



BOARD MEETING AGENDA
Monday, December 10, 2018
Regular Meeting - 7:00 P.M.

Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Union Sanitary District
Administration Building
5072 Benson Road
Union City, CA 94587

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

1. Call to Order.

2. Pledge of Allegiance.

3. Roll Call.

- Motion 4. Approve Minutes of the Regular Meeting of November 12, 2018.

- Motion 5. Approve Minutes of the Special Meeting of November 26, 2018.

- Information 6. Balanced Scorecard *(to be reviewed by the Legal/Community Affairs Committee)*.
 - a. First Quarter Fiscal Year 2019 District-Wide Balanced Scorecard Measures.
 - b. Balanced Scorecard for the Collection Services Work Group.

7. Written Communications.

8. Oral Communications.

The public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District office at least one working day prior to the meeting). This portion of the agenda is where a member of the public may address and ask questions of the Board relating to any matter within the Board's jurisdiction that is not on the agenda. If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. Oral comments are limited to three minutes per individuals, with a maximum of 30 minutes per subject. Speaker's cards will be available in the Boardroom and are to be completed prior to discussion.

- Motion 9. Consider a Resolution to Adopt the Final Mitigated Negative Declaration of Environmental Impacts for the Emergency Outfall Improvements Project and Approve the Emergency Outfall Improvements Project as Defined in the Final Mitigated Negative Declaration for the Purpose of Filing the Notice of Determination *(to be reviewed by the Engineering and Information Technology Committee)*.

- Motion 10. Consider a Resolution to Adopt the Final Mitigated Negative Declaration of Environmental Impacts for the Primary Digester No. 7 Project and Approve the Primary Digester No. 7 Project as Defined in the Final Mitigated Negative Declaration for the Purpose of Filing the Notice of Determination *(to be reviewed by the Engineering and Information Technology Committee)*.

- Motion 11. Authorize the General Manager to Execute Amendment No. 1 to Task Order No. 1 with Hazen and Sawyer for the Secondary Treatment Process Improvements Project *(to be reviewed by the Engineering and Information Technology Committee)*.

- Motion 12. Authorize the General Manager to Execute Amendment No. 4 to Task Order No. 1 with RMC Water and Environment for the Plant Master Plan *(to be reviewed by the Engineering and Information Technology Committee)*.
-
- Information 13. Collection Services Closed-Circuit Television Camera Operations and Maintenance *(to be reviewed by the Engineering and Information Technology Committee)*.
-
- Information 14. Legislative Update on Regional Issues of Interest to the Board *(to be reviewed by the Legislative Committee)*.
-
- Information 15. Fiscal Year 2019 – 2022 Strategic Plan.
-
- Information 16. Check Register.
-
- Information 17. Committee Meeting Reports. *(No Board action is taken at Committee meetings)*:
- a. Legislative Committee – Wednesday, December 5, 2018, at 10:30 a.m.
 - Director Fernandez and Director Lathi
 - b. Engineering and Information Technology Committee – Thursday, December 6, 2018, at 10:30 a.m.
 - Director Handley and Director Lathi
 - c. Legal/Community Affairs Committee – Friday, December 7, 2018, at 10:30 a.m.
 - Director Fernandez and Director Handley
 - d. Audit Committee – will not meet.
 - e. Budget & Finance – will not meet.
 - f. Personnel Committee – will not meet.
-
- Information 18. General Manager’s Report. *(Information on recent issues of interest to the Board)*.
-
19. Other Business:
- a. Comments and questions. *Directors can share information relating to District business and are welcome to request information from staff.*
 - b. Scheduling matters for future consideration.
-
20. Adjournment – The Board will adjourn to a Regular Meeting in the Boardroom on Monday, January 14, 2019, at 7:00 p.m.
-

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 If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board’s jurisdiction but not on the agenda, the speaker will be heard at the time “Oral Communications” is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker’s cards will be available in the Boardroom and are to be completed prior to discussion of the agenda item.

