC and PLC Upgrade - Engineering	ET	ET	ET										$140,000	
2	Aeration Basin No. 1 Diffusers	E	E					B	B	A	C	C	C	$170,000	
4	Effluent Pump Station Pump Replacement								B	B	A	C	C	$100,000	
Carryover															
	Oso Lift Station Improvement Project	C	C	C	C	C	C	C	C	C	C	C	C	$1,000,000	$1,954,322
	Grit Chamber Rehab/Re-Coating			E	E	E	B	B	A	C	C	C		$85,000	
	OOPS Emergency Generator Replacement	E	E	E	E	B	A	C	C					$220,000	
	R-6 Floating Cover Replacement Project			RFP	RFP	RFP	ET	A	E	E	E	E			
	Caltrans Widening Utility Relocations	C	C	C	C										$769,777
	Clarifier No. 3 and 4 Scum Pump Station									B	B	A/O	C	$80,000	
	Master Plan Update	RFP	RFP											$350,000	
												Total		$2,875,000	$2,724,099

E = Engineering/Study
C = Construction
O = Order
N = Negotiate
R = Receive
P = Permit
CQ = CEQA
CO = Carry Over
RFP = Request for Proposal
B = Bid
A = Approve by Board
L = Legal
ET = Evaluate
M = Monitoring
BP = Board Presentation

10/15/2020

Item No. 3

STAFF REPORT

TO: BOARD OF DIRECTORS **MEETING DATE: October 19, 2020**

FROM: Dennis Cafferty, General Manager

SUBJECT: MWDOC Economic Benefits Study

In April of 2020, MWDOC proposed contracting with two economists to perform an economic analysis of the regional benefits within Orange County associated with the potential MWDOC participation in the South Coast Water District Doheny desalination project. There was significant discussion and reaction by the member agencies both to the concept of MWDOC's direct participation in a local project as well as the potential cost of the economic benefits study.

Over the next six months MWDOC has continued to discuss the proposed study but has attempted to decouple the study from the specific connection to the Doheny project. MWDOC now proposes to conduct a more general evaluation of the potential economic impacts of water service interruption within the County in an effort to better inform the return on investment for water reliability projects within Orange County as well as in the broader MET service area. The project scope includes a survey of the business community to determine how they might be impacted by both emergency water shortages (i.e. earthquakes) which are severe shorter-term shortages; and by longer-term and less severe shortages (i.e. droughts). There has been extensive discussion regarding the proposed project including several specific meetings with member agency managers. There has been vocal opposition to the project as well as to the proposed survey of businesses by certain agencies, notably Irvine Ranch Water District and Orange County Water District.

At the Planning & Operations Committee meeting on October 5, MWDOC staff proposed award of contracts with the Brattle Group to complete the economic benefits study in the estimated amount of $245,000, plus additional support services by CDM Smith not to exceed $25,000. The P&O Committee recommended approval to the MWDOC Board and the item is now on the October 21 MWDOC Board Meeting consent calendar.

Staff will provide further updates and detail to facilitate a discussion of the proposed project at the ETWD Engineering Committee Meeting. The attached reference material includes the MWDOC Staff paper that accompanied the proposed item in the October 5 P&O Committee agenda.

Item No. 1

ACTION ITEM
October 21, 2020

TO: **MWDOC Board of Directors**

FROM: **Planning &Operations Committee**
(Directors McVicker, Dick, Yoo Schneider)

Robert Hunter, General Manager

Staff Contact: Karl Seckel/Charles Busslinger

SUBJECT: **Economic Benefit Studies and Modeling Work to Quantify the Benefits of Local Projects and to Understand the Potential Implications of MET's 2020 Integrated Resources Plan (IRP)**

STAFF RECOMMENDATION

Staff recommends the Board authorize the General Manager to enter into a consulting contract with the Brattle Group to complete the economic benefit studies as outlined below in the estimated amount of $245,000, plus additional support services by CDM Smith not to exceed $25,000 for a total estimated cost not to exceed $270,000.

COMMITTEE RECOMMENDATION

The P&O Committee (to be determined at the meeting).

SUMMARY

Staff recommends that MWDOC proceed with the previously authorized reliability modeling work and add to the existing scope of work the additional economic studies described below. The combined effort is designed to more closely examine issues within the MET IRP as well as future reliability investments at both the MET level and at the Orange County level. This additional work is an important part of MWDOC's responsibility in representing our member agencies. An important note is that MWDOC has taken considerable time and effort to step back and discuss in detail the economic studies with MWDOC's member agencies.

Budgeted (Y/N): N	Budgeted amount: n/a	Core _X_	Choice __
Action item amount: $270,000	Line item: 21-7010		
Fiscal Impact (explain if unbudgeted): Staff recommends the study costs be funded out of reserves as this issue arose after the budget discussions were completed for 2020-21 and due to the COVID impacts to our agencies.			

Following the April Committee meeting there was considerable push back from the agencies and a request for more time and discussion to understand the nature and scope of work for the economic studies. The need for the studies was discussed at several meetings with our agencies along with other items such as MWDOC's role and mission, the hydraulic model, and MWDOC's water rate resolution and ordinance. MWDOC committed to include Dr. David Sunding at a workshop in July where the entire meeting was dedicated to a discussion of the studies. The agencies input from the July meeting was captured and discussed at the Managers meeting with our agencies in August. Subsequently, a second dedicated workshop was held in September to focus entirely on the context of the economic studies and to further discuss the scope of work. Dr. David Sunding, Dr. Wallace Walrod, and Dan Rodrigo from CDM Smith were at the September workshop.

Good discussions occurred during the September 24, 2020 workshop; although with over 30 agency representatives in attendance, only about five agencies weighed in during the detailed discussions. Staff is of the opinion that the member agencies have a much better understanding of the studies and what might be at risk in the MET IRP discussions.

Undertaking $270,000 in additional study work involves a significant investment. Staff believes that the investment will provide an improved basis for staff, directors, MET directors and MWDOC member agencies to do their planning and analysis as a result of a better overall understanding of the issues involved. Staff believes it is time to move forward with this work under the modified scope of work.

DETAILED REPORT

In April 2020, MWDOC staff recommended the Board consider authorizing staff to retain consultants to proceed with economic benefit studies that would describe and quantify the economic benefits of new local water supplies to the MWDOC service area. Staff is of the opinion that the studies will be useful to MWDOC and to our member agencies in better understanding the reliability benefits that come from the implementation of various local projects in Orange County. In April, input was provided by several member agencies requesting further discussion and time to digest the need for, and the scope of, the studies. At that time, MWDOC's agencies were not supportive of moving forward.

Since April 2020, discussions were held with our member agencies concerning the nature and scope of the economic studies at several meetings. The need for the studies was discussed at several meetings with our agencies along with other items such as MWDOC's role and mission, the hydraulic model, and MWDOC's water rate resolution and ordinance. MWDOC committed to include Dr. David Sunding at a workshop in July where the entire meeting was dedicated to a discussion of the economic studies. The agencies input from the July meeting was captured and discussed at the Managers meeting with our agencies in August. Subsequently, a second dedicated workshop was held in September to focus entirely on the context of the economic studies and to further discuss the scope of work. Dr. David Sunding, Dr. Wallace Walrod, and Dan Rodrigo from CDM Smith were at the September workshop.

Based upon member agency input, the approach previously considered in April has been broadened and the scope of work by Dr. David Sunding has been modified and reduced in cost. The survey work is now focused on surveying the business community to determine how they might be impacted by both emergency water shortages (i.e. earthquakes) which are severe shorter-term shortages; and by longer-term and less severe shortages (i.e. droughts). The residential impacts will now not require a survey of consumers. Dr. Sunding has indicated there is substantial information on the residential impacts of water shortages and he will rely on published data for this part of the study. Staff has amplified the background information to assist our agencies in understanding the nature of the work and why staff is interested in pursuing the work.

Below are notes from the July 23 workshop where input was captured in the discussions with our agencies. Items A. through G. below were the identified concepts of the potential study benefits and issues to provide a broader context for the economic studies. These items were then discussed with the agencies in August and again in the September 24 workshop discussions as potential goals of the economic studies:

A. Quantify the value to residents & businesses from increased water reliability by investing in local projects
   - Helpful for updates of the reliability model; Dr. Sunding indicated that good data is not currently available on shortage impacts to businesses, so this information would be key.
   - Helpful for understanding and evaluating MET's IRP update and options for MET's Local Resources Program (LRP).
B. How do MET reliability investments impact OC and MET member agencies? What are the costs paid through MET water rates and what reliability improvements will be achieved?
   - MET's Carson Regional Recycled Water Program
   - Delta Conveyance Project
   - Local Projects by MET member agencies and OC agencies
C. What changes occur if MET moves to higher fixed charges by way of their rates and charges?
D. What implications occur with changes in the structure of MET's LRP?
E. Compare costs and reliability improvements at the MET level to the costs and reliability benefits of local projects
F. Agencies could use the information developed by MWDOC to build their own reliability models. The CDM Smith scope of work includes options for providing interested retail agencies a spreadsheet template they can utilize in their own planning effort should they desire.
G. What evaluations are included for OC to decide whether to support future investments being considered at the MET level?
   - For example, an investment by MET in the Carson Project may increase the cost of all MET water by $200 per AF – is this a good investment for OC?

At the most recent workshop on September 24, 2020 staff discussed the items above and provided the following introduction and overview to the work:

> There are potentially large dollar stakes involved in MET's IRP update. Staff believes the nature of the recommended work will provide valuable information towards an improved understanding of MET's IRP and where some of the policy issues may head. The recommended action item of $270,000 is not an inexpensive endeavor; but what is at stake from the perspective of Orange County is the future reliability options under the MET IRP and upcoming decisions about investments in reliability both at the MET level and by the local agencies in Orange County. Staff believes these future investments will be large and having an improved understanding of how both MET and OC are impacted by these investments will serve our staff, directors and MET directors well in helping to represent our member agencies. It is also important for our agencies to benefit from these efforts to have an improved understanding of how local decisions impact our collective and individual reliability.

Our goal is to ensure that MET, the MET member agencies, and the local agencies do not collectively over-invest or under-invest from a reliability perspective at either the MET level or the OC level. Staff believes the type of work being pursued is consistent with MWDOC's mission of ensuring that policies and investments at the MET level work for Orange County; and to ensure investments made within OC complement MET's investments while meeting our local needs. When we presented this information on September 24th, staff was asked if this effort was a departure from MWDOC's historical role where our MET directors have acted at MET regarding what is in the best interests of Southern California and MET. Staff does not believe this is a departure from that role, as we have always kept in mind the end result of actions at MET as well as to understand how investments in water reliability within Orange County align with those investments.

In the September workshop, we included Dan Rodrigo from CDM Smith to remind the group of work already underway with which he has already been tasked. The CDM Smith work includes the following:

Why the Reliability Modeling Update? (This work was authorized by the MWDOC Board in August 2020)

- Greater Uncertainty Regarding Delta Conveyance Project
- MET IRP Update includes Scenario Planning for the first time
- Regional Water Demands Trending Downward
- Potential Changes in MET Water Rate Structure (e.g., greater fixed cost recovery) and Reduced Funding for LRP
- Update the OC Water Reliability Model

Additional Work by CDM Smith or Others

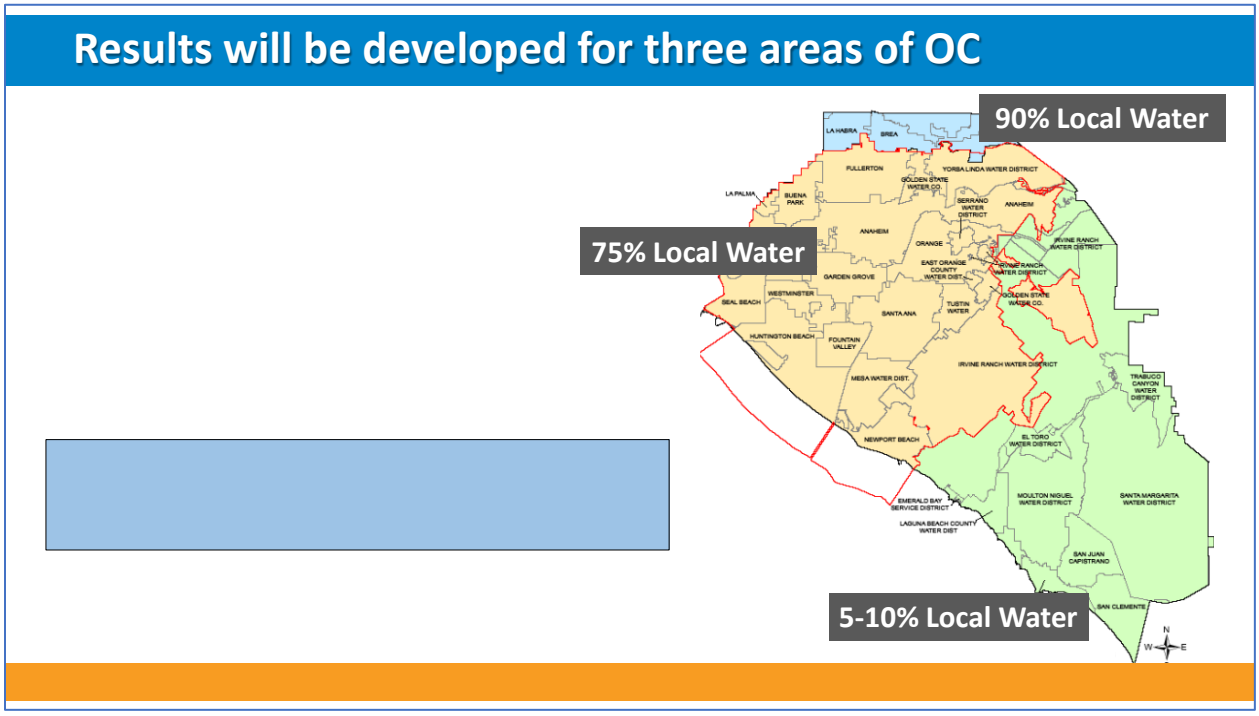
- Update Regional Water Demands (MET will complete as part of IRP Update in the December-January timeframe)

- Update OC Water Demands (CDM Smith proposal being reviewed jointly by MWDOC and OCWD for possible joint funding)
- New modeling of State Water Project (SWP) reliability with and without the Delta Conveyance Project (MET anticipates information will become available in October-November timeframe)

Benefits of the CDM Smith Scope of Work

- Useful to MWDOC and member agencies for planning purposes
  - New planning scenarios
  - CDM to provide member agencies templates for assessing local reliability and the benefits of local projects in their service area
  - Support for Urban Water Management Plans (e.g., demand forecasts)
- Support/evaluate MET's IRP Update
- Support for Proposed Study on Value of Water Supply Reliability

Dan Rodrigo reminded the group that the reliability modeling work will proceed at the level of the three reliability areas within Orange County based on what was done in the 2016 and 2018 reliability studies. Based on the reliability for these three areas, extrapolation templates can be provided at the agency level.



Dan Rodrigo also reminded the group that we will need to discuss and work through updated scenarios for the 2021 Reliability Study Update. Dan provided a first cut (see below) of potential scenarios that could be modeled in the upcoming work. Dan indicated that further discussions will be held concerning the nature of the scenarios to seek input

from the agencies. A good discussion ensued on the prospects of the Delta Conveyance Project and the likelihood under which it might proceed or be delayed over the course of several years. In the end, our agencies supported understanding the impacts of both scenarios, because it could be 20 years or more before a Delta Solution might begin operations.

First Cut Draft of Proposed New Planning Scenarios

Changes from 2018 OC Study →	Added a "significant stress" climate impact scenario	Lowered MET and OC demand projections based on recent trends	Added more variability in assumed supplies	Added more variability in assumed supplies	Added scenario in which project is not implemented
Scenario Name	**Climate Change Impacts**	**MET & OC Water Demands**	**MET Water Transfers and GW Banking**	**MET Regional Recycled Water Program**	**Delta Conveyance Project**
Low Stress with some MET projects but **without Delta Conveyance**	Slight impact on SWP supplies only	Lower base MET and OC water demands	100,000 AFY	91,000 AFY (LB & Main Basin)	Not implemented
Moderate Stress with some MET projects and **with Delta Conveyance**	Slight impact on SWP and local GW, moderate impact on CRA and water demands	Lower base MET and OC water demands	100,000 AFY	102,000 AFY (LB, West Basin & Main Basin)	Implemented with about 400,000 AFY improvement on average
Moderate Stress with more MET projects but **without Delta Conveyance**	Slight impact on SWP and local GW, moderate impact on CRA and water demands	Lower base MET and OC water demands **with increased outdoor conservation**	250,000 AFY	116,000 AFY (full program without OC Basin)	Not implemented
Significant Stress with some MET projects and **with Delta Conveyance**	Moderate impact on SWP local GW, significant impact on CRA and water demands	Lower base MET and OC water demands	100,000 AFY	168,000 AFY (full program)	Implemented with about 400,000 AFY improvement on average
Significant Stress with more MET projects but **without Delta Conveyance**	Moderate impact on SWP local GW, significant impact on CRA and water demands	Lower base MET and OC water demands **with increased outdoor conservation**	250,000 AFY	168,000 AFY (full program)	Not implemented

Economic Studies Work

Dr. David Sunding from UC Berkeley and the Brattle Group discussed the project team which he will lead. The team includes Dr. Wallace Walrod of OC Business Council and Dr. Marlon Boarnet, Chair of the Urban Planning & Spatial Analysis Department at the USC Sol Price School of Public Policy. Dr. Sunding outlined how the information will be developed and used (his scope of work is attached):

- Information will be used to understand and quantify the economic benefits of local projects or projects serving local water into Orange County
- Consider periodic droughts and less frequent, extreme events such as earthquakes
- This effort is not specific to any one project but is intended to be applicable to any local projects that are being considered in Orange County.
- Project team will consider the value of reliability to both residential and business customers
- Will examine several measures of the value of reliability:
    - Willingness to pay
    - Jobs Losses
    - Lost economic activity
    - Regional (multiplier) impacts
- Value of reliability will be quantified at the agency level within MWDOC
- Residential losses will be calculated using retail demand relationships calibrated to socioeconomic and land use conditions within each district
- Business losses will be investigated with a survey of county businesses implemented by CSU Fullerton with Dr. Wallace Walrod
- Results will be a set of “loss functions” that capture the relationship between impacts and percentage shortages
- Final product will be draft and final reports, presentations to MWDOC and its member agencies and will include the survey results
- Cost ~ $245,000 for the Brattle Group; the support costs for CDM Smith are separate and estimated not to exceed $25,000; the total project costs are estimated not to exceed $270,000.
- Timing ~ 6 months to complete after the CDM’s modeling work has been completed (target April 2021).

Schedule for the Work

Due to the delayed start on this work in order to hold discussions with the member agencies, combined with the need to coordinate some of the modeling work with MET’s IRP modeling, the schedule will be phased such that some of the work products will become available during MET’s IRP discussions and others will become available during the policy discussions phase of MET’s IRP. The modeling and demand projections are slated for completion in January 2021 while the economic studies will trail this work and be completed in April 2021.

Input from the Member Agencies

Good discussions occurred during the September 24, 2020 workshop; although with over 30 agency representatives in attendance, only about five agencies weighed in during the detailed discussions. Staff is of the opinion that the member agencies have a much better understanding of the studies and what might be at risk in the MET IRP discussions. Input during the discussions included the following:

- Some of the participants felt that the scope of work ultimately developed and the time taken for iterative discussions with the agencies was appreciated. Some noted that the clarifications and work plan would result in some good information being developed. This does not mean there was full consensus among the agencies to move forward (since we only heard from five agencies), but the mood can probably best be described as "reluctant concurrence" (MWDOC's characterization).
- Some participants felt that understanding the impacts on businesses from both emergency shortages and longer-term drought driven shortages was very important.
- It was also noted that the economic damages from under or over investing was also an important consideration.
- Tracking project benefits based on a who is paying and who is receiving the benefits was also noted as a good objective.
- A question was raised as to whether this effort was duplicating the 2018 Reliability Study? Staff believes the CDM discussions noting the changes since the 2018 study (which was based on demand projection work completed in 2016) adequately characterized the need for the updated modeling work to be completed; this was why the CDM modeling work had previously been approved by the MWDOC Board in August 2020. The modeling work will proceed independent of the economic studies work.
- As previously noted, a question was raised as to whether this work represented a policy deviation by the MWDOC Board or MET Directors in how they look at what is best for Southern California. Staff noted that looking at what is best for Southern California does not mean MET Directors ignore potential impacts in OC. A main goal of the work MWDOC pursues, is to make sure we understand, to the greatest degree possible, what the ensuing implications are of MET policies on our member agencies. Staff believes this is an important aspect of this work and it is not a deviation from prior policy.
- A wide-ranging discussion occurred regarding the Delta Conveyance Project. In the end we agreed that while it may or may not proceed, if it does proceed, it may be 20 years or more before it begins operation. Therefore, we should evaluate future economic and reliability implications both with and without the Delta Conveyance Project. The discussion noted that one of the big obstacles in the Delta Conveyance Project is getting the Federal Central Valley Project contractors on board in some manner.
- IRWD continued to raise concerns that the survey of businesses could unduly alarm businesses that there might be shortages that could be unrealistic based on where the businesses are physically located. Dr. Sunding noted the concern and indicated

that extreme care would be taken in communications with the businesses being surveyed to clarify that we are simply seeking to generically understand potential business impacts of various levels of shortages to help our planning efforts. It will be emphasized that the range of shortages in the survey do not mean these shortages would occur specifically to any particular business. Staff believes these measures can alleviate the IRWD concerns.

- Two agencies indicated it might be preferable for them to "opt out" of the survey process (IRWD and MNWD). It was pointed out that not including the entire business community from Orange County would result in an incomplete analysis of the MET investment impacts in Orange County and was therefore not recommended. Other participants indicated they believed it would be a mistake if portions of Orange County were not included.

Undertaking $270,000 in additional study work involves a significant investment. Staff believes that the investment will provide an improved basis for staff, directors, MET directors and MWDOC member agencies to do their planning and analysis as a result of a better overall understanding of the issues involved. Staff believes it is time to move forward with this work under the modified scope of work.

Staff indicated to the agencies that an agenda item would be prepared and presented at the October 5th Planning and Operations Committee and all are welcome to provide input. If the item clears the P&O Committee, it would then go to the Board on October 21st.

The Brattle Scope of Work for the Economic Studies is attached.

BOARD OPTIONS

Option #1

- **Authorize the Economic Studies**

Fiscal Impact: Requires the expenditure of $270,000 from reserves plus staff time. However, based on the outcome of MET's IRP, there could be large swings in investments in local projects and MET projects by way of capital costs, O&M costs and water rate payments that could save Orange County agencies many times more than the amount being spent.

Business Analysis: Staff believes the type of work being pursued is consistent with MWDOC's mission of ensuring that policies and investments at the MET level work for Orange County; and to ensure investments made within OC complement MET's investments while meeting our local needs. Helps to ensure that we do not collectively over or under invest in water reliability in Orange County, both of which can be quite expensive.

Option #2

- **Do Not Authorize the Economic Studies**

Fiscal Impact: Would save staff time and reduce expenditures by $270,000 in FY 2020-21. However, based on the outcome of MET's IRP, there could be large swings in investments in local projects and MET projects by way of water rate payments that could potentially cost quite a bit more than would be spent in pursuing the studies.

Business Analysis: Staff would not be carrying out its full responsibilities to its member agencies in representing them at the MET level. Overall, it could result in Orange County collectively over or under investing in water reliability in Orange County which can be quite expensive.

STAFF RECOMMENDATION

Option #1

The Value of Water Supply Reliability: Study Proposal and Scope of Work

Marlon Boarnet, David Sunding, Wallace Walrod

September 22, 2020

Prepared for Municipal Water District of Orange County

I. Introduction

This document describes a study of the value of water supply reliability in Orange County, California. The County faces two vastly different kinds of potential disruptions – periodic drought, typical of the region's climate, and larger, potentially catastrophic disruptions in water availability.

A drought scenario is better understood as it is experienced more frequently. In dry periods, residents may face voluntary water use reductions, price increases, and in more extreme circumstances water rationing that in the past have yielded reductions in water use from 10 to 35 percent. Businesses, being high-value water users responsible for the local job base, are often shielded from water rationing efforts.

A more extreme event could require reductions in water supply of 50 percent or more, for possibly weeks or months, and it would likely not be possible to shield businesses from supply reductions in the case of a catastrophic event. The most commonly discussed source of extreme interruptions would be earthquake damage to water treatment or major distribution systems, such as the potential for an earthquake to damage the Robert B. Diemer water treatment plant in north Orange County.

In both circumstances – a drought or a catastrophic disruption – residents and businesses could experience a reduction in available water supply. ***Efforts to mitigate against those reductions require that the County have a credible estimate of the value of water supply reliability to ensure the avoidance of over-investing or under-investing in water supply projects.*** How much would residents and businesses be willing to pay to avoid reductions or interruptions in water supply? And how would this compare to mitigation costs to avoid shortages?

The most recent study which quantified the value of water supply reliability in Orange County was almost two decades ago (Orange County Business Council, 2003). Since then, little work has been done that can illuminate how residents and businesses would be economically harmed if water supply is reduced or interrupted. Water agencies do occasionally conduct customer surveys or opinion polls, and those surveys are useful for assessing customer satisfaction in

qualitative terms. That said opinion and satisfaction surveys do not provide insight into how residents and businesses value a reliable water supply, nor can satisfaction or opinion surveys give a quantified estimate of the value of a secure water supply. Similarly, satisfaction or opinion surveys cannot illuminate how residents and businesses would be willing to pay for investments that can increase the reliability of water supply.

We propose a detailed economic study that will quantify how the Orange County community values water supply reliability. The end products of our research will be quantified measures of the benefits that would accrue to the County from reducing small (e.g. drought) and large (e.g. catastrophic event) reductions in water availability. As the threat of earthquakes, changes in climate and relatedly hydrology, or other possibly unforeseen events become more prominent in strategic policy-making, an understanding the value of investments that will increase the reliability of supply is vital.

II. Scope

We will study two different classes of supply disruption: droughts and earthquakes. Those will model, respectively, normal supply reductions in ranges experienced in the recent past, and larger supply reductions that could occur due to catastrophic events.

For both the drought and earthquake scenarios, we will quantify the value of reliability by using willingness-to-pay or demand measures for residential consumers and measures of lost revenue, added costs, or employment reductions for business customers.

An important contribution of this study will be the quantification of business losses from large, infrequent and unplanned water supply reductions. As a general rule, business losses are typically substantially larger than aggregated losses from residential customers for water supply reductions of a given magnitude. As an example, Brozovic et al. (2007) estimated that business losses from hypothesized earthquakes in the Bay Area, focusing only on the resulting disruption to water supply from the Hetch Hetchy distribution system, would be from 30 to 70 times larger than resident valuations for the same water supply disruptions.

A. Drought Scenario

Residential Sector Losses: We will quantify how Orange County residents value reductions in water supply by using updated residential water demand curves based on our prior work for Metropolitan Water District of Southern California and the State of California. These water demand relationships capture the relationship between quantity consumed and willingness to pay and are frequently employed to measure customer losses from episodes of mandatory rationing as in Buck et al. (2016). We propose to update these loss functions by using current rates, consumption levels and socioeconomic profiles for retail water agencies in Orange County.

It should be noted that the drought scenario only considers residential losses since there's not really a record of business shortages during droughts in CA. The residential sector is typically large enough to accommodate any needed changes in water use to accommodate business shortages.

The output of this portion of the study will be a set of "loss functions" which are mathematical equations describing the consumer loss for various levels of mandatory rationing. These loss functions will be developed separately for each retail water agency in Orange County. To parameterize loss functions for each community in the county, we will gather rate and consumption information to calibrate the functions, and will adjust demand elasticities for each agency based on characteristics of the customer base such as household income, housing density and the like. The exact method for developing residential loss functions is described in Buck et al. (2016).

B. Earthquake Scenario

The earthquake (or catastrophic disruption) scenario will be an important innovation in this study. We know less about reliable valuations of large reductions than for smaller drought scenarios, and what is known indicates that the costs of catastrophic reductions in water supply could be larger than simple extrapolations from smaller reductions. For residents and businesses, a loss of half or more of water supply can be much more costly than the impact of a 10 or 20 percent reduction in water supply that would be typical in a drought.

Residential Sector Losses: We propose to follow the method outlined in Brozovic et al. (2007) to calculate residential losses from catastrophic water supply disruptions. This method is similar to the one used for drought impacts, since both approaches aim to measure customer willingness to pay to avoid a given water supply interruption. In the case of seismic events, however, there is a possibility that some customers may be totally without water (or see a significant disruption in the amount of water available) for some period of time while repairs are made. In these cases, emergency water supplies may need to be made available (potentially by truck or through distribution of bottled water), and the cost of these measures will form part of the welfare loss from the earthquake-induced disruption.

Business Sector Losses: A key innovation of this study will be extending business loss information into the Orange County context. The best available study of business losses from water supply reductions is a survey of firms conducted by MHB Consultants (1994). That work, albeit from 1994, is still the best available data on how businesses will reduce operations and employment in the face of large reductions in water supply. Yet, the MHB data are almost three decades old.

We will leverage the position of the Orange County Business Council to reach out to firms in an interview and survey approach. We will group industries in the county into approximately ten categories, and interview a small number of firms (approximately one to three) in each category. Those interviews will inform a survey to be implemented by CSU Fullerton that will query Orange County firms about how reductions in water supply will lead to reductions in revenues, increases in costs, and/or reductions in employment. The result will be a detailed understanding of how

water supply reductions could lead to business losses in the county. Those business survey results will be inputs into models (such as IMPLAN or other regional economic models) that quantify the economic effect of different magnitudes of water supply reductions on the local economy.

C. The Value of Water Supply Reliability

The output of the study will be quantified estimates of the impact of water supply reductions, from the drought and earthquake scenarios, for both residents and firms. That will provide the best available insight into how Orange County residents and businesses value water supply reliability. The quantified estimates of supply reliability can be used in later studies as a decision tool to assess investments or strategies that could increase the reliability of water supply.

III. Timeline

Six Months from project commencement.

IV. Deliverables

The project deliverables will include a draft and final report of the research performed, as well as spreadsheets and computer code describing the formulas and methods for calculating the value of water supply reliability for MWDOC member agencies.

Part of our analysis will be based on an original survey of Orange County business owners in various sectors of the economy to be conducted by CSU Fullerton (Dr. Wallace Walrod will be using CSU Fullerton for the business survey). Upon completion of the project, we will make the survey responses available to MWDOC. We will also include a written summary of the survey's findings and implications in our draft and final reports.

V. Cost

The cost for this project is $245,000, inclusive of all direct and indirect costs. Following is a budget breakdown by task:

Residential Analysis	$80,000
Survey of OC Businesses	$85,000
Regional Economic Modeling	$80,000
Total	$245,000

VI. References

Brozovic, Nicholas, David L. Sunding, and David Zilberman. 2007. Estimating Business and Residential Water Supply Interruption Losses from Catastrophic Events. *Water Resources Research*, vol. 43.

Buck, Steven, Max Auffhammer, Steven Hamilton and David L. Sunding. 2016. Measuring Welfare Losses from Urban Water Supply Disruptions. *Journal of the Association of Environmental and Resource Economists*, vol. 3.

MHB Consultants. 1994. *The Economic Impact of Water Delivery Reductions in San Francisco Water Department's Commercial and Manufacturing Customers*. Report to the San Francisco Public Utilities Commission.

Orange County Business Council. 2003. *Determining the Value of Water Supply Reliability in Orange County, California.* Report to the Metropolitan Water District of Orange County.

MINUTES OF THE REGULAR MEETING
OF THE
FINANCE COMMITTEE MEETING

September 21, 2020

At approximately 8:55 a.m. Director Vergara called the Regular meeting to order via Zoom.

