

HYBRID MEETING NOTICE

Joint Coordinating Committee

For The Truckee Meadows Water Reclamation Facility

DATE: August 2, 2023
TIME: 10:00 a.m.
PLACE: Truckee Meadows Water Reclamation Facility – Training Center
8500 Clean Water Way, Reno NV 89502

Public Notice: This Agenda is posted at Reno City Hall, Sparks City Hall, and the Washoe County Administration Complex. Further, in compliance with NRS 241.020, this notice has been posted to the official website for the City of Reno at www.reno.gov, the City of Sparks at <https://cityofsparks.us/>, and a link to this agenda has been posted to the State of Nevada website at <https://notice.nv.gov>. To obtain further documentation regarding posting, please contact Leslie Griffin at Reno City Hall, 1 East 1st Street, 7th Floor, Reno, NV 89501, or at griffinl@reno.gov.

Members of the Committee may participate in this meeting using the zoom video conference platform.

Members of the public may participate in the meeting by registering through the below zoom link which will provide the meeting ID number and call-in phone number.

Virtual link: https://us06web.zoom.us/meeting/register/tZMkc-ChpzgoH9C8913O_qZvK-dIYwFr_EE7
In Person: Truckee Meadows Water Reclamation Facility – Training Center
8500 Clean Water Way, Reno NV 89502

Supporting Material: The designated contact to request support materials is Leslie Griffin, 1 East First Street, 7th Floor, 775-657-4595. Support materials are also available at the scheduled meeting.

Order of Business: Section titles on this agenda are for convenience and reference purposes and are not intended to define, govern, limit, modify or in any manner affect the titles of the items listed for consideration by the Committee. A time listed next to a specific agenda item indicates that the specific item will not be heard before that time – it does not indicate the time schedule of any other item. Items on the agenda may be removed, postponed, taken out of order and the Committee may combine two or more agenda items for consideration.

Accommodations: Committee and staff will make reasonable efforts to assist and accommodate persons with physical disabilities desiring to attend the meeting. If you require special arrangements for this meeting, please call 334-4230 prior to the date of the meeting.

Public Comment:

In-Person

A person wishing to address the public body shall submit a “Request to Speak” form to the presiding officer. Public comment, whether on items listed on the agenda or general public comment, is limited to three (3) minutes per person. Unused time may not be reserved by the speaker, nor allocated to another speaker. No action may be taken on a matter raised under general public comment until the matter is included on an agenda as an item on which action may be taken.

Virtual

No action may be taken on a matter raised under general public comment until the matter is included on a subsequent agenda as an action item.

Pursuant to NRS 241.023, those wishing to submit public comment may do so by sending an email to chewh@reno.gov, by leaving a voicemail at 775-531-7222 or at the meeting during virtual public comment. Public comment is limited to three (3) minutes per person. Voicemail Comments received prior to 4:00 p.m. on the day preceding the meeting will be transcribed, provided to the Committee for review, and entered into the record. Comments received after 4:00 pm on the day preceding the meeting will be provided to the Committee for review prior to adjournment, and entered into the record. Email comments will be provided to the Committee for review prior to adjournment, and entered into the record.

AGENDA

1. Call Meeting to Order.
2. Roll Call.
3. PUBLIC COMMENT – This item is for either public comment on any action item or for general public comment and is limited to no more than **three (3) minutes** for each commentator.
4. Approval of Agenda – August 2, 2023. (For Possible Action)
5. Approval of Minutes for May 31 2023 JCC Meeting (For Possible Action)
6. Nomination and election of Chairman for the Fiscal Year 24/25. (For Possible Action)
7. Informational Management Reports from TMWRF Management Team:
 - a. Safety Update – Safety Coordinator
 - b. Staffing Update – Plant Manager
 - c. FY 23 Unaudited End of Year Budget as of June 30, 2023 – Plant Manager
 - d. The Influent flow split - Plant Manager
 - e. Inspection Update – Plant Manager
 - f. Ongoing Operations activities including status of processes - Operations Manager
 - g. Lab Audit and Update – Lab Manager
 - h. Ongoing Maintenance activities - Maintenance Manager
8. Update and discussion regarding compliance with the allowable Total Nitrogen (TN), Total Phosphate (TP) and Total Dissolved Solids (TDS) discharges in accordance with the National Pollutant Discharge Elimination System permit issued by Nevada Division of Environmental Protection (NDEP) by the Plant Manager.
9. Update, discussion, and presentation on the TMWRF Capital Improvement Program (CIP) progress and pilot testing by the TMWRF CIP Program Manager.
10. Review and approval of the draft 1-Year Capital Improvement Program reallocation for Fiscal Year 2024 or direction thereon. (for Possible Action)
11. Identification of future agenda items.
12. Discussion and Direction regarding setting the next meeting date as November 1, 2023. (For Possible Action)
13. PUBLIC COMMENT – This is for general public comment limited to items that do not appear on the agenda and is limited to no more than **three (3) minutes** for each commentator. Pursuant to NRS 241.020, no action may be taken upon a matter raised under this item until the matter has been specifically included on an agenda.
14. Adjournment. (For Possible Action)

MINUTES

JOINT COORDINATING COMMITTEE (JCC) FOR THE TRUCKEE MEADOWS WATER RECLAMATION FACILITY (TMWRF) Wednesday, May 31, 2023

The Joint Coordinating Committee (JCC) special meeting was hybrid using Zoom and meeting in person at Truckee Meadows Water Reclamation Facility - Training Center at 8500 Clean Water Way, Reno NV and conducted the following business:

1. Call Meeting to Order

The meeting was called to order by Chair Michael Drinkwater at 10:03 a.m.

2. Roll Call - A quorum was present.

Committee Members Present

Donald Abbott	Council Member, City of Sparks
Jeff Cronk	Finance Director, City of Sparks
Michael Drinkwater	Community Services Director, City of Sparks
Justin Waters (proxy for John Flansberg)	Utility Services Assistant Director, City of Reno
Trina Magoon	Director of Utility Services, City of Reno
John Martini	Assistant City Manager, City of Sparks
Chris Melton (present at 10:05 a.m.)	General Manager, SVGID
Dwayne Smith (proxy for David Solaro)	Director of Engineering and Capital Projects, Washoe County
Vicki Van Buren	Finance Director, City of Reno

Members Absent

John Flansberg	Regional Infrastructure Administrator, City of Reno
Jenny Brekhuis	Council Member, City of Reno
David Solaro	Assistant County Manager, Washoe County

Staff Present

Susan Ball Rothe	Deputy City Attorney, City of Reno
Matt Smith	Senior Civil Engineer, City of Reno
Haley Chew	Associate Civil Engineer, City of Reno

3. Public Comment

None

4. Approval of Agenda - May 31, 2023 (For Possible Action)

IT WAS MOVED BY MEMBER MARTINI, SECONDED BY MEMBER ABBOTT, TO APPROVE THE AGENDA. THE MOTION CARRIED UNANIMOUSLY WITH EIGHT MEMBERS PRESENT.

5. Approval of Minutes for May 3, 2023 JCC Meeting (For Possible Action)

IT WAS MOVED BY MEMBER CRONK, SECONDED BY MEMBER MARTINI, TO APPROVE THE MINUTES. THE MOTION CARRIED UNANIMOUSLY WITH EIGHT MEMBERS PRESENT.

6. Discussion and potential approval of staff recommendation to proceed with the Construction Manager at Risk (CMAR) process for the New Dewatering Facility Project (For Possible Action)

(Member Melton present at 10:05 a.m.)

Matt Smith, Reno Senior Civil Engineer, gave the Dewatering Building CMAR Presentation at the last JCC meeting and stated that staff is looking for approval of the recommendation to proceed with the CMAR process.

IT WAS MOVED BY MEMBER MARTINI, SECONDED BY MEMBER ABBOTT, TO APPROVE THE STAFF RECOMMENDATION. THE MOTION CARRIED UNANIMOUSLY WITH NINE MEMBERS PRESENT.