The facilities at the District Offices are wheelchair accessible. Any attendee requiring special accommodations at the meeting should contact the General Manager’s office at (510) 477-7503 at least 24 hours in advance of the meeting. THE PUBLIC IS INVITED TO ATTEND



Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

LEGISLATIVE COMMITTEE MEETING

Committee Members: Director Fernandez and Director Lathi

AGENDA

Wednesday, December 5, 2018

10:30 A.M.

Alvarado Conference Room

5072 Benson Road

Union City, CA 94587

THIS MEETING WILL BE TELECONFERENCED WITH DIRECTOR LATHI FROM THE GUEST PARKING AREA ON OCASO CAMINO, WEST OF AND CLOSEST TO THE INTERSECTION OF PASEO PADRE PARKWAY IN FREMONT, CALIFORNIA.

1. Call to Order

2. Roll Call

3. Public Comment

4. Items to be reviewed for the Regular Board meeting of December 10, 2018:
 - Legislative Update on Regional Issues of Interest to the Board

5. Adjournment

Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings. The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting). If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Public Comment" is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker's cards will be available and are to be completed prior to discussion of the agenda item.

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THE PUBLIC IS INVITED TO ATTEND



**ENGINEERING AND INFORMATION TECHNOLOGY
COMMITTEE MEETING**

Committee Members: Director Handley and Director Lathi

Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

AGENDA

**Thursday, December 6, 2018
10:30 A.M.**

**Alvarado Conference Room
5072 Benson Road
Union City, CA 94587**

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

THIS MEETING WILL BE TELECONFERENCE WITH DIRECTOR HANDLEY FROM 851 UINTA COURT, FREMONT, CALIFORNIA. THIS MEETING WILL BE TELECONFERENCE WITH DIRECTOR LATHI FROM THE GUEST PARKING AREA ON OCASO CAMINO, WEST OF AND CLOSEST TO THE INTERSECTION OF PASEO PADRE PARKWAY IN FREMONT, CALIFORNIA.

1. Call to Order

2. Roll Call

3. Public Comment

4. Items to be reviewed for the Regular Board meeting of December 10, 2018:
 - Consider a Resolution to Adopt the Final Mitigated Negative Declaration of Environmental Impacts for the Emergency Outfall Improvements Project and Approve the Emergency Outfall Improvements Project as Defined in the Final Mitigated Negative Declaration for the Purpose of Filing the Notice of Determination
 - Consider a Resolution to Adopt the Final Mitigated Negative Declaration of Environmental Impacts for the Primary Digester No. 7 Project and Approve the Primary Digester No. 7 Project as Defined in the Final Mitigated Negative Declaration for the Purpose of Filing the Notice of Determination
 - Authorize the General Manager to Execute Amendment No. 1 to Task Order No. 1 with Hazen and Sawyer for the Secondary Treatment Process Improvements Project
 - Authorize the General Manager to Execute Amendment No. 4 to Task Order No. 1 with RMC Water and Environment for the Plant Master Plan
 - Collection Services Closed-Circuit Television Camera Operations and Maintenance

5. Adjournment

Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings. The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting). If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Public Comment" is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker's cards will be available and are to be completed prior to discussion of the agenda item.

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Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

LEGAL/COMMUNITY AFFAIRS COMMITTEE MEETING
Committee Members: Director Fernandez and Director Handley

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

AGENDA
Friday, December 7, 2018
10:30 A.M.

Karen W. Murphy
Attorney

Alvarado Conference Room
5072 Benson Road
Union City, CA 94587

**THIS MEETING WILL BE TELECONFERENCED WITH DIRECTOR HANDLEY FROM 851 UINTA COURT,
FREMONT, CALIFORNIA.**

1. Call to Order

2. Roll Call

3. Public Comment

4. Items to be reviewed for the Regular Board meeting of December 10, 2018:
 - Balanced Scorecard
 - First Quarter Fiscal Year 2019 District-Wide Balanced Scorecard Measures
 - Balanced Scorecard for the Collection Services Work Group_____
5. Adjournment

Items reviewed at committee meetings will be included in the agenda packet for the upcoming Board meeting. No action will be taken at committee meetings.