Consent Calendar

Director Vergara asked for a Motion.

Motion: Director Freshley made a Motion, seconded by Director Havens and unanimously carried across the Board to approve the Consent Calendar.

Roll Call Vote:

President Monin	aye
Vice President Gaskins	aye
Director Vergara	aye
Director Freshley	aye
Director Havens	aye

Finance Action Items

Financial Package - Authorization to Approve Bills for Consideration dated September 21, 2020 and Receive and File Financial Statements as of August 31, 2020

Mr. Cafferty stated that on page 9, Aged Receivable History, remains consistent but we are paying close attention to any revenue impacts that might be tied to the Covid-19 pandemic.

Mr. Cafferty stated that at the next Board meeting staff hopes to introduce a new CFO to the Board.

Director Vergara asked for a Motion.

Motion: Vice President Gaskins made a Motion, seconded by President Monin and unanimously carried across the Board to 1) approve, ratify and confirm payment of

those bills as set forth in the schedule of bills for consideration dated September 21, 2020, and 2) receive and file the Financial Statements for the period ending August 31, 2020.

Roll Call Vote:

President Monin	aye
Vice President Gaskins	aye
Director Vergara	aye
Director Freshley	aye
Director Havens	aye

Financial Information Items

2020/21 Fiscal Year Budget/Cost of Service Evaluation/Preparation and Tentative Schedule Status Report

Mr. Cafferty stated that we are having a Public Hearing this week to consider increasing water rates and so far have only received one protest letter.

Tiered Water Usage and Revenue Tracking

There were no comments.

Comments Regarding Non-Agenda FIC Items

Director Freshley asked if we are making any progress on the electrical demand at the Plant. Mr. Cafferty replied yes, staff is focused on the usage at the Plant for additional efficiencies.

At approximately 9:00 a.m. the Finance Committee meeting was closed.

Regular Session

Attorney Report

Mr. Granito reported that there is no need for a Closed Session at today's meeting, so regular session continued.

Adjournment

There being no further business to come before the Board, the Finance Committee meeting was adjourned at approximately 9:05 a.m.

Respectfully submitted,

_____
POLLY WELSCH
Recording Secretary

APPROVED:

_____
MARK L. MONIN, President
of the El Toro Water District and the
Board of Directors thereof

_____
DENNIS P. CAFFERTY, Secretary
of the El Toro Water District and the
Board of Directors thereof

EL TORO WATER DISTRICT
INSURANCE UPDATE

October 2020

Liability Program

There is nothing new to report this quarter.

Property Insurance

Coverage on the District's property program renewed as of July 1, 2020. Premium this year is $73,253.91 which is higher than last year's premium of $65,270.86. Budget for 2020-2021 is $70,000.00 which is $3,253.91 over budget.

Excess Crime

This coverage was renewed on July 1, 2020 for another year. Our premium is year is $1,995.00, which is $5.00 under budget. Coverage includes Public Employee "Dishonesty, forgery or alteration, Computer Fraud, Faithful Performance of Duty and Pension Plans. The Treasurer and Board Members are included under the coverage as well.

Underground Storage Tank Pollution Liability

This coverage was renewed July 1, 2020. Our premium is $1,453.00. The budget for Underground Storage Tank is $1,500.00 which is $47.00 under budget.

Dam Failure Liability

There is nothing new to report this quarter.

Fiduciary Liability Policy

There is nothing new to report this quarter.

Liability & Property Claim

1. On August 20, 2020 one of our drivers was at Avenida De Carlota & El Toro Road going straight through the light when another driver in the right turn only decided to go straight & caused an accident with our driver. This was sent to JPIA & has been settled. No damage to our truck.
2. On September 28, 2020 one of our drivers was south bound on 5 freeway when a piece of metal debris punctured the grill & radiator. He noticed smoke when he opened the hood and found a piece of metal stuck in the radiator. This report was sent to JPIA and a check is being sent minus the deductible for the repairs.

Workers' Compensation Policy

The Workers' Compensation Policy was renewed as of July 1, 2020 and runs through June 30, 2021.

Workers' Compensation Claims

There were no worker's compensation claims this quarter.

Medical Insurance

The District offers three medical plans as follows:

Kaiser Health - $10 office co-pay with no annual deductibles.

Anthem Blue Cross – HMO; Offers a $10 copay with no annual deductibles.

Anthem Blue Cross – PPO; this plan offers benefits within the physician network and outside of the network. In network there is a co-pay of $15.00 with an annual deductible of $200 per person and $600 per family. Out of the network, benefits are offered at 20% cost to the employee for all covered services with the same annual deductibles.

Average cost per month per employee for the first quarter is $1392.69.

Vision Insurance

VSP provides vision coverage to our employees, Directors and dependents. It provides an annual eye exam and discounted rates for frames, lenses and contacts.

The cost per month per employee for the first quarter is $17.21.

Dental Insurance

The District provides dental coverage with Delta Dental. Our dental insurance pays up to $1,500 for the upcoming year for covered services. All preventative services are offered every six months with the copay waived.

Average cost per month per employee for the first quarter is $81.80.

Long and Short Term Disability Insurance

The District offers Long and Short Term Disability Program through Lincoln National Life Insurance Company. The Long Term Disability program provides a maximum monthly benefit of $10,000. The Short Term Disability program provides a maximum weekly benefit of $ 1,500.

Both Short and Long Term Disability Programs are paid by the District and provides disability payments up to 66 2/3 of an employee's weekly or monthly salary if the claim is approved.

Average cost per month per employee for the first quarter is $57.06.

Long Term Care Insurance

Long Term care is a program that provides a monthly benefit of $2,500 to be applied to home health care or an assisted living facility.

Average cost per month per employee for the first quarter is $11.70.

Life Insurance Coverage

The District offers Life Insurance coverage through Lincoln National Life Insurance Company at twice the employee's annual salary up to a maximum of $300,000.

Lincoln National Life Insurance Company also provides life insurance coverage for the Directors.

Premium rates are based on age and salary of insured employees. The premium is adjusted on the employee's birthday every fifth year.

Average cost per month per employee for the first quarter is $46.29.

Employee Assistance Program (EAP) Coverage

UNUM is our carrier for our Employee Assistance Program. This program offers assistance in many areas such as: childcare, eldercare, legal consultations, and health information, personal relationship issues, financial planning assistance, stress management and career development. This benefit also comes with a $5,000 portable term life insurance benefit.

The cost per month per employee for the first quarter is $1.70.

An insurance report of Budget vs. Actual Costs for fiscal year 2020/2021 is attached for the Board's review as well as a summary of currently held District insurance policies.

Submitted by:
Nancy Laursen
Judy Cimorell

Budget vs. Actual - Q1 2020/19/2020
10/1/2020

Insurance Coverage	Annual Budget	Actual Paid to Date	Difference
Liability	$150,000	$172,271	$22,271
Property	$70,000	$65,271	($4,729)
Fiduciary Liability (Pd 2 years 9/2018 - 8/2020)	$6,300	$6,164	($137)
Dam Ins. (includes Excess)	$21,405	$23,949	$2,544
less SMWD- 50% &	($7,950)	($11,975)	-$4,025
MNWD 5% - R-6	($795)	($1,197)	($402)
Underground Storage Tank	$1,350	$1,419	$69
Excess Crime	$1,750	$1,900	$150
Total Insurance	**$242,060**	**$257,801**	**$15,741**

Benefits - Directors	Annual Budget	Q1 Budget	Accumulative Q1 Actual	Difference
Long Term Care	$27,878	$6,970	$8,351	$1,382
Dental	$3,266	$817	$632	($185)
Vision	$158	$40	$258	$219
Life	$139	$35	$34	($0)
Total Benefits Directors	**$31,441**	**$7,860**	**$9,275**	**$1,415**
Retiree Benefits				
Medical	$327,383	$81,846	$72,334	($9,512)
Employee paid	($32,738)	($8,185)	($7,233)	$951
Total retiree benefits	**$294,645**	**$73,661**	**$65,101**	**($8,561)**
Employee Benefits				
Emp.Assistance Program	$1,242	$311	$288	($23)
Medical	$1,207,490	$301,873	$267,407	($34,466)
Emp. Co-pay	($88,006)	($22,002)	($20,901)	$1,100
Life/AD&D	$36,971	$9,243	$8,193	($1,049)
Dental	$60,128	$15,032	$14,478	($554)
Vision	$12,550	$3,138	$3,046	($91)
LTD/STD	$39,455	$306	$10,101	$9,795
LTC	$15,770	$3,943	$2,476	($1,467)
LTC-Emp. Paid	($3,270)	($818)	($404)	$413
Workers comp.	$141,750	$35,438	$31,061	($4,377)
Total Employee Benefits	**$1,424,080**	**$346,462**	**$315,744**	**($30,718)**

SUMMARY OF COVERAGE

Type of Coverage	**GENERAL LIABILITY**	**Coverage Term: 10/19-20**
Coverage Includes	1. Commercial General Liability 2. Contractual Liability 3. Products/Completed Operations 4. Personal Injury	**Premium - $172,271**
Coverage Limits	**Insurance Carrier**	**Policy Number**
	Pooled Self-insured	MOLC - 100110

Type of Coverage	**AUTO LIABILITY**	**Coverage Term: 10/19-20**
Coverage Includes	1. Owned Automobiles/Trucks 2. Non-owned Automobiles/Trucks 3. Hired Automobiles/Trucks	**Premium - Included**
Coverage Limits	**Insurance Carrier**	**Policy Number**
	Pooled Self-insured	MOLC - 100110

Type of Coverage	**PUBLIC OFFICIALS LIABILITY**	**Coverage Term: 10/19-20**
Coverage Includes	1. Errors & Omissions	**Premium - Included**
Coverage Limits	**Insurance Carrier**	**Policy Number**
	Pooled Self-insured	MOLC - 100110

Type of Coverage	**PROPERTY**	**Coverage Term: 7/20 - 21**
Coverage Includes	1. Basic Property Values- Building, Fixed Equipment, Personal Property 2. Mobile Equipment Value 3. Licensed Vehicle - Comprehensive & Collision - Private Passenger, Light Truck, Sport Utility, Other Vehicles	**Premium - $73,254**
Automobile Physical Damage **Comprehensive - 83 Vehicles** **Collision - 83 Vehicles**		
Coverage Limits	**Insurance Carrier**	**Policy Number**
	Pooled Self-insured	MOLC - 100110

Type of Coverage	**EXCESS CRIME PROGRAM**	Coverage Term: 7/20-21
Coverage Includes	1. Public Employee Dishonesty 2. Forgery or Alteration 3. Computer Fraud 4. Faithful Performance of Duty 5. Treasurer/Tax Collector/Board Members (included)	**Premium - $1,995**
Coverage Limits	**Insurance Carrier**	**Policy Number**
	Pooled Self-insured	MOLC - 100110

Type of Coverage	**UNDERGROUND STORAGE TANK POLLUTION LIABILITY**	Coverage Term: 7/20-21
Coverage Includes	1. Claims-Made 2. Environmental Incident	**Premium - $1,453**
Covers 1 Tank Located at: **23542 Moulton Parkway** **Laguna Woods, CA 92637**		
Coverage Limits	**Insurance Carrier**	**Policy Number**
	Pooled Self-insured	MOLC - 100110

Type of Coverage	**DAM FAILURE LIABILITY**	Coverage Term: 10/19-09/20
Coverage (Includes Excess Ins. for El Toro Reservoir)	$10,000,000.00	**Premium - $23.949.**
Covers: **El Toro Reservoir** **Rossmoor Dam**	$5,000,000.00	
Coverage Limits	**Insurance Carrier**	**Policy Number**
		MOLC - 100110

Type of Coverage	**FIDUCIARY LIABILITY**	Coverage Term: 9/20-21
Coverage Includes	1. Executive Protection Policy	**Premium - $10,337**
Parent Organization: **ETWD Retirement Savings Plan & Trust Agreement**		
Coverage Limits	**Insurance Carrier**	**Policy Number**
	Hudson Insurance Company	SFD31211603

Type of Coverage	WORKERS' COMPENSATION	Coverage Term: 7/19 - 6/20
Coverage Includes	1. Coverage A - Workers' Compensation 2. Coverage B - Employer's Liability	**Premium - Paid Quarterly** **Varies per Payroll**
Coverage Limits	**Insurance Carrier**	**Policy Number**
Coverage A		
$0 - $2 Million	Pooled Self-insured	MOLC - 100110
$2 Million to Statutory		
Coverage Limits	**Insurance Carrier**	**Policy Number**
Coverage B		
$0 - $2 Million	Pooled Self-insured	MOLC - 100110
$2 Million excess of $2 Million SIR		

Type of Coverage	LIFE & ACCIDENT	1st Quarter Premium $8,227
Coverage Includes	**Coverage - 2 X Annual Income (Max. of $300,000)**	
Insurance Carrier	**Lincoln National Life Insurance Co.**	**Policy # 10218807**
Eligibility Period	**2 Months After Hire**	
Plan Wait or Deductible	**60 Days**	

Type of Coverage	LONG / SHORT TERM DISABILITY	1st Quarter Premium $10,101
Coverage Includes	**66 2/3 Insured Earnings Max. of $10,000**	
Insurance Carrier	**Lincoln National Life Insurance Co.**	**Policy # 10218808**
Eligibility Period	**1 Year After Hire**	
Plan Wait or Deductible	**30 Days STD 90 Days or 9 Weeks LTD**	

Type of Coverage	LONG TERM CARE	1st Quarter Premium $2,072
Coverage Includes	**$2,500/Month $150,000 Total Benefit**	
Insurance Carrier	**UNUM**	**Policy # 220384**
Eligibility Period	**1 Year After Hire**	
Plan Wait or Deductible	**365 Days**	

Type of Coverage	PERSONAL ACCIDENT INSURANCE	1st Quarter Premium Employee Paid
Coverage Includes	$50,000 or $100,000	
Insurance Carrier	INA	Policy # OKH-1253-56
Eligibility Period	Optional	
Plan Wait or Deductible	None	

Type of Coverage	DENTAL	1st Quarter Premium $15,110
Coverage Includes	$25.00 or $50.00/Family	
Insurance Carrier	Delta Dental Plan of California	Policy #399-1012
Eligibility Period	2 Months After Hire	
Plan Wait or Deductible	60 Days	

Type of Coverage	MEDICAL	1st Quarter Premium $310,606
Coverage Includes	HMO or PPO by Employee Choice	
Insurance Carrier	Anthem Blue Cross / Kaiser Insurance thru ACWA	Policy #229CA
Eligibility Period	1 Month After Hire	
Plan Wait or Deductible	30 Days	

* Premium includes employees and retirees

Type of Coverage	VISION	1st Quarter Premium $3,304
Coverage Includes	Annual Exam/Frame Every 2 Years	
Insurance Carrier	Vision Service Plan thru ACWA	Policy #399-1012
Eligibility Period	2 Months After Hire	
Plan Wait or Deductible	60 Days	

EL TORO WATER DISTRICT
FINANCIAL REPORT
October 19, 2020

EL TORO WATER DISTRICT
BALANCE SHEET

	9/30/20 (Unaudited)	June 30, 2020 (Unaudited)
ASSETS		
Current Assets		
Cash	$1,965,017	$2,717,028
Investments:		
Investments Cash	8,002,408	7,724,881
Investments FMV Adjustment	86,316	122,443
Receivables:		
Accounts Receivable	4,670,828	2,666,116
Inventories	727,973	629,459
Prepaid Expenses	269,065	166,971
Total Current Assets	$15,721,607	14,026,898
Restricted Assets		
Cash & Investments	10,334,300	10,562,058
Total Restricted Assets	10,334,300	10,562,058
Non-Current Assets		
Utility Plant:		
Land & Easements	7,451,585	7,451,585
Long Term Leases	342,382	342,382
Equipment	121,682,254	115,192,376
Collection & Impound Reservoirs	6,243,706	6,243,706
Structure & Improvements	34,889,919	34,871,067
Total Utility Plant	170,609,847	164,101,118
Less Accumulated Depreciation & Amortization	(80,908,621)	(79,719,396)
Net Utility Plant	89,701,226	84,381,722
Construction Work in Progress	1,162,381	7,259,007
Deffered Outflow OPEB	3,634,674	3,337,168
Total Non-current Assets	94,498,281	94,977,897
TOTAL ASSETS	$120,554,189	$119,566,853

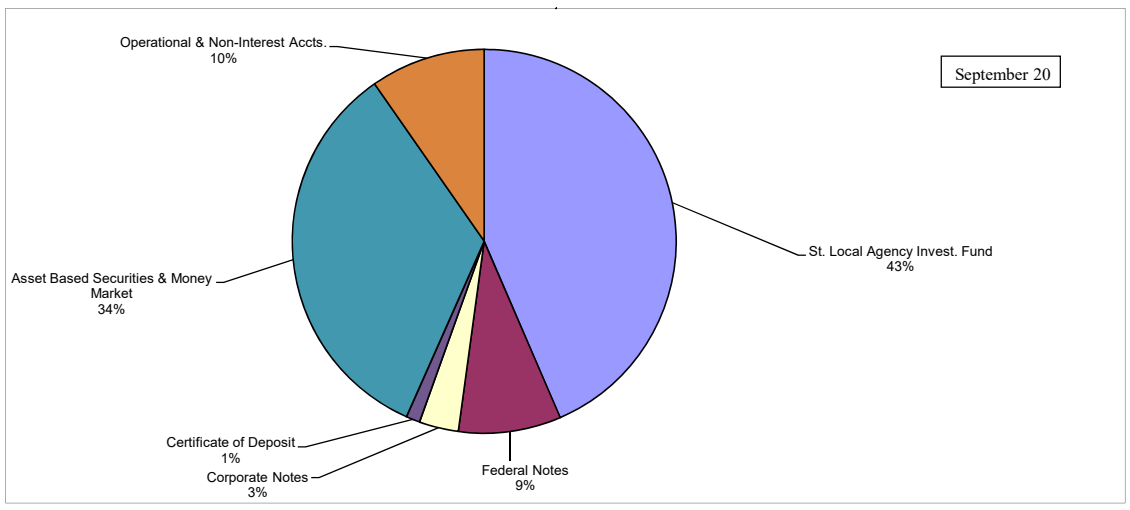
EL TORO WATER DISTRICT
BALANCE SHEET

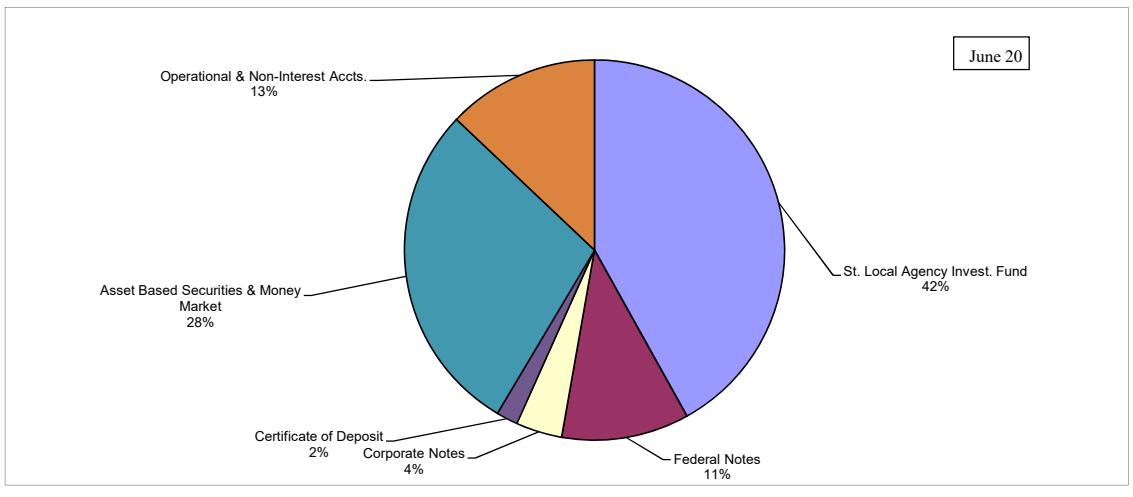
	9/30/20 (Unaudited)	June 30, 2020 (Unaudited)
LIABILITIES and EQUITY		
Liabilities		
Current Liabilities Payable		
Accounts Payable	$2,064,543	$1,855,614
Current Portion of Long-Term Debt	1,858,352	6,180
Other Current Liabilities	2,854,098	1,770,803
Total Current Liabilities Payable From Current Assets	6,776,993	3,632,597
Long Term Debt		
Long Term Debt	50,591,444	51,149,798
Total Long Term Debt	50,591,444	51,149,798
Total Liabilities	57,368,437	54,782,395
Fund Equity		
Retained Earnings - Reserved	17,034,893	17,034,893
Contributed Capital	8,744,767	8,744,767
Retained Earnings - Unreserved	36,959,626	38,773,389
Net Income	446,465	231,408
Total Fund Equity	63,185,752	64,784,457
Total Liabilites & Fund Equity	$120,554,189	$119,566,853

CASH & INVESTMENTS (General Fund)

SUMMARY OF INVESTMENTS BY TYPE

	Maturity Dates	Par	Market Value 9/30/20	Financial Institution	YTM 9/30/20	Original Cost 9/30/20
State Local Agency Investment Fund	NA	NA	$8,836,399	LAIF	0.69%	$8,836,399
US Treasury N/B - Coupon Rate 1.375%	10/31/2020	95,000	95,089	US Bank/CAMP	1.65%	94,228
US Treasury N/B - Coupon Rate 1.750%	12/31/2020	340,000	341,381	US Bank/CAMP	1.90%	338,513
US Treasury N/B - Coupon Rate 1.375%	1/31/2021	50,000	50,203	US Bank/CAMP	2.05%	49,006
US Treasury N/B - Coupon Rate 1.125%	2/28/2021	150,000	150,633	US Bank/CAMP	2.41%	144,428
US Treasury N/B - Coupon Rate 2.000%	5/31/2021	490,000	496,125	US Bank/CAMP	2.62%	481,272
Inter-American Development Bank - Coupon Rate 2.125%	11/9/2020	90,000	90,155	US Bank/CAMP	1.81%	90,834
Intl Finance Note - Coupon Rate 2.250%	1/25/2021	70,000	70,398	US Bank/CAMP	2.35%	69,794
Intl Finance Corporation Note - Coupon Rate 2.635%	3/9/2021	90,000	90,942	US Bank/CAMP	2.66%	89,933
Inter-American Dev Bank Note - Coupon Rate 1.875%	3/15/2021	200,000	201,459	US Bank/CAMP	2.56%	196,046
Inter-American Dev Bank Note - Coupon Rate 2.625%	4/19/2021	70,000	70,900	US Bank/CAMP	2.70%	69,846
CA ST TXBL GO Bonds- Coupon Rate 2.800%	4/1/2021	100,000	101,196	US Bank/CAMP	2.80%	100,004
FNA 2018-M5 A2- Coupon Rate 3.560%	9/1/2021	28,059	28,252	US Bank/CAMP	2.93%	28,617
Federal Notes		1,773,059	1,786,732			1,752,520
Bank of America Note - Coupon Rate 2.328%	10/1/2021	90,000	90,005	US Bank/CAMP	2.33%	90,000
Citigroup Inc Corp Notes - Coupon Rate 2.650%	10/26/2020	40,000	40,050	US Bank/CAMP	2.34%	40,360
Paccar Financial Corp Notes - Coupon Rate 2.050%	11/13/2020	20,000	20,040	US Bank/CAMP	2.05%	19,998
VISA Inc. (Callable) Corp Notes - Coupon Rate 2.200%	12/14/2020	20,000	20,048	US Bank/CAMP	1.85%	20,220
Wal-Mart Stores Inc. Corp. Note - Coupon Rate 1.900%	12/15/2020	90,000	90,310	US Bank/CAMP	1.95%	89,870
Paccar Financial Corp Notes - Coupon Rate 2.800%	3/1/2021	30,000	30,316	US Bank/CAMP	2.82%	29,985
National Rural Util Coop - Coupon Rate 2.900%	3/15/2021	35,000	35,420	US Bank/CAMP	2.94%	34,961
United Parcel Service Corporate Bond - Coupon Rate 2.050%	4/1/2021	90,000	90,799	US Bank/CAMP	2.10%	89,858
Toyota Motor Credit Corp Notes - Coupon Rate 2.950%	4/13/2021	90,000	91,163	US Bank/CAMP	2.96%	89,964
Pepsico Inc. Corp. Note - Coupon Rate 2.000%	4/15/2021	30,000	30,255	US Bank/CAMP	2.01%	29,994
Hershey Company Corp. Note - Coupon Rate 3.100%	5/15/2021	40,000	40,702	US Bank/CAMP	3.12%	39,972
American Express Co. - Coupon Rate 3.375%	5/17/2021	45,000	45,727	US Bank/CAMP	3.38%	44,992
Charles Schwab Corp. Corp. Notes - Coupon Rate 3.250%	5/21/2021	55,000	55,881	US Bank/CAMP	3.25%	54,998
Corporate Notes		675,000	680,716			675,173
Swedbank (NewYork) CD- Coupon Rate 2.270%	11/16/2020	135,000	135,332	US Bank/CAMP	2.27%	135,000
Royal Bank of Canada NY CD- Coupon Rate 3.240%	6/7/2021	100,000	102,128	US Bank/CAMP	3.24%	100,000
Certificate of Deposit		235,000	237,460			235,000
Toyota ABS 2017-B A3 - Coupon Rate 1.760%	7/15/2021	687	687	US Bank/CAMP	1.76%	687
Honda ABS 2017-2 A3 - Coupon Rate 1.680%	8/15/2021	5,680	5,686	US Bank/CAMP	1.68%	5,679
John Deere ABS 2017-B A3 - Coupon Rate 1.820%	10/15/2021	858	858	US Bank/CAMP	1.82%	858
Ford ABS 2017-B A3 - Coupon Rate 1.690%	11/15/2021	3,816	3,818	US Bank/CAMP	1.69%	3,816
Hyundai ABS 2017-B A3 - Coupon Rate 1.770%	1/18/2022	9,044	9,057	US Bank/CAMP	1.77%	9,043
Allya 2017-5 A3 - Coupon Rate 1.990%	3/15/2022	9,528	9,548	US Bank/CAMP	1.99%	9,527
Fordo 2017-C A3 - Coupon Rate 2.010%	3/15/2022	21,406	21,476	US Bank/CAMP	2.01%	21,402
JDOT 2018-A A3 - Coupon Rate 2.660%	4/15/2022	5,846	5,879	US Bank/CAMP	2.66%	5,845
Hart 2018-A A3 - Coupon Rate 2.790%	7/15/2022	19,332	19,493	US Bank/CAMP	2.79%	19,329
MBart 2018-1 A3 - Coupon Rate 3.030%	1/15/2023	35,047	35,578	US Bank/CAMP	3.03%	35,045
CAMP Money Market Fund	NA	NA	6,726,385	US Bank/CAMP	0.27%	6,726,385
Asset Based Securities & Money Market		111,243	6,838,464			6,837,616
Total Camp Investments		2,794,302	9,543,372			9,500,309
Operational & Non-Interest Bearing Accounts						
ETWD General Cash Account	NA	NA	1,961,423	Union Bank of Cal.	0.00%	1,961,423
ETWD Capital Facilities Reserve Account	NA	NA	2,895	Union Bank of Cal.	0.00%	2,895
ETWD Payroll Account	NA	NA	0	Union Bank of Cal.	0.00%	0
ETWD Petty Cash Account	NA	NA	700	Union Bank of Cal.	0.00%	700
Operational & Non-Interest Accts.			1,965,017			1,965,017
			$20,344,788	**Total Investments & Cash**		$20,301,725





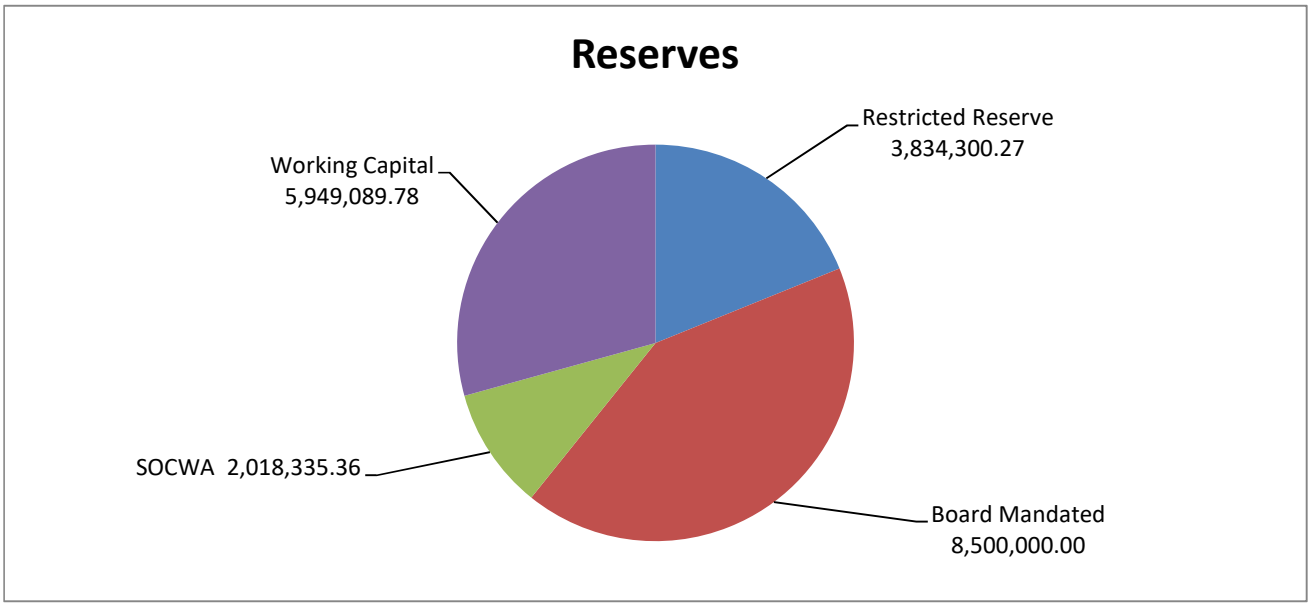
LIQUIDITY

	September 30, 2020			June 30, 2020	
	$	%		$	%
DEMAND	$ 17,527,801	86.34%		$ 17,297,570	82.35%
30 Days	$ 40,360	0.20%		$ -	0.00%
31-180 Days	$ 1,402,815	6.91%		$ 1,310,976	6.24%
181 - 360	$ 1,135,884	5.60%		$ 2,053,566	9.78%
361-1800 Days	$ 194,865	0.96%		$ 341,855	1.63%
TOTAL	$ 20,301,725	100.00%		$ 21,003,967	100.00%

* The portfolio is in compliance with the investment policy.

** PFM Investment Advisory Services (10bp on first $25 mm, 8bp over) $ 480.91 for January 2020

EL TORO WATER DISTRICT
RESERVE ANALYSIS
30-Sep-20



Restricted Reserve	$	3,834,300
Board Mandated	$	8,500,000
SOCWA	$	2,018,335
Capital Cash Flow / Compliance	$	5,949,090
Total	**$**	**20,301,725**

Restricted Reserve

SRFL-Recycled Phase I	$	1,602,958
SRFL-Recycled Phase II	$	409,046
Capital Facilities Reserve	$	2,895
Tiered Cons Fund	$	967,704
Baker Funding	$	851,698
Total	**$**	**3,834,300**

Board Mandated Minimum Reserve Levels

Capital Construction	$	3,000,000
Rate Stabilization	$	2,200,000
Operations	$	1,300,000
Working Capital	$	2,000,000
Total	**$**	**8,500,000**

Six months operating expense requirement:	$12,800,791
Cash less restricted reserve on hand:	$16,467,425

ETWD has the ability to meet its expediture requirements for the next six months.