7. Public Comment

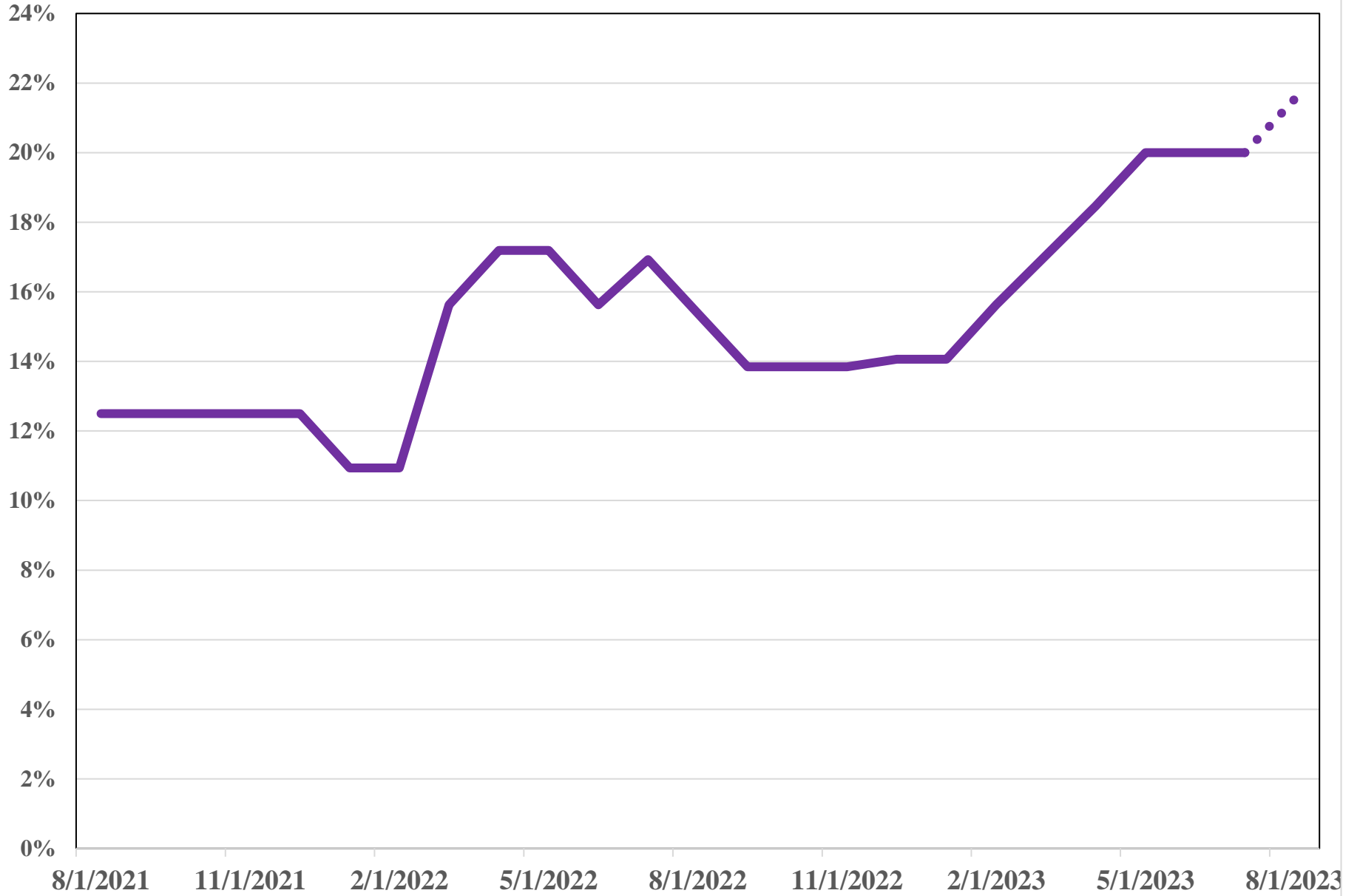
None

8. Adjournment (For Possible Action)

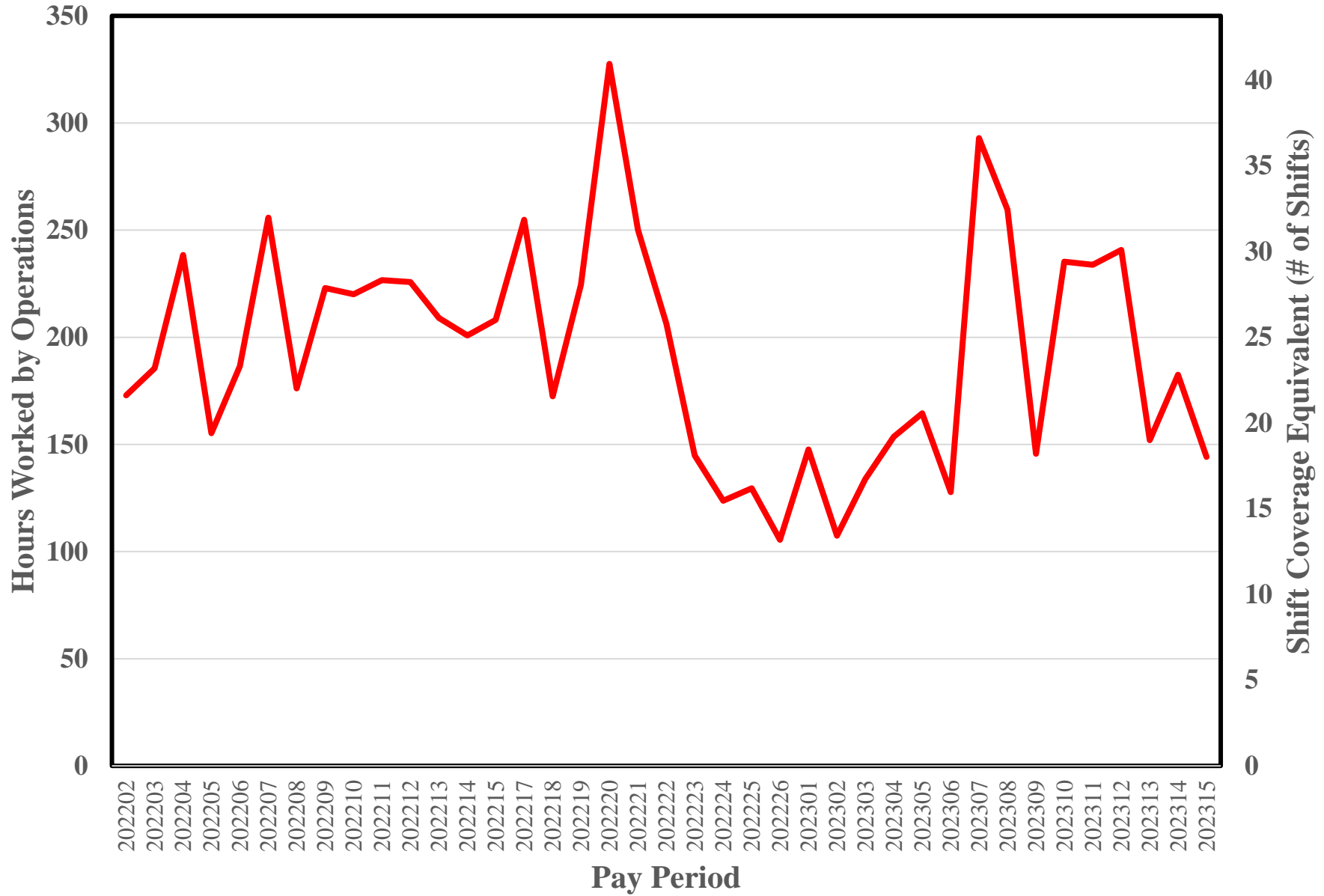
The meeting was adjourned at 10:08 a.m.

Respectfully submitted by,
Christine Birmingham, Recording Secretary

Item 7b - Staffing Update - TMWRF Vacancy Rate



Item 7b -Staffing Update - Overtime Worked Per Pay Period by Ops



TMWRF Operations Costs - FY23 Budget to Actual Unaudited

Item 7c

6/30/2023

	FY23 Working Budget	FY23 Actuals (thru 06/30/2023)	Remaining Budget	% Used
Salaries				
Base Salaries	4,842,729	4,260,279	582,450	88%
Longevity	95,200	105,199	(9,999)	111%
Overtime/Premium Pays*	722,100	661,653	60,447	92%
Leave Bank adjustments & cash outs	219,300	140,059	79,241	64%
Other Salaries	0	6,131	(6,131)	#DIV/0!
Total Salaries	5,879,329	5,173,321	706,008	88%
Benefits				
Retirement - PERS	1,499,796	1,346,851	152,945	90%
Health Insurance	1,192,444	920,183	272,261	77%
Cell Phone, D/C Match, Tuition, Uniform	102,207	110,150	(7,943)	108%
Non-contractual Benefits**	252,784	143,967	108,817	57%
Total Benefits	3,047,231	2,521,151	526,080	83%
Discretionary Services & Supplies				
Chemicals (Budget <i>excludes</i> \$300K Contingency)	6,634,932	6,412,544	222,388	97%
Maintenance and Repairs	2,653,201	850,176	1,803,025	32%
Operating Supplies	1,427,439	1,008,434	419,005	71%
Biosolds Hauling	1,649,995	1,725,356	(75,361)	105%
Professional Services (includes temp agency costs)	740,366	398,280	342,086	54%
Other Discretionary Services & Supplies	1,036,000	894,614	141,386	86%
Total Discretionary Services & Supplies	14,141,933	11,289,405	2,852,529	80%
Non-Discretionary Services & Supplies				
Electricity	2,175,000	2,537,950	(362,950)	117%
Common Service Charge	706,828	706,829	(1)	100%
General Insurance Premium	568,700	550,255	18,445	97%
Other Non-discretionary Services & Supplies	222,550	232,458	(9,908)	104%
Total Non-Discretionary Services & Supplies	3,673,078	4,027,492	(354,414)	110%
Capital Outlay (managed by TMWRF staff)				
Capital Outlay (Budget <i>excludes</i> \$1M Contingency)	1,828,185	456,105	1,372,080	25%
Total Capital Outlay	1,828,185	456,105	1,372,080	25%
Total	28,569,756	23,467,475	5,102,281	82%