The Public may provide oral comments at regular and special Board meetings; however, whenever possible, written statements are preferred (to be received at the Union Sanitary District at least one working day prior to the meeting).

If the subject relates to an agenda item, the speaker should address the Board at the time the item is considered. If the subject is within the Board's jurisdiction but not on the agenda, the speaker will be heard at the time "Public Comment" is calendared. Oral comments are limited to three minutes per individual, with a maximum of 30 minutes per subject. Speaker's cards will be available and are to be completed prior to discussion of the agenda item.

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THE PUBLIC IS INVITED TO ATTEND

**MINUTES OF THE MEETING OF THE
BOARD OF DIRECTORS OF
UNION SANITARY DISTRICT
November 12, 2018**

CALL TO ORDER

President Lathi called the meeting to order at 7:00 p.m.

PLEDGE OF ALLEGIANCE

ROLL CALL

PRESENT: Anjali Lathi, President
Manny Fernandez, Vice President
Jennifer Toy, Secretary
Pat Kite, Director

ABSENT: Tom Handley, Director

STAFF: Paul Eldredge, General Manager/District Engineer
Karen Murphy, District Counsel
Armando Lopez, Treatment and Disposal Services Manager
Sami Ghossain, Technical Services Manager
Robert Simonich, Fabrication, Maintenance, and Construction Manager
James Schofield, Collection Services Manager
Laurie Brenner, Business Services Coach
Karoline Terrazas, Organizational Performance Manager
Somporn Boonsalat, Associate Engineer
Regina McEvoy, Executive Assistant to the General Manager/Board Clerk

VISITOR: Roelle Balan, Tri-City Voice Newspaper
Brandon Young, Lance, Soll, & Lunghard, LLP, Certified Public Accountants

APPROVE MINUTES OF THE REGULAR MEETING OF OCTOBER 22, 2018

It was moved by Director Kite, seconded by Secretary Toy, to Approve the Minutes of the Regular Meeting of October 22, 2018. Motion carried with the following vote:

AYES: Fernandez, Kite, Lathi, Toy
NOES: None
ABSTAIN: None
ABSENT: Handley

APPROVE MINUTES OF THE SPECIAL MEETING OF OCTOBER 23, 2018

It was moved by Director Kite, seconded by Vice President Fernandez, to Approve the Minutes of the Special Meeting of October 23, 2018. Motion carried with the following vote:

AYES: Fernandez, Kite, Lathi, Toy
NOES: None
ABSTAIN: None
ABSENT: Handley

APPROVE MINUTES OF THE SPECIAL MEETING OF OCTOBER 29, 2018

It was moved by Vice President Fernandez, seconded by Secretary Toy, to Approve the Minutes of the Special Meeting of October 29, 2018. Motion carried with the following vote:

AYES: Fernandez, Kite, Lathi, Toy
NOES: None
ABSTAIN: None
ABSENT: Handley

WRITTEN COMMUNICATIONS

There were no written communications.

ORAL COMMUNICATIONS

There were no oral communications.

CONDUCT A PUBLIC HEARING TO RECEIVE COMMENTS ON THE INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACTS FOR THE PRIMARY DIGESTER NO. 7 PROJECT

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated that, pursuant to the California Environmental Quality Act, the potential environmental impact for the Primary Digester No. 7 Project was analyzed and required mitigation measures be included. The Initial Study, completed by Scheidegger and Associates, concluded measures could be used to effectively mitigate potential adverse environmental impacts that could result from the Project. It was determined a Mitigated Negative Declaration would be appropriate for the Project. The public hearing was scheduled to allow for public comment on the Initial Study and Mitigated Declaration for the Project.

President Lathi opened the public hearing. There were no speakers. President Lathi closed the public hearing.

CERTIFIED ANNUAL FINANCIAL REPORT (CAFR) FOR THE FISCAL YEAR (FY) ENDING JUNE 30, 2018

This item was reviewed by the Audit Committee. Business Services Coach Brenner provided an overview of the CAFR highlights and introduced Brandon Young with Lance, Soll & Lunghard, LLP. Mr. Young stated there were no significant findings for FY 2018. Staff recommended the Board receive and direct staff to file the Certified Annual Financial Report (CAFR) for the Fiscal Year ending June 30, 2018.