EL TORO WATER DISTRICT
CHANGE IN RESERVES

	September 30, 2020	Year to Date	June 30, 2020
Operating Revenue	2,304,839	7,241,140	24,886,981
Non-operating Revenue	177,699	436,912	2,057,794
Total Revenue	2,482,538	7,678,052	26,944,775
Operating Expenses	2,028,245	5,966,848	22,155,519
Depreciation & Amortization	358,855	1,076,566	4,483,605
Non-operating Expenses	63,054	189,162	777,511
Total Expenses	2,450,154	7,232,577	27,416,636
NET INCOME	32,383	445,475	(471,860)
Add Depreciation & Amortization	358,855	1,076,566	4,483,605
Net Cash Provided by Operating Activities	(654,194)	(1,647,553)	2,476,850
Net Cash Provided by Investing Activities	(370,228)	(502,636)	(1,447,543)
Net Cash Provided by Financing Activities	-	-	(2,197,763)
Net Increase/(Decrease) Cash for the Period	(633,183)	(628,147)	2,843,288
Cash at End of Period from Balance Sheet		10,053,741	
Restricted Cash		10,334,300	
Unrealized (Gains)/Losses Fair Market Value		(86,316)	
Cash at End of Period		20,301,725	
Net (Increase)/Decrease Cash for the Period		633,183	
Net (Increase)/Decrease in Rescricted Cash for the Period		(114,988)	
Net Increase/(Decrease) in Unrealized Gains/(Losses) Fair Market Value		(3,334)	
Void Checks in Prior Period		-	
Cash at Beginning of Period		20,816,587	

EL TORO WATER DISTRICT
Cash Sheet
For the month ending September 30, 2020

CHECK NUMBER	PAYMENT DATE	VENDOR NAME	PAYMENT AMOUNT
89337	09/03/2020	MUNICIPAL WATER DISTRICT OF ORANGE CO.	659,363.72
89445	09/22/2020	SO. CALIFORNIA EDISON CO.	138,001.97
89333	09/03/2020	IRVINE RANCH WATER DISTRICT	117,604.33
89379	09/17/2020	ACWA HEALTH BENEFITS AUTHORITY	114,378.01
89336	09/03/2020	MOULTON NIGUEL WATER DISTRICT	109,309.20
89391	09/17/2020	EVOLUTION LANDSCAPING & PLUMBING	86,971.88
		TOTAL CHECKS OVER $50,000	**$ 1,225,629.11**
		TOTAL CHECKS IN REGISTER	**$ 1,591,443.85**

DEBIT TRANSFERS

	09/11/2020	PAYROLL DIRECT DEPOSIT	140,049.20
	09/11/2020	FEDERAL DEPOSIT LIABILITY	30,392.72
	09/11/2020	SDI & STATE TAX	11,798.29
	09/11/2020	WAGE GARNISHMENTS	585.00
	09/11/2020	PRUDENTIAL (401K)	52,275.50
	09/11/2020	PRUDENTIAL (457)	16,847.09
	09/15/2020	PAYROLL BOARD OF DIRECTOR	6,449.97
	09/15/2020	SS, MEDICARE, SDI & STATE TAX	1,865.47
	09/15/2020	PRUDENTIAL (457)	2,793.34
	09/25/2020	PAYROLL DIRECT DEPOSIT	138,925.28
	09/25/2020	FEDERAL DEPOSIT LIABILITY	29,833.42
	09/25/2020	SDI & STATE TAX	11,572.16
	09/25/2020	WAGE GARNISHMENTS	585.00
	09/25/2020	PRUDENTIAL (401K)	51,316.78
	09/25/2020	PRUDENTIAL (457)	16,451.54
	09/30/2020	ADP AND BANK FEES	4,770.46
		TOTAL INTERBANK WIRES / DEBIT TRANSFERS	**$ 516,511.22**
		TOTAL DISBURSEMENTS	**$ 2,107,955.07**

ETWD EMPLOYEES

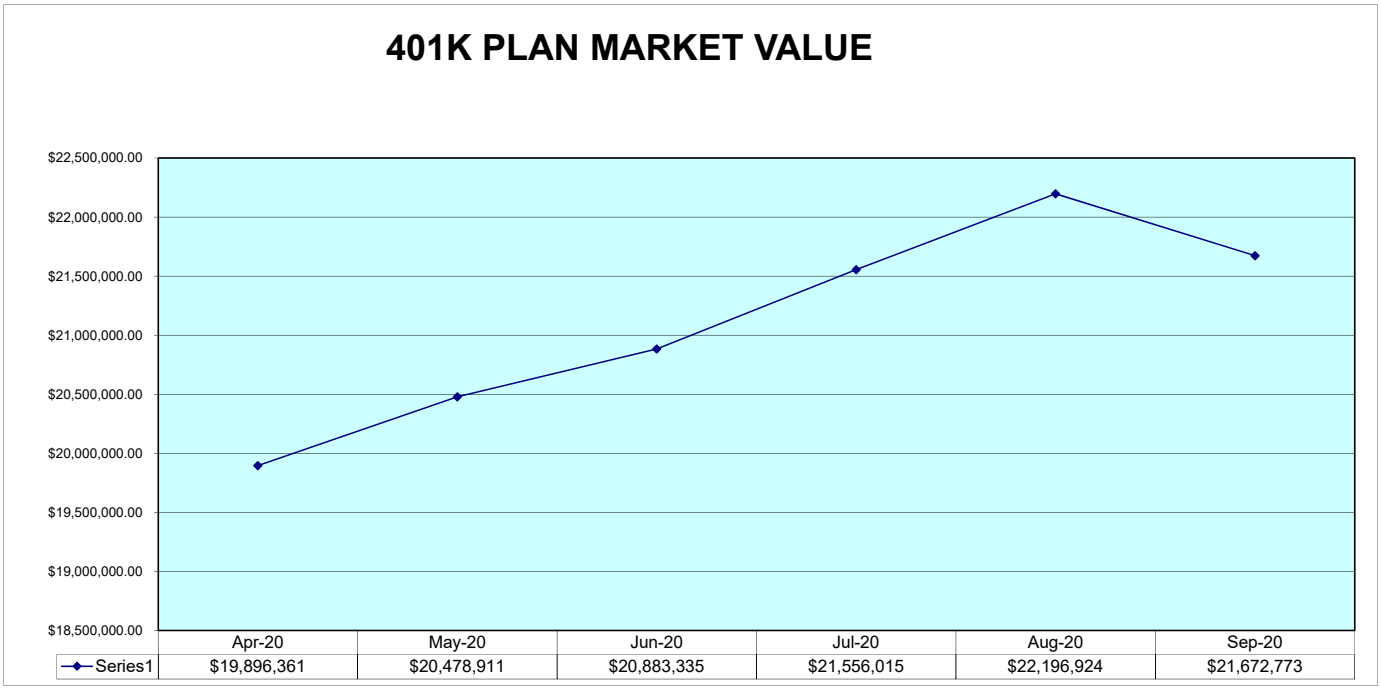
CHECK NUMBER	PAYMENT DATE	PAYEE (DESCRIPTION)	PAYMENT AMOUNT
89334	09/03/2020	JIM REDDING	155.00
		TOTAL CHECKS TO EMPLOYEES	**$ 155.00**

ETWD DIRECTORS

CHECK NUMBER	PAYMENT DATE	PAYEE (DESCRIPTION)	PAYMENT AMOUNT
		No Activity	
		TOTAL CHECKS TO DIRECTORS	**$ -**

EL TORO WATER DISTRICT

401K PLAN SUMMARY

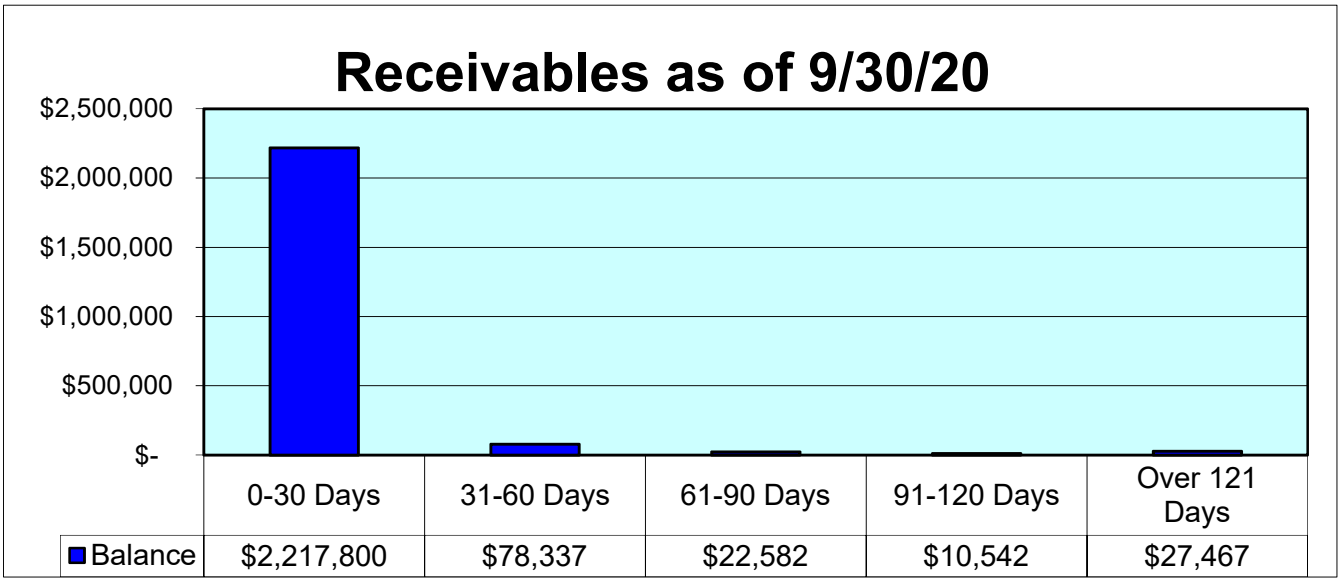


MARKET VALUE SUMMARY

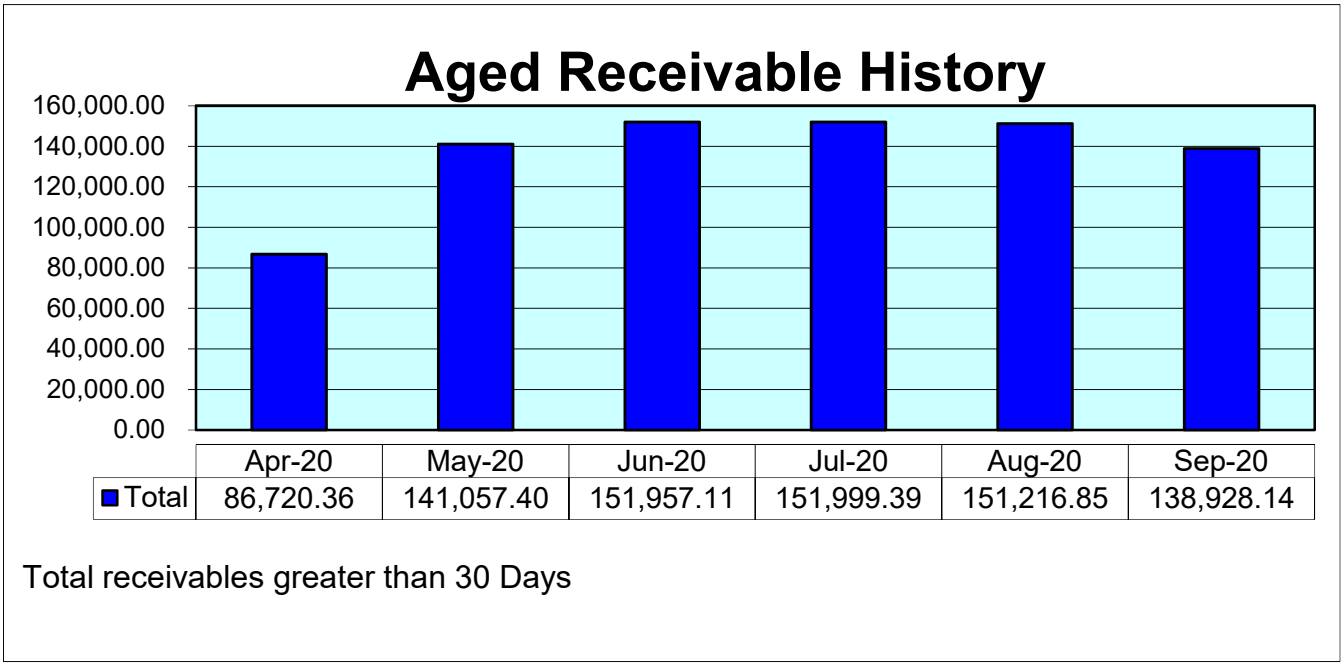
	Growth Under 40 yrs. Old	Capital Appreciation 40 to 44 yrs. Old	Balanced 45 to 49 yrs. Old	Balanced Income 50 to 54 yrs. Old	Income & Growth 55 to 59 yrs. Old	Income 60 to 64 yrs. Old	Capital Pres. Port Over 65 yrs. Old
Balance at July 1, 2020	$ 1,792,144.51	$515,185.81	$1,342,947.76	$5,031,746.61	$7,076,815.63	$4,137,005.60	$987,489.23
Contributions	85,325.12	15,311.95	23,857.20	53,545.28	67,035.76	108,537.80	25,942.80
Withdrawals	0.00	0.00	0.00	0.00	(204,244.03)	(118,531.73)	(300,000.00)
Transfers	(233,311.03)	121,616.52	(791,692.87)	(307,035.64)	(242,151.66)	763,611.10	688,963.58
Interest, dividends and appreciation net of fees and charges	117,457.46	39,964.19	53,114.94	269,002.09	339,792.06	177,248.13	36,079.23
Balance at September 30, 2020	$ 1,761,616.06	$692,078.47	$628,227.03	$5,047,258.34	$7,037,247.76	$5,067,870.90	$1,438,474.84
Average return YTD September 30, 2020	6.55%	7.76%	3.96%	5.35%	4.80%	4.28%	3.65%

Average return is calculated by dividing the interest, dividends and appreciation, net of fees by beginning fiscal year fund balance.

RECEIVABLES AGEING



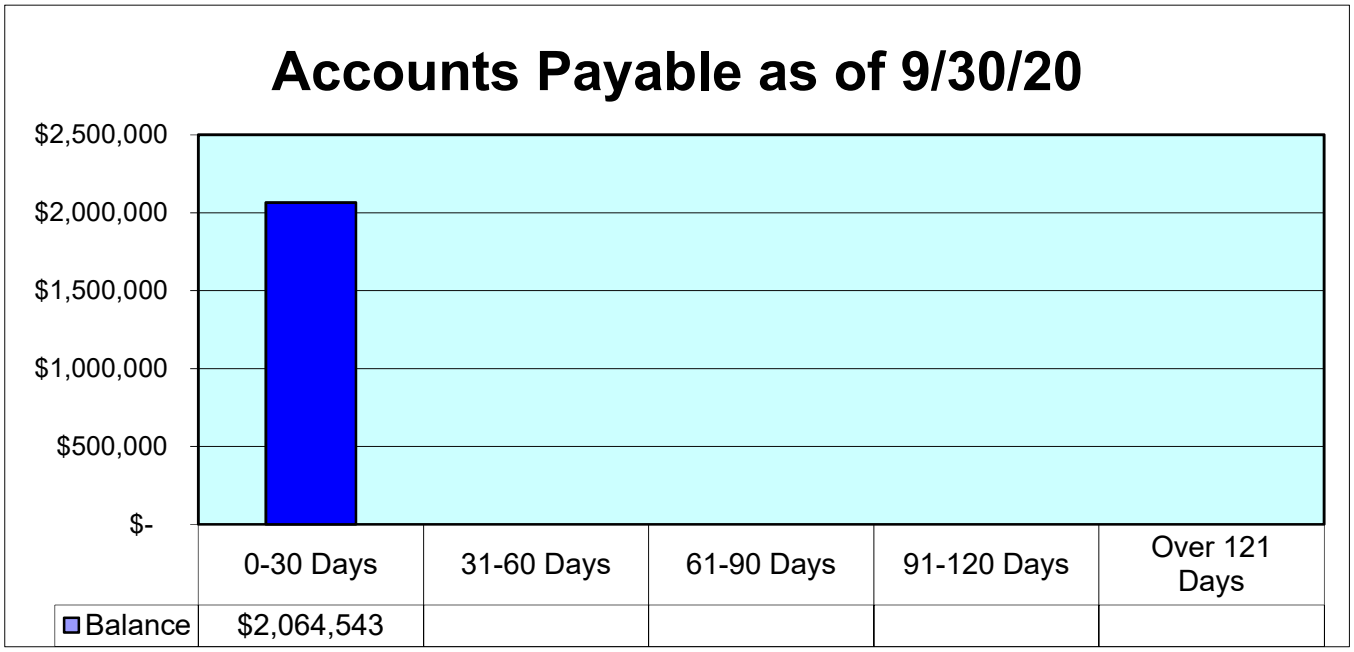
Bad Debts Year to Date: **-51.26**



Total receivables greater than 30 Days

	31-60 Days	61-90 Days	91-120 Days	Over 121 Days	Total
Apr-20	39,890.33	22,781.81	11,948.97	12,099.25	86,720.36
May-20	81,514.14	28,539.19	12,645.73	18,358.34	141,057.40
Jun-20	89,567.35	22,697.27	13,295.37	26,397.12	151,957.11
Jul-20	89,673.98	20,626.01	11,946.76	29,752.64	151,999.39
Aug-20	88,494.50	19,594.80	11,174.89	31,952.66	151,216.85
Sep-20	78,337.29	22,581.64	10,542.33	27,466.88	138,928.14

PAYABLES AGEING

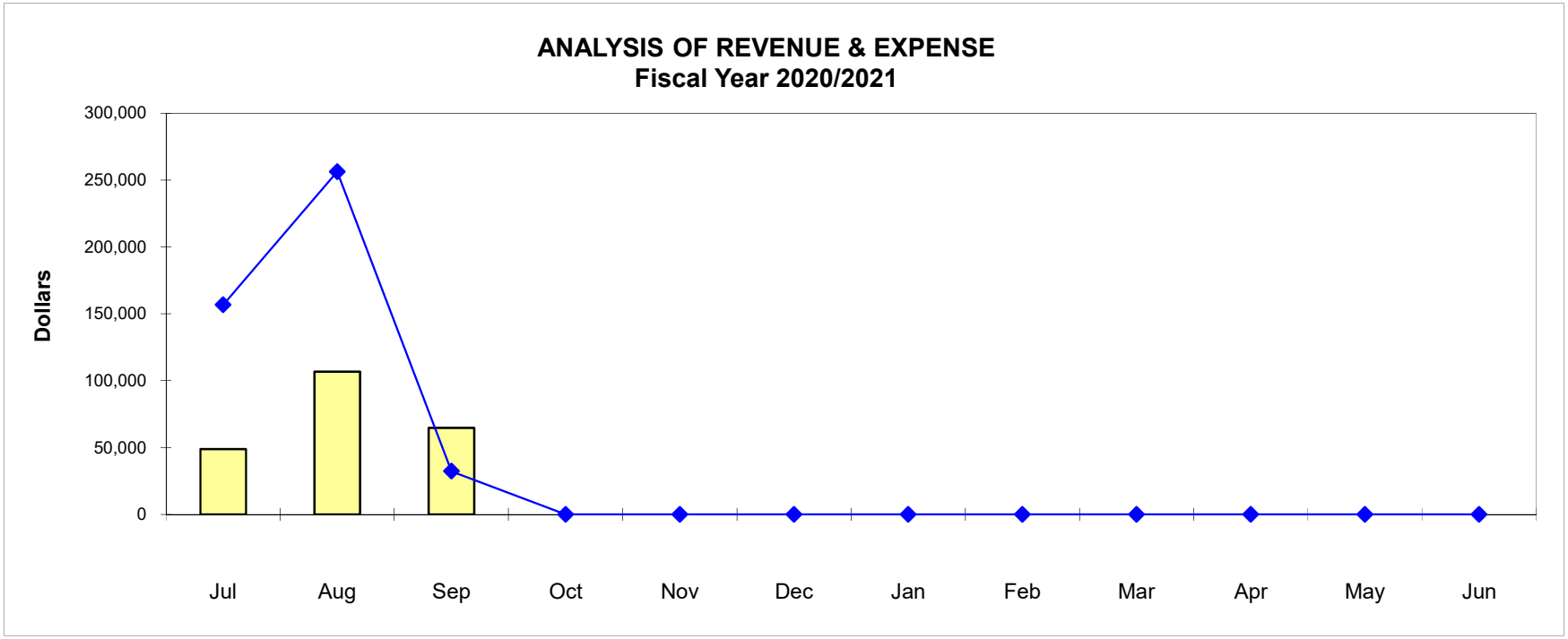


Year to Date Discounts Taken: **$243**

El Toro Water District
Income Statement
September 2020

	Sep 20	Budget	% of Budget	Jul - Sep 19	Jul - Sep 20	YTD Budget	% of Budget	Annual Budget
Income								
4600 · Water Service Charge	304,313.01	318,682.25	95.49%	892,721.78	915,520.84	956,046.75	95.76%	3,824,187.00
4700 · Sanitary Service	651,896.75	647,916.67	100.61%	1,965,040.50	1,932,431.94	1,943,749.97	99.42%	7,775,000.00
4722 · Recycled Water Tertiary Sales	189,941.50	251,850.33	75.42%	590,306.99	668,898.73	716,101.09	93.41%	1,663,847.00
4724 · Service Charge - Recycled Water	22,977.44	28,017.25	82.01%	60,622.10	66,827.49	84,051.75	79.51%	336,207.00
4750 · Capital Facilities Charge	250,520.99	251,250.00	99.71%	751,664.31	751,641.65	753,750.00	99.72%	3,015,000.00
4800 · Commodity Charge	883,699.21	828,626.52	106.65%	2,767,638.30	2,891,180.84	2,833,761.10	102.03%	8,904,396.00
4950 · Other Operating Income	1,489.79	4,583.33	32.51%	16,572.02	3,638.08	13,750.03	26.46%	55,000.00
4960 · Other Income	79,150.97	45,104.17	175.49%	115,428.44	144,784.95	135,312.47	107.0%	541,250.00
4967 · SMWD	0.00	9,333.33	0.0%	0.00	0.00	28,000.03	0.0%	112,000.00
4970 · MNWD	0.00	1,958.34	0.0%	11,000.00	11,000.00	5,874.94	187.24%	23,500.00
4980 · Interest Income	12,389.97	29,166.67	42.48%	103,967.91	38,841.63	87,499.97	44.39%	350,000.00
4985 · Changes FMV CAMP	-3,333.53			7,905.90	-13,515.75			
4986 · Changes FMV LAIF								
4990 · Property Taxes	89,491.40	87,791.67	101.94%	234,692.67	266,801.49	263,374.97	101.3%	1,053,500.00
Total Income	2,482,537.50	2,504,280.53	99.13%	7,517,560.92	7,678,051.89	7,821,273.07	98.17%	27,653,887.00
Gross Profit	2,482,537.50	2,504,280.53	99.13%	7,517,560.92	7,678,051.89	7,821,273.07	98.17%	27,653,887.00
Expense								
5100 · Personnel Cost	645,038.28	715,783.08	90.12%	1,971,868.09	1,980,625.11	2,147,349.28	92.24%	8,589,397.00
5405 · Water Purchases	735,575.65	726,776.74	101.21%	2,262,519.01	2,356,951.58	2,462,410.87	95.72%	7,878,746.00
5410 · Electrical Power	132,099.13	93,616.65	141.11%	348,137.45	395,865.62	280,850.15	140.95%	1,123,400.00
5415 · Repair Parts & Materials	35,655.57	33,823.74	105.42%	105,113.42	82,279.40	101,471.34	81.09%	405,885.00
5420 · Equipment Maintenance & Repair	10,407.62	10,285.82	101.18%	25,129.43	37,094.76	30,857.62	120.21%	123,430.00
5425 · Pump Maintenance & Repair	2,520.81	8,291.67	30.4%	22,398.58	16,701.06	24,874.97	67.14%	99,500.00
5430 · Motor Maintenance & Repair	0.00	2,791.66	0.0%	6,849.77	0.00	8,375.06	0.0%	33,500.00
5440 · Electrical/Contl Maint & Repair	5,157.80	6,633.34	77.76%	6,170.26	6,804.95	19,899.94	34.2%	79,600.00
5445 · Meter Maintenance & Repair	0.00	487.50	0.0%	0.00	1,672.52	1,462.50	114.36%	5,850.00
5455 · Chemicals	22,339.30	18,225.01	122.58%	71,610.00	66,040.18	54,674.91	120.79%	218,700.00
5460 · Structure Maint & Repair	6,102.67	2,694.25	226.51%	4,352.58	9,972.23	8,082.75	123.38%	32,331.00
5465 · Asphalt Maintenance & Repair	0.00	6,916.67	0.0%	32,953.00	0.00	20,749.97	0.0%	83,000.00
5470 · Consultants	947.20	4,695.83	20.17%	9,718.55	1,092.50	14,087.53	7.76%	56,350.00
5475 · Contractors	114,001.94	98,705.49	115.5%	248,300.74	314,715.13	296,116.59	106.28%	1,184,466.00
5480 · Engineers	90,463.16	11,583.33	780.98%	30,961.15	91,992.00	34,750.03	264.73%	139,000.00
5482 · Dump Fees	4,578.95	1,500.00	305.26%	2,581.44	6,682.40	4,500.00	148.5%	18,000.00
5485 · Laboratory	1,413.86	2,408.33	58.71%	5,258.92	7,477.70	7,225.03	103.5%	28,900.00
5490 · License & Permits	2,364.85	15,025.50	15.74%	11,872.97	22,287.82	45,076.50	49.44%	180,306.00
5495 · Gas & Oil	8,195.98	8,750.00	93.67%	28,447.24	23,945.92	26,250.00	91.22%	105,000.00
5500 · Equipment Rental	3,208.95	1,675.00	191.58%	2,948.23	5,211.01	5,025.00	103.7%	20,100.00
5505 · Landscaping	4,608.88	13,669.85	33.72%	16,636.98	14,665.64	41,009.35	35.76%	164,038.00
5510 · Small Tools & Equipment	2,598.16	5,583.35	46.53%	16,086.78	10,510.45	16,749.85	62.75%	67,000.00
5515 · Security	1,599.38	1,587.94	100.72%	4,792.69	4,798.14	4,763.54	100.73%	19,055.00
5520 · Operating Supplies	4,697.78	4,688.33	100.2%	10,514.03	23,287.19	14,065.03	165.57%	56,260.00
5525 · Safety Equipment	955.76	2,999.99	31.86%	5,950.85	8,269.88	9,000.09	91.89%	36,000.00
5530 · Temporary Help	0.00	2,291.67	0.0%	0.00	0.00	6,874.97	0.0%	27,500.00
5535 · Other Employee Cost	17,378.85	9,250.00	187.88%	44,432.92	65,361.10	27,750.00	235.54%	111,000.00
5540 · Depreciation	358,285.00	408,333.33	87.74%	1,091,025.00	1,074,855.00	1,225,000.03	87.74%	4,900,000.00
5545 · Insurance	25,694.84	25,981.08	98.9%	131,181.15	76,388.93	77,943.28	98.01%	311,773.00
5548 · Retiree Medical Insurance	18,621.79	24,553.75	75.84%	0.00	62,061.85	73,661.25	84.25%	294,645.00
5555 · Advertising & Publicity	6,200.00	166.67	3,719.93%	560.00	6,200.00	499.97	1,240.07%	2,000.00
5560 · Amortization	570.49	570.83	99.94%	1,711.47	1,711.47	1,712.53	99.94%	6,850.00
5570 · Annual Event	0.00	500.00	0.0%	0.00	0.00	1,500.00	0.0%	6,000.00
5575 · Audit	10,920.00	2,141.67	509.88%	16,500.00	13,920.00	6,424.97	216.66%	25,700.00
5580 · Bad Debts	-96.80	1,666.67	-5.81%	1,788.59	-51.26	4,999.97	-1.03%	20,000.00
5585 · Bank Charges	4,770.46	5,250.00	90.87%	14,624.26	14,300.79	15,750.00	90.8%	63,000.00
5590 · Data Processing Supply & Access	284.31	2,083.34	13.65%	4,528.77	7,611.04	6,249.94	121.78%	25,000.00
5595 · Data Processing Equipment	5,154.07	2,500.00	206.16%	8,425.56	5,154.07	7,500.00	68.72%	30,000.00
5600 · Data Processing Consultants	0.00	3,333.33	0.0%	12,157.75	1,800.00	10,000.03	18.0%	40,000.00
5605 · Directors Fees	10,950.00	10,000.00	109.5%	27,056.00	31,755.00	30,000.00	105.85%	120,000.00
5610 · Dues & Memberships	6,149.38	7,278.33	84.49%	18,481.82	18,377.02	21,835.03	84.16%	87,340.00
5615 · Education & Training	180.00	2,833.33	6.35%	7,746.25	3,058.60	8,500.03	35.98%	34,000.00
5620 · Election Expense	0.00	2,916.67	0.0%	0.00	0.00	8,749.97	0.0%	35,000.00
5625 · Employee Service Awards	1,050.00	341.67	307.31%	871.35	2,150.00	1,024.97	209.76%	4,100.00
5630 · Software Maintenance & Licenses	24,581.66	13,416.67	183.22%	39,621.70	35,154.46	40,249.97	87.34%	161,000.00
5640 · Interest Expense	63,054.00	63,054.08	100.0%	196,864.86	189,162.00	189,162.28	100.0%	756,649.00
5645 · Janitorial	6,624.75	3,133.33	211.43%	9,074.25	19,874.25	9,400.03	211.43%	37,600.00
5650 · Legal	14,804.04	8,941.66	165.56%	29,353.59	35,203.56	26,825.06	131.23%	107,300.00
5655 · Meets, Conventions & Travel	256.82	3,250.00	7.9%	11,176.02	718.78	9,750.00	7.37%	39,000.00
5657 · Meets, Con & Travel - Directors	548.00	3,541.65	15.47%	8,054.43	1,173.00	10,625.15	11.04%	42,500.00
5660 · Office Supplies	171.18	1,650.00	10.38%	5,679.34	2,582.25	4,950.00	52.17%	19,800.00
5670 · Postage	179.96	1,708.33	10.53%	294.80	427.96	5,125.03	8.35%	20,500.00
5675 · Printing & Reproduction	3,741.40	1,550.00	241.38%	1,500.63	3,741.40	4,650.00	80.46%	18,600.00
5680 · Property Tax	37.96	716.67	5.3%	44.77	41.44	2,149.97	1.93%	8,600.00
5685 · Public Education & Outreach	24,162.42	15,391.67	156.98%	21,753.18	42,072.51	46,174.97	91.12%	184,700.00
5690 · Publications & Subscriptions	0.00	250.00	0.0%	0.00	0.00	750.00	0.0%	3,000.00
5695 · Communications	9,810.96	9,583.33	102.38%	23,854.12	25,138.23	28,750.03	87.44%	115,000.00
5700 · Utilities	1,536.88	2,275.84	67.53%	3,971.46	3,689.92	6,827.44	54.05%	27,310.00
Total Expense	2,450,154.10	2,439,654.64	100.43%	6,983,506.20	7,232,576.56	7,601,044.77	95.15%	28,433,281.00

	Sep 20	Budget	% of Budget	Jul - Sep 19	Jul - Sep 20	YTD Budget	% of Budget	Annual Budget
Net Income	**32,383.40**	**64,625.89**	**50.11%**	**534,054.72**	**445,475.33**	**220,228.30**	**202.28%**	**-779,394.00**