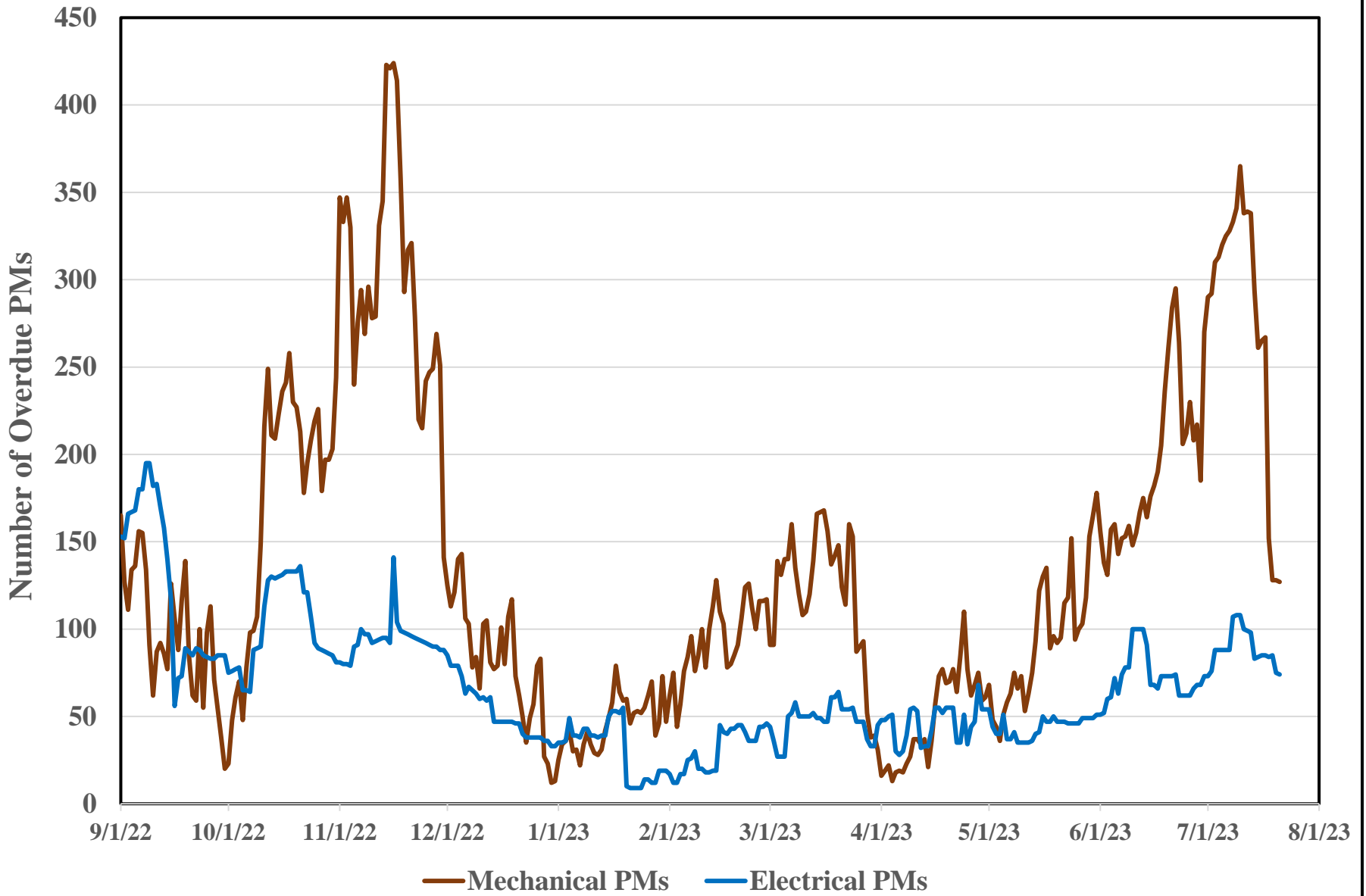
* Overtime/Premium Pays include Overtime Callback, Worked Holiday, Standby and Night Differential

** Non-contractual Benefits includes Medicare, Workers Comp, Unemployment and OPEB

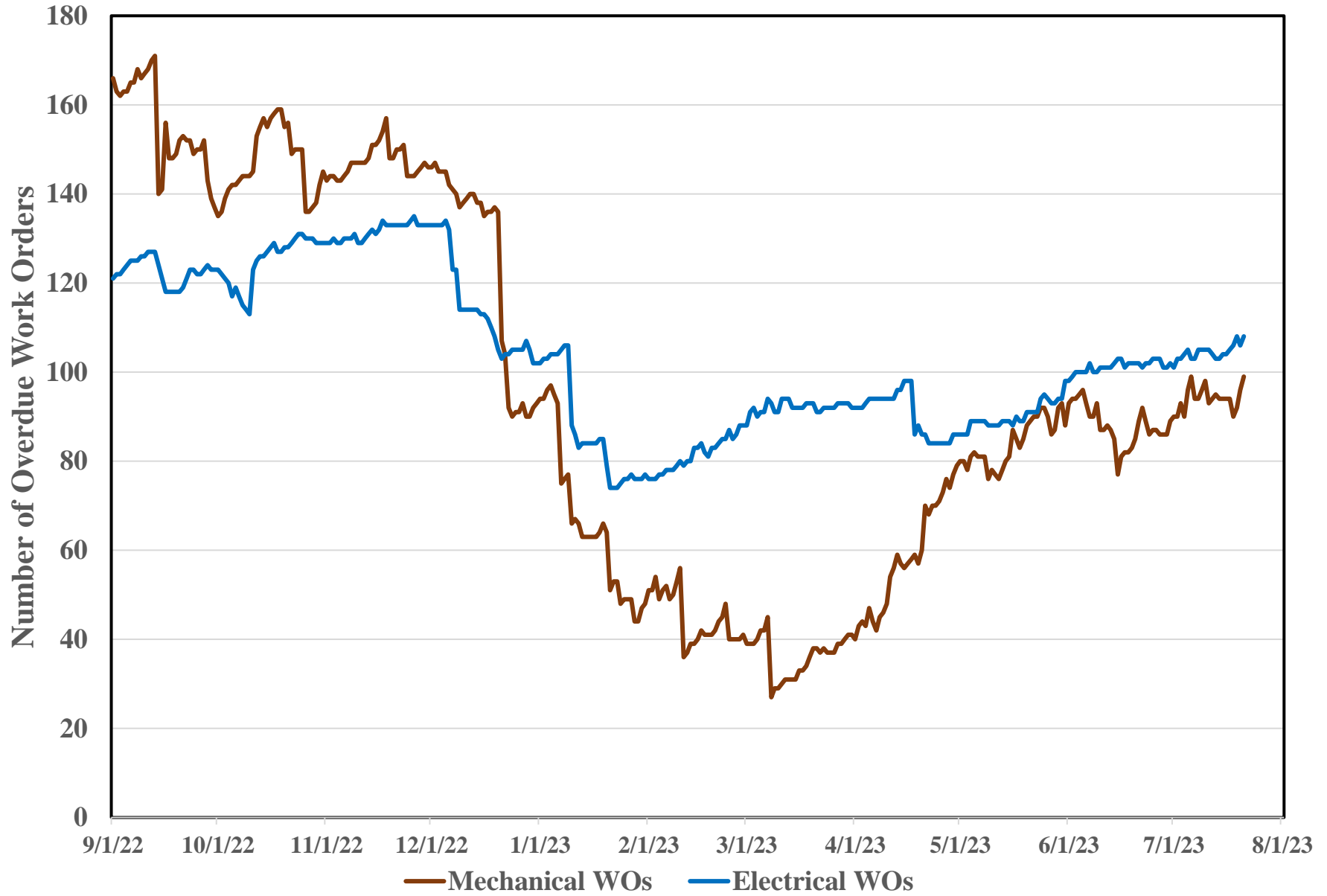
Item 7d - TMWRF Influent Flow Splits Q1 and Q2 2023

	January		February	
	Flow (MGD)	Percent	Flow (MGD)	Percent
Reno	20.3	61.5%	20.0	61.8%
Sparks	12.7	38.5%	12.3	38.2%
Total	33.1		32.3	
	March		April	
	Flow (MGD)	Percent	Flow (MGD)	Percent
Reno	22.0	64.2%	22.2	65.5%
Sparks	12.2	35.8%	11.7	34.5%
Total	34.2		33.9	
	May		June	
	Flow (MGD)	Percent	Flow (MGD)	Percent
Reno	23.0	64.5%	21.9	62.7%
Sparks	12.6	35.5%	13.0	37.3%
Total	35.6		34.8	