It was moved by Secretary Toy, seconded by Vice President Fernandez, to Receive and Direct Staff to File the Certified Annual Financial Report for the Fiscal Year Ending June 30, 2018. Motion carried with the following vote:

AYES: Fernandez, Kite, Lathi, Toy
NOES: None
ABSTAIN: None
ABSENT: Handley

CONSIDER APPROVING A CAPACITY CHARGE REFUND FOR THE PALMDALE ESTATES – PHASE 2 DEVELOPMENT LOCATED NEAR MISSION BOULEVARD AND WASHINGTON BOULEVARD IN THE CITY OF FREMONT

This item was reviewed by the Budget & Finance Committee. Technical Services Manager Ghossain stated Robson Homes, LLC owns the Palmdale Estates development located on Washington Boulevard near Mission Boulevard in the City of Fremont. Phase 2 of the Project included the planned demolition of the Motherhouse located on the property. The District required Robson Homes to pay capacity charges without receiving a capacity credit for the Motherhouse. The Motherhouse has since been demolished and Robson Homes requested the capacity credit, which the District agreed to based upon FY17 rates. Staff recommended the Board approve a capacity charge refund in the amount of \$268,246.18.

It was moved by Secretary Toy, seconded by Director Kite, to Approve a Capacity Charge Refund in the Amount of \$268,246.18 to Robson Homes, LLC. Motion carried with the following vote:

AYES: Fernandez, Kite, Lathi, Toy
NOES: None
ABSTAIN: None
ABSENT: Handley

AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AGREEMENT AND TASK ORDER NO. 1 WITH CAROLLO ENGINEERS FOR THE WAS THICKENER REPLACEMENT PROJECT

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated the equipment in the waste activated sludge (WAS) thickening building has reached the end of its useful life. Following a proposal review process, staff selected Carollo Engineers to design the WAS Thickener Replacement Project. The scope of services in Task Order No.1 include evaluation of four alternative thickening technologies. Staff recommended the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with Carollo Engineers in the amount of \$284,233 for the WAS Thickener Replacement Project.

It was moved by Vice President Fernandez, seconded by Secretary Toy, to Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Carollo Engineers in the Amount of \$284,233 for the WAS Thickener Replacement Project. Motion carried with the following vote:

AYES: Fernandez, Kite, Lathi, Toy
NOES: None
ABSTAIN: None
ABSENT: Handley

AUTHORIZE THE GENERAL MANAGER TO EXECUTE AN AGREEMENT AND TASK ORDER NO 1 WITH WOODARD & CURRAN, INC. FOR THE CONTROL BOX NO. 1 IMPROVEMENTS PROJECT

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated Control Box 1 (CB1) receives the combined influent wastewater flows from the twin force mains and the Alvarado Influent Pump Station and distributes the wastewater to any of the Plant's six primary clarifiers. Following the Request for Proposal (RFP) process, staff selected Woodard & Curran for the Project. Task Order No. 1, Predesign Services, will include condition assessment of the components of CB1 and other structures, evaluation of grit deposition, and evaluation of the CB1 bypass alternatives to facilitate construction of the improvements. Staff recommended the Board authorize the General Manager to execute an agreement and Task Order No. 1 with Woodard & Curran, Inc. in the amount of \$229,041 for the Control Box No. 1 Improvements Project.