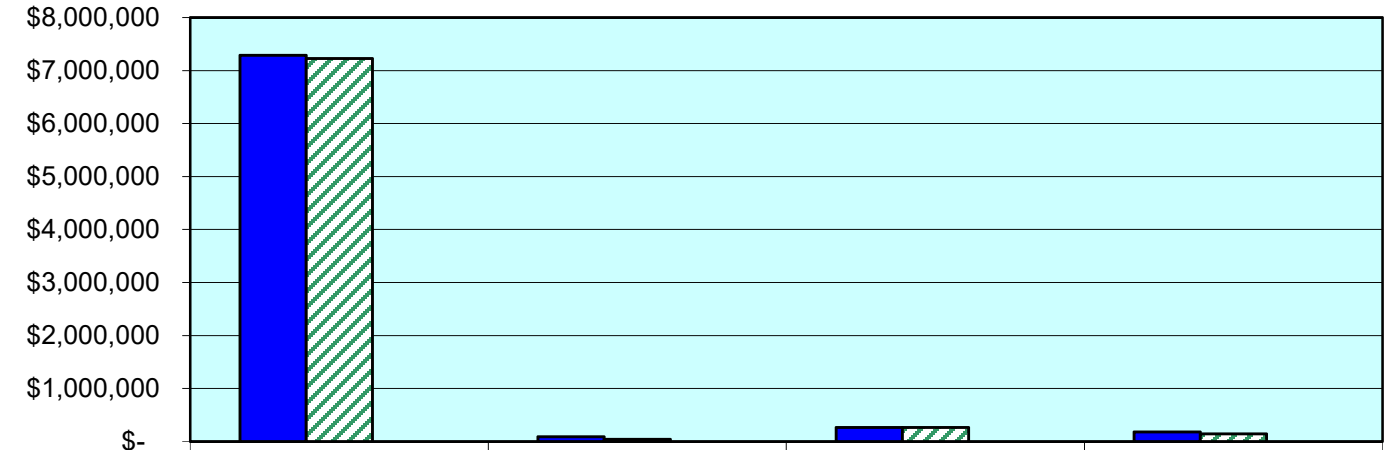


ANALYSIS OF REVENUES & EXPENSES
BUDGET COMPARED TO ACTUAL
FISCAL YEAR 2020/2021

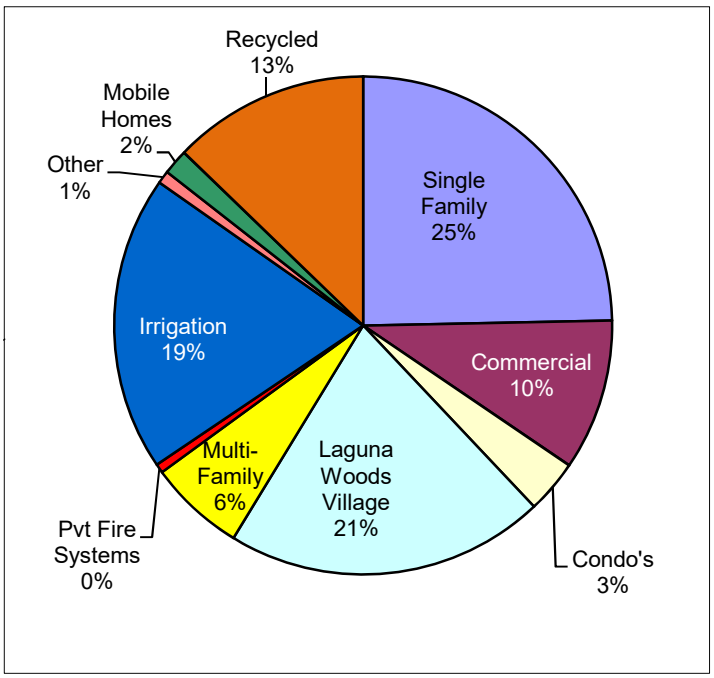
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Budget												
Revenue	2,578,232	2,738,760	2,504,281									
Expense	2,529,347	2,632,043	2,439,655									
Profit/Loss	48,886	106,717	64,626	0	0	0	0	0	0	0	0	0
Actual												
Revenue	2,594,130	2,609,535	2,482,538									
Expense	2,437,346	2,353,227	2,450,154									
Profit/Loss	156,784	256,308	32,383	0	0	0	0	0	0	0	0	0

EL TORO WATER DISTRICT
REVENUES FROM WATER & WASTE WATER SALES AS OF 9/30/20

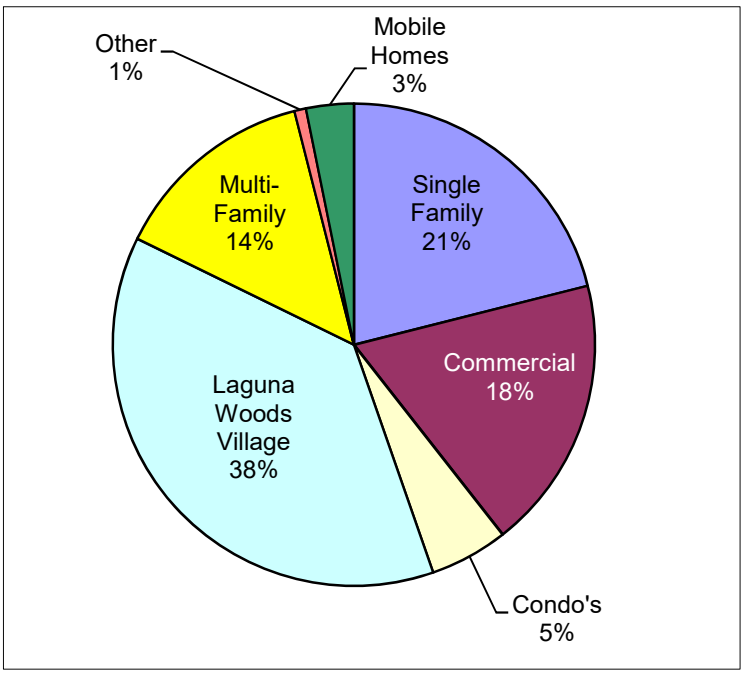
Where the Money Comes From



	Rates	Interest Income	Property Taxes	Other Non-Rate
Budget YTD	$7,287,461	$87,500	$263,375	$182,937
Actual YTD	$7,226,501	$38,842	$266,801	$145,907
% of Total	94.12%	0.51%	3.47%	1.90%



WATER REVENUE YTD 2020/2021



WASTE WATER REVENUE YTD 2020/2021

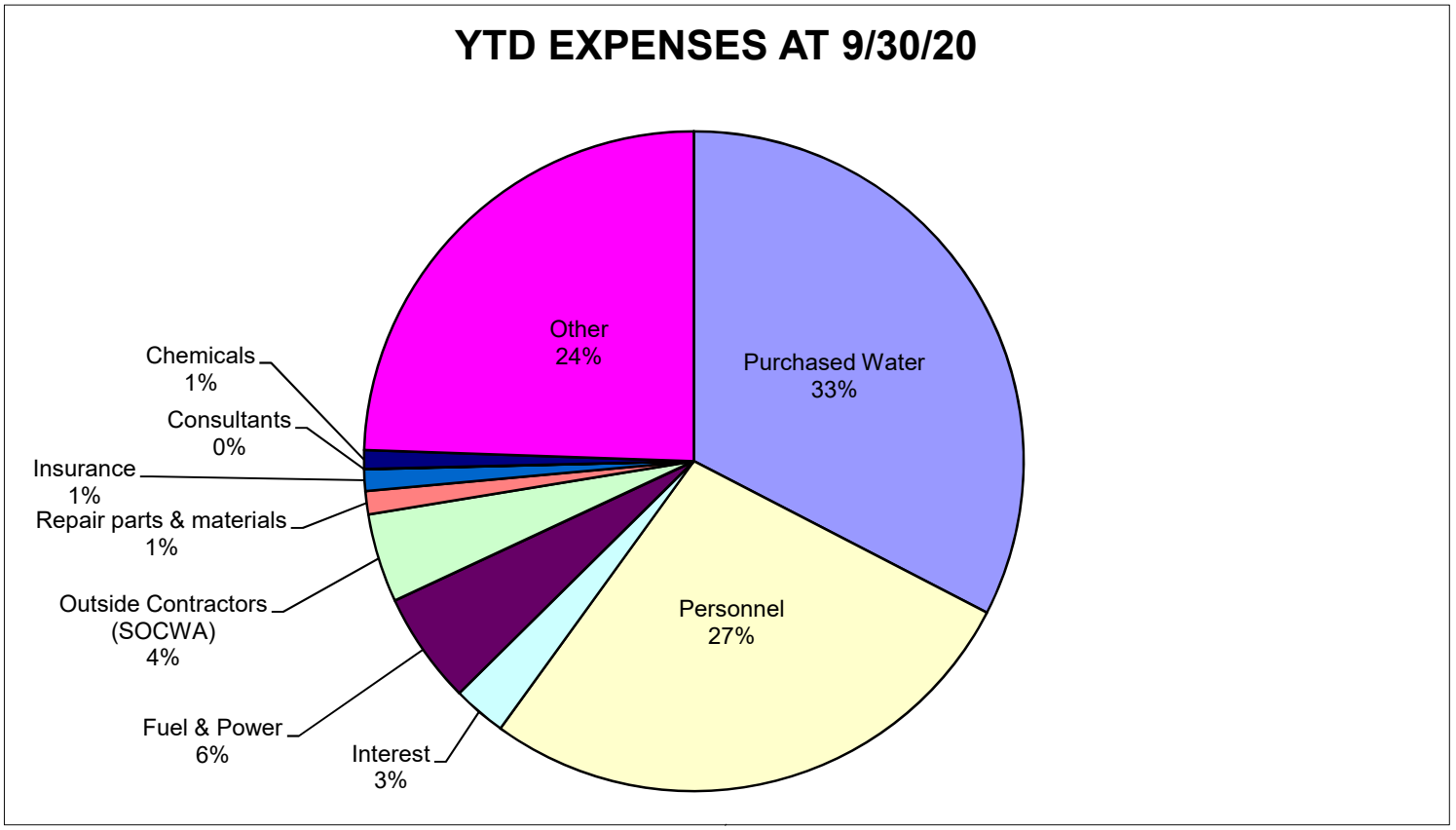
EL TORO WATER DISTRICT
REVENUE COMPARISON
For the Month Ended September 30, 2020

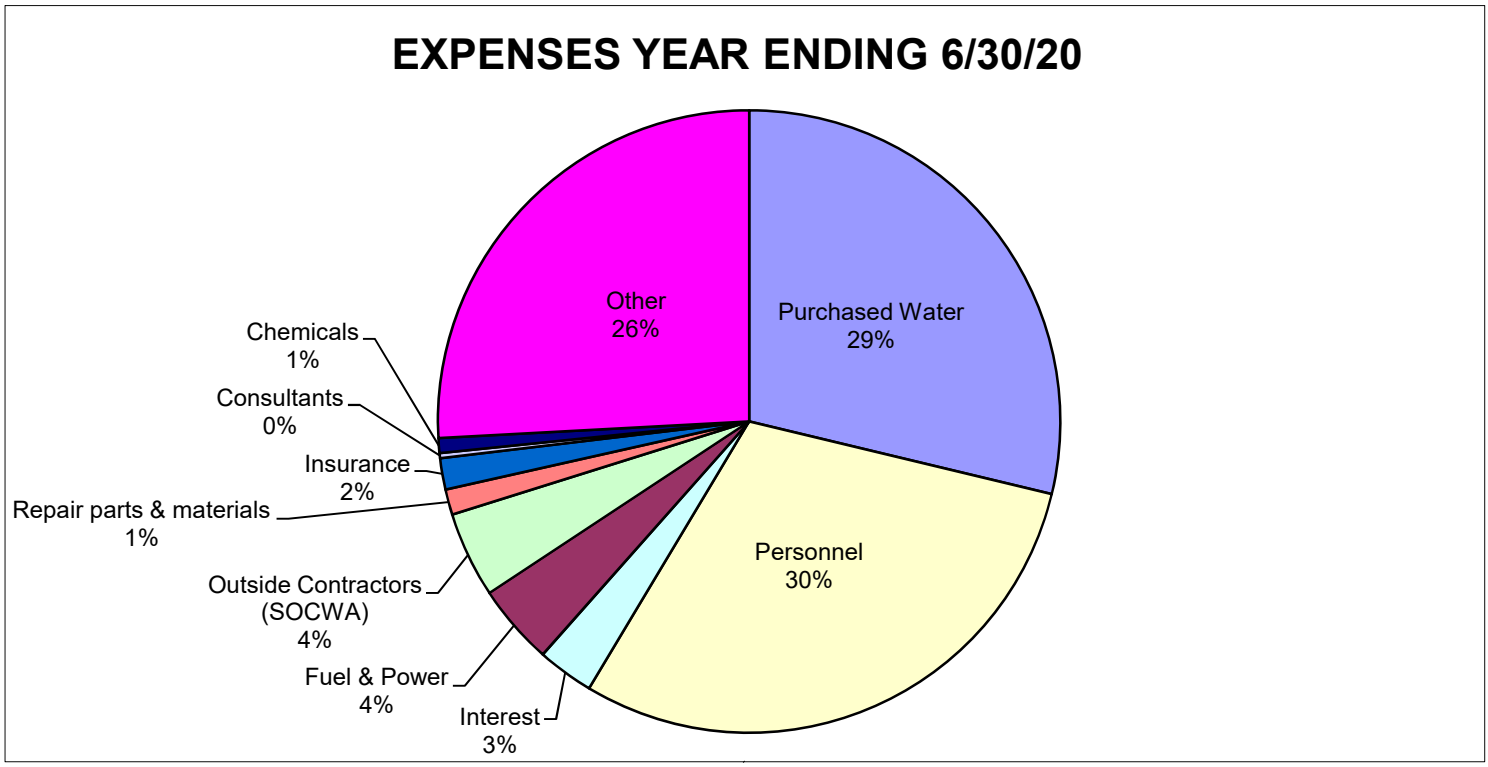
	ACTUAL	CURRENT MONTH BUDGET	VARIANCE DOLLARS	% +/-	YEAR TO DATE ACTUAL	YEAR TO DATE BUDGET	VARIANCE DOLLARS	% +/-	BUDGET	REMAINING BUDGET
From Rates										
Capital Facilities Charge	$ 250,521	$ 251,250	$ (729)	0%	$ 751,642	$ 753,750	$ (2,108)	0%	$ 3,015,000	$ 2,263,358
Water sales - Commodity	883,699	828,627	55,073	7%	2,891,181	2,833,761	57,420	2%	8,904,396	6,013,215
Water sales - Fixed Meter	304,313	318,682	(14,369)	-5%	915,521	956,047	(40,526)	-4%	3,824,187	2,908,666
Waste water sales	651,897	647,917	3,980	1%	1,932,432	1,943,750	(11,318)	-1%	7,775,000	5,842,568
Recycled water tertiary sales	189,942	251,850	(61,909)	-25%	668,899	716,101	(47,202)	-7%	1,663,847	994,948
Service charge - Recycled water	22,977	28,017	(5,040)	-18%	66,827	84,052	(17,224)	-20%	336,207	269,380
TOTAL FROM RATES	2,303,349	2,326,343	(22,994)	-1%	7,226,501	7,287,461	(60,959)	-1%	25,518,637	18,292,136
Non-rate Revenue										
Admin fee	1,395	1,600	(205)	-13%	3,458	4,800	(1,342)	-28%	19,200	15,742
48 Hour notice fee	-	2,451	(2,451)	-100%	-	7,354	(7,354)	-100%	29,416.44	29,416
Restoration fee	-	370	(370)	-100%	-	1,110	(1,110)	-100%	4,440	4,440
Unpaid check fee	95	150	(55)	-37%	180	450	(270)	-60%	1,800	1,620
Cut lock fee	-	12	(12)	-100%	-	36	(36)	-100%	144	144
TOTAL NON-RATE	1,490	4,583	(3,094)	-67%	3,638	13,750	(10,112)	-74%	55,000	51,362
Other Revenue										
Interest	12,390	29,167	(16,777)	-58%	38,842	87,500	(48,658)	-56%	350,000	311,158
Change FMV Investment	(3,334)	-	(3,334)	0%	(13,516)	-	(13,516)	0%	-	13,516
Property taxes	89,491	87,792	1,700	2%	266,801	263,375	3,427	1%	1,053,500	786,699
Other	79,151	45,104	34,046	75%	144,785	135,312	9,472	7%	541,250	396,465
TOTAL OTHER REVENUE	177,699	162,063	15,636	10%	436,912	486,187	(49,275)	-10%	1,944,750	1,507,838
Contract Service										
Santa Margarita W. D.	-	9,333	(9,333)	-100%	-	28,000	(28,000)	-100%	112,000	112,000
Moulton Niguel W. D.	-	1,958	(1,958)	-100%	11,000	5,875	5,125	87%	23,500	12,500
TOTAL CONTRACT SERVICES	-	11,292	(11,292)	-100%	11,000	33,875	(22,875)	-68%	135,500	124,500
TOTAL REVENUE	$ 2,482,538	$ 2,504,281	$ (21,743)	-1%	$ 7,678,052	$ 7,821,273	$ (143,221)	-2%	$ 27,653,887	$ 19,975,836

EL TORO WATER DISTRICT
NON-RATE REVENUE ANALYSIS
FOR THE MONTH ENDING September 30, 2020

	Sep-20 Actual	Sep-20 Budget	Jul 20- Sep 20 YTD Actual	Jul 20- Sep 20 YTD Budget
Site Leases	22,401	19,583	51,126	58,749
MWD Recycled Water LRP Rebate	56,750	23,854	92,625	71,562
JPIA Refund		-	-	-
SOCWA Refund		-	-	-
Recycled Metal		-	928	-
Diesel Fuel Tax Refund		-	-	-
Sale of District Trucks		-	-	-
Misc Work for Customers		1,667	106	5,001
	$ 79,151	$ 45,104	$ 144,785	$ 135,312
Other Operating Income				
Sales to Santa Margarita	-		-	
Sales to Moulton Niguel	-		-	
	-		-	
Total	79,151		144,785	

WHERE THE MONEY GOES





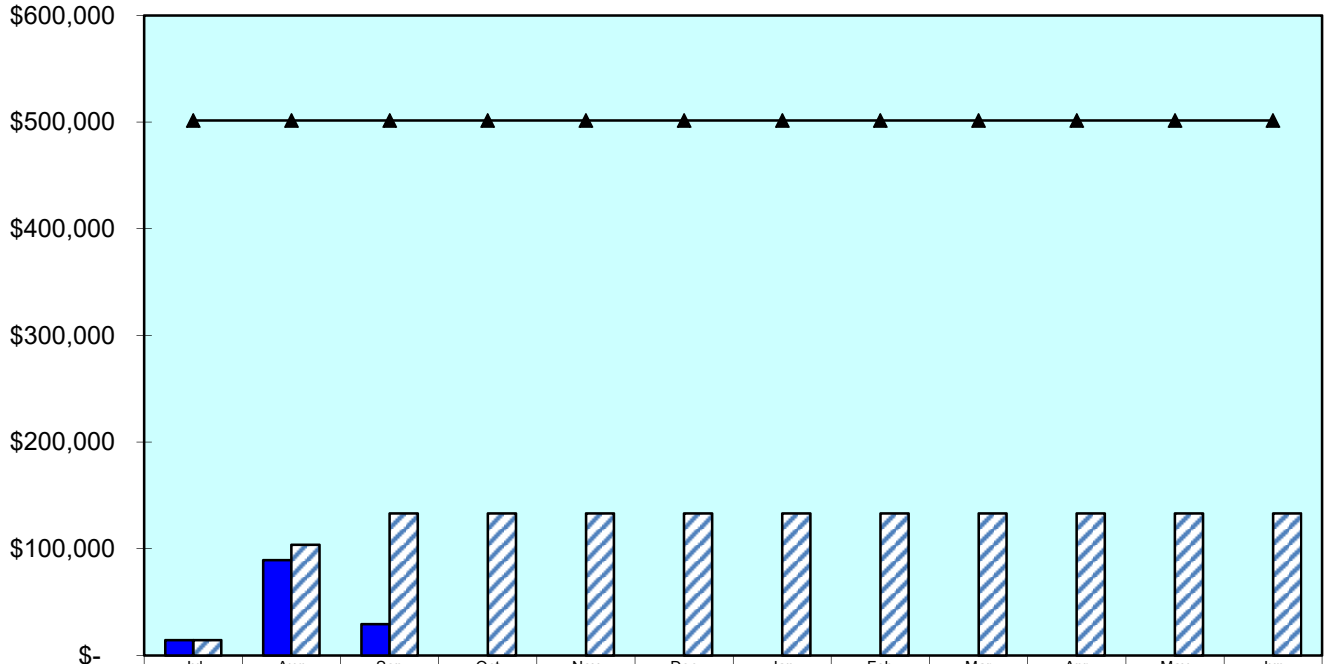
EL TORO WATER DISTRICT
Expense Comparison
For the Month Ended September 30, 2020

	ACTUAL	CURRENT MONTH BUDGET	VARIANCE DOLLARS	% +/-	YEAR TO DATE ACTUAL	YEAR TO DATE BUDGET	VARIANCE DOLLARS	% +/-	Annual BUDGET	REMAINING BUDGET
Operating Expenses										
Personnel cost	$645,038	$715,783	$70,745	10%	$1,980,625	$2,147,349	$166,724	8%	$8,589,397	6,608,772
Purchased water	735,576	726,777	(8,799)	-1%	2,356,952	2,462,411	105,459	4%	7,878,746	5,521,794
Electrical power	132,099	93,617	(38,482)	-41%	395,866	280,850	(115,015)	-41%	1,123,400	727,534
Repair parts & materials	35,656	33,824	(1,832)	-5%	82,279	101,471	19,192	19%	405,885	323,606
Equipment repairs & maintenance	10,408	10,286	(122)	-1%	37,095	30,858	(6,237)	-20%	123,430	86,335
Pump repairs & maintenance	2,521	8,292	5,771	70%	16,701	24,875	8,174	33%	99,500	82,799
Motor repairs & maintenance	0	2,792	2,792	100%	0	8,375	8,375	100%	33,500	33,500
Electrical repairs & maintenance	5,158	6,633	1,476	22%	6,805	19,900	13,095	66%	79,600	72,795
Meter repairs & maintenance	0	488	488	100%	1,673	1,463	(210)	-14%	5,850	4,177
Chemicals	22,339	18,225	(4,114)	-23%	66,040	54,675	(11,365)	-21%	218,700	152,660
Structure repairs & maintenance	6,103	2,694	(3,408)	-127%	9,972	8,083	(1,889)	-23%	32,331	22,359
Asphalt repairs & maintenance	0	6,917	6,917	100%	0	20,750	20,750	100%	83,000	83,000
Consultants - outside	947	4,696	3,749	80%	1,093	14,088	12,995	92%	56,350	55,258
Contractors - outside	114,002	98,705	(15,296)	-15%	314,715	296,117	(18,599)	-6%	1,184,466	869,751
Engineers - outside	90,463	11,583	(78,880)	-681%	91,992	34,750	(57,242)	-165%	139,000	47,008
Dump fees	4,579	1,500	(3,079)	-205%	6,682	4,500	(2,182)	-48%	18,000	11,318
Laboratories	1,414	2,408	994	41%	7,478	7,225	(253)	-3%	28,900	21,422
License & permits	2,365	15,026	12,661	84%	22,288	45,077	22,789	51%	180,306	158,018
Automotive fuel & oil	8,196	8,750	554	6%	23,946	26,250	2,304	9%	105,000	81,054
Equipment rental	3,209	1,675	(1,534)	-92%	5,211	5,025	(186)	-4%	20,100	14,889
Landscaping	4,609	13,670	9,061	66%	14,666	41,009	26,344	64%	164,038	149,372
Small tools & equipment	2,598	5,583	2,985	53%	10,510	16,750	6,239	37%	67,000	56,490
Security	1,599	1,588	(11)	-1%	4,798	4,764	(35)	-1%	19,055	14,257
Operating supplies	4,698	4,688	(9)	0%	23,287	14,065	(9,222)	-66%	56,260	32,973
Safety equipment	956	3,000	2,044	68%	8,270	9,000	730	8%	36,000	27,730
Temporary help	0	2,292	2,292	100%	0	6,875	6,875	100%	27,500	27,500
Other employee cost	17,379	9,250	(8,129)	-88%	65,361	27,750	(37,611)	-136%	111,000	45,639
Employee service awards	1,050	342	(708)	-207%	2,150	1,025	(1,125)	-110%	4,100	1,950
Education & training	180	2,833	2,653	94%	3,059	8,500	5,441	64%	34,000	30,941
Total Operating Expenses	1,853,141	1,813,916	(39,225)	-2%	5,559,513	5,723,828	164,315	3%	20,924,414	15,364,901

EL TORO WATER DISTRICT
Expense Comparison
For the Month Ended September 30, 2020

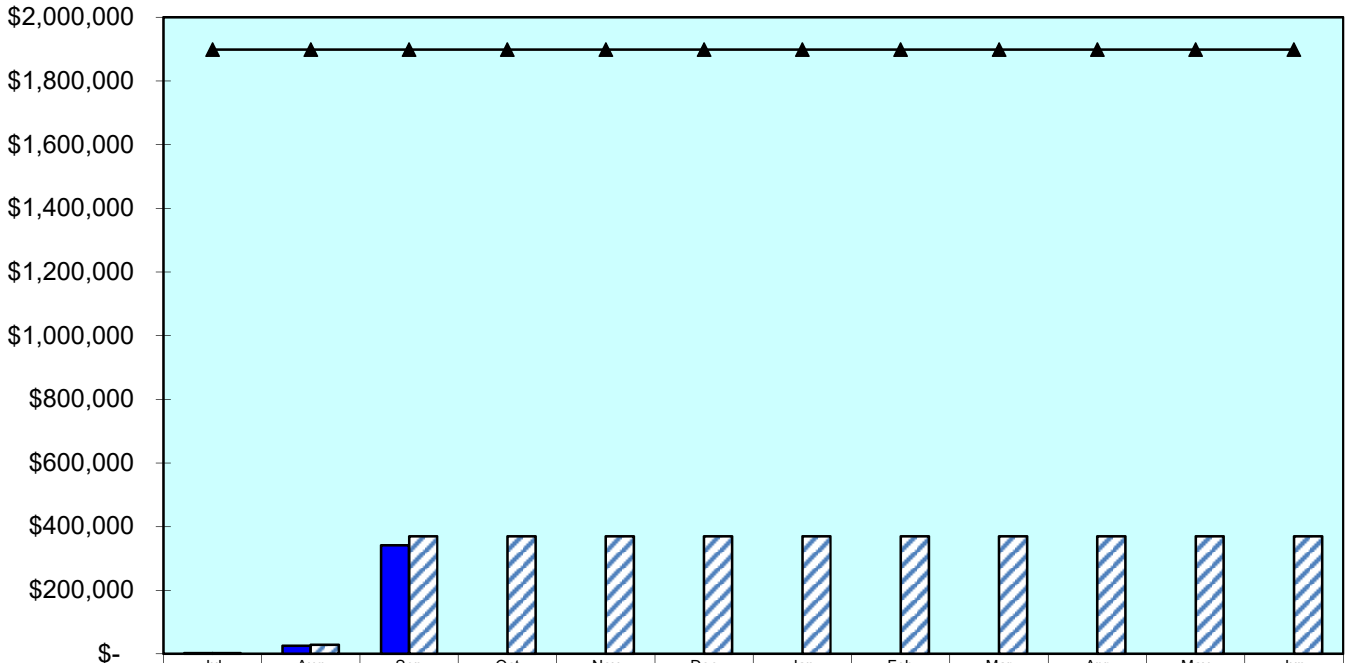
	ACTUAL	CURRENT MONTH BUDGET	VARIANCE DOLLARS	% +/-	YEAR TO DATE ACTUAL	YEAR TO DATE BUDGET	VARIANCE DOLLARS	% +/-	Annual BUDGET	REMAINING BUDGET
Indirect Cost										
Depreciation	358,285	408,333	50,048	12%	1,074,855	1,225,000	150,145	12%	4,900,000	3,825,145
Amortization	570	571	0	0%	1,711	1,713	1	0%	6,850	5,139
Insurance	25,695	25,981	286	1%	76,389	77,943	1,554	2%	311,773	235,384
Retiree Medical Insurance	18,622	24,554	5,932	24%	62,062	73,661	11,599	16%	294,645	232,583
Data processing supplies & assc.	284	2,083	1,799	86%	7,611	6,250	(1,361)	-22%	25,000	17,389
Data processing equipment	5,154	2,500	(2,654)	-106%	5,154	7,500	2,346	31%	30,000	24,846
Data processing consultants	-	3,333	3,333	100%	1,800	10,000	8,200	82%	40,000	38,200
Software maintenance & licenses	24,582	13,417	(11,165)	-83%	35,154	40,250	5,096	13%	161,000	125,846
Janitorial	6,625	3,133	(3,491)	-111%	19,874	9,400	(10,474)	-111%	37,600	17,726
Printing & reproduction	3,741	1,550	(2,191)	-141%	3,741	4,650	909	20%	18,600	14,859
Publications & subscriptions	0	250	250	100%	0	750	750	100%	3,000	3,000
Communications - voice	1,237	1,833	597	33%	2,161	5,500	3,339	61%	22,000	19,839
Communications - data	5,091	4,750	(341)	-7%	13,788	14,250	462	3%	57,000	43,212
Communications - mobile	3,483	3,000	(483)	-16%	9,189	9,000	(189)	-2%	36,000	26,811
Utilities	1,537	2,276	739	32%	3,690	6,827	3,138	46%	27,310	23,620
Total Indirect Cost	454,906	497,565	42,659	9%	1,317,181	1,492,695	175,514	12%	5,970,778	4,653,597
Overhead Cost										
Annual events	0	500	500	100%	0	1,500	1,500	100%	6,000	6,000
Audit	10,920	2,142	(8,778)	-410%	13,920	6,425	(7,495)	-117%	25,700	11,780
Bad debts	(97)	1,667	1,763	106%	(51)	5,000	5,051	101%	20,000	20,051
Bank charges	4,770	5,250	480	9%	14,301	15,750	1,449	9%	63,000	48,699
Directors fees	10,950	10,000	(950)	-10%	31,755	30,000	(1,755)	-6%	120,000	88,245
Dues & memberships	6,149	7,278	1,129	16%	18,377	21,835	3,458	16%	87,340	68,963
Election Expense	0	2,917	2,917	100%	0	8,750	8,750	100%	35,000	35,000
Interest	63,054	63,054	0	0%	189,162	189,162	0	0%	756,649	567,487
Legal	14,804	8,942	(5,862)	-66%	35,204	26,825	(8,379)	-31%	107,300	72,096
Meetings, conventions & travel	257	3,250	2,993	92%	719	9,750	9,031	93%	39,000	38,281
Meets, con & travel - Directors	548	3,542	2,994	85%	1,173	10,625	9,452	89%	42,500	41,327
Office supplies	171	1,650	1,479	90%	2,582	4,950	2,368	48%	19,800	17,218
Postage	180	1,708	1,528	89%	428	5,125	4,697	92%	20,500	20,072
Property taxes	38	717	679	95%	41	2,150	2,109	98%	8,600	8,559
Advertising & Publicity	6,200	167	(6,033)	-3620%	6,200	500	(5,700)	-1140%	2,000	(4,200)
Public education & outreach	24,162	15,392	(8,771)	-57%	42,073	46,175	4,102	9%	184,700	142,627
Total Overhead Cost	142,107	128,174	(13,933)	-11%	355,883	384,522	28,639	7%	1,538,089	1,182,206
TOTAL EXPENSES	$2,450,154	$2,439,655	($10,499)	0%	$7,232,577	$7,601,045	$368,468	5%	$28,433,281	$21,200,704

CAPITAL COST ANALYSIS - EQUIPMENT 09/20



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Actual	$14,485	$89,293	$29,311	$-	$-	$-	$-	$-	$-	$-	$-	$-
YTD	$14,485	$103,778	$133,089	$133,089	$133,089	$133,089	$133,089	$133,089	$133,089	$133,089	$133,089	$133,089
Budget	$501,516	$501,516	$501,516	$501,516	$501,516	$501,516	$501,516	$501,516	$501,516	$501,516	$501,516	$501,516

CAPITAL COST ANALYSIS - PROJECTS 09/20



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Actual	$2,168	$25,993	$340,917	$-	$-	$-	$-	$-	$-	$-	$-	$-
YTD	$2,168	$28,162	$369,078	$369,078	$369,078	$369,078	$369,078	$369,078	$369,078	$369,078	$369,078	$369,078
Budget	$1,898,485	$1,898,485	$1,898,485	$1,898,485	$1,898,485	$1,898,485	$1,898,485	$1,898,485	$1,898,485	$1,898,485	$1,898,485	$1,898,485

STAFF REPORT

TO: BOARD OF DIRECTORS **MEETING DATE: October 19, 2020**

FROM: Jason Hayden, Chief Financial Officer

SUBJECT: El Toro Water District GASB 75 Actuarial Valuation

In 2015, the Governmental Accounting Standards Board (GASB) promulgated Statement 75 which overhauled the accounting and reporting requirements for Other Post-retirement Benefit Programs (OPEB) which include all benefits offered to employees outside of traditional pension plans. The District is subject to these reporting requirements because it offers employees subsidized post-retirement health insurance benefits. The Comprehensive Annual Financial Report (CAFR) of the District incorporated the changes required by GASB Statement 75 in the Fiscal Year 2018 CAFR.