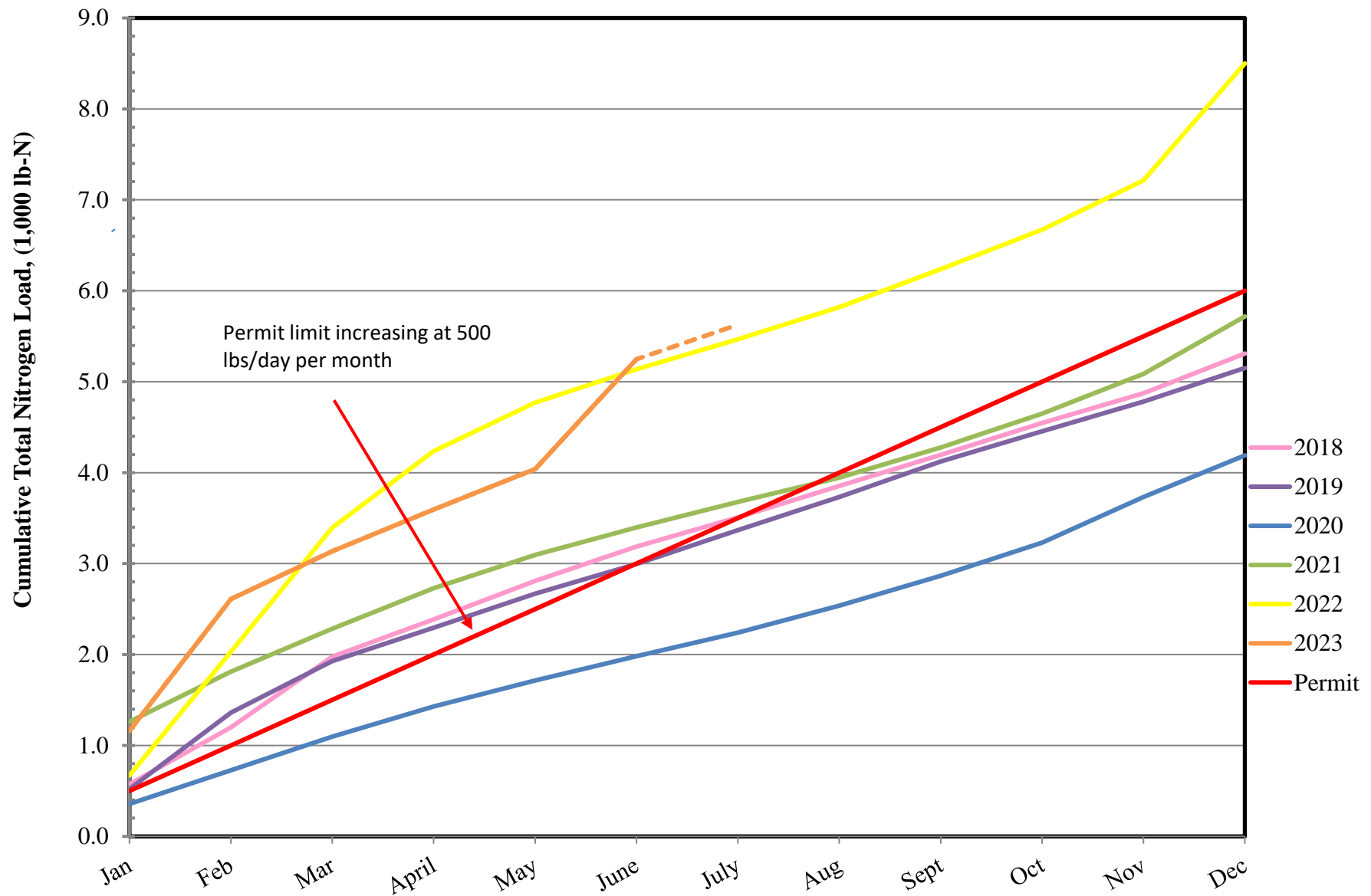
Item 7h - Past Due Maintenance PMs



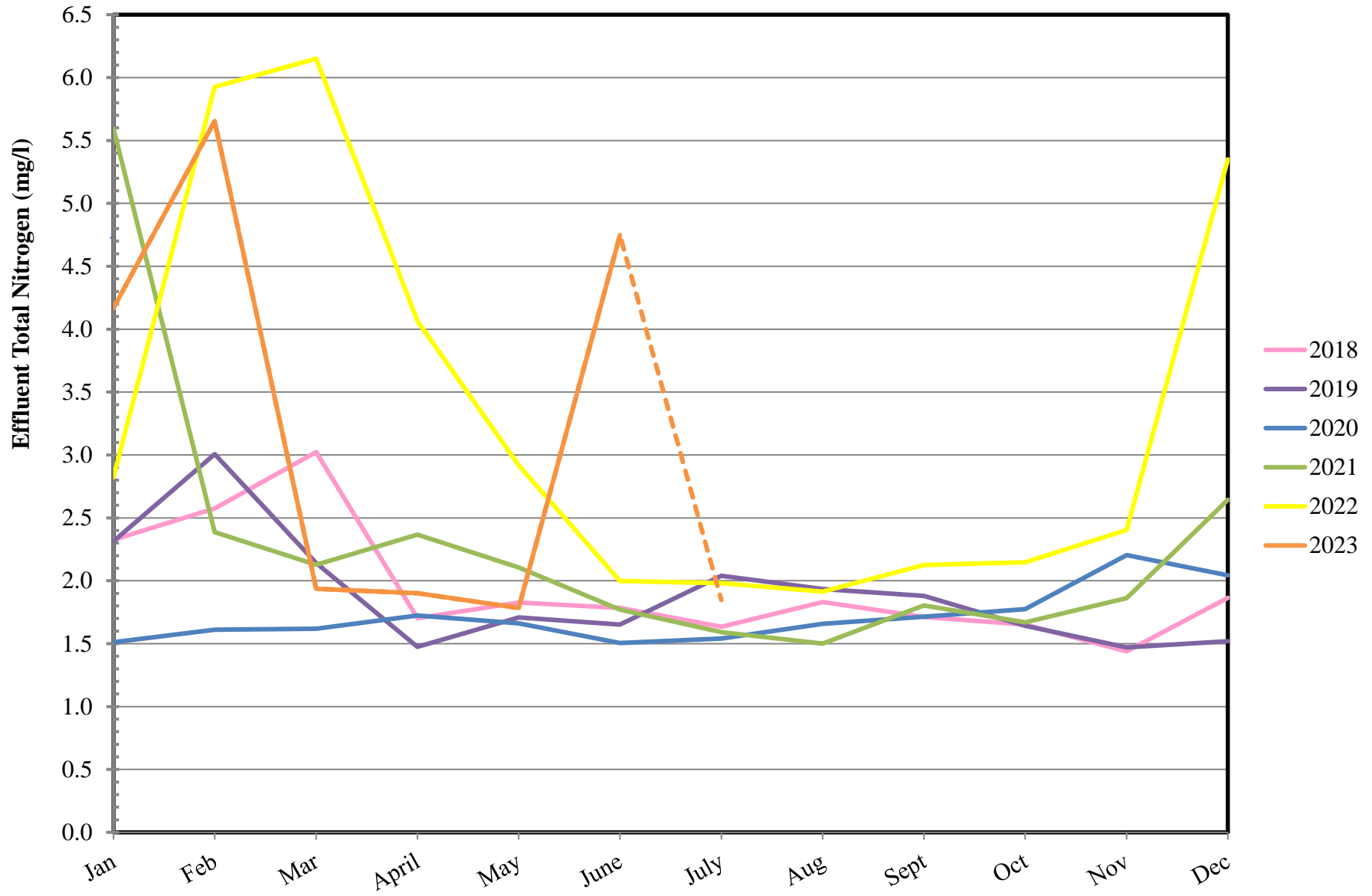
Item 7h - Past Due Maintenance Work Orders (WO)