It was moved by Vice President Fernandez, seconded by Secretary Toy, to Authorize the General Manager to Execute an Agreement and Task Order No. 1 with Woodard & Curran, Inc. in the Amount of \$229,041 for the Control Box No. 1 Improvements Project. Motion carried with the following vote:

AYES: Fernandez, Kite, Lathi, Toy
NOES: None

ABSTAIN: None
ABSENT: Handley

AUTHORIZE THE GENERAL MANAGER TO EXECUTE TASK ORDER NO. 3 WITH CH2M HILL ENGINEERS, INC. FOR THE ODOR CONTROL ALTERNATIVES STUDY

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated the Board authorized execution of an Agreement and Task Order No. 1 with CH2M HILL Engineers to conduct the Odor Control Alternatives Study to evaluate alternative odor control technologies on January 9, 2017. The Board authorized Task Order No. 2 to evaluate the potential of minimizing odors and capital improvement costs at the Plant on February 26, 2018. Task Order No. 3 will include preliminary assessment for the Plant as well as emissions calculations and assessment of the Irvington and Newark Pump Stations. Staff recommended the Board authorize the General Manager to execute Task Order No. 3 with CH2M HILL Engineers, Inc. in the amount of \$86,700 for the Odor Control Alternatives Study.

It was moved by Director Kite, seconded by Vice President Fernandez, to Authorize the General Manager to Execute Task Order No. 3 with CH2M HILL Engineers, Inc. in the Amount of \$86,700 for the Odor Control Alternatives Study. Motion carried with the following vote:

AYES: Fernandez, Kite, Lathi, Toy
NOES: None
ABSTAIN: None
ABSENT: Handley

INFORMATION ITEMS:

Status of Priority 1 Capital Improvements Program Projects

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated the Board approved the Capital Improvement Program (CIP) Budget for Fiscal Year 2019 (FY19) in the amount of \$9.29 million for design and construction of 31 CIP projects. The 31 projects were ranked as Priority 1, 2, or 3 based upon criteria prepared by staff and approved by the Executive Team. The status of Priority 1 projects is reviewed by the Executive Team at the end of each quarter, and a copy of the status report was included in the Board meeting packet for review. For FY19, 12 projects were ranked as Priority 1, and the remaining 19 are ranked as Priority 2 or 3.

First Quarterly Report on the Capital Improvements Program for FY19

This item was reviewed by the Engineering and Information Technology Committee. Technical Services Manager Ghossain stated first quarter expenditures for FY19 were presented on budget projection graphs included in the Board meeting packet. The graphs depict actual expenditures versus approved budget for Capacity Fund 900, Renewal and

Replacement Fund 800, as well as for both funds combined. Total CIP expenditures up to September 30, 2018, were under projections for the first quarter by \$193,000.

Report on the East Bay Dischargers Authority (EBDA) Meeting of October 18, 2018

General Manager Eldredge provided an overview of the October 18, 2018, EBDA meeting summary included in the Board meeting packet.

Check Register

Staff answered Board questions regarding the Check Register.

COMMITTEE MEETING REPORTS:

The Budget & Finance, Audit, and Engineering and Information Technology Committees met.

GENERAL MANAGER'S REPORT:

General Manager Eldredge reported the following:

- Introduced Somporn Boonsalat, the District's new Associate Engineer.
- The District's employee potluck will be held December 13, 2018.
- The November 26, 2018, Regular Board meeting was canceled and a Board Workshop will be held that evening.

OTHER BUSINESS:

There was no other business.

ADJOURNMENT:

The meeting was adjourned at 7:45 p.m. to a Special Meeting in the Alvarado Conference Room on Monday, November 26, 2018, at 6:00 p.m.

SUBMITTED:

ATTEST:

REGINA McEVOY
BOARD CLERK

JENNIFER TOY
SECRETARY

APPROVED:

ANJALI LATHI
PRESIDENT

Adopted this 10th day of December 2018

**MINUTES OF THE SPECIAL MEETING OF THE
BOARD OF DIRECTORS OF
UNION SANITARY DISTRICT
November 26, 2018**

CALL TO ORDER

President Lathi called the special meeting to order at 6:00 p.m.

ROLL CALL

PRESENT: Anjali Lathi, President
Manny Fernandez, Vice President
Jennifer Toy, Secretary
Tom Handley, Director

ABSENT: Pat Kite, Director

STAFF: Paul Eldredge, General Manager/District Engineer
Karen Murphy, District Counsel
Michele Powell, Communications and Intergovernmental Relations Coordinator
Regina McEvoy, Executive Assistant to the General Manager/Board Clerk

PUBLIC COMMENT

There was no public comment.