One mandate imposed by GASB Statement 75 is the requirement to commission an actuarial analysis to determine the total OPEB liability, the Fiduciary Net Position, and the Net OPEB Liability for the District's other post-retirement benefits. A full actuarial analysis must be completed every two years but the analysis must be updated during the year in which the full analysis is not completed.

Attached for the Board's review and consideration is the GASB Statement 75 actuarial analysis, prepared by Bartel & Associates LLC and updated for the fiscal year ended June 30, 2019. The full actuarial analysis was originally completed as of June 30, 2018 and then incorporated into the 2019 CAFR. The attached report is based on the original actuarial analysis but has been updated with data from the fiscal year ended June 30, 2019 and will be incorporated into the June 30, 2020 CAFR.

The significant changes included in the attached report are illustrated in the table below:

	Total OPEB Liability
Balance at 6/30/19	$ 15,204,470
6/30/18 measurement	
Changes for the year	
Service Cost	410,098
Interest	598,626
Assumption Changes	923,090
Benefit Payments	(292,405)
Net Change in Liability	1,639,409
Balance at 6/30/20	$ 16,843,879
6/30/19 measurement	

When the District's FY 2020 CAFR is presented in November of 2020, the total other post-employment benefits liability will be presented in the District's Statement of Net Position (equivalent to a Balance Sheet) under Non-current Liabilities and the OPEB liability amounts noted above are included in the 2019 and 2020 fiscal year.

The change in liability amount is incorporated into the District's Statement of Revenues, Expenses, and Changes in Net Position (equivalent to an Income Statement) as an expense in General & Administration and is therefore a significant reason for the increase in operating expenses that occurred in 2020 (operating expenses increased $1,035,008 or 4.61% in 2020 and the expense for the change in the OPEB liability amount equaled $428,651 or 41% of the change in operating expenses from 2019 to 2020).

However, when considering the impact this liability is having on the District's financial statements, please understand that these are non-cash accounting charges. Ultimately, these charges do not impact the cash reserves of the District and are more of an indication of the potential long-term costs the District may incur for offering the post-retirement health insurance benefits.

Recommended Action: Staff recommends that the Board Receive and File the ETWD Actuarial Valuation Update as of the Measurement Date of June 30, 2019.

El Toro Water District
Retiree Healthcare Plan

June 30, 2020 GASBS 75
Accounting Information
As of Measurement Date June 30, 2019
Based on the June 30, 2018 Actuarial Valuation

Mary Elizabeth Redding, Vice President
Tak Frazita, Associate Actuary
Joseph Herm, Senior Actuarial Analyst
Bartel Associates, LLC

September 17, 2020

Contents

Applicable Dates and Periods

	Fiscal Year Ended June 30, 2020
■ Measurement date	June 30, 2019
■ Measurement period	July 1, 2018 to June 30, 2019
■ Actuarial valuation date	June 30, 2018

Update procedures were used to roll forward the Total OPEB Liability from the valuation date (June 30, 2018) to the measurement date (June 30, 2019).

Plan Information

	Fiscal Year Ended June 30, 2020
■ Plan type	Single Employer
■ OPEB trust	No
■ Special funding situation	No
■ Nonemployer contributing entities	No

Covered Participants*

At June 30, 2019, the measurement date, the following numbers of participants were covered by the benefit terms:

	Number of Covered Participants
■ Inactives currently receiving benefits	21
■ Inactives entitled to but not yet receiving benefits	-
■ Active employees	61
■ Total	82

* As reported by the District.

Total OPEB Liability

	Fiscal Year Ended	
	6/30/19	6/30/20
	Measurement Date 6/30/18	Measurement Date 6/30/19
■ Total OPEB Liability (TOL)	$ 15,204,470	$ 16,843,879

Changes in Total OPEB Liability

	Total OPEB Liability
■ Balance at 6/30/19 (6/30/18 measurement date)	$15,204,470
■ Changes for the year	
● Service Cost	410,098
● Interest	598,626
● Changes of benefit terms	-
● Actual vs. expected experience	-
● Assumption changes	923,090
● Benefit payments*	(292,405)
■ Net Changes	1,639,409
■ Balance at 6/30/20 (6/30/19 measurement date)	$16,843,879

* See the measurement period column on page 16 for details.

Sensitivity of Total OPEB Liability

■ **Changes in the Discount Rate**

	Discount Rate		
	1% Decrease (2.50%)	Current Rate (3.50%)	1% Increase (4.50%)
■ Total OPEB Liability	$ 19,770,758	$ 16,843,879	$ 14,513,534

■ **Changes in the Healthcare Trend Rate**

	Healthcare Trend Rate		
	1% Decrease	Current Trend	1% Increase
■ Total OPEB Liability	$ 14,179,529	$ 16,843,879	$ 20,246,972

OPEB Expense for Fiscal Year

	2019/20 Measurement Period 2018/19
■ OPEB Expense*	$ 1,646,198

* See page 21 for OPEB expense detail, which is not required disclosure.

Deferred Outflows/Inflows Balances at June 30, 2020

	June 30, 2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources
■ Differences between expected and actual experience	$ 705,293	$ -
■ Changes in assumptions	2,625,086	-
■ Employer contributions made subsequent to the measurement date*	304,295	-
■ Total	3,634,674	-

* See page 16 for details.

Recognition of Deferred Outflows and Inflows of Resources in Future OPEB Expense

FYE June 30	Deferred Outflows/(Inflows) of Resources
■ 2021	$ 637,474
■ 2022	637,474
■ 2023	637,474
■ 2024	637,474
■ 2025	637,471
■ Thereafter	143,012

Significant Actuarial Assumptions Used for Total OPEB Liability

Actuarial Assumption	June 30, 2019 Measurement Date
■ Actuarial Valuation Date	■ June 30, 2018
■ Contribution Policy	■ No pre-funding
■ Discount Rate	■ 3.50% at June 30, 2019 (Bond Buyer 20-Bond Index) ■ 3.87% at June 30, 2018 (Bond Buyer 20-Bond Index)
■ General Inflation	■ 2.75% annually
■ Mortality, Retirement, Disability, Termination	■ CalPERS 1997-2015 Experience Study (2%@55 rates for Tiers 1-3, modified rates for Tier 4)
■ Mortality Improvement	■ Post-retirement mortality projected fully generational with Scale MP-2018

Significant Actuarial Assumptions Used for Total OPEB Liability

Actuarial Assumption	June 30, 2019 Measurement Date
■ Salary Increases	■ Aggregate - 3% annually ■ Merit - CalPERS 1997-2015 Experience Study
■ Medical Trend	■ Non-Medicare - 7.5% for 2020, decreasing to an ultimate rate of 4.0% in 2076 ■ Medicare - 6.5% for 2020, decreasing to an ultimate rate of 4.0% in 2076
■ Healthcare Participation at Retirement	■ Actives: 95% Tiers 1-3, 90% Tier 4 ■ Retirees: 100%
■ Spouse Healthcare Participation at Retirement	■ 100% Tiers 1-3, 50% Tier 4, if spouse currently covered ■ 0% if spouse not currently covered
■ Medical Plan Election at Retirement	■ Same as currently elected

Changes Since June 30, 2018 Measurement Date

	June 30, 2019 Measurement Date
■ Changes of assumptions	■ Discount rate was updated based on municipal bond rate as of the measurement date
■ Changes of benefit terms	■ None

Schedule of Changes in Total OPEB Liability and Related Ratios

	2019/20 Measurement Period 2018/19
■ Changes in Total OPEB Liability	
● Service Cost	$ 410,098
● Interest	598,626
● Changes of benefit terms	-
● Actual vs. expected experience	-
● Assumption changes	923,090
● Benefit payments	(292,405)
■ Net Changes	1,639,409
■ Total OPEB Liability (beginning of year)	15,204,470
■ Total OPEB Liability (end of year)	16,843,879

Required Supplementary Information

Schedule of Changes in Total OPEB Liability and Related Ratios

	2019/20
■ Total OPEB Liability	$ 16,843,879
■ Covered employee payroll*	5,889,881
■ Total OPEB Liability as a percentage of covered employee payroll	286.0%

* For the 12-month period ended on June 30, 2019 (Measurement Date).
As reported by the District.

Actuarial Certification

This report presents El Toro Water District Retiree Healthcare Plan 2019/20 disclosure under Governmental Accounting Standards Board Statement No. 75 (GASBS 75). The Journal Entries in this report are provided for the District's convenience and are not an actuarial communication and this actuarial certification does not apply to them.

The report provides information intended for reporting under GASBS 75, but may not be appropriate for other purposes. Information provided in this report may be useful to the District for the Plan's financial management. The total OPEB liability has been calculated from the June 30, 2018 actuarial valuation. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods, or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The June 30, 2018 valuation is based on Plan provisions and participant data provided by the District, which we relied on and did not audit. We reviewed the census data for reasonableness. Additional information on participants included in the valuation and actuarial assumptions can be found in the June 30, 2018 actuarial valuation report. As the actuary, Bartel Associates has recommended the assumptions used in this report, and we believe they are reasonable.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASBS 75. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

Mary Elizabeth Redding, FSA, EA, FCA, MAAA
Vice President
Bartel Associates, LLC
September 17, 2020

Tak Frazita, FSA, EA, FCA, MAAA
Associate Actuary
Bartel Associates, LLC
September 17, 2020

Supporting Calculations

Employer Contributions

	Measurement Period	Measurement Date to FYE	Prior Measurement Date to Prior FYE
	7/1/18 to 6/30/19	7/1/19 to 6/30/20	Same as Measurement Period
■ Cash benefit payments	$ 257,229	$ 262,279	$ 257,229
■ Implied subsidy benefit payments	35,176	42,016	35,176
■ Total benefit payments	292,405	304,295	292,405
■ Administrative expenses	-	-	-
■ Total employer contributions	292,405	304,295	292,405

Measurement period (7/1/18 to 6/30/19): $292,405
Fiscal year (7/1/19 to 6/30/20): $304,295

Average of the Expected Remaining Service Lives

As of July 1, 2018 (beginning of the measurement period):

	2019/20 Measurement Period 2018/19
■ Total expected remaining service lives*	550 years
■ Covered participants*	78
■ Average of the expected remaining service lives (not less than 1 year)	7.1 years

* Participants with no liability excluded for the purpose of calculating the average.

Recognition of Deferred Outflows/Inflows at June 30, 2020

Differences between Expected and Actual Experience

Fiscal Year	Initial Amt	Initial Recog Period	Amount Recognized in OPEB Expense for FY							Deferred Balances June 30, 2020	
			19/20	20/21	21/22	22/23	23/24	24/25	25/26+	Outflows	(Inflows)
17/18	-	-	-	-	-	-	-	-	-	-	-
18/19	987,411	7.0	141,059	141,059	141,059	141,059	141,059	141,057	-	705,293	-
19/20	-	-	-	-	-	-	-	-	-	-	-
Total			141,059	141,059	141,059	141,059	141,059	141,057	-	705,293	-

Supporting Calculations

Recognition of Deferred Outflows/Inflows at June 30, 2020
Changes of Assumptions

Fiscal Year	Initial Amt	Initial Recog Period	Amount Recognized in OPEB Expense for FY							Deferred Balances June 30, 2020	
			19/20	20/21	21/22	22/23	23/24	24/25	25/26+	Outflows	(Inflows)
17/18	-	-	-	-	-	-	-	-	-	-	-
18/19	2,564,813	7.0	366,402	366,402	366,402	366,402	366,402	366,401	-	1,832,009	-
19/20	923,090	7.1	130,013	130,013	130,013	130,013	130,013	130,013	143,012	793,077	-
Total			496,415	496,415	496,415	496,415	496,415	496,414	143,012	2,625,086	-

Supporting Calculations

Recognition of Deferred Outflows/Inflows in Future OPEB Expense

	20/21	21/22	22/23	23/24	24/25	Thereafter 25/26+
■ Differences between Expected and Actual Experience	$141,059	$141,059	$141,059	$141,059	$141,057	$ -
■ Changes of Assumptions	496,415	496,415	496,415	496,415	496,414	143,012
■ Total	637,474	637,474	637,474	637,474	637,471	143,012

Components of GASBS 75 OPEB Expense

	2019/20 Measurement Period 2018/19
■ Service Cost	$ 410,098
■ Interest on Total OPEB Liability	598,626
■ Administrative expense	-
■ Changes of benefit terms	-
■ Recognition of deferred outflows/(inflows)	
● Experience	141,059
● Assumptions	496,415
■ OPEB Expense	1,646,198

Components of GASBS 75 OPEB Expense
Calculation of Interest on Total OPEB Liability

	Dollar Amount	Discount Rate	Portion of Year	Interest
■ Total OPEB Liability	$ 15,204,470	3.87%	100%	$ 588,413
■ Service Cost	410,098	3.87%	100%	15,871
■ Changes of benefit terms	-	3.87%	0%	-
■ Experience	-	3.87%	0%	-
■ Assumption changes*	923,090	3.87%	0%	-
■ Benefit payments	(292,405)	3.87%	50%	(5,658)
■ Total interest				598,626

* Liability determined as of the end of the measurement period, so no interest charge is applicable.

GASBS 75 Balance Equation

	Fiscal Year Ended	
	6/30/19	6/30/20
	Measurement Date 6/30/18	Measurement Date 6/30/19
■ Total OPEB Liability	$ 15,204,470	$ 16,843,879
■ Fiduciary Net Position	-	-
■ Net OPEB Liability	15,204,470	16,843,879
■ Deferred inflows of resources	-	-
■ Deferred (outflows) of resources	(3,044,763)	(3,330,379)
■ Balance Sheet	12,159,707	13,513,500

Check:

■ Balance Sheet 6/30/19	$ 12,159,707
● OPEB Expense	1,646,198
● Employer Contributions*	(292,405)
■ Balance Sheet 6/30/20	13,513,500

* See the measurement period column on page 16 for details.

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Employer Contributions

The entries below assume cash benefit payments, Trust contributions, and administrative expenses have been charged to OPEB Expense when paid, and that no accounting entries have been made for the current year implied subsidy payment, which is recorded as a reduction to active employee health care costs. See page 16 for details.

Following records the impact of employer contributions as deferred outflows of resources and as a reduction to Net OPEB Liability.

	Debit	(Credit)
■ Net OPEB Liability - (for Contributions paid 7/1/18 to 6/30/19)	$ 292,405	$ -
■ OPEB Expense - (for admin fees paid 7/1/18 to 6/30/19)	-	-
■ Deferred Outflow - 7/1/18 to 6/30/19 contributions	-	(292,405)
■ Deferred Outflow - 7/1/19 to 6/30/20 contributions	304,295	-
■ Active employee health care costs - (implied subsidy payments 7/1/19 to 6/30/20)	-	(42,016)
■ OPEB Expense - (for contributions paid 7/1/19 to 6/30/20)	-	(262,279)
Check	*596,700*	*(596,700)*

Summary Journal Entries - OPEB Expense

Following records the impact of current year OPEB expense

	Debit	(Credit)
■ Deferred Outflows*	$ 426,675	$ (141,059)
■ Deferred Inflows**	-	-
■ OPEB Expense/Credit	1,646,198	-
■ Net OPEB Liability/Asset	-	(1,931,814)
Check	*2,072,873*	*(2,072,873)*

* See page 28 ('Subtotal' row) for details.

** See page 29 for details.

Ending Balances at June 30, 2020

	Debit	(Credit)
■ Deferral: Differences between expected and actual experience	$ 705,293	$ -
■ Deferral: Changes of assumptions	2,625,086	-
■ Total deferred outflow/inflow	3,330,379	-
■ Net OPEB Liability (NOL)	-	(16,843,879)
■ Contributions after the Measurement Date	304,295	-
■ Net Impact	13,209,205	-
Check:	*16,843,879*	*(16,843,879)*
■ Total OPEB expense/(income) for FYE 2020	1,646,198	-

Reconciliation of Deferred Outflows

Detail for page 26

Deferred Outflows	Opening Balance - Debit	Journal Entry - Debit	Journal Entry - (Credit)	Ending Balance - Debit
■ Differences between actual and expected experience	$ 846,352	$ -	$ (141,059)	$ 705,293
■ Change in assumptions	2,198,411	426,675	-	2,625,086
■ Subtotal - actuarial deferrals	3,044,763	426,675	(141,059)	3,330,379
■ Contributions after the Measurement Date	292,405	304,295	(292,405)	304,295
■ Total Deferred Outflows	3,337,168	730,970	(433,464)	3,634,674

Reconciliation of Deferred Inflows

Detail for page 26

Deferred Inflows	Opening Balance - (Credit)	Journal Entry - (Credit)	Journal Entry - Debit	Ending Balance - (Credit)
■ Differences between actual and expected experience	$ -	$ -	$ -	$ -
■ Change in assumptions	-	-	-	-
■ Total Deferred (Inflows)	-	-	-	-

Reconciliation of Deferred Outflows/(Inflows)

Summary of Balances

	Fiscal Year Ended	
	6/30/19	6/30/20
	Measurement Date 6/30/18	Measurement Date 6/30/19
■ Total OPEB (Liability)	$ (15,204,470)	$ (16,843,879)
■ Fiduciary Net Position	-	-
■ Net OPEB (Liability)/Asset	(15,204,470)	(16,843,879)
■ Deferred (inflows) of resources	-	-
■ Deferred outflows of resources	3,337,168	3,634,674
■ Balance Sheet Impact	(11,867,302)	(13,209,205)

Deferred Outflows include contributions after the measurement date.

STAFF REPORT

TO: BOARD OF DIRECTORS **MEETING DATE: October 19, 2020**

FROM: Dennis Cafferty, General Manager

SUBJECT: El Toro Water District Staffing & Succession Plan

District staff continues to closely monitor succession planning requirements for the foreseeable future. In 2018 the Board approved a staff recommendation, as part of the succession plan, to hire a new employee bringing the headcount to 61 employees. Following a subsequent retirement and consolidation of two positions, the 2020/21 labor budget was based on a headcount of 60 employees leaving one open position within the Board approved headcount.

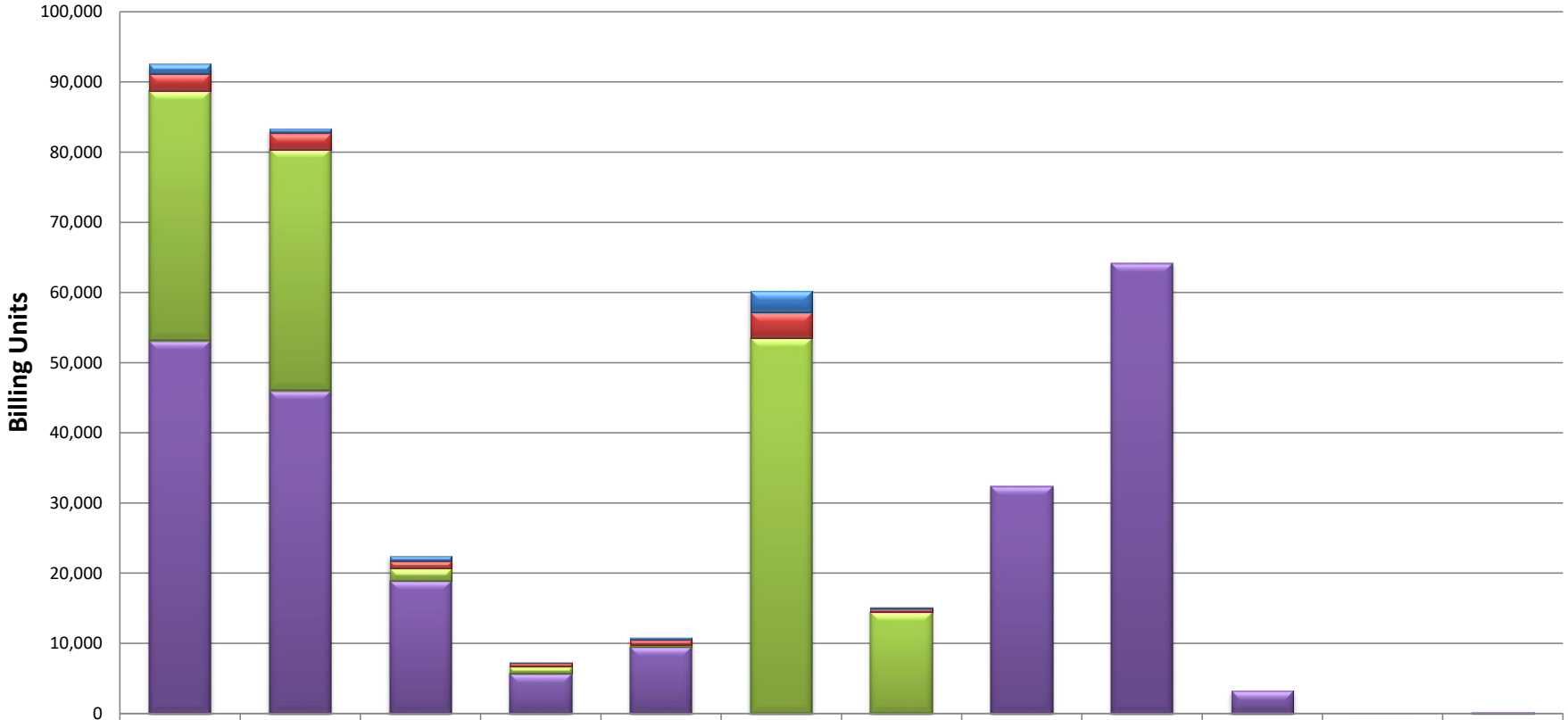
With the recent retirement of another District employee, staff performed a detailed evaluation of options considering several factors:

- Long Term Succession Needs
- Future Retirements
- Inter Department Transfers
- Use of Interns
- Transfer of Interns to Full Time Employees
- Temporary Increase to the Budgeted Headcount to Facilitate Training and Transition

Staff will lead a discussion at the Finance Committee Meeting to describe the proposed response to fill the void left by a recent retirement and the potential increase to the budgeted headcount to plan for future succession.

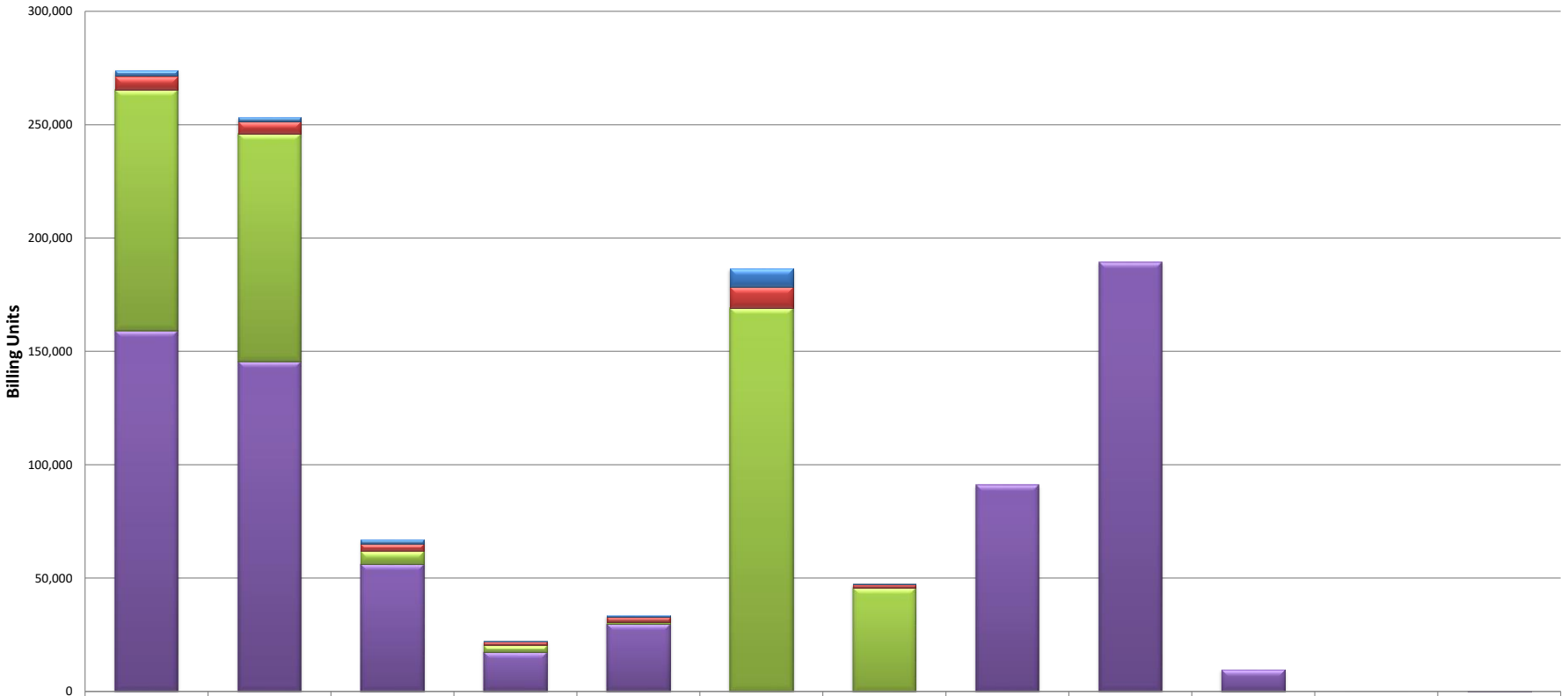
Recommended Action: Staff recommends that the Board of Directors consider authorizing a temporary exceedance of the head count defined in the 2020/21 budget to facilitate the implementation of current succession planning efforts.

September 2020 Water Sales

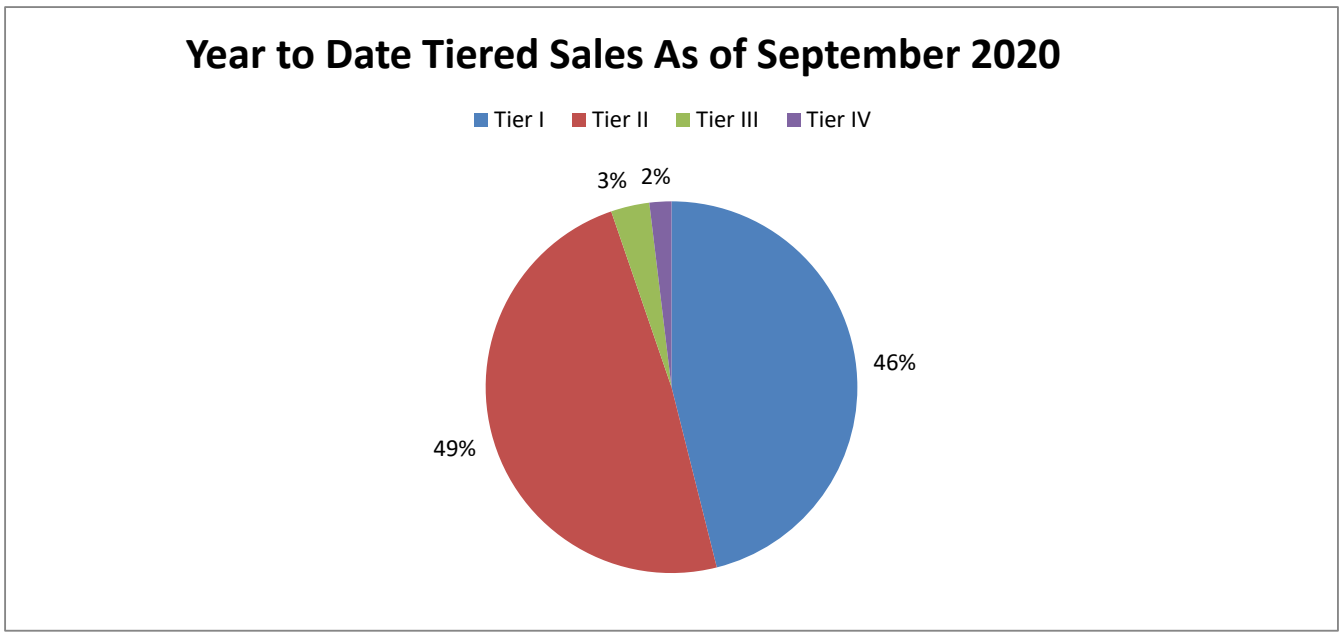


	Residential	Laguna Woods Village	Multi Family	Trailer Parks	Condo	Irrigation - Functional	Irrigation - Recreational	Commercial	Recycled Water	Public Authority	Private Fire	Flooding
Tier IV	1,368	600	704	113	313	3,097	170	0	0	0	0	0
Tier III	2,507	2,389	1,082	539	704	3,635	477	0	0	0	0	0
Tier II	35,553	34,396	1,759	963	274	53,520	14,517	0	0	0	0	0
Tier I	53,140	45,975	18,878	5,704	9,542	0	0	32,362	64,191	3,210	10	230

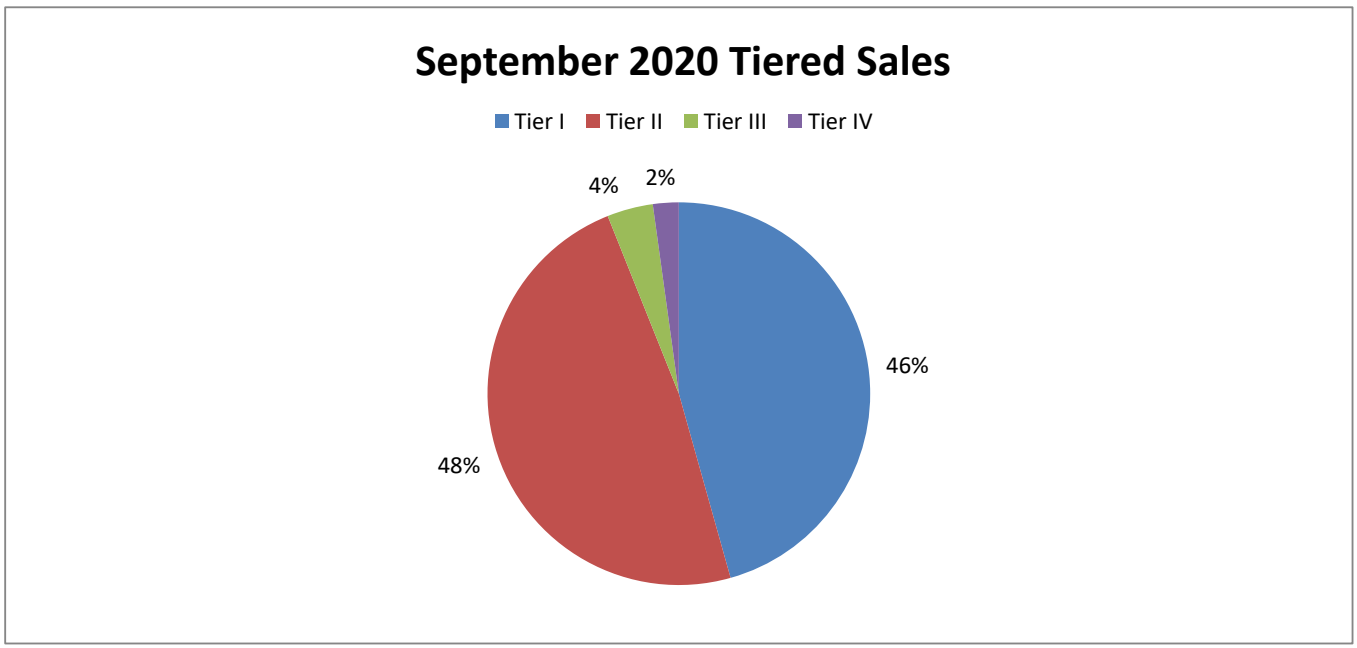
Year-to-Date Water Sales as of September 2020