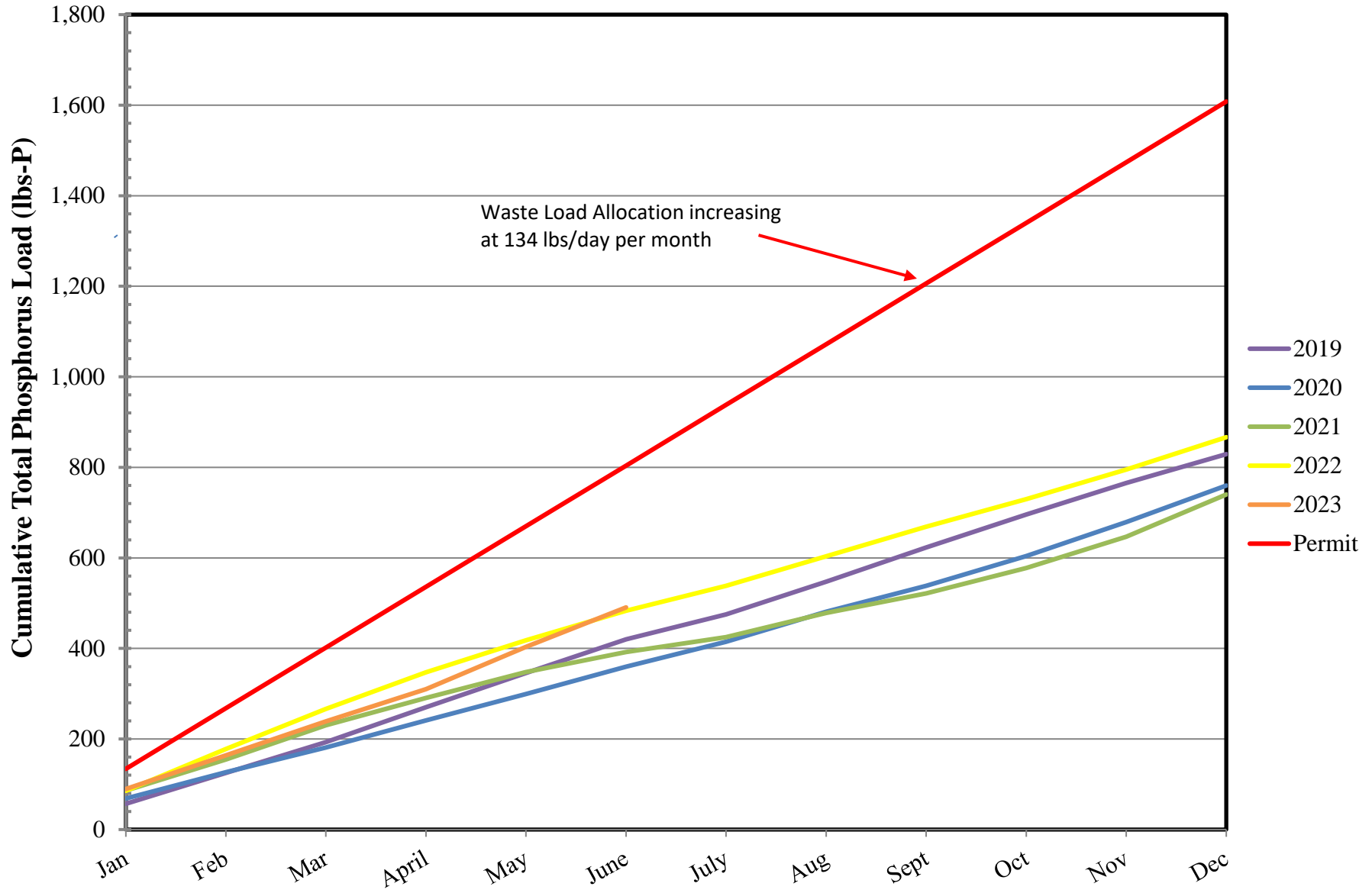
Item 8a - TMWRF Cumulative Total Nitrogen Discharge



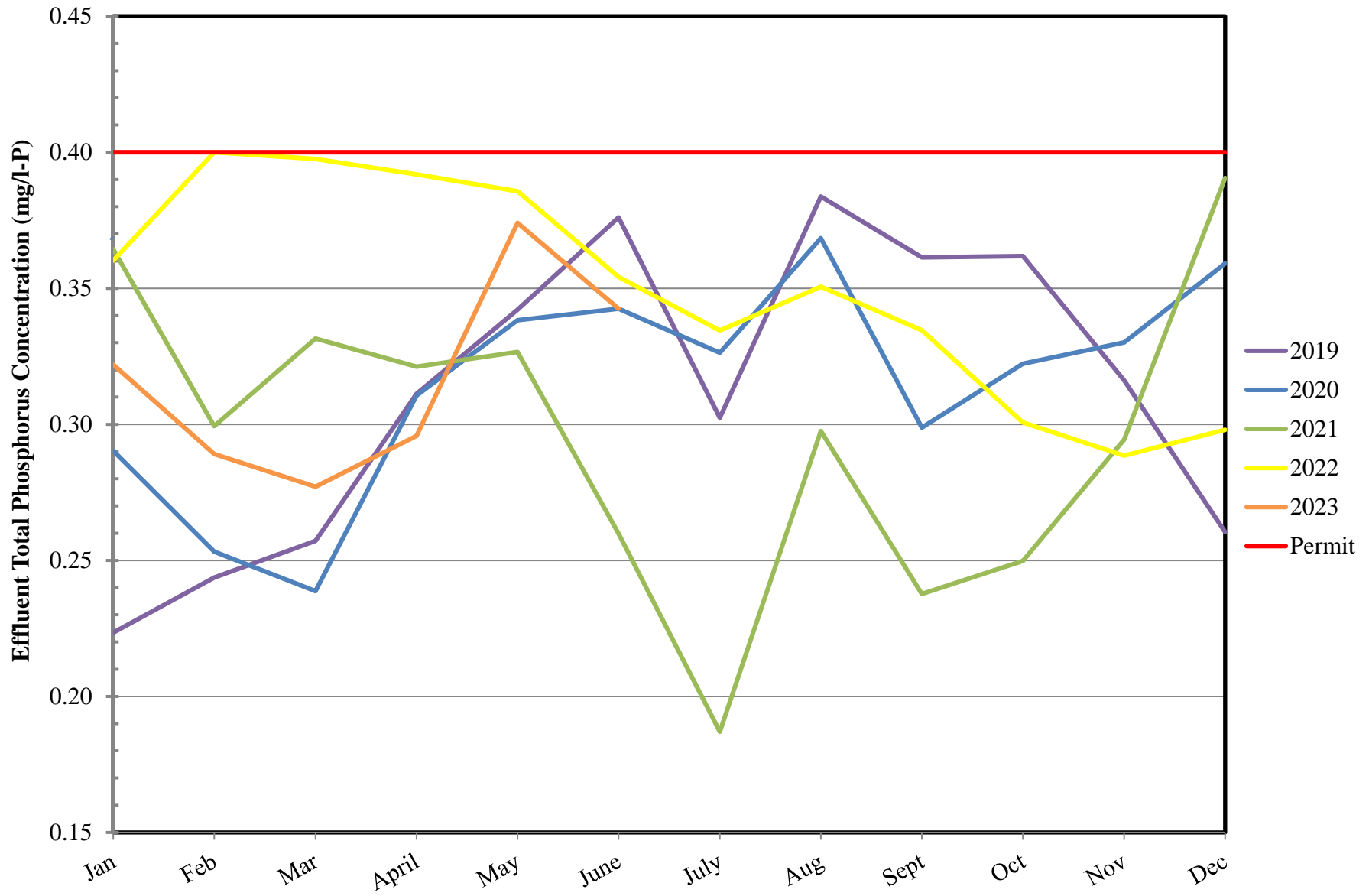
Item 8b - TMWRF Effluent Nitrogen Concentration by Month



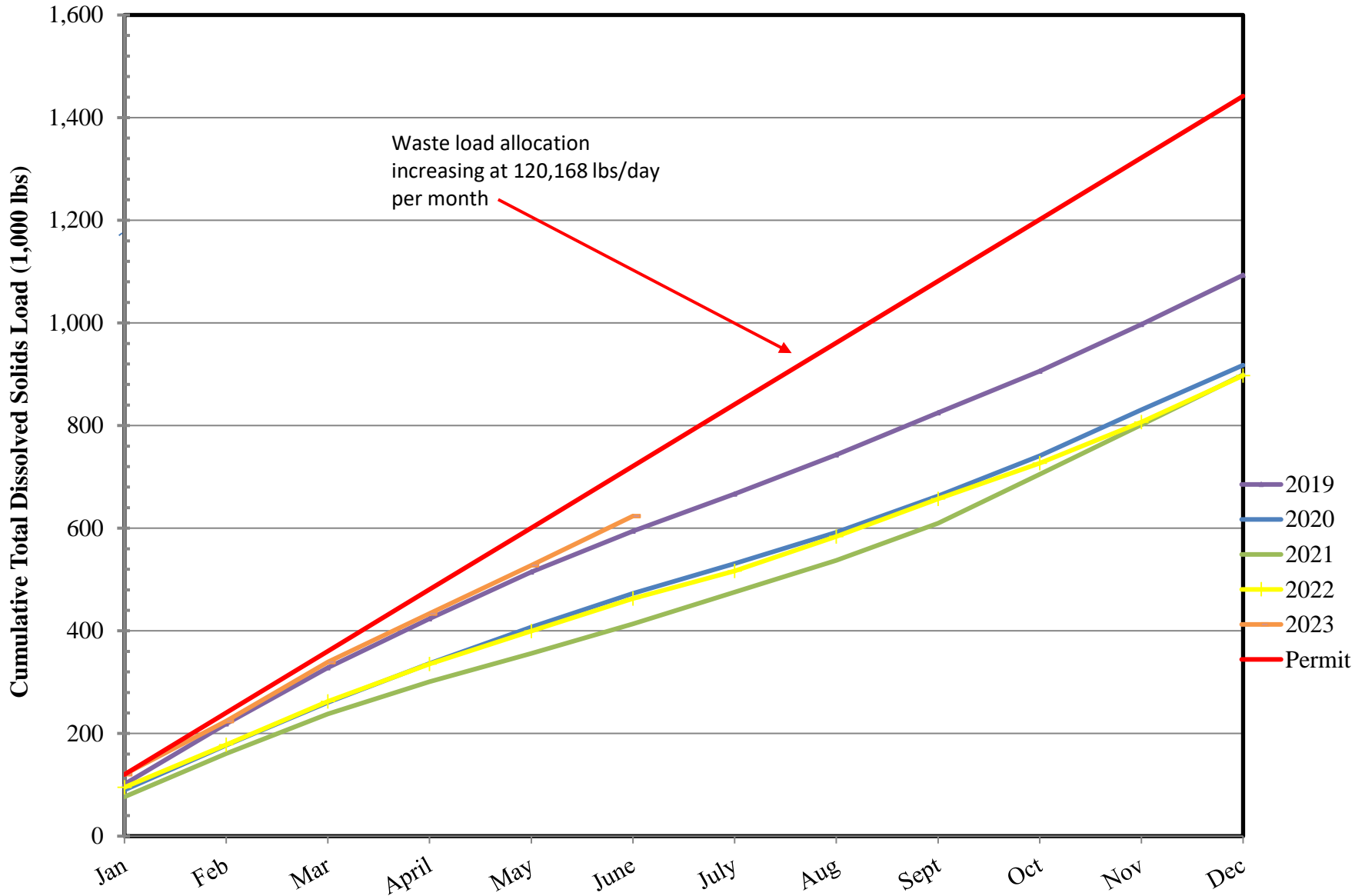
Item 8c - TMWRF Cumulative Total Phosphorus Discharge