BOARD WORKSHOP

General Manager Eldredge presented an update on the District's rebranding process.

District Counsel Murphy provided an overview of upcoming District Board Member Elections.

ADJOURNMENT:

The special meeting was adjourned at approximately 7:10 p.m. to the next Regular Board Meeting in the Boardroom on Monday, December 10, 2018, at 7:00 p.m.

SUBMITTED:

ATTEST:

REGINA McEVOY
BOARD CLERK

JENNIFER TOY
SECRETARY

APPROVED:

ANJALI LATHI
PRESIDENT

Adopted this 10th day of December, 2018



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: December 4, 2018

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Karoline Terrazas, Organizational Performance Manager

SUBJECT: Agenda Item No. 6a - Meeting of December 10, 2018
Information Item: **First Quarter FY 19 District-Wide Balanced Scorecard Measures**

Recommendation:
Information Only.

Background:

This report summarizes progress meeting the District's strategic objectives for the first quarter of fiscal year 2018-19 (July 1 through September 30, 2018).

Safety

The District met published targets for all Safety measures in the first quarter of FY 18. The Safety committee has scheduled inspections in the 2nd quarter.

See Table 1: Safety Objectives and Measures, for District performance against all safety measures in Q1.

Operational Excellence

The District also met all published targets for the Operational Excellence measures in Q1 of FY19. “Pending” values reported for % Plant Asset Renewal and % CS/Transport Renewal in the Annual Report have been updated (post-year end close). These are “Track and Report” only measures.

See Table 2: Operational Excellence Objectives and Measures, for District performance against all operational measures in Q1.

Legend for Table 1 and Table 2:

Green: meeting or exceeding target or projected to meet target by the end of the fiscal year

Yellow: Will not meet target if trend continues, and/or not meeting target by <10%- needs attention

Red: Will not meet FY target by >10%- corrective action needed

Table 1: Safety Objectives and Measures

Objectives	Measurements	1st Qtr	YTD Actual	Target	FY18	FY17	FY16	Comments
Reduce the number of accidents	Total accidents with lost days	0	0	0	2	1	2	
	Other OSHA reportable accidents	0	0	≤4	0	2	0	
	# Incidents of vehicle or equipment accidents/damage	0	0	≤2	2	1	3	
Reduce the impact of accidents on employees and the District	Cost associated with vehicle/equipment accidents	0	0	≤\$5000	\$0	\$0	\$540.00	
	Ave FTE lost time	0.03	0.03	<0.5	0.33	0.15	0.145	While there were no new accidents in the 1st qrt., additional time was lost due to a prior injury.
	Total Costs: Lost time Wages only	\$597.90	\$597.90	≤\$46,883	\$32,052.64	\$16,450.00	\$9,883.00	
	Ave FTE limited duty time	0	0	≤0.5	.08	0.15	0.12	
	Total costs: Limited duty/Other 1/2 wages	\$0.00	\$0.00	≤\$23,441	\$2,930.91	\$9,517.03	\$4,775	
	X-Mod		0.78	≤1.0	0.78	0.72	1.01	Fiscal year measurement.
Identify and correct poor	# Facility inspections completed (SIT)	0	0	4	4	4	4	Safety committee planning inspections in 2nd quarter.

practices and potential hazards	% of areas of concern identified during internal facility inspections that are resolved within 45 days of report	N/A	N/A	≥90%	94.59%	96.50%	90%	
	# work site inspections completed	87	87	282	373	297	337	
Implement industry best practices	# site visits (for potential BMPS) completed and discussed by ET	0	0	≥2	1	0	1	EHSPM planning a visit to Sacramento in 3 rd quarter.
Communicate our commitment to safety	# GM communications on status of safety program and performance	3	3	≥4	7	8	8	Office hygiene, HVAC system in admin building, nuisance vectors (birds) in the Plant.
	# safety strategy reviews conducted by ET and EHSPM	1	1	6	8	8	8	
Educate employees in safe work practices	# of major safety training events offered	3	3	7	11	15	1	
	Ave % of targeted employees trained vs. plan	97.31%	97.31%	≥90%	94.02%	95.08%	77.8%	
Create a positive safety culture	% Positive responses on the employee's safety survey (ave)		N/A	≥75%	94.08%	NA	91.06%	Completed in FY18 and occurs every two years.