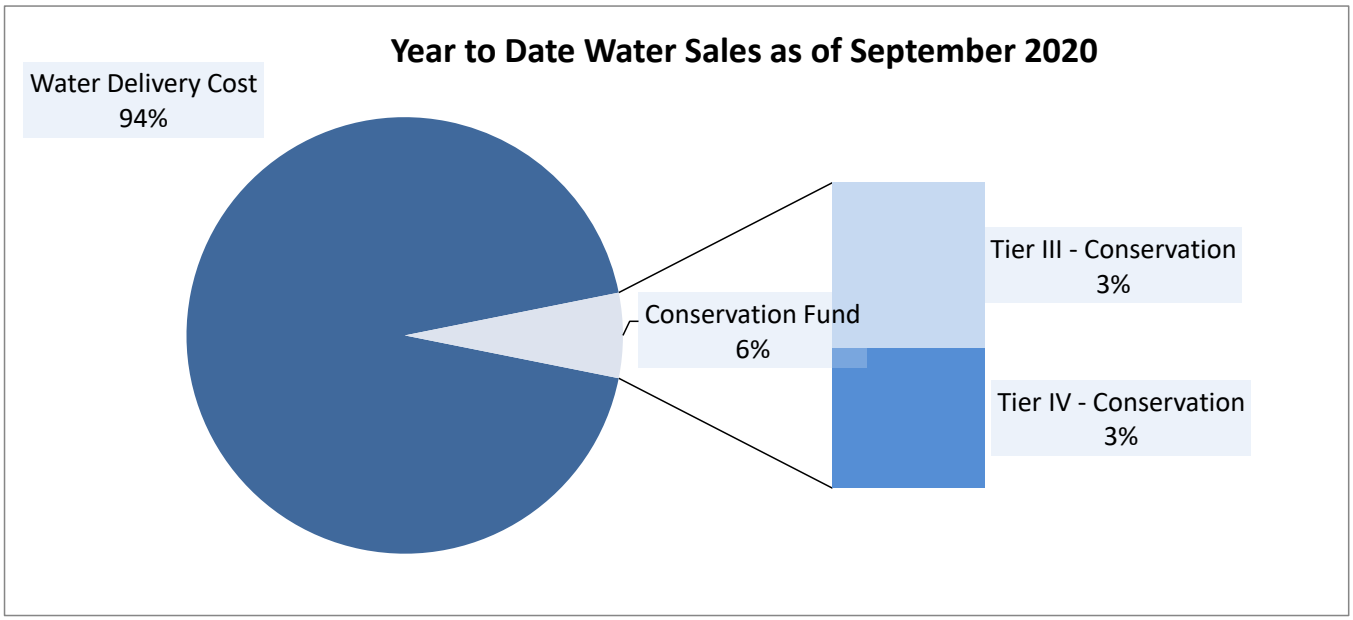
	Residential	Laguna Woods Village	Multi Family	Trailer Parks	Condo	Irrigation - Functional	Irrigation - Recreational	Commercial	Recycled Water	Public Authority	Private Fire	Flooding
Tier IV	2,718	2,024	1,983	487	937	8,195	595	0	0	0	0	0
Tier III	6,118	5,608	3,384	1,530	2,204	9,414	1,413	0	0	0	0	0
Tier II	106,188	100,312	5,676	3,065	826	169,139	45,777	0	0	0	0	0
Tier I	159,129	145,557	56,219	17,452	29,810	0	0	91,165	189,484	9,757	37	492



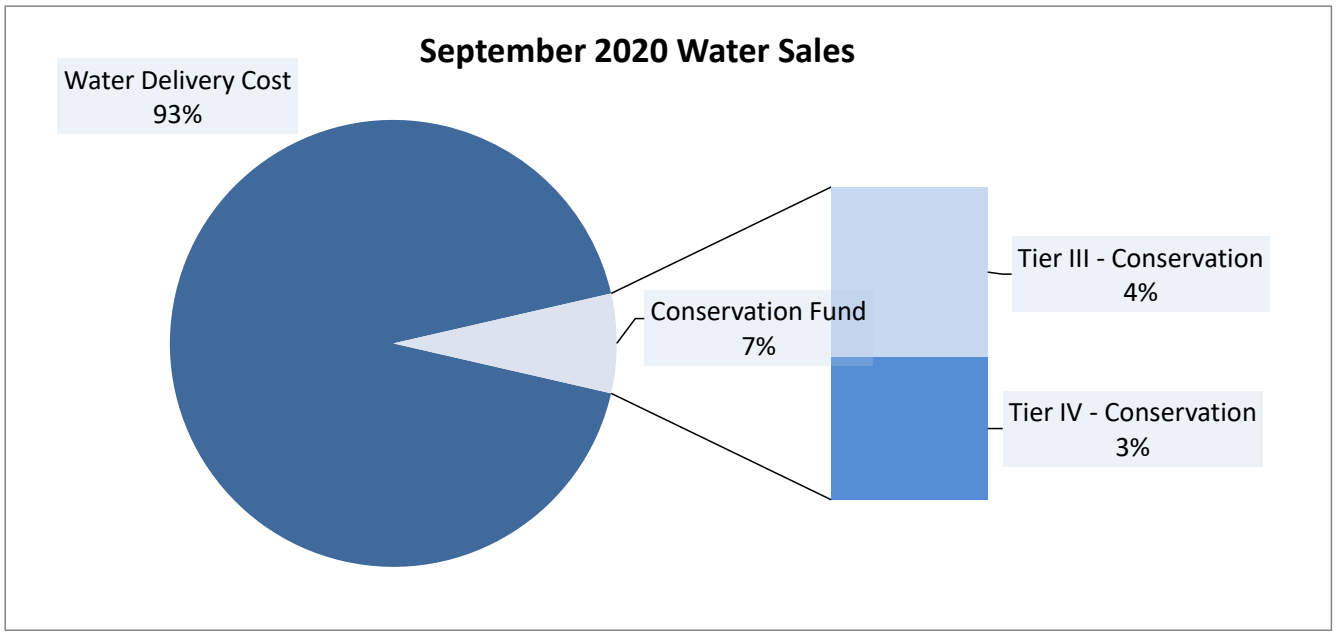
Year To Date Sales in ccf		
Tier I	408,167	46.08%
Tier II	430,983	48.66%
Tier III	29,671	3.35%
Tier IV	16,939	1.91%
	885,760	100.00%



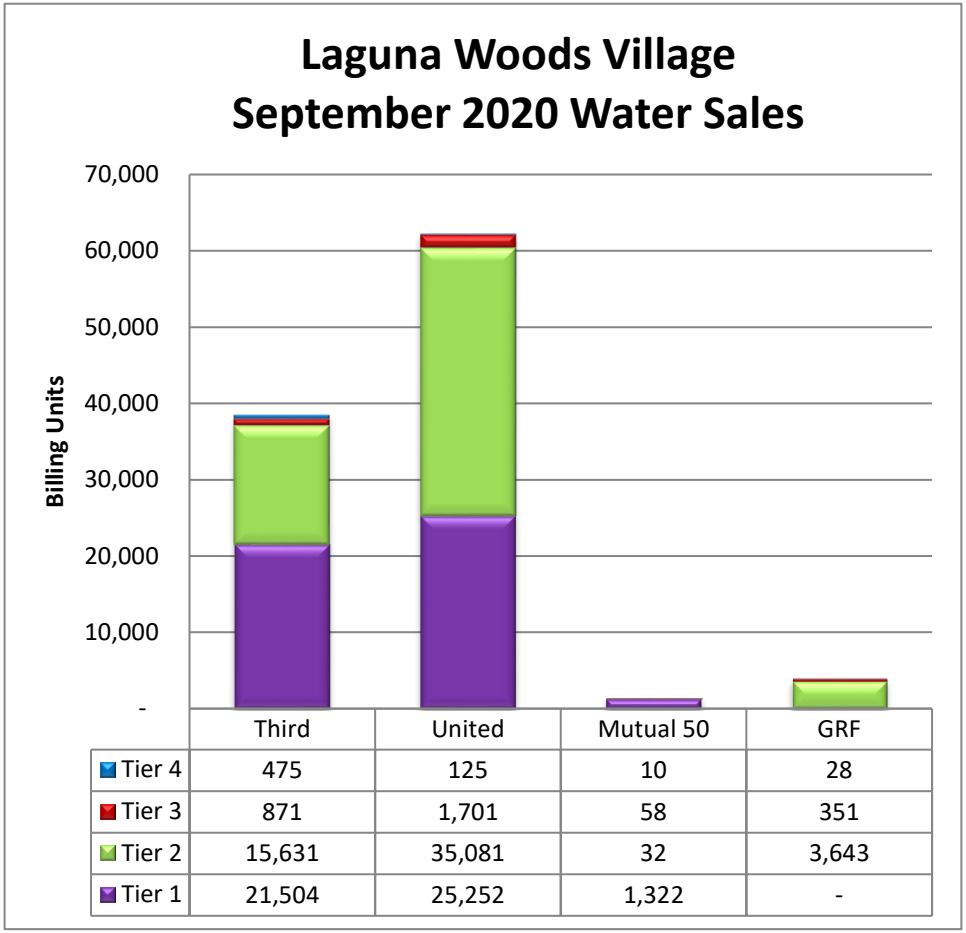
Current Month Sales in ccf		
Tier I	133,239	45.64%
Tier II	140,982	48.29%
Tier III	11,333	3.88%
Tier IV	6,365	2.18%
	291,919	100.00%



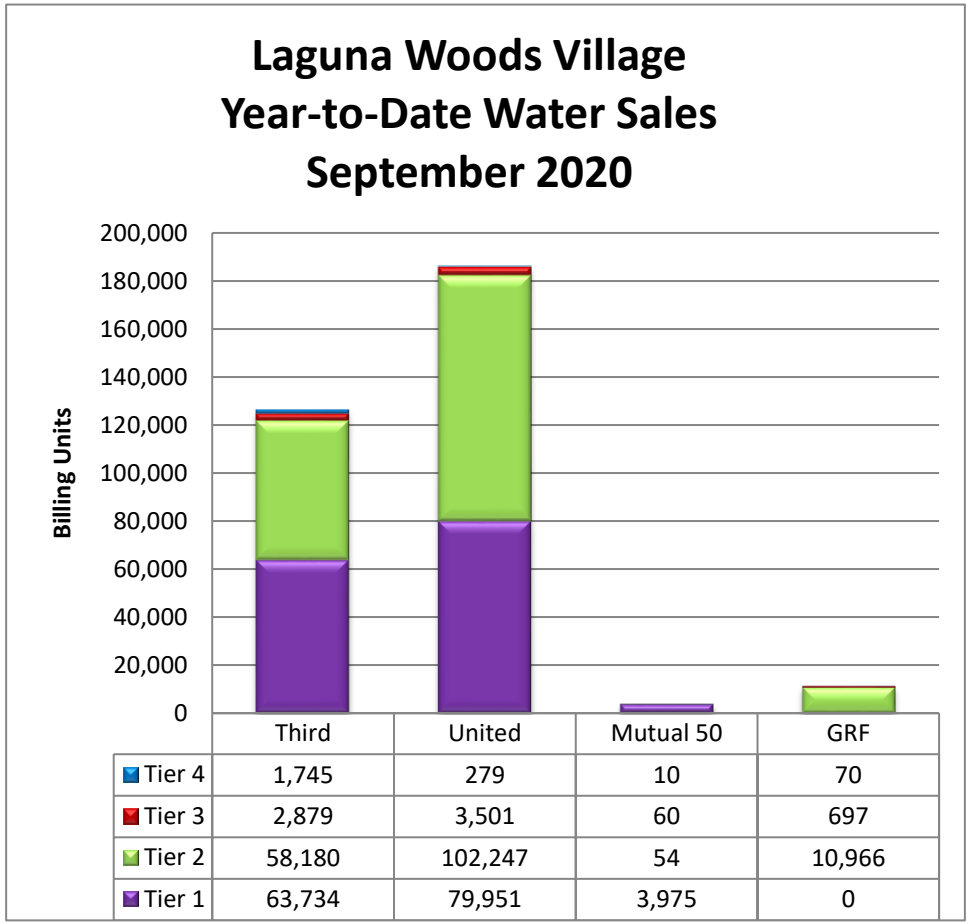
Category	Billings	Percentage
Water Delivery Cost	$2,481,138.56	93.71%
Tier III - Conservation	$90,199.84	3.41%
Tier IV - Conservation	$76,229.80	2.88%
	$2,647,568.20	100.00%



Category	Billings	Percentage
Water Delivery Cost	$818,673.61	92.82%
Tier III - Conservation	$34,452.32	3.91%
Tier IV - Conservation	$28,836.54	3.27%
	$881,962.47	100.00%

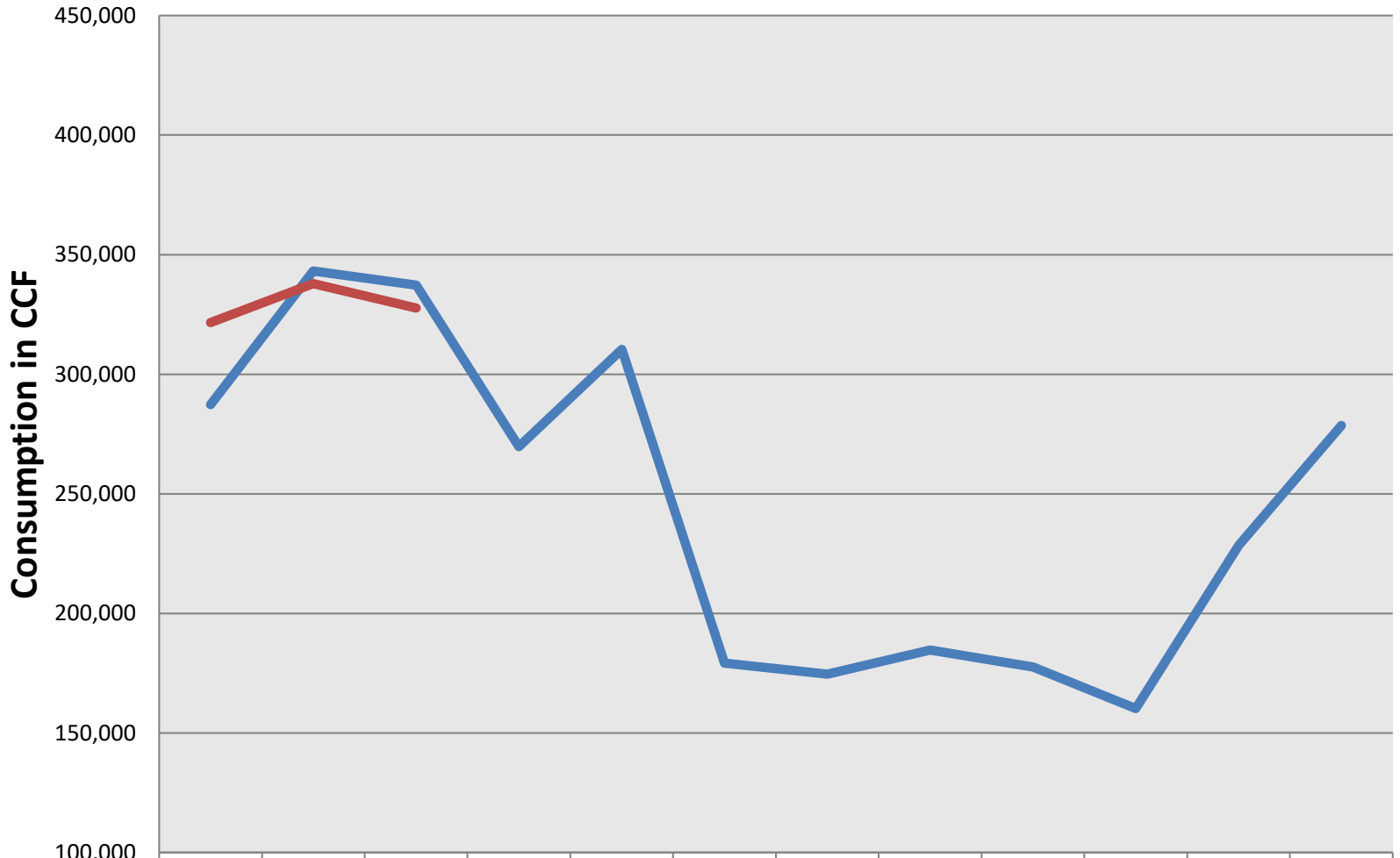


	Third	United	Mutual 50	GRF
Tier 4	475	125	10	28
Tier 3	871	1,701	58	351
Tier 2	15,631	35,081	32	3,643
Tier 1	21,504	25,252	1,322	-



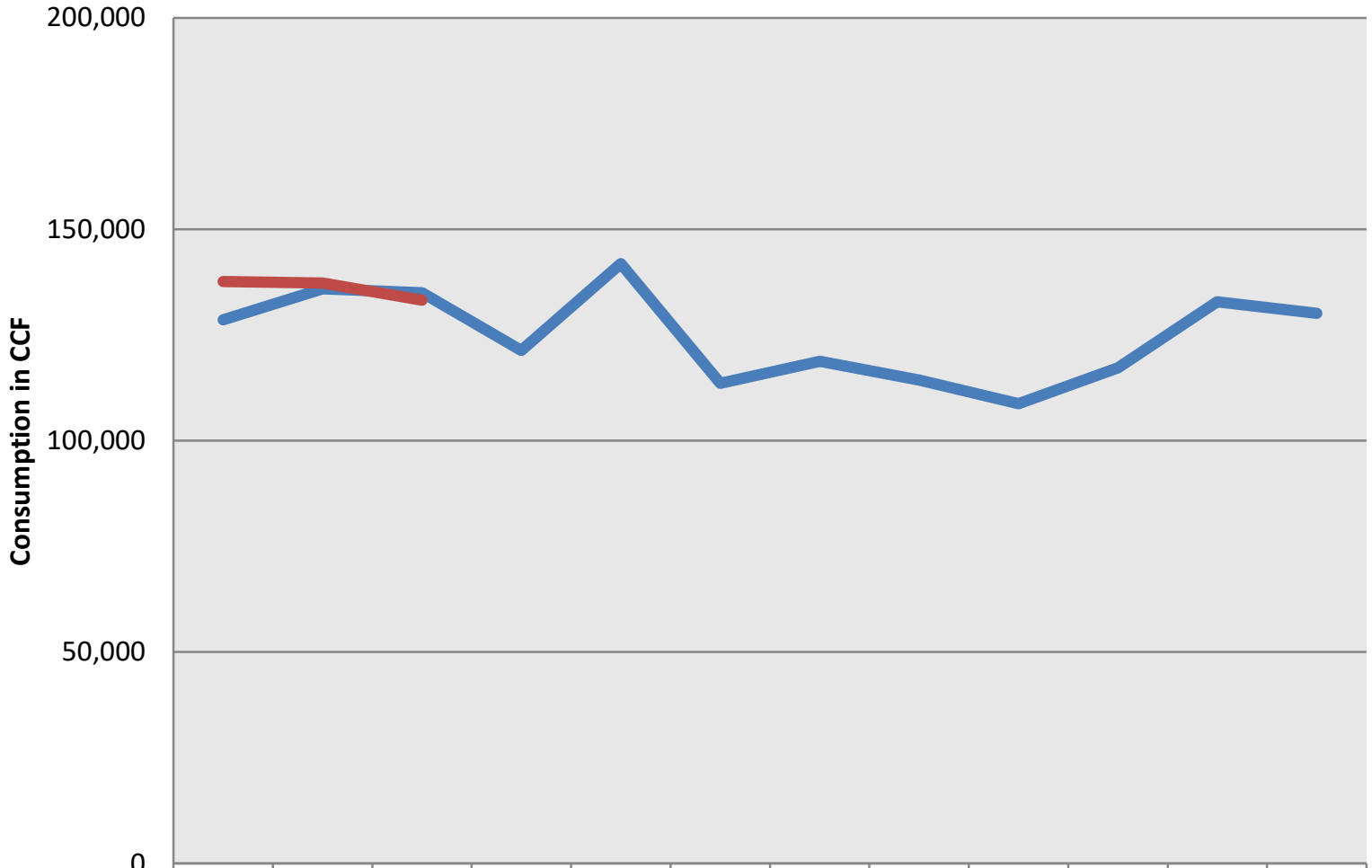
	Third	United	Mutual 50	GRF
Tier 4	1,745	279	10	70
Tier 3	2,879	3,501	60	697
Tier 2	58,180	102,247	54	10,966
Tier 1	63,734	79,951	3,975	0

ETWD Total Consumption



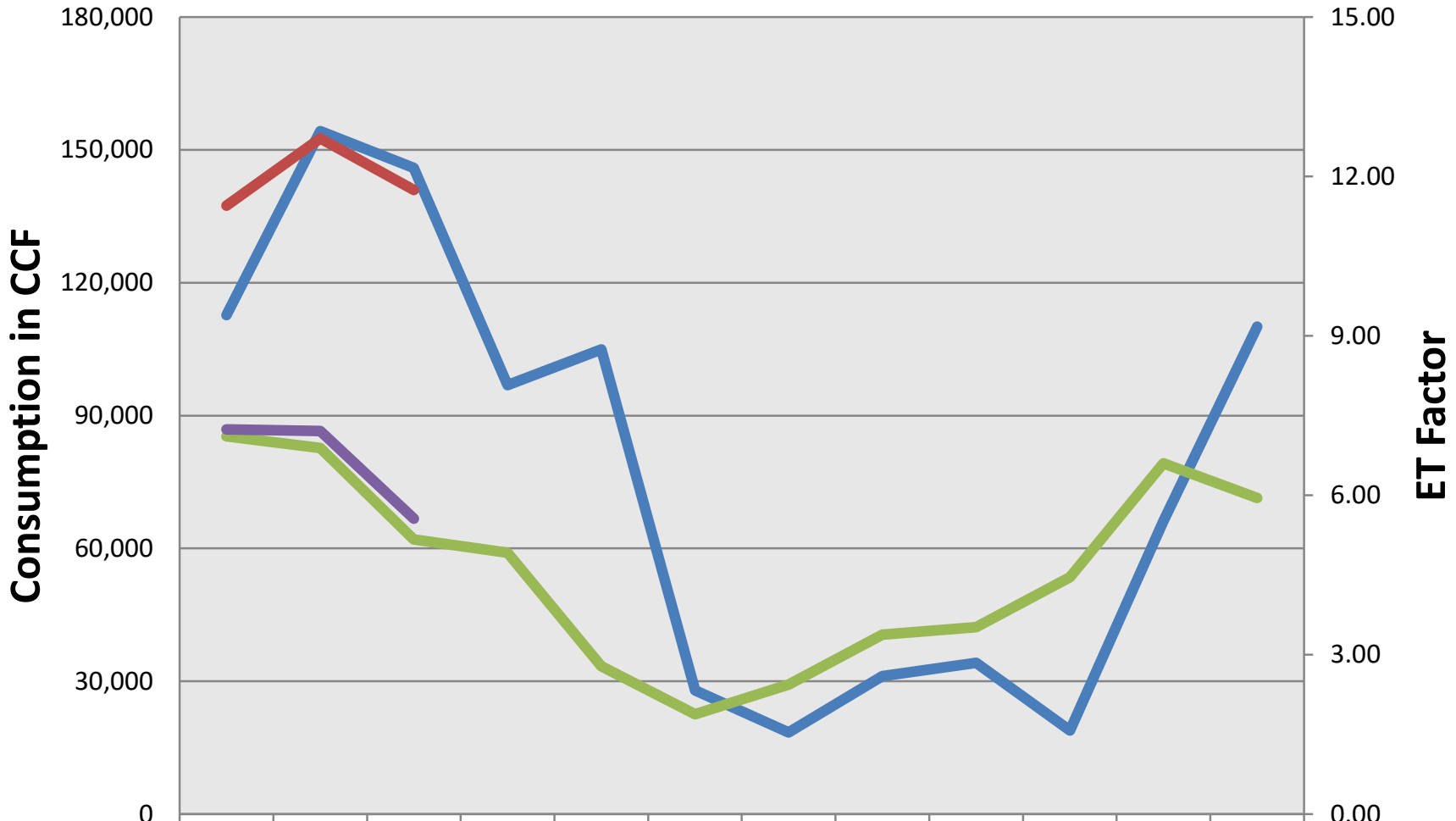
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	287,207	343,163	337,247	269,666	310,344	179,155	174,596	184,609	177,526	160,199	228,443	278,527
2020-2021	321,599	337,881	327,731									
%	112%	98%	97%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Tier I Consumption



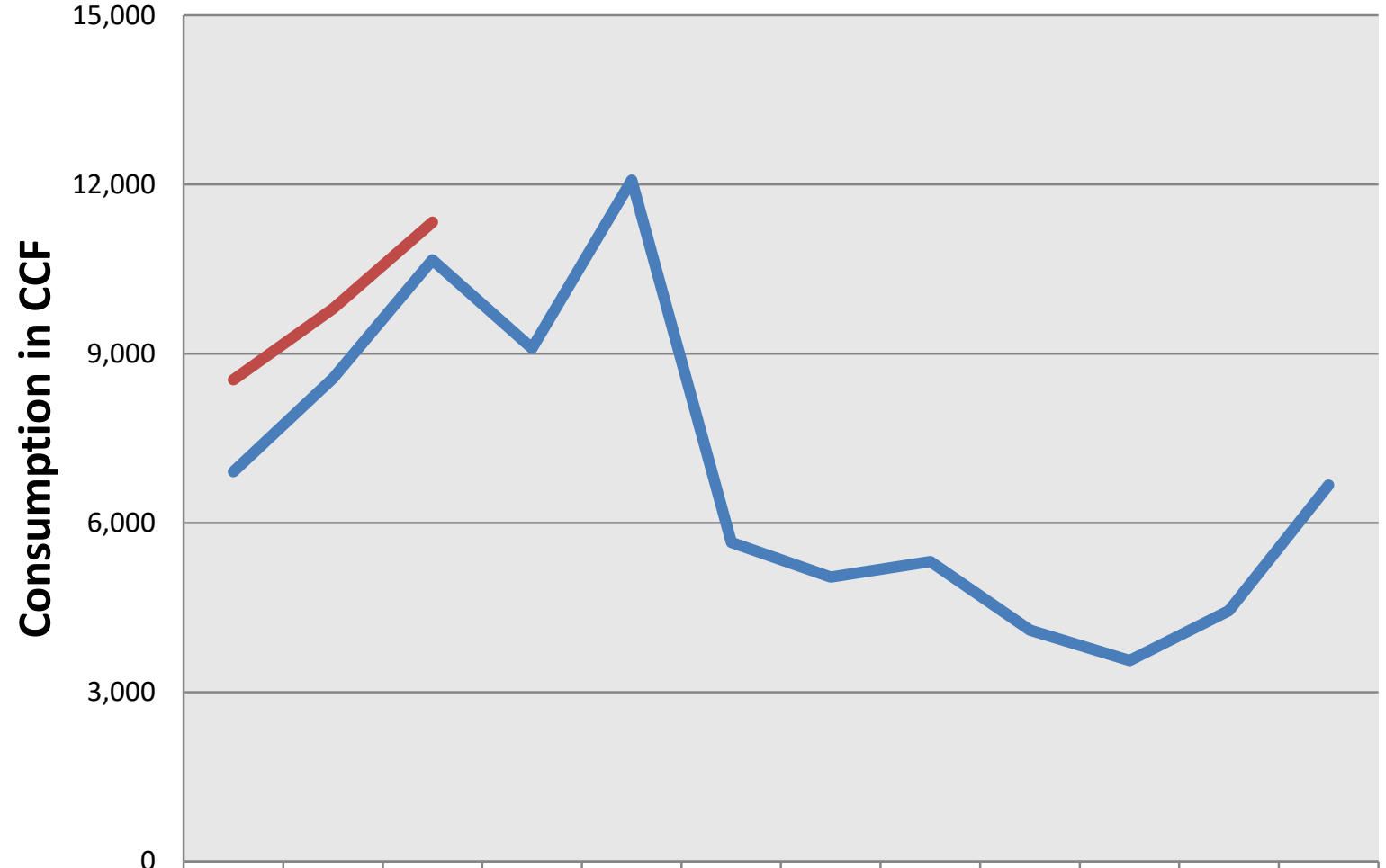
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	128,554	135,906	134,987	121,297	141,878	113,574	118,788	114,338	108,744	117,284	132,878	130,117
2020-2021	137,646	137,282	133,239									

Tier II Consumption



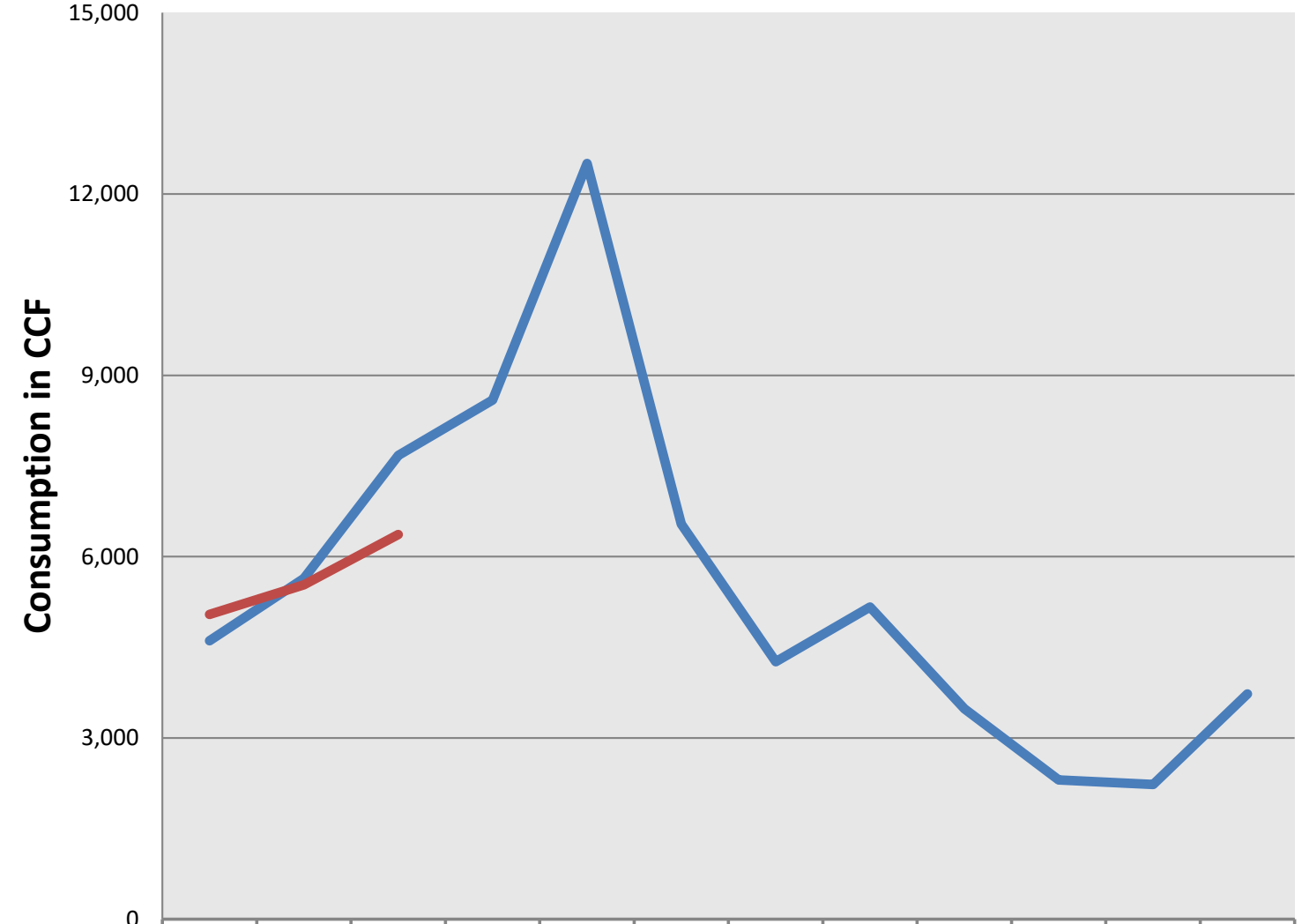
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	112,695	154,237	145,968	96,862	104,906	27,914	18,449	31,164	34,192	18,866	66,147	110,075
2020-2021	137,408	152,593	140,982									
19/20 ET	7.11	6.89	5.17	4.92	2.78	1.88	2.44	3.38	3.52	4.46	6.60	5.95
20/21 ET	7.24	7.21	5.56									