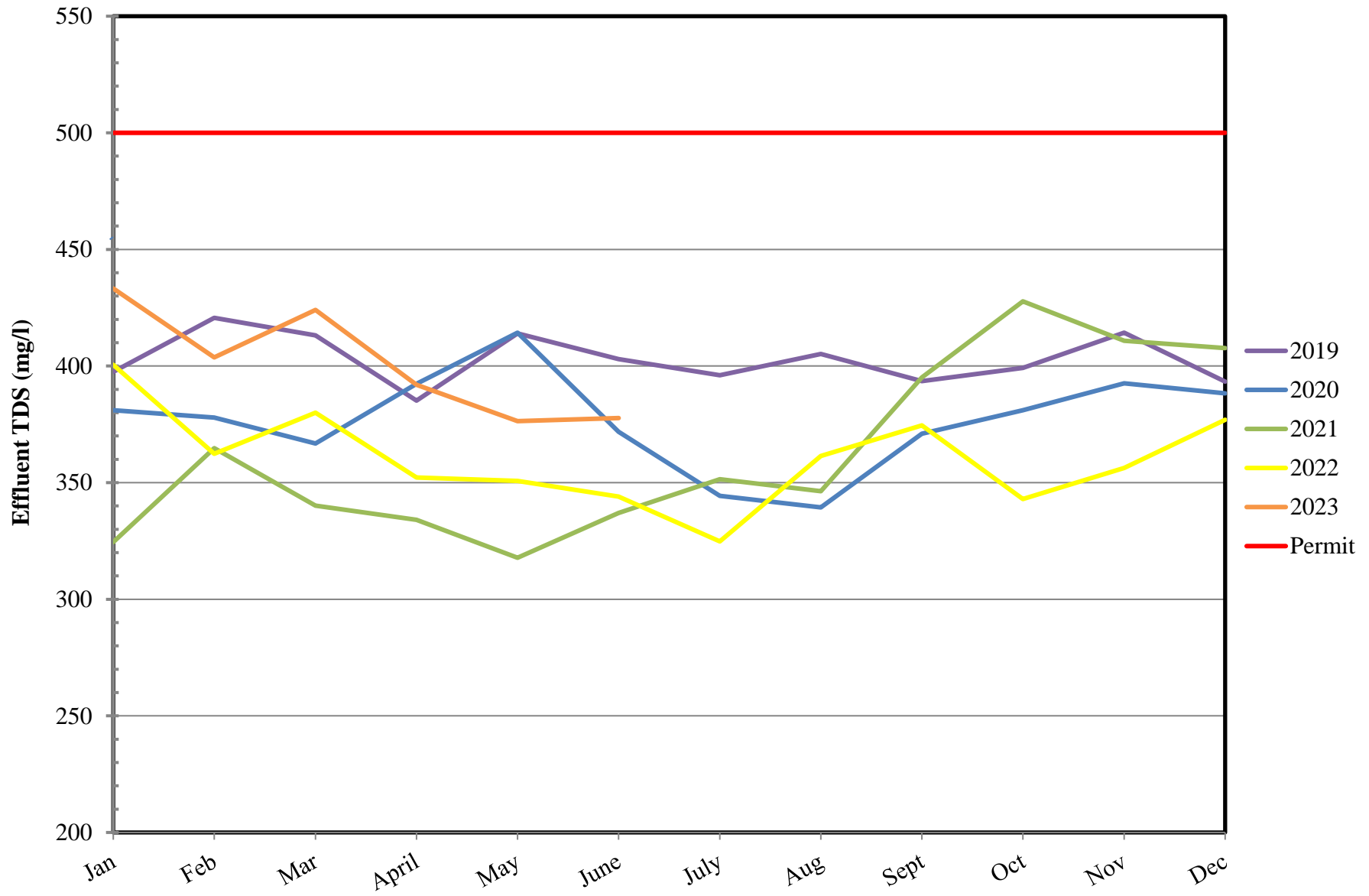
Item 8d - TMWRF Effluent Phosphorus Concentration by Month



Item 8e - TMWRF Cumulative Total Dissolved Solids Discharge



Item 8f - TMWRF Effluent Total Dissolved Solids Concentration



Agenda Item #9
August 2, 2023

TO: Joint Coordinating Committee (JCC)

FROM: Matt Smith, P.E., Senior Civil Engineer--City of Reno Utility Services
Department

DATE: August 2, 2023

RE: Update, discussion, and presentation on the TMWRF Capital
Improvement Program (CIP) progress and pilot testing by the TMWRF
CIP Program Manager

TMWRF Capital Improvement Program Update Summary:

The TMWRF Capital Improvement Program currently encompasses eighteen projects, including engineering evaluation/design, construction, and pilot studies. All but one of the approved projects are progressing on-time and within budget. One construction project was delayed due to material shortages and supply chain issues.

TMWRF Capital Improvement Program Project Updates:

Fourteen engineering projects and evaluations are underway:

- Heat Loop Improvements Project: This project is progressing on time and within budget. Carollo completed a Basis of Design Report for the recommended heat loop improvements, incorporating TMWRF staff comments. Thirty percent (30%) design drawings were also provided with the final report, and TMWRF staff are reviewing these. The next milestone is 60% design drawings, expected in September.
- Digester #4 Membrane Cover: The design phase of this project is progressing on time and within budget. The 60% design documents were submitted last month (July) and a review workshop is scheduled for next week.
- Gas Conditioning System Improvements Design: This project is progressing on-time and within budget. The 60% design documents were submitted and a design review workshop were held in June. Stantec staff are progressing the design to the 90% phase.

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- TWAS Near-Term Improvements Project: The design phase of this project is progressing on time and within budget, and should be closed out this month. TNT Industrial Contractors, Inc. was awarded the project June 26, 2023, and a pre-construction meeting was held earlier this week.
- Nitrification Tower #1 Rehabilitation Project: This project is delayed until more information is gathered regarding the nitrification tower process upsets. No additional update at this time.
- Aeration Tank 1A Improvements: This project is progressing on time and within budget. Carollo and TMWRF staff met for a project kick-off meeting in May, and 60% design documents are expected next month (September).
- Electrical Systems and Expansion Study: The evaluation and pre-design phase of this project is progressing on time and within budget. AECOM and TMWRF staff completed a review meeting in May and a final draft of the BODR is expected this month.
- Fluidized Bed Reactor (FBR) and Nitrification Pump Station Evaluation: This project is progressing on time and within budget. Brown & Caldwell is analyzing the existing FBR infrastructure for potential process deficiencies and expansion alternatives. Brown & Caldwell provided multiple design alternatives in a coordination meeting last month, and TMWRF staff is currently reviewing these alternatives.
- Dewatering Building Evaluation/Pre-Design: This project is progressing on time and within budget. Jacobs provided TMWRF staff with a technical memorandum documenting their recommendation to pursue a CMAR for the construction of this project and a draft Preliminary Design Report in June. A review meeting was held in early July, and a final draft is expected this month. This project will be progressing into the detailed design phase, and is expected to go to the City Councils at the end of this month.
- Disinfection and Filtration Evaluation and Pre-Design: This project is progressing on time and within budget. At the end of June, Carollo, City of Reno, and TMWRF staff collaborated at an onsite workshop to determine the appropriate design approach for the UV disinfection improvements component of this project. Technical memorandums and review meetings for the UV disinfection design are anticipated to occur this month.
- Sewer Manhole (SSMH) 'E' Remediation Project: This project is progressing on time and within budget. Construction is anticipated to begin in the next couple of months.

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- Plantwide Sewer Manhole and Drain Facility Assessment Project: This project is progressing on time and within budget. Atkins has completed their initial inspection of the manholes and catch basins onsite and are compiling a list of target areas to investigate further. A draft report is anticipated in the next couple of months.
- Sodium Bisulfite Storage Tank Improvements: This project is progressing on time and within budget. Brown & Caldwell has completed the 90% design documents, and TMWRF staff are currently reviewing for comment. A design review meeting is anticipated to occur this month.
- Primary Sludge Screening & APD Valve/Piping Improvements: This project is progressing on time and within budget. Keller and TMWRF staff had a kick-off meeting and site visit last month. The first deliverable is anticipated in September.