Table 2: Operational Excellence Objectives and Measures

Objectives	Measures	1st Qrt	YTD Actual	Target	FY18	FY17	FY16	Comments
Stewardship: Demonstrate responsible stewardship of District assets and the environment	Progress implementing outreach plan milestones: % planned events completed	22.95%	22.95%	≥90%	91.80%	98.36%	92.80%	
Service: Provide reliable, high quality service	Response time to calls for service: % under 1 hour	97.50%	97.50%	≥95%	96.83%	97.28%	97.50%	
	Response time to contact USD inquiries: % within 3 business days	100.00%	100.00%	≥90%	94.08%	96.50%	96.90%	
	# Total adverse impacts on customers	2	2	≤10	4	4	10	Two verified odor complaints associated with the Plant.
Be prepared for emergencies	# emergency preparedness events (drills, training, debriefs, table top exercises, etc.)	0	0	3	5	3	2	Two activities have been scheduled for the 2nd quarter.

Fiscal responsibility: Ensure funding for critical programs and projects, while maintaining comparable rates	Residential SSC compared to other agencies		5.8th	≤33rd percentile	11.5	11.5	11.5	Survey criteria expanded, and new survey completed in October 2018
Accurately project and control costs	% Budget expended, Operating Expenditures		NA	95-103%	N/A	92.00%	93.00%	
	% expended Priority 1 Special Projects		NA	80-110%	N/A	44.00%	80.00%	
	# regional projects/initiatives with financial benefit	3	3	≥3	3	3	3	
Asset Management: Manage and maintain assets and infrastructure	# Critical asset failures wo negative impacts	0	0	≤2	0	0	0	-
	# critical asset failures with negative impacts	0	0	0	0	0	3	
	% asset renewal/year: Plant		NA	Track & Report	1.74%	2.31%	2.52%	Annual Reporting Frequency
	% asset renewal/year: Collection System		NA	Track & Report	0.18%	0.47%	0.45%	Annual Reporting Frequency

	Priority CIP Project milestones met vs. planned	100%	100%	85%	85.00%	93.32%	63.00%	
Efficiency: Optimize processes; Use technology and resources effectively	See Timeline & Team/ Process scorecards							
Environmental Protection: Maintain our ability to meet current and future regulations	# adverse impacts on environment (Cat 1 SSO)	0	0	0	0	1	1	
	Category 2/3 SSOs	0	0	≤10	2	3	5	
Implement projects and programs that benefit the environment	# regional projects/initiatives with environmental benefit	3	3	≥3	3	3	3	
Planning: Plan for long-term financial, project and staffing needs	% Timeline projects on schedule			Develop new tracking mechanism in FY19				
Employees: Maintain a highly competent, flexible workforce	Employee Turnover Rate- total		NA	Track and report	6.11%	8.03%	9.80%	Annual Reporting Frequency
	Employee Turnover Rate- nonretirement		NA	Track and report	2.29%	2.19%	3.00%	Annual Reporting Frequency

	% Training System Milestones Completed (accumulative total)	37%	37%	100%	100.00%	100.00%	76.47%	
	# competency assessments completed	5	5	43	73	74	58	
Safety: Work safely; reduce accidents and injuries	See safety scorecard							
Labor relations: Foster a collaborative employee-management relationship that encourages new ideas and continuous improvement	Ave % non-mgmt. employees participating in District committees and taskforces		N/A	45-55%	45.00%	46.15%	48.30%	2x Frequency Reporting
	% non-mgmt. employees participating in alternative compensation program (accumulative total)		N/A	Track & Report	43.00%	45.25%	52.50%	Annual Reporting Frequency