Tier III Consumption



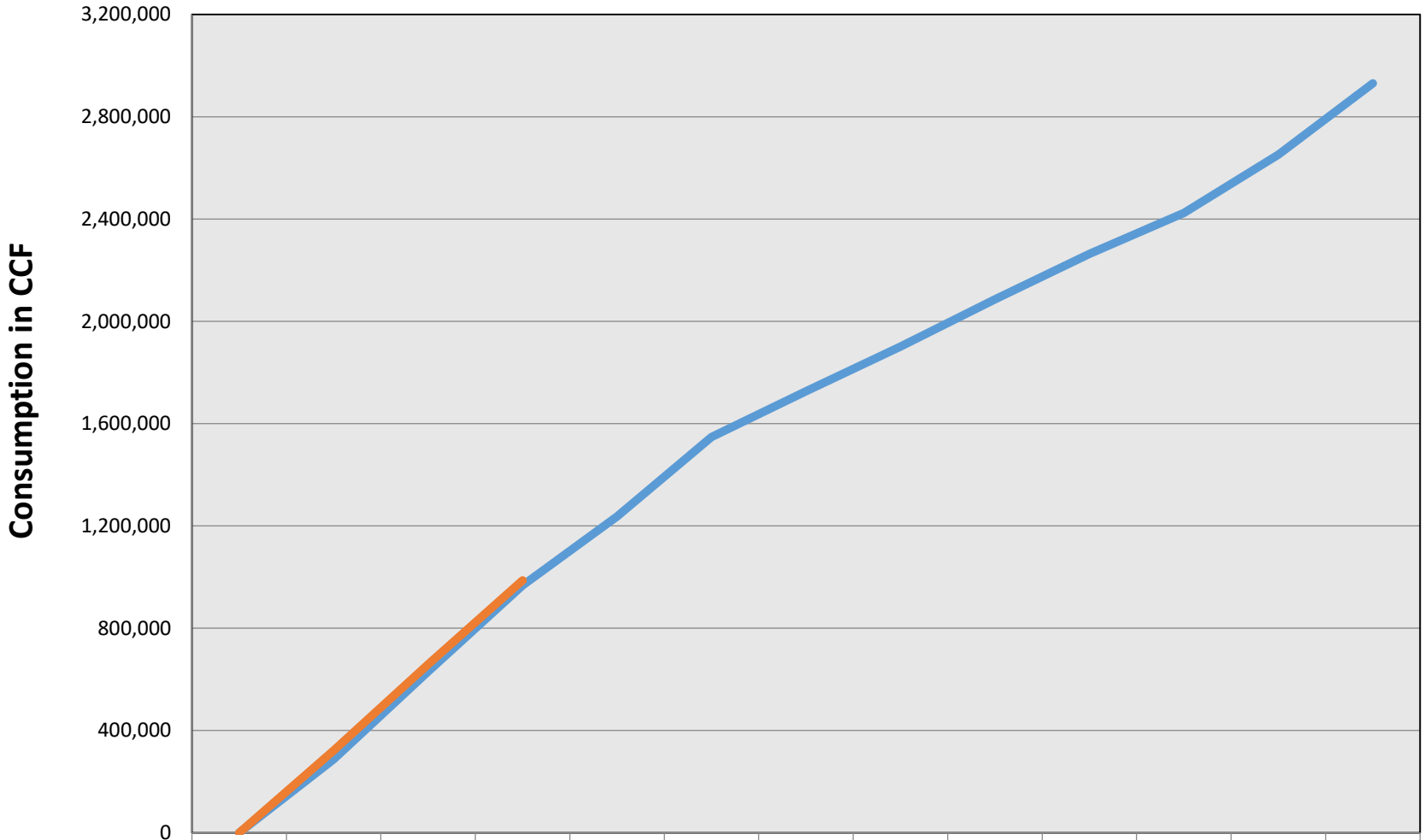
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	6,910	8,567	10,664	9,094	12,078	5,654	5,038	5,318	4,098	3,562	4,446	6,675
2020-2021	8,539	9,799	11,333									

Tier IV Consumption



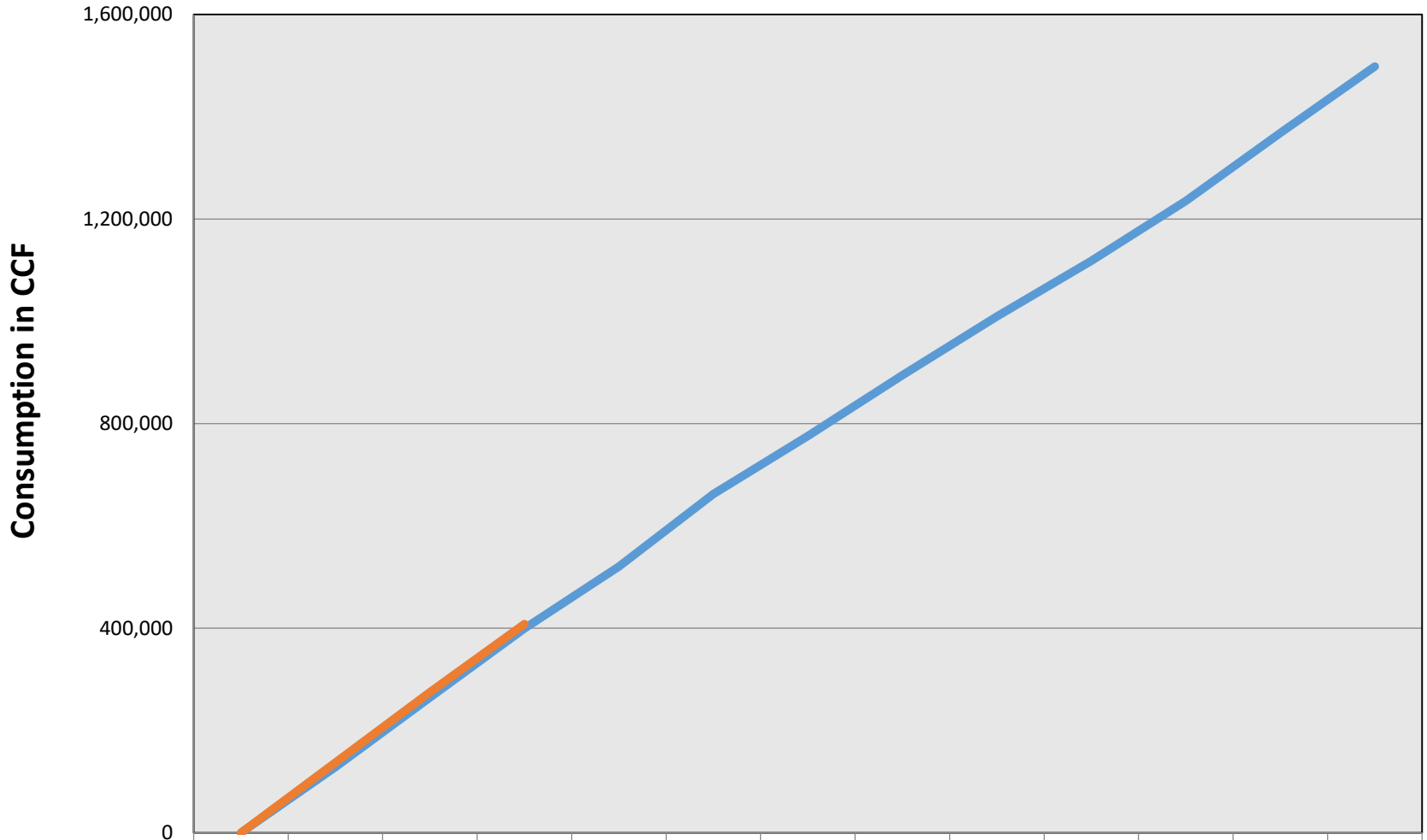
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	4,608	5,639	7,676	8,591	12,505	6,539	4,262	5,166	3,479	2,304	2,229	3,729
2020-2021	5,043	5,531	6,365									

ETWD YTD Consumption



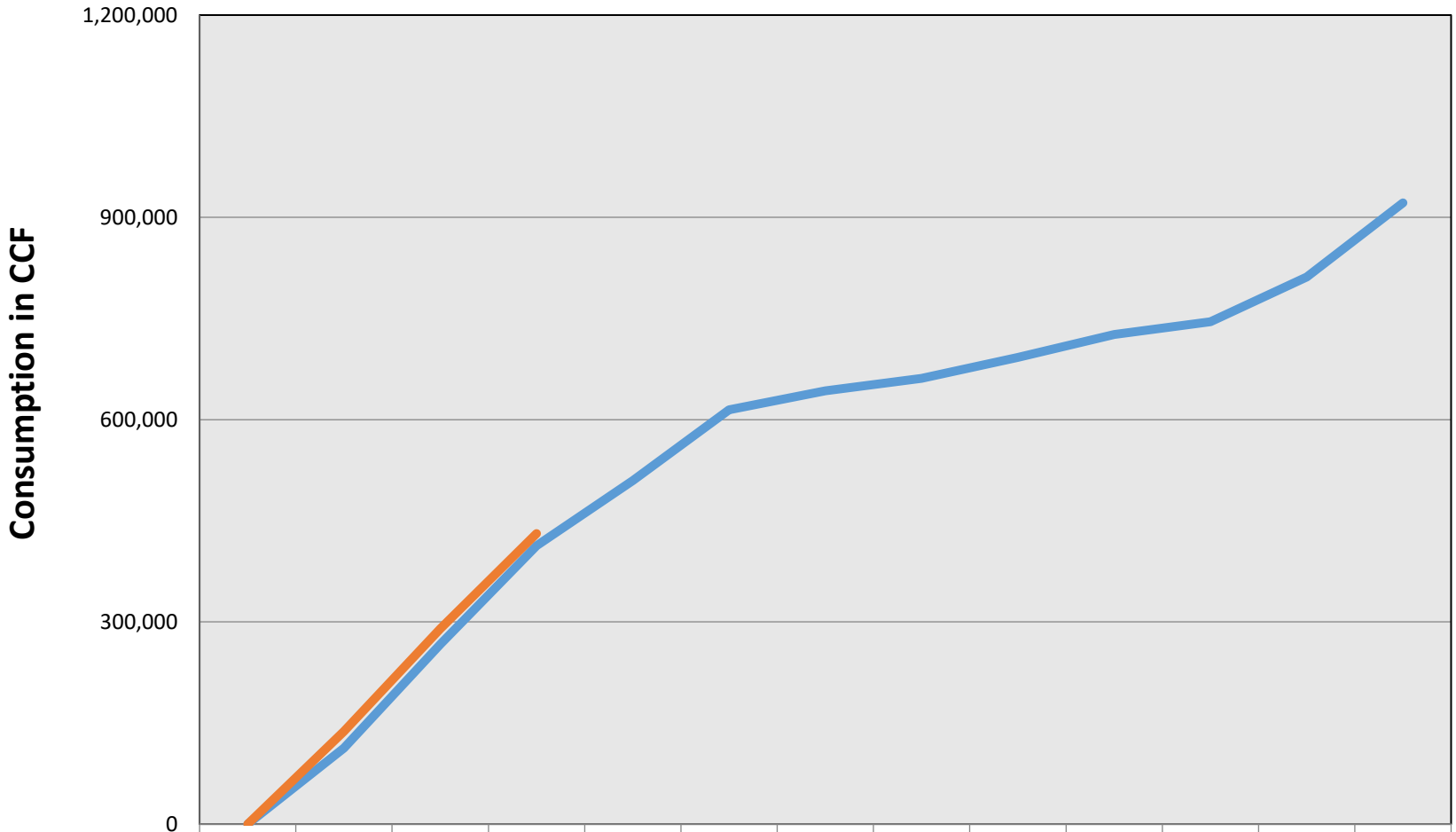
	YTD Start	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	0	287,207	630,370	967,617	1,237,283	1,547,627	1,726,782	1,901,378	2,085,987	2,263,513	2,423,712	2,652,155	2,930,682
2020-2021	0	321,599	659,480	987,211									

Tier I YTD Consumption



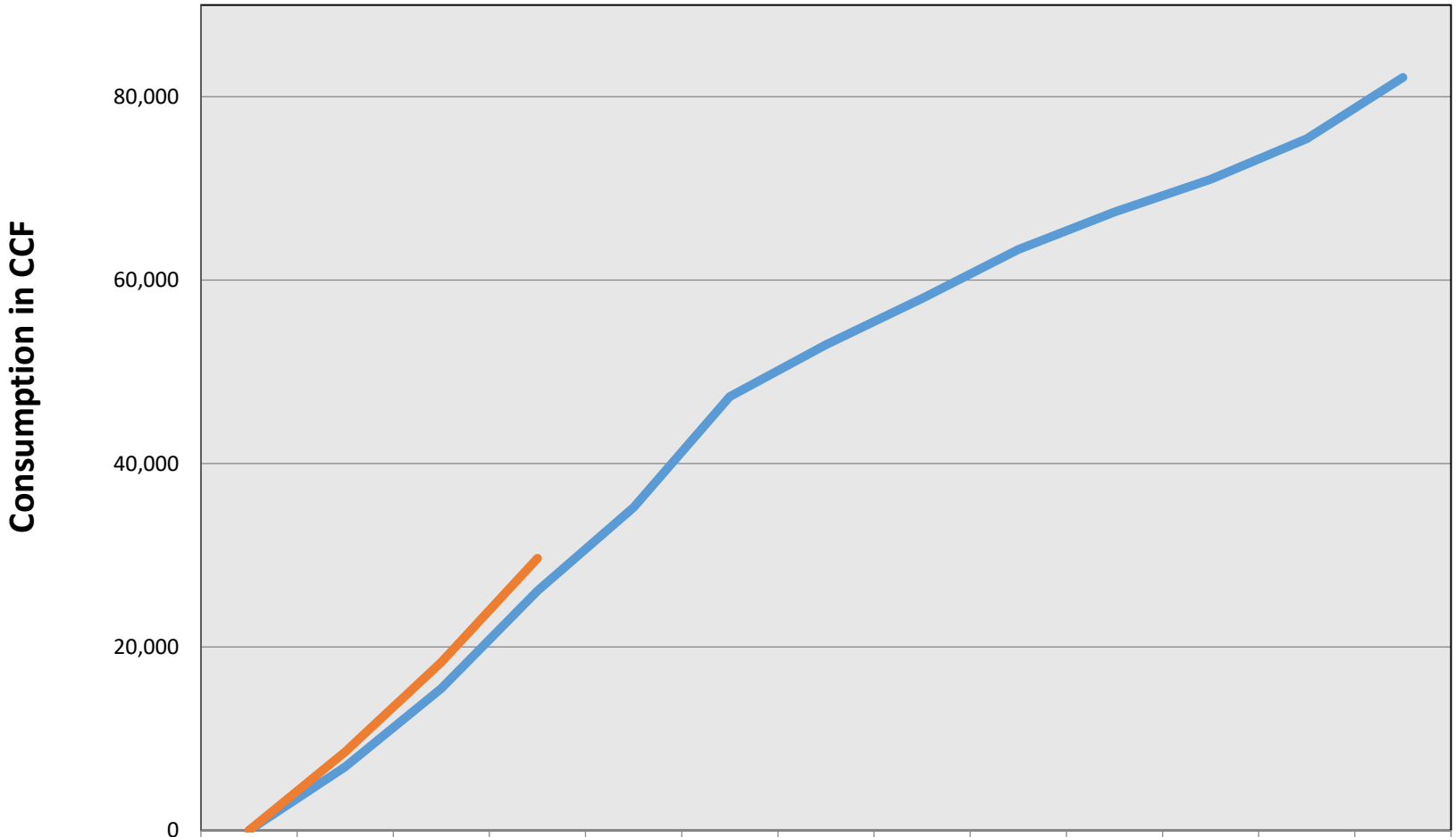
	YTD Start	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	0	128,554	264,460	399,447	520,744	662,622	776,196	894,984	1,009,322	1,118,066	1,235,350	1,368,228	1,498,345
2020-2021	0	137,646	274,928	408,167									

Tier II YTD Consumption



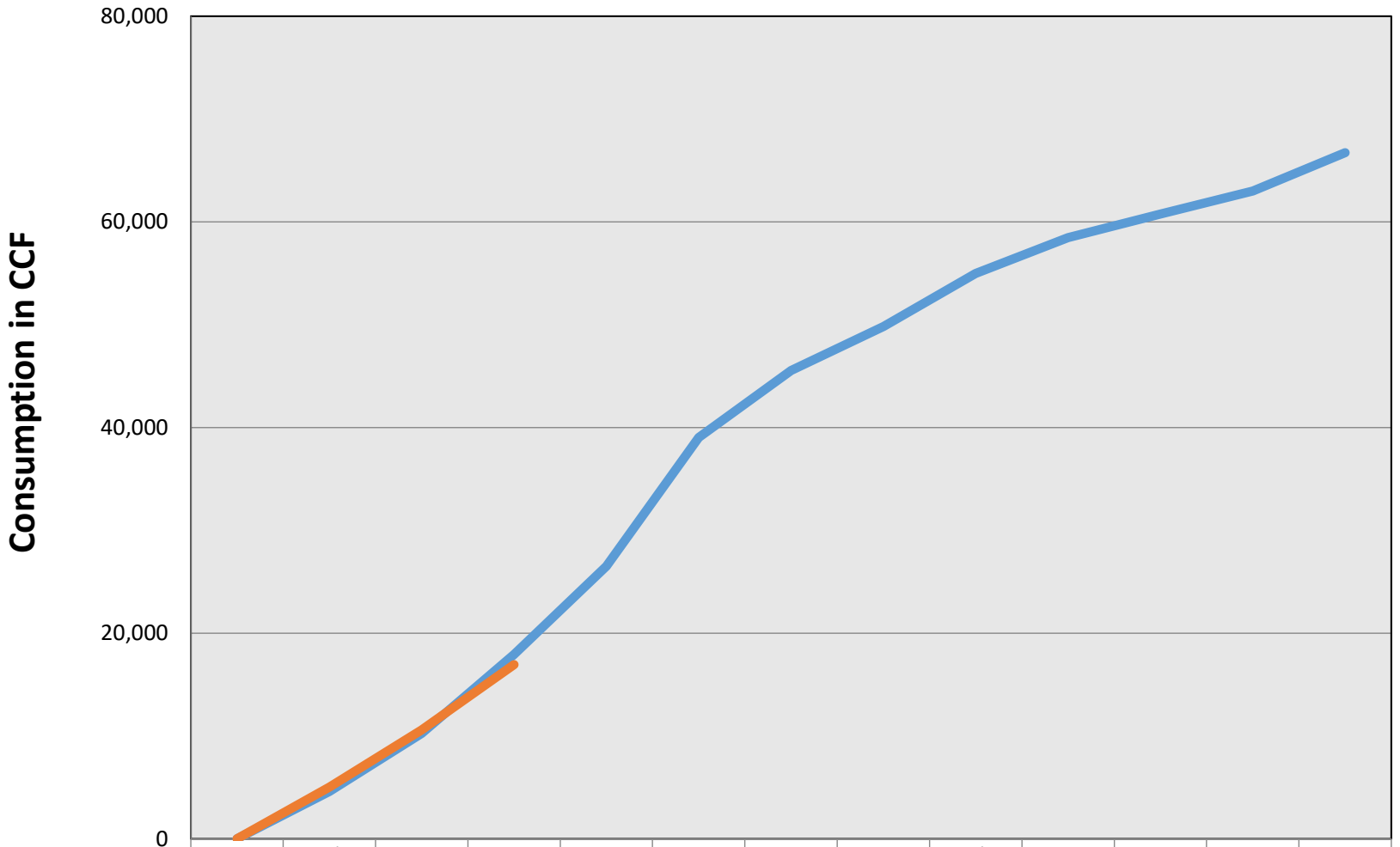
	YTD Start	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	0	112,695	266,932	412,900	509,762	614,668	642,582	661,031	692,195	726,387	745,253	811,400	921,475
2020-2021	0	137,408	290,001	430,983									

Tier III YTD Consumption



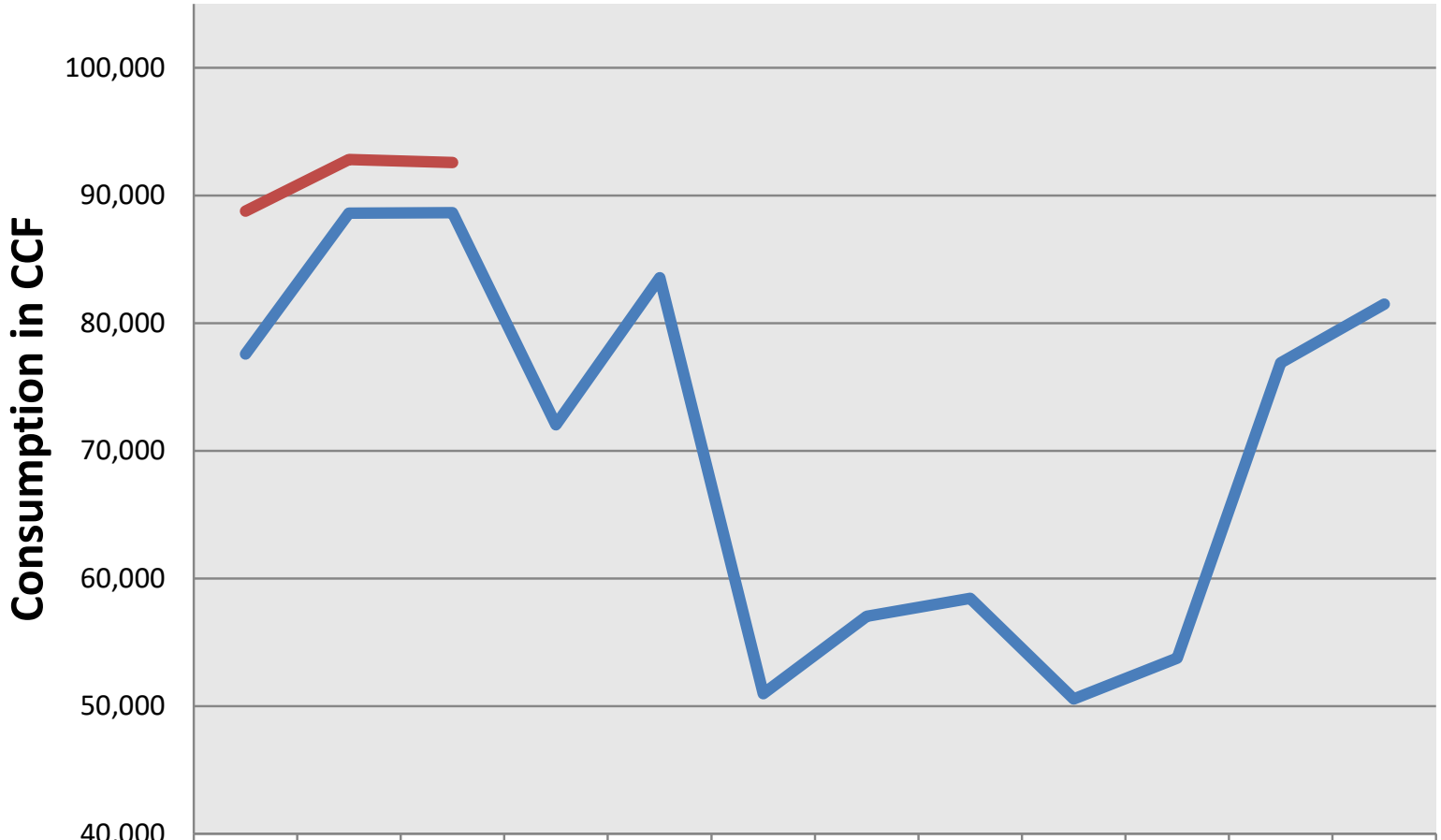
	YTD Start	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	0	6,910	15,477	26,141	35,235	47,313	52,967	58,005	63,323	67,421	70,983	75,429	82,104
2020-2021	0	8,539	18,338	29,671									

Tier IV YTD Consumption



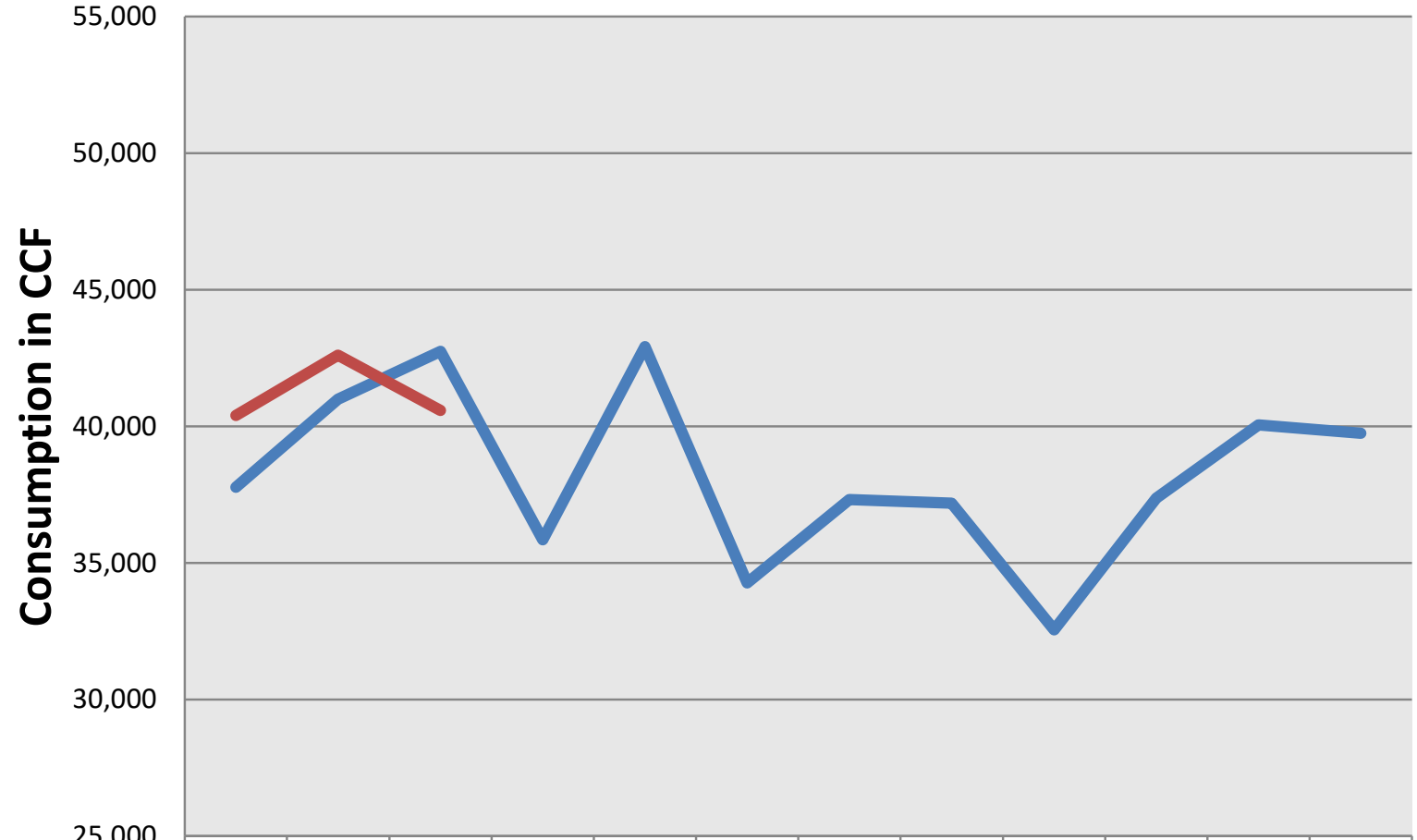
	YTD Start	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	0	4,608	10,247	17,923	26,514	39,019	45,558	49,820	54,986	58,465	60,769	62,998	66,727
2020-2021	0	5,043	10,574	16,939									

Single Family Residents Consumption



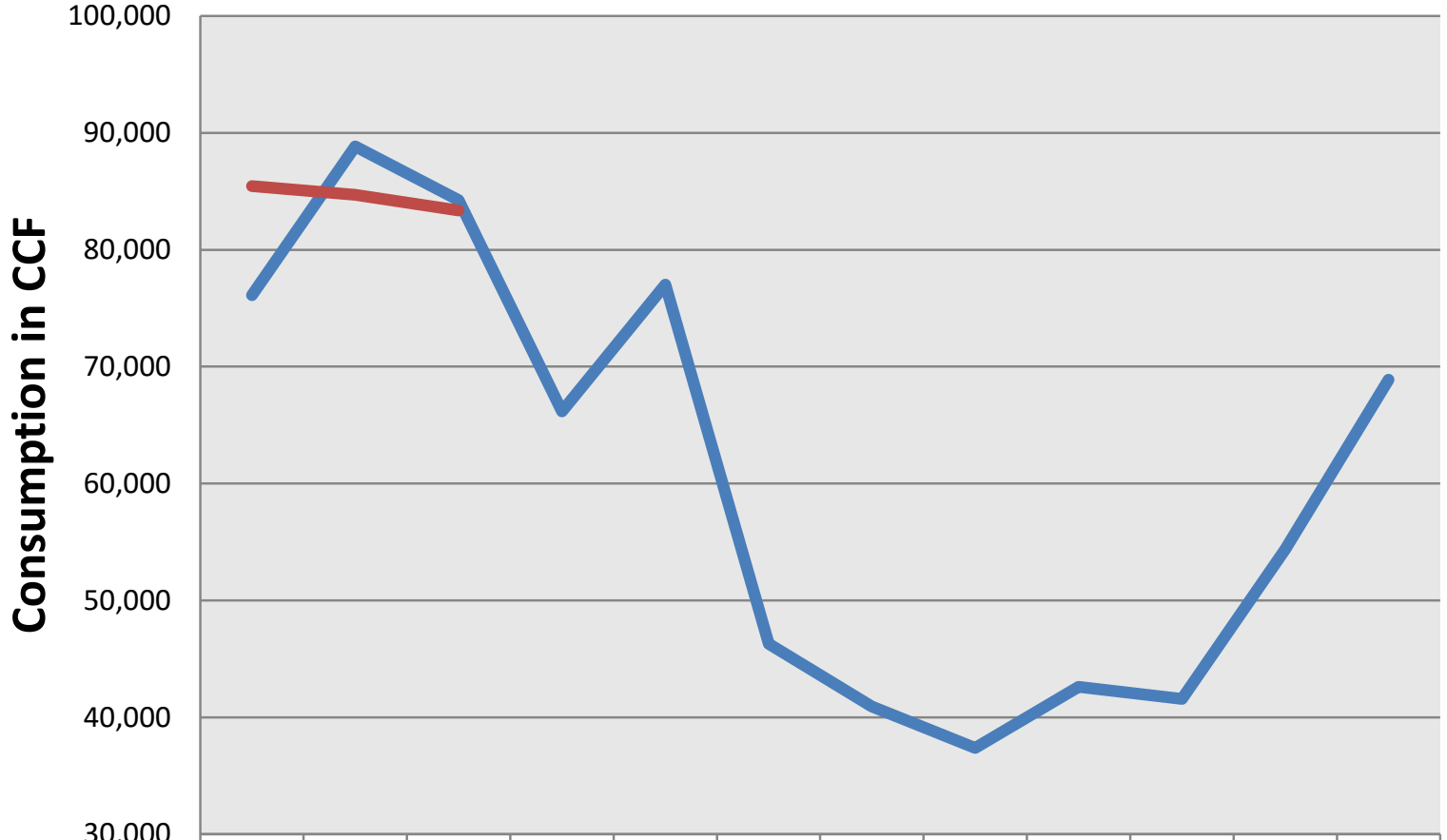
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	77,586	88,625	88,650	72,040	83,550	50,955	57,031	58,453	50,557	53,765	76,880	81,484
2020-2021	88,770	92,815	92,568									
%	114%	105%	104%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Multi Family Residents Consumption