Three CIP construction projects are underway:

- Secondary Clarifier 2A Rehabilitation Project: This project is progressing within budget and on schedule. A pre-construction meeting was held in XXX.
- MCC 16 and 17 Replacement Project: This project is progressing within budget. Despite the initial delay in procuring equipment, the contractor has completed a majority of the work for this project. The remaining items are scheduled to be completed this month along with project closeout.
- Effluent Reuse Pump Station Project: This project was awarded last year with completion to occur in August of 2023. Treated effluent pumping began in March 2023. The project is progressing on-time and within budget.

One CIP pilot project is underway:

- Mobile Organic Biofilm (MOB) Pilot Study: Nuvoda, Jacobs, and the University of Nevada, Reno (UNR) are all under contract for this project. A kick-off meeting is anticipated later this month.

TMWRF Capital Improvement Program Completed Projects Update:

No construction projects have been completed since the last JCC meeting.

No engineering projects have been completed since the last JCC meeting.

No piloting projects have been completed since the last JCC meeting.

Status of Capital Project Funding:

Total authorized funding for open projects:	\$20,435,061
Authorized funding encumbered (as of July 27, 2023)	\$18,325,325
% Total authorized funding encumbered:	90%
Encumbered funding expended (as of July 27, 2023):	\$9,340,424
% Total encumbered funding expended:	51%

Total authorized funding encumbered includes projects that were approved in previous fiscal years that are still open.

Discussion:

Staff is presenting this report to the Committee for information and discussion.

Truckee Meadows Water Reclamation Facility (TMWRF)

Pilot Projects Update

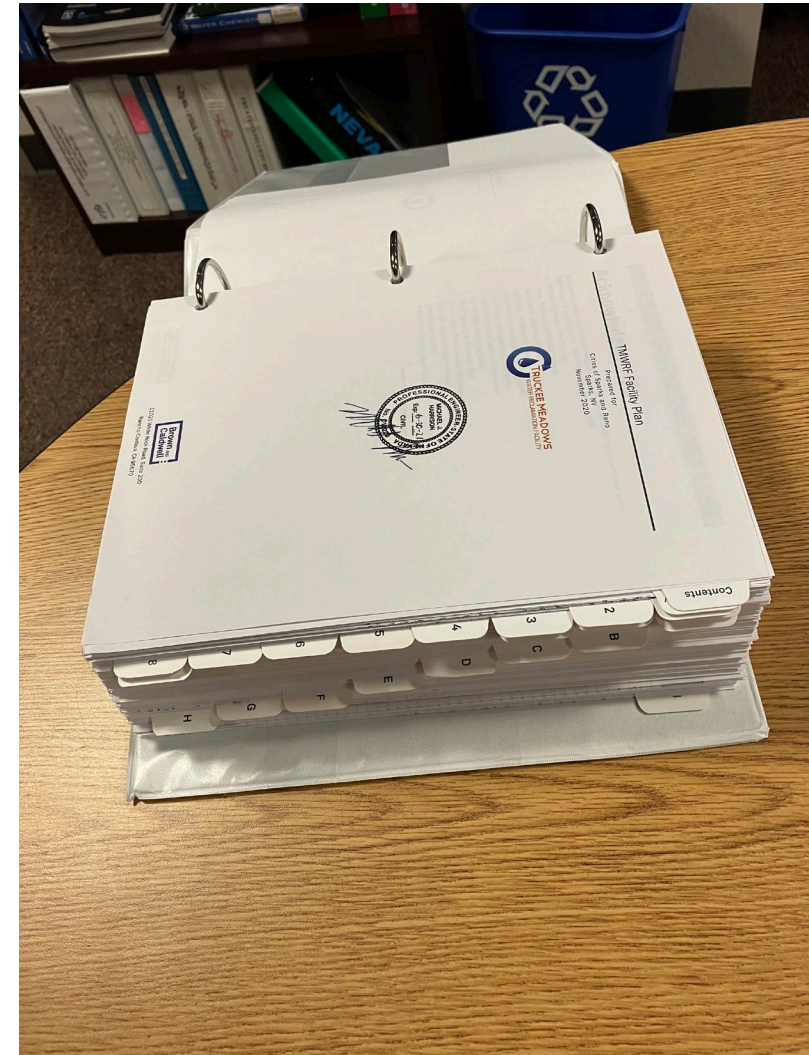
Joint Coordinating Committee Meeting

August 2, 2023



Pilots Completed Since Facility Plan

- AquaNereda Activated Sludge Pilot Test
- CleanB Sludge Conditioning Pilot Test
- Centrifuge Pilot Testing - Separate Sludges
- Cloth Media Filter Pilot



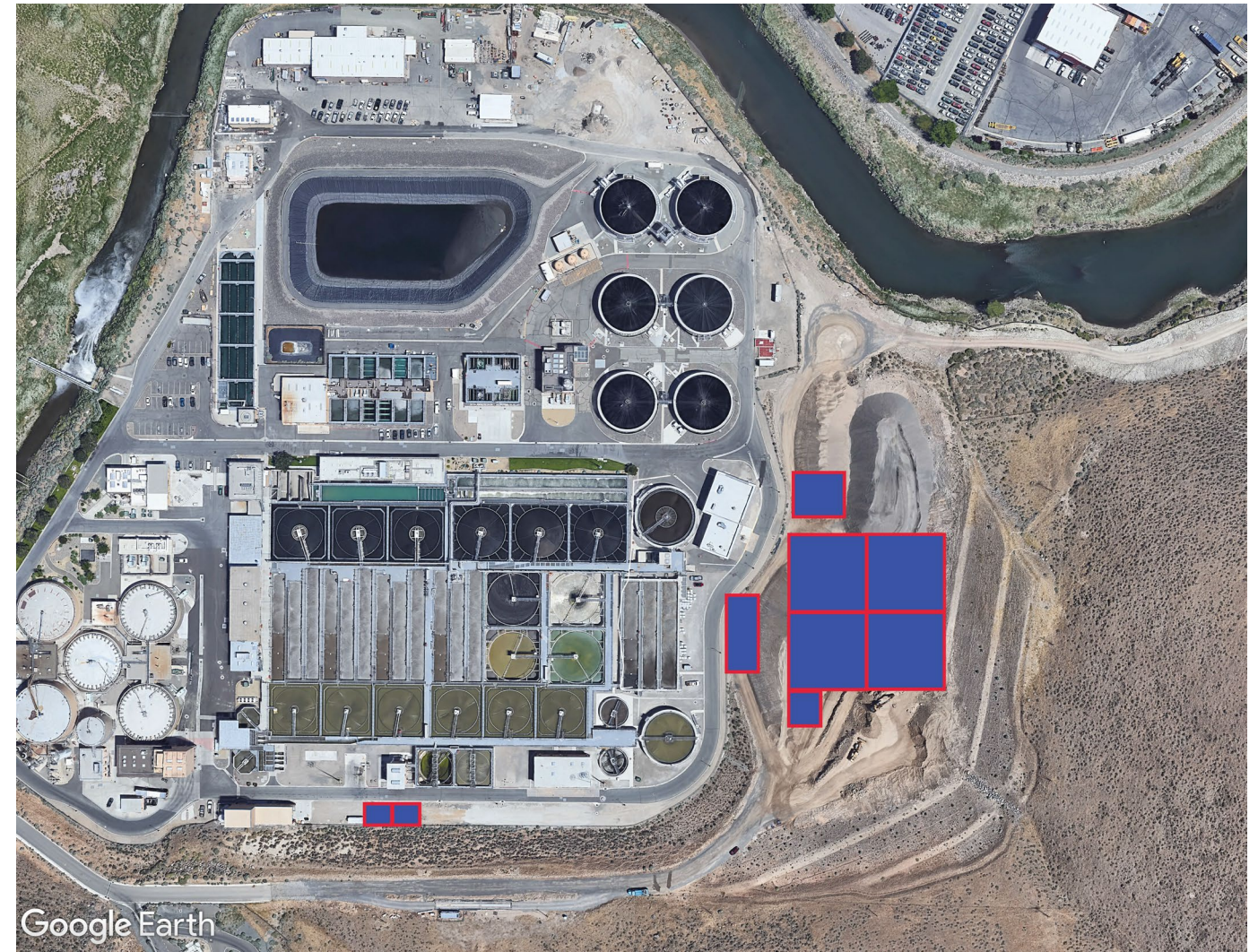
AquaNereda Activated Sludge Pilot Test

- Goal – New Activated Sludge Process
- Potential Benefits
 - Resiliency
 - Cost Savings
 - Nutrient Removal
 - Nitrification Towers



AquaNereda Activated Sludge Pilot Test Results

- The good
 - Great performance overall
 - Nutrient removal increases cost savings
 - Proven Cold Weather Treatment
- The bad
 - Implementation
 - Cost - \$120 million (only 4 reactors)
 - New Process



CleanB Sludge Conditioning Pilot Test

- Goals – Condition waste activated sludge prior to dewatering.
- Potential Benefits
 - Decreased odors
 - Cost Savings
 - Dewaterability



CleanB Sludge Conditioning Pilot Test Results

- Good odor control performance
- Negatively impacted Dewaterability
 - Poor cake quality
 - Poor centrate quality



Centrifuge & Screw Press Dewatering Pilot

- Goals – Use dewatering equipment to dewater sludge and select best technology
- Potential benefits
 - Equipment Selection
 - Cost Savings
 - Maintenance



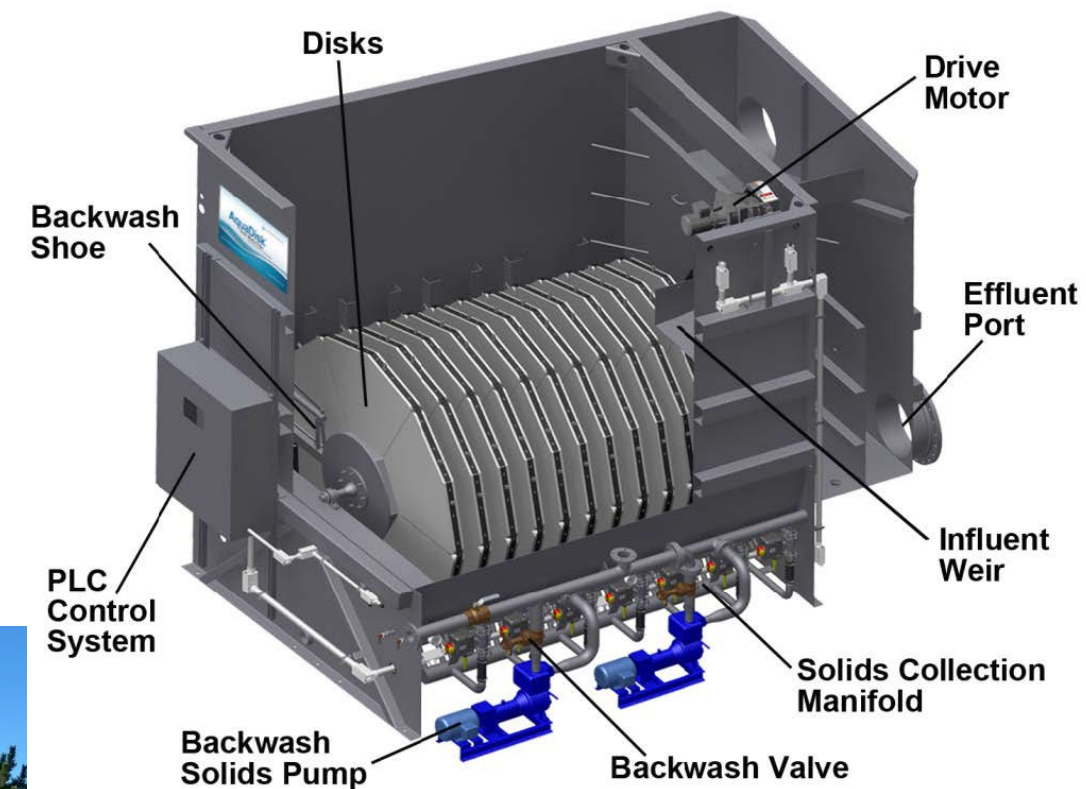
Centrifuge & Screw Press Dewatering Pilot Results

- Centrifuge selected
- Good performance with Screw Press
- Informed unanticipated odor profiling



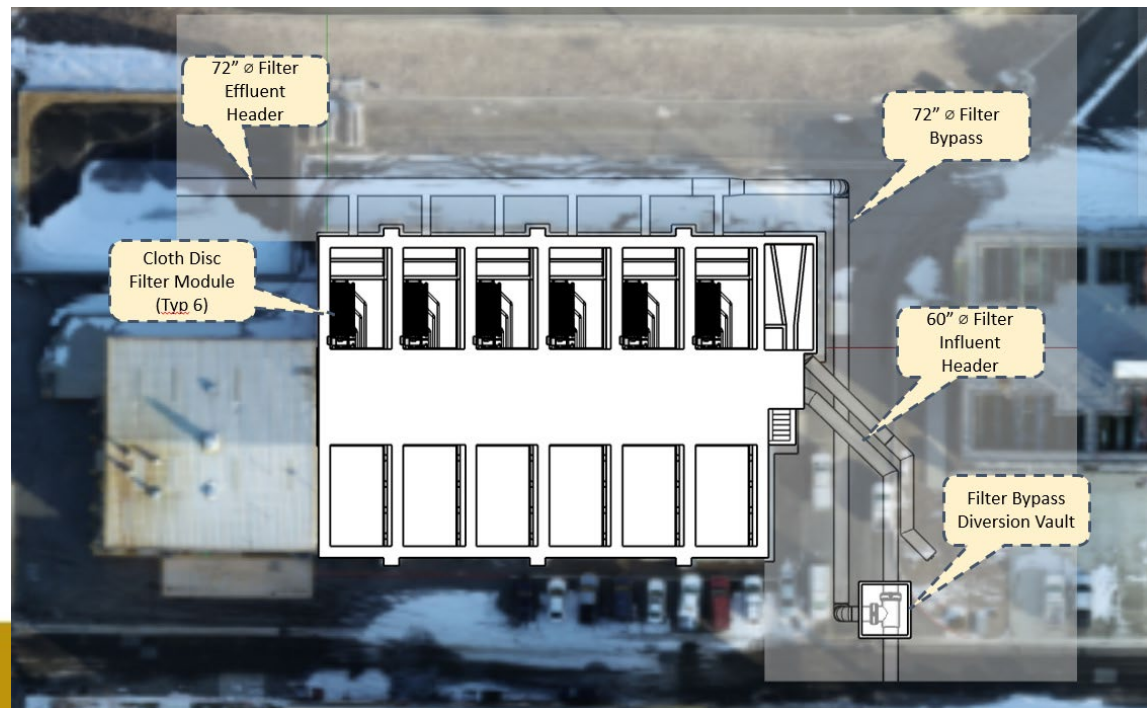
Cloth Media Filter Pilot

- Goals – Run denitrified effluent through cloth media filter to assess fitness as a filter technology.
- Potential benefits
 - Lower capital cost
 - Operational cost savings
 - Increased capacity
 - Smaller footprint
 - Eliminates pumping



Cloth Media Filter Pilot Results

- Filter quality effluent was good overall
- Informed
 - filter influent quality is bad
 - Informed number of cloth filters required



Highlights – What's the path forward?

- AquaNereda
 - High capital cost – MOB study
- CleanB
 - Not for TMWRF.
- Centrifuges
 - Selected Centrifuge
- Cloth Media Filter
 - Selected Cloth Media Filter

Mobile Organic Biofilm – Coming to TMWRF Soon!

- Goals – Modify and demonstrate Mobile Organic Biofilm process in System 3 and analyze results of the treatment.
- Potential benefits
 - Full nitrification
 - Nitrification towers
 - Maintain performance



Agenda Item #10
August 2, 2023

To: Joint Coordinating Committee (JCC)

From: Matt Smith, P.E., Senior Civil Engineer--City of Reno Utilities Services
Department

Date: August 2, 2023

Re: Review and approval of the Draft 1-Year Capital Improvement Program
reallocation for fiscal year 2024 or direction thereon. (For Possible Action)

Recent construction projects and plant inspections have identified staff safety issues and failed drainage infrastructure. The CIP staff has advanced engineering resources to finish design for improvement/repair of the unsafe infrastructure. The TMWRF CIP Manager (Matt Smith) will lead a discussion on a proposed reallocation of projects and funding, and discuss project drivers for the proposed projects and contingency.

Staff seeks direction and possible approval of the Draft TMWRF FY24 1-Year CIP Reallocation.

TMWRF FY2024 One-Year Capital Improvement Program *Reallocation*
Replacement and Rehabilitation of TMWRF Infrastructure Systems
For Approval at the August 2, 2023 JCC Meeting

Risk Rank	Process: Description of Activity	FY24	Δ	FY 24 Reallocation	
16	Clarifier Basin Concrete and Steel Rehabilitation (One per year)***	\$627,000	(\$627,000)	\$0	
	SBS Tank Venting Improvements		\$50,000	\$50,000	Subtotal of these projects
	Pump Station Paving Project		\$70,000	\$70,000	
	Manhole "E" Rehabilitation		\$30,000	\$30,000	
	Pump Station Safety Improvements		\$50,000	\$50,000	
	Contingency		\$427,000	\$427,000	
					\$627,000
3	Gas Conditioning System Improvements (Construction)	\$1,000,000	\$0	\$1,000,000	
8	Fluidized Bed Reactors Design	\$3,000,000	\$0	\$3,000,000	
2	Digester #4 Membrane Cover (Construction)	\$4,000,000	\$0	\$4,000,000	
7	Heat Loop Improvements (Construction Ph1/Ph2)	\$2,200,000	\$0	\$2,200,000	
4	Primary Sludge Screens and APD Valves	\$3,000,000	\$0	\$3,000,000	
9	Aeration Basin Rehabilitation System 1 (Construction)	\$2,000,000	\$0	\$2,000,000	
1	New Dewatering Facility (Design)	\$5,000,000	\$0	\$5,000,000	
	Totalizing Reuse Meter	\$200,000	\$0	\$200,000	
	Total (not including previous FY CIPs)	\$21,027,000	\$0	\$21,027,000	
	Reno Portion (68.63%)	\$14,430,830			
	Sparks Portion (31.37%)	\$6,596,170			