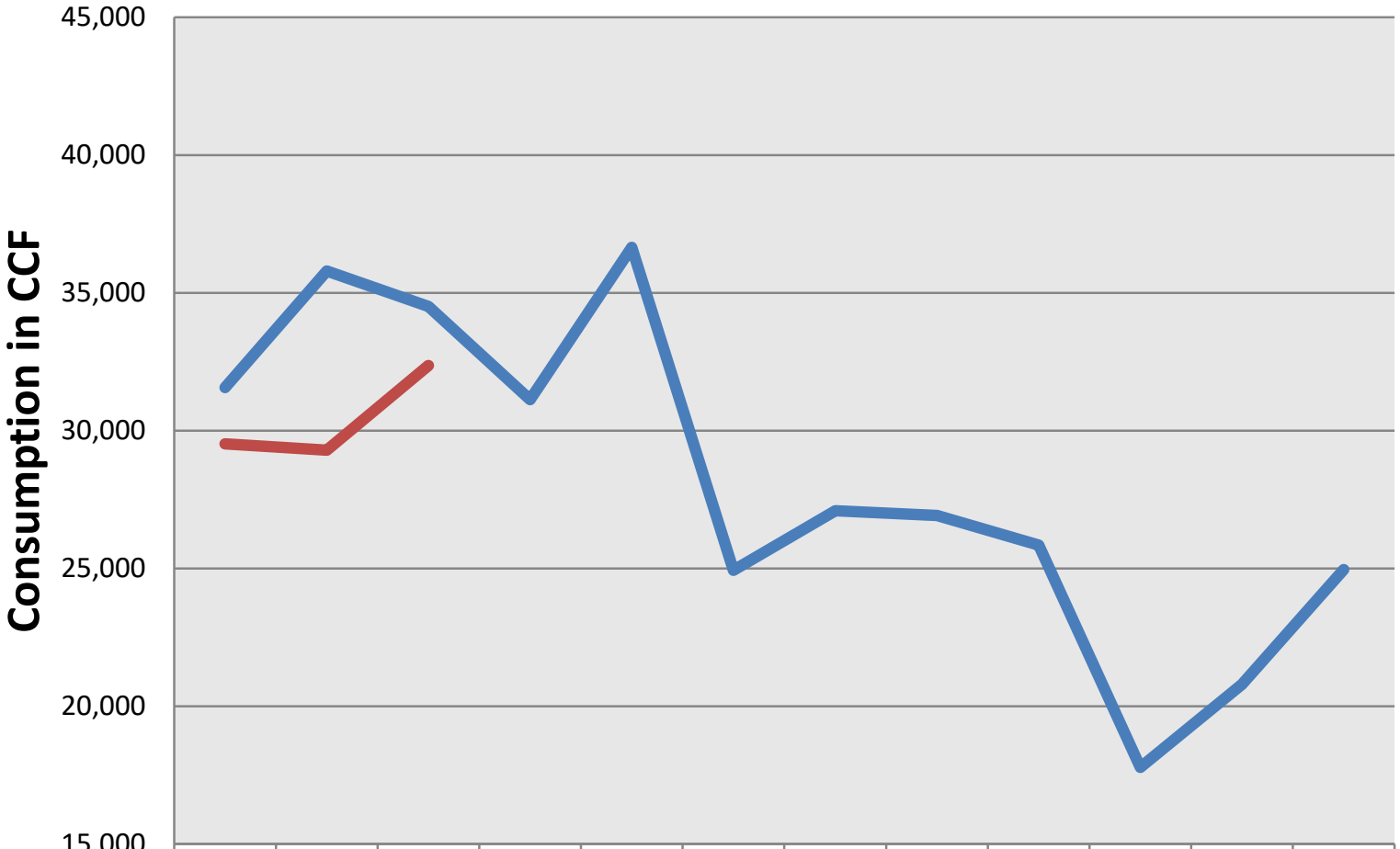
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	37,764	40,990	42,748	35,846	42,915	34,269	37,314	37,185	32,549	37,372	40,056	39,751
2020-2021	40,396	42,602	40,575									
%	107%	104%	95%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Laguna Woods Village Consumption
(Excluding Dedicated Irrigation)



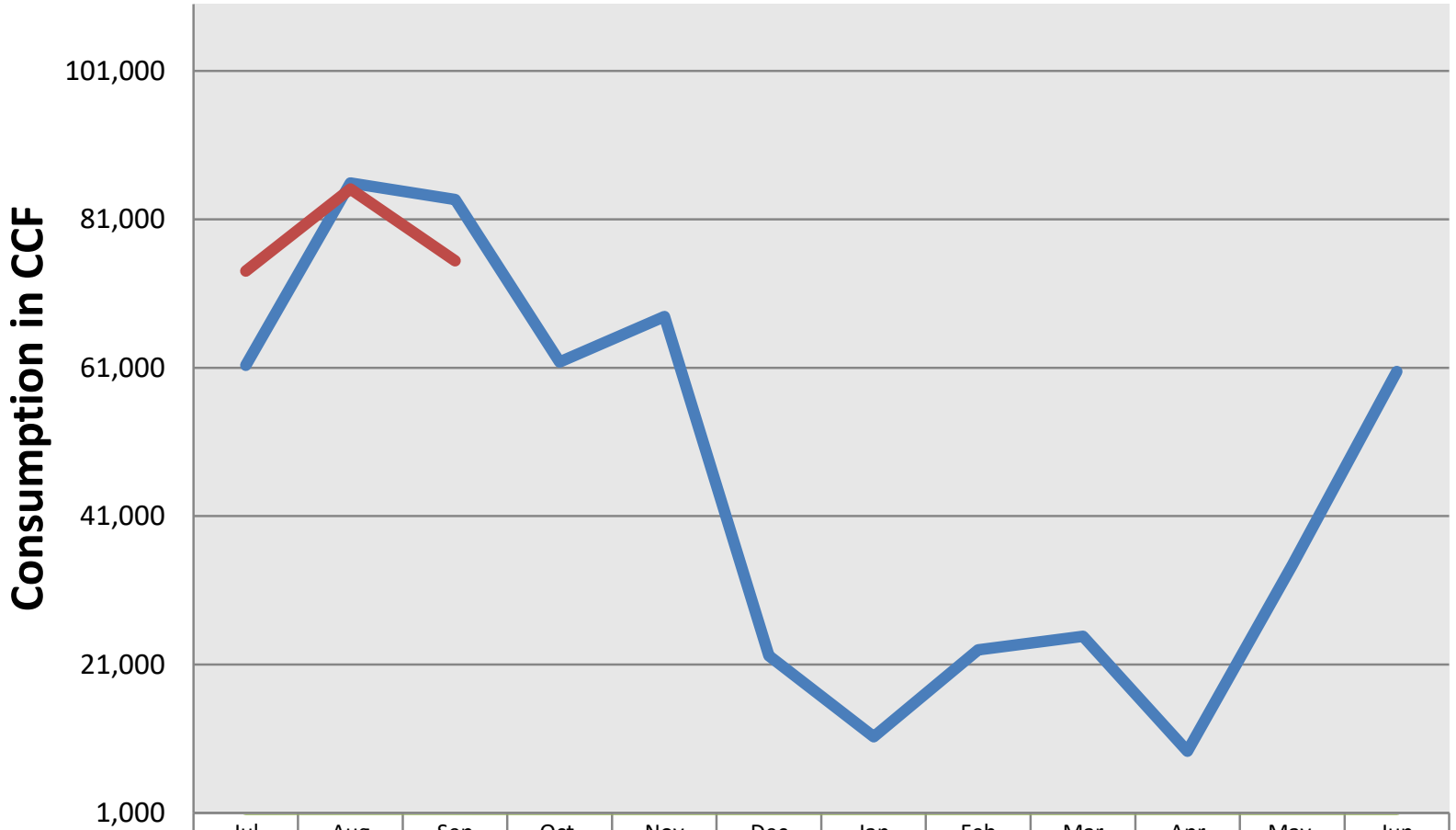
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	76,109	88,839	84,242	66,165	77,014	46,268	40,923	37,375	42,605	41,567	54,391	68,893
2020-2021	85,444	84,697	83,360									
%	112%	95%	99%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Commercial Consumption



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	31,560	35,793	34,506	31,129	36,650	24,924	27,092	26,914	25,842	17,778	20,786	24,962
2020-2021	29,513	29,290	32,362									
%	94%	82%	94%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Dedicated Irrigation Consumption (including LWV)



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
2019-2020	61,308	85,895	83,655	61,793	67,888	22,189	11,269	22,973	24,802	9,312	34,373	60,468
2020-2021	74,026	85,091	75,416									
%	121%	99%	90%	0%	0%	0%	0%	0%	0%	0%	0%	0%

EL TORO WATER DISTRICT
Glossary of Water Terms

Accumulated overdraft: The amount of water necessary to be replaced in the intake area of the groundwater basin to prevent the landward movement of ocean water into the fresh groundwater body.

Acre-foot, AF: A common water industry unit of measurement. An acre-foot is 325,851 gallons, or the amount of water needed to cover one acre with water one foot deep. An acre-foot serves annual needs of two typical California families.

ACWA: Association of California Water Agencies.
A statewide group based in Sacramento that actively lobbies State and Federal Government on water issues.

Advanced treatment: Additional treatment processes used to clean wastewater even further following primary and secondary treatment. Also known as tertiary treatment.

AFY: Acre-foot per year.

Alluvium: A stratified bed of sand, gravel, silt, and clay deposited by flowing water.

AMP: Allen McCulloch pipeline.

Major pipeline transporting treated water to water districts between Yorba Linda, where it starts to El Toro Water District reservoir, where it terminates.

Annexation: The inclusion of land within a government agency's jurisdiction.

Annual overdraft: The quantity by which the production of water from the groundwater supplies during the water year exceeds the natural replenishment of such groundwater supplies during the same water year.

Aqueduct: A man-made canal or pipeline used to transport water.

Aquifer: An underground geologic formation of rock, soil or sediment that is naturally saturated with water; an aquifer stores groundwater.

Arid: Dry; deserts are arid places. Semi-arid places are almost as dry as a desert.

Artesian: An aquifer in which the water is under sufficient pressure to cause it to rise above the bottom of the overlying confining bed, if the opportunity is provided.

Artificial recharge: The addition of surface water to a groundwater reservoir by human activity, such as putting surface water into recharge basins. (See also: groundwater recharge and recharge basin.)

AWWA American Water Works Association
Nationwide group of public and private water purveyors and related industrial suppliers.

Base flow: The portion of river surface flow which remains after deduction of storm flow and/or purchased imported water.

Bay-Delta: The Sacramento-San Joaquin Bay-Delta is a unique natural resource of local, state and national significance. The Delta Is home to more than 500,000 people; contains 500,000 acres of agriculture; provides habitat for 700 native plant and animal species; provides water for more than 25 million Californians and 3 million acres of agriculture; is traversed by energy, communications and transportation facilities vital to the economic health of California; and supports a $400 billion economy.

BIA: Building Industry Association.

Biofouling: The formation of bacterial film (biofilm) on fragile reverse osmosis membrane surfaces.

Biosolids: Solid organic matter recovered from a sewage treatment process and used especially as fertilizer.

BMP: Best Management Practice. An engineered structure or management activity, or combination of these, that eliminates or reduces adverse environmental effects.

Brackish water: A mixture of freshwater and saltwater.

Brown Act: Ralph M. Brown Act enacted by the State legislature governing all meetings of legislative bodies. Also know as the Open Meeting requirements.

Canal: A ditch used to move water from one location to another.

CASA: California Association of Sanitation Agencies The sanitation equivalent of ACWA concerned solely with issues affecting the treatment and disposal of solid waste and wastewater.

CEQA: California Environmental Quality Act.

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act. This federal law establishes the Superfund program for hazardous waste sites. It provides the legal basis for the United States EPA to regulate and clean up hazardous waste sites, and if appropriate, to seek financial compensation from entities responsible for the site.

CFS: Cubic feet per second.

Chloramines: A mixture of ammonia and chlorine used to purify water.

Clarify: To make clear or pure by separation and elimination of suspended solid material.

Coagulation: The clumping together of solids so they can more easily be settled out or filtered out of water. A chemical called aluminum sulfate (alum) is generally used to aid coagulation in water treatment and reclamation.

Coastkeepers: A non-profit organization dedicated to the protection and preservation of the marine habitats and watersheds of Orange County through programs of education, restoration, enforcement and advocacy.

Colored water: Groundwater extracted from the basin that is unsuitable for domestic use without treatment due to high color and odor exceeding drinking water standards.

Condensation: The process of water vapor (gas) changing into liquid water. An example of condensation can be seen in the tiny water droplets that form on the outside of a glass of iced tea as warmer air touches the cooler glass.

Confined aquifer: An aquifer that is bound above and below by dense layers of rock and contains water under pressure.

Conjunctive use: Storing imported water in a local aquifer, in conjunction with groundwater, for later retrieval and use.

Contaminate: To make unclean or impure by the addition of harmful substances.

CPCFA: California Pollution Control Financing Authority. State agency providing funds for wastewater reclamation projects.

Crisis:
1. **a:** The turning point for better or worse **b:** a paroxysmal attack of pain, distress, or disordered function **c:** an emotionally significant event or radical change of status in a person's life <a midlife *crisis*>
2. The decisive moment (as in a literary plot)
3. **a:** An unstable or crucial time or state of affairs in which a decisive change is impending; *especially* **:** one with the distinct possibility of a highly undesirable outcome <a financial *crisis*> **b:** a situation that has reached a critical phase

CTP Coastal Treatment Plant

CWPCA California Water Pollution Control Association. A 7000 member non-profit educational organization dedicated to water pollution control.

Dam: A barrier built across a river or stream to hold water.

Decompose: To separate into simpler compounds, substances or elements.

Deep percolation: The percolation of surface water through the ground beyond the lower limit of the root zone of plants into a groundwater aquifer.

Degraded water: Water within the groundwater basin that, in one characteristic or another, does not meet primary drinking water standards.

Delta: Where the rivers empty; an outlet from land to ocean, also where the rivers deposit sediment they carry forming landforms.

Delta Vision: Delta Vision is intended to identify a strategy for managing the Sacramento-San Joaquin Delta as a sustainable ecosystem that would continue to support environmental and economic functions that are critical to the people of California.

Demineralize: To reduce the concentrations of minerals from water by ion exchange, distillation, electro-dialysis, or reverse osmosis.

De-nitrification: The physical process of removing nitrate from water through reverse osmosis, microfiltration, or other means.

Desalting (or desalination): Removing salts from salt water by evaporation or distillation. Specific treatment processes, such as reverse osmosis or multi-stage flash distillation, to demineralize seawater or brackish (saline) waters for reuse. Also sometimes used in wastewater treatment to remove salts other pollutants.

Desilting: The physical process of removing suspended particles from water.

Dilute: To lessen the amount of a substance in water by adding more water.

Disinfection: Water treatment which destroys potentially harmful bacteria.

Drainage basin: The area of land from which water drains into a river, for example, the Sacramento River Basin, in which all land area drains into the Sacramento River. Also called catchment area, watershed, or river basin.

Drought: A prolonged period of below-average precipitation.

DPHS: California Department of Public Health Services. Regulates public water systems; oversees water recycling projects; permits water treatment devices; certifies drinking water treatment and distribution operators; supports and promotes water system security; provides support for small water systems and for improving technical, managerial, and financial (TMF) capacity; provides funding opportunities for water system improvements.

DVL: Diamond Valley Lake. Metropolitan's major reservoir near Hemet, in southwestern Riverside County.

DWR: California Department of Water Resources. Guides development/management of California's water resources; owns/operates State Water Project and other water facilities.

Endangered Species: A species of animal or plant threatened with extinction.

Endangered Species Act of 1973 (ESA): The most wide-ranging of the dozens of United States environmental laws passed in the 1970s. As stated in section 2 of the act, it was designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untendered by adequate concern and conservation.

Ecosystem: Where living and non-living things interact (coexist) in order to survive.

Effluent: Wastewater or other liquid, partially or completely treated or in its natural state, flowing from a treatment plant.

Evaporation: The process that changes water (liquid) into water vapor (gas).

Estuary: Where fresh water meets salt water.

Evapotransporation: The quantity of water transpired (given off), retained in plant tissues, and evaporated from plant tissues and surrounding soil surface. Quantitatively, it is expressed in terms of depth of water per unit area during a specified period of time.

FCH Federal Clearing House – Environmental Review/Processing

FEMA Federal Emergency Management Agency

Filtration: The process of allowing water to pass through layers of a porous material such as sand, gravel or charcoal to trap solid particles. Filtration occurs in nature when rain water soaks into the ground and it passes through hundreds of feet of sand and gravel. This same natural process of filtration is duplicated in water and wastewater treatment plants, generally using sand and coal as the filter media.

Flocculation: A chemical process involving addition of a coagulant to assist in the removal of turbidity in water.

Forebay: A reservoir or pond situated at the intake of a pumping plant or power plant to stabilize water level; also, a portion of a groundwater basin where large quantities of surface water can recharge the basin through infiltration.

Gray water reuse: Reuse, generally without treatment, of domestic type wastewater for toilet flushing, garden irrigation and other non-potable uses. Excludes water from toilets, kitchen sinks, dishwashers, or water used for washing diapers.

Green Acres Project (GAP): A 7.5 million gallons per day (MGD) water reclamation project that serves tertiary treated recycled water to irrigation and industrial users in Costa Mesa, Fountain Valley, Huntington Beach, Newport Beach, and Santa Ana.

God Squad: A seven-member committee that is officially called the "Endangered Species Committee". Members consist of Secretary of the Interior, the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Council of Economic Advisers, the Administrator of the National Oceanic and Atmospheric Administration and one individual from the affected state. The squad was established in 1978 by an amendment to the 1973 Endangered Species Act (ESA). It has only been called into action three times to deal with proposed federal agency actions that have been determined to cause "jeopardy" to any listed species. Such actions may receive an exemption from the ESA if five members of the committee determine that the action is of regional or national significance, that the benefits of the action clearly outweigh the benefits of conserving the species and that there are no reasonable and prudent alternatives to the action.

Groundwater: Water that has percolated into natural, underground aquifers; water in the ground, not water puddled on the ground.

Groundwater basin: A groundwater reservoir defined by the overlying land surface and the underlying aquifers that contain water stored in the reservoir. Boundaries of success-ively deeper aquifers may differ and make it difficult to define the limits of the basin.

Groundwater mining: The withdrawal of water from an aquifer in excess of recharge over a period of time. If continued, the underground supply would eventually be exhausted or the water table could drop below economically feasible pumping lifts.

Groundwater overdraft: The condition of a groundwater basin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin over a period of years during which water supply conditions approximate average.

Groundwater recharge: The action of increasing groundwater storage by natural conditions or by human activity. See also: Artificial recharge.

Ground Water Replenishment System (GWRS): A joint project of the Orange County Water District and the Orange County Sanitation District that will provide up to 100,000 acre-feet of reclaimed water annually. The high-quality water will be used to expand an existing underground seawater intrusion barrier and to replenish the groundwater basin underlying north and central Orange County.

Groundwater table: The upper surface of the zone of saturation (all pores of subsoil filled with water), except where the surface if formed by an impermeable body.

GPM: Gallons per minute.

Ground Water Replenishment System (GWRS): Orange County Water District's state-of-the-art, highly advanced, waste-water treatment facility.

Hydrologic balance: An accounting of all water inflow to, water outflow from, and changes in water storage within a hydrologic unit over a specified period.

Hydrologic cycle: The process of water constantly circulating from the ocean, to the atmosphere, to the earth in a form of precipitation, and finally returning to the ocean.

Imported water: Water that has originated from one hydrologic region and is transferred to another hydrologic region.

Inflatable rubber dams: Designed to replace temporary sand levees that wash out during heavy storm flow, the dams hold back high-volume river flows and divert the water into the off-river system for percolation.

Influent: Water or wastewater entering a treatment plant, or a particular stage of the treatment process.

Irrigation: Applying water to crops, lawns or other plants using pumps, pipes, hoses, sprinklers, etc.

JPIA Joint Powers Insurance Authority. A group of water agencies providing self-insurance to members of the ACWA.

LAIF Local Agency Investment Fund. Statewide pool of surplus public agency money managed by State Treasurer.

Leach: To remove components from the soil by the action of water trickling through.

MAF: Million acre feet.

MCL: Maximum contaminant level set by EPA for a regulated substance in drinking water. According to health agencies, the maximum amount of a substance that can be present in water that's safe to drink and which looks, tastes and smells good.

MET: Metropolitan Water District of Southern California.

MGD: Million gallons per day.

Microfiltration: A physical separation process where tiny, hollow filaments members separate particles from water.

Microorganism: An animal or plant of microscopic size.

MWD: Metropolitan Water District of Southern California.

MWDOC: Municipal Water District of Orange County. Intermediate wholesaler between MWD and 27 member agencies including ETWD.

Non-point source pollution: Pollution that is so general or covers such a wide area that no single, localized source of the pollution can be identified.

NPDES National Pollution Discharge Elimination System

OCBC: Orange County Business Council.

OCEMA Orange County Environmental Management Agency

OCWD: Orange County Water District.

Opportunity:
1. A favorable juncture of circumstances.
2. A good chance for advancement or progress .

Organism: Any individual form of life, such as a plant, animal or bacterium.

PCM Professional Community Management, Inc. Property Management company providing services to Laguna Woods Village and other homeowner associations.

Perched groundwater: Groundwater supported by a zone of material of low permeability located above an underlying main body of groundwater with which it is not hydrostatically connected.

Percolation: The downward movement of water through the soil or alluvium to the groundwater table.

Permeability: The capability of soil or other geologic formations to transmit water.

Point source: A specific site from which waste or polluted water is discharged into a water body, the source of which is identified. See also: non-point source.

Potable water: Suitable and safe for drinking.

PPB: Parts per billion.

Precipitation: Water from the atmosphere that falls to the ground as a liquid (rain) or a solid (snow, sleet, hail).

Primary treated water: First major treatment in a wastewater treatment facility, usually sedimentation but not biological oxidation.

Primary treatment: Removing solids and floating matter from wastewater using screening, skimming and sedimentation (settling by gravity).

Prior appropriation doctrine: Allocates water rights to the first party who diverts water from its natural source and applies the water to beneficial use. If at some point the first appropriator fails to use the water beneficially, another person may appropriate the water and gain rights to the water. The central principle is beneficial use, not land ownership.

Pumping Plant: A facility that lifts water up and over hills.

Recharge: The physical process where water naturally percolates or sinks into a groundwater basin.

Recharge basin: A surface facility, often a large pond, used to increase the infiltration of surface water into a groundwater basin.

Reclaimed wastewater: Wastewater that becomes suitable for a specific beneficial use as a result of treatment. See also: wastewater reclamation.

Reclamation project: A project where water is obtained from a sanitary district or system and which undergoes additional treatment for a variety of uses, including landscape irrigation, industrial uses, and groundwater recharge.

Recycling: A type of reuse, usually involving running a supply of water through a closed system again and again. Legislation in 1991 legally equates the term "recycled water" to reclaimed water.

Reservoir: A place where water is stored until it is needed. A reservoir can be an open lake or an enclosed storage tank.

Reverse osmosis: (RO) A method of removing salts or other ions from water by forcing water through a semi-permeable membrane.

RFP Request for Proposal

Riparian: Of or on the banks of a stream, river, or other body of water.

RO: Reverse osmosis. See the listing under "reverse osmosis."

R-O-W Right-of-way

Runoff: Liquid water that travels over the surface of the Earth, moving downward due to gravity. Runoff is one way in which water that falls as precipitation returns to the ocean.

RWQCB Regional Water Quality Control Board. State agency regulating discharge and use of recycled water.

Safe Drinking Water Act (SDWA): The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.) SDWA authorizes the United States Environmental Protection Agency (US EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems work together to make sure that these standards are met.

Safe yield: The maximum quantity of water that can be withdrawn from a groundwater basin over a long period of time without developing a condition of overdraft, sometimes referred to as sustained yield.

SAFRA Santa Ana River Flood Protection Agency

Salinity: Generally, the concentration of mineral salts dissolved in water. Salinity may be measured by weight (total dissolved solids - TDS), electrical conductivity, or osmotic pressure. Where seawater is known to be the major source of salt, salinity is often used to refer to the concentration of chlorides in the water.

SAWPA: Santa Ana Watershed Project Authority.

SCADA Supervisory Control and Data Acquisition

SCAP Southern California Alliance of Publicly. Newly formed group of public agencies seeking reasonable regulation of sewer industry.

SCH State Clearing House – Environmental Review/Processing

Seasonal storage: A three-part program offered by Metropolitan Water District of Southern California:

> **STSS (Short Term Seasonal Storage)** financially encourages agencies with local groundwater production capabilities to produce a higher percentage of their demand in the summer from their local groundwater supplies, thus shifting a portion of their demand on the MWD system from the summer to winter;
>
> **LTSS (Long Term Seasonal Storage)** financially encourages retail agencies to take and store additional amounts of MWD water above their normal annual demands for later use; Replenishment Water provides less expensive interruptible water that is generally available and used to increase the operating yield of groundwater basins.

Seawater intrusion: The movement of salt water into a body of fresh water. It can occur in either surface water or groundwater basins.

Seawater barrier: A physical facility or method of operation designed to prevent the intrusion of salt water into a body of freshwater.

Secondary treatment: The biological portion of wastewater treatment which uses the activated sludge process to further clean wastewater after primary treatment. Generally, a level of treatment that produces 85 percent removal efficiencies for biological oxygen demand and suspended solids. Usually carried out through the use of trickling filters or by the activated sludge process.

Sedimentation: The settling of solids in a body of water using gravity.

Settle: To clarify water by causing impurities/solid material to sink to a container's bottom.

Sewer: The system of pipes that carries wastewater from homes and businesses to a treatment plant or reclamation plant. Sewers are separate from storm drains, which is a system of drains and pipes that carry rain water from urban streets back to the ocean. Overwatering your yard can also cause water to run into the streets and into storm drains. Storm drain water is not treated before it is discharged.

SigAlert: Any unplanned event that causes the closing of one lane of traffic for 30 minutes or more, as opposed to a planned event, like road construction, which is planned.

SJBA San Juan Basin Authority

Sludge: The solids that remain after wastewater treatment. This material is separated from the cleaned water, treated and composted into fertilizer. Also called biosolids.

SOCWA South Orange County Wastewater Authority. Regional Joint Powers Authority formed for collection and treatment of sewerage (previously known as AWMA/SERRA/SOCRA). SOCWA member agencies:

CSC – City of San Clemente

CSJC – City of San Juan Capistrano

CLB – City of Laguna Beach

ETWD – El Toro Water District

EBSD – Emerald Bay Service District

IRWD – Irvine Ranch Water District

MNWD – Moulton Niguel Water District

SCWD – South Coast Water District

SMWD – Santa Margarita Water District

TCWD – Trabuco Canyon Water District

SRF State Revolving Fund

Storm Drain: The system of pipes that carries rain water from urban streets back to the ocean. Overwatering your yard can also cause water to run into the streets and into storm drains. Storm drain

water is not treated before it is discharged. Storm drains are separate from sewers, which is a separate system of pipes to carry wastewater from homes and businesses to a treatment plant or reclamation plant for cleaning.

Storm flow: Surface flow originating from precipitation and run-off which has not percolated to an underground basin.

SWP: State Water Project. An aqueduct system that delivers water from northern California to central and southern California.

SWRCB State Water Resources Control Board

TDS: Total dissolved solids. A quantitative measure of the residual minerals dissolved in water that remain after evaporation of a solution. Usually expressed in milligrams per liter.

Tertiary treatment: The treatment of wastewater beyond the secondary or biological stage. Normally implies the removal of nutrients, such as phosphorous and nitrogen, and a high percentage of suspended solids.

THM: Trihalomethanes. Any of several synthetic organic compounds formed when chlorine or bromine combine with organic materials in water.

TMA: Too many acronyms.

TMDL: Total maximum daily load; A quantitative assessment of water quality problems, contributing sources, and load reductions or control actions needed to restore and protect bodies of water.

Transpiration: The process in which plant tissues give off water vapor to the atmosphere as an essential physiological process.

Turbidity: Thick or opaque with matter in suspension; muddy water.

Ultraviolet light disinfection: A disinfection method for water that has received either secondary or tertiary treatment used as an alternative to chlorination.

VE Value Engineering

VOC: Volatile organic compound; a chemical compound that evaporates readily at room temperature and contains carbon.

Wastewater: Water that has been previously used by a municipality, industry or agriculture and has suffered a loss of quality as a result.

Water Cycle: The continuous process of surface water (puddles, lakes, oceans) evaporating from the sun's heat to become water vapor (gas) in the atmosphere. Water condenses into clouds and then falls back to earth as rain or snow (precipitation). Some precipitation soaks into the ground (percolation) to replenish groundwater supplies in underground aquifers.

Water rights: A legally protected right to take possession of water occurring in a natural waterway and to divert that water for beneficial use.

Water-use Efficiency: The water requirements of a particular device, fixture, appliance, process, piece of equipment, or activity.

Water year (USGS): The period between October 1st of one calendar year to September 30th of the following calendar year.

Watermaster: A court appointed person(s) that has specific responsibilities to carry out court decisions pertaining to a river system or watershed.

Water Reclamation: The treatment of wastewater to make it suitable for a beneficial reuse, such as landscape irrigation. Also called water recycling.

Watershed: The total land area that from which water drains or flows to a river, stream, lake or other body of water.

Water table: The top level of water stored underground.

WEF Water Environment Federation. Formerly – Water Pollution Control Federation (WPCF). International trade group advising members of sewage treatment techniques and their effect on the environment.

Weir box: A device to measure/control surface water flows in streams or between ponds.

Wellhead treatment: Water quality treatment of water being produced at the well site.

Wetland: Any area in which the water table stands near, at, or above the land surface for a portion of the year. Wetlands are characterized by plants adapted to wet soil conditions.

Xeriscape: Landscaping that requires minimal water.