Collection Services FY19 Qtr 1 Balance Scorecard

Objectives	FY19 Collection Services BSC Measures	FY 19 Target	Qtr 1	
Customer Perspective:				
• Minimize Overflows SSO's	• # of Category 3 SSOs (See Comment Note==>)	≤ 10 Category 3 SSOs	0	SSOs
	• # of Category 2 SSOs	• Zero Category 2 SSOs	0	SSOs
	• # of Category 1 SSOs	• Zero Category 1 SSOs	0	SSOs
• Minimize Negative Impact on Environment	• Percent of spill recovery	• 50% Recovery	0.0%	Recovery
	• SSO's # of Repeats	• Zero Repeats	0	SSO Repeats
Manage and maintain assets and infrastructure	• Critical Asset Failures Sewer Main or MH Deficiency resulting in Category 1 SSO, sink hole, injury or resulting property damage > \$2,000 due to one or more of the following: <ul style="list-style-type: none"> - Break, collapse, offset or hole in pipe or manhole. - PMP not followed - Corrosion - Defect identified & corrective action not taken. 	• Asset failure	0	Asset failure
	• Stoppage in > 12" diameter mainline	• Zero Stoppages	0	Stoppages
	• # of times building becomes dangerous or unsuitable for occupation.	• Zero Incidents	0	Incidents
	Critical asset failure with a negative impact on customers or the environment	Zero Incidents	0	Incidents
• Provide Prompt Service	Response Time from notification thru initial contact includes dispatch time	≥ 95% w/i 1 hr	97.5%	w/i 1 hour
• Reduce negative impacts of District	Number of odor complaints attributable to sewer.	≤ 2 Odor	0	Odors
Financial Perspective:				
• Provide competitive service	Cleaning – Cost per ft/day/crew	Clean - \$0.84 to \$1.51	\$0.86	Per ft
	Cost per feet/day	Televising – Cost per ft/day/crew	TV - \$0.87 to \$1.52	\$1.24 Per ft
• Minimize Claims & Fines	Total Cost of Claims/Fines (from SSO's & Stoppages)	Claims ≤\$2000	\$0	Total Claims
		Fines-\$0	\$0	Total Fines
	Average Cost Per Claim / Fine	Claims ≤\$1000	\$0	Avg Claims
		Fines-\$0	\$0	Avg Fines
Internal Process Perspective:				
• Pipe/Problem Assessment	Number of Repeat Spills	≤ 2 per year	0	Zero
	• Preventative Maint. Program	Cleaning Goal Footage % Complete	Annual Goal = 100%	23.9% % Complete
		Televising Goal Footage % Complete	Annual Goal = 100%	23.5% % Complete
• Cleaning (other cleaning omitted)	Per Month Cleaning Footages	86,544 Mo; 1,038,531 YE	85,416	Avg Ft Per Mo
• Televising	Per Month Televising Footages	58,359 Mo; 700,312 YE	63,249	Avg Ft Per Mo
• Key Vehicles not Available For Preventative Maintenance Program	Days Per Mo 2 Hydrojets Not Available	< 3 Days	0	Days
	Days Per Mo 2 TV Vans Not Available	< 3 Days	0	Days
Learning & Growth:				
• Maintain and increase employee skills	# Training Modules Updated & Taught	9	5	Module
	# of Training Modules w/Instructions Completed	2		
	# of individual Competency Assessments Passed	43	5	Assessments
• Communicate Performance Data to Teams	# of Times Info Shared with Teams	12 Total, Min. 1 per/mo	3	Min. per mo



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: December 3, 2018

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Sami E. Ghossain, Manager of Technical Services
Raymond Chau, CIP Coach
Andrew Baile, Assistant Engineer

SUBJECT: Agenda Item No. 9 - Meeting of December 10, 2018
Consider a Resolution to Adopt the Final Mitigated Negative Declaration of Environmental Impacts for the Emergency Outfall Improvements Project and Approve the Emergency Outfall Improvements Project as Defined in the Final Mitigated Negative Declaration for the Purpose of Filing the Notice of Determination

Recommendation

Staff recommends the Board consider a resolution to adopt the Final Mitigated Negative Declaration of environmental impacts and Mitigation Monitoring and Reporting Plan for the Emergency Outfall Improvements Project (Project) and approve the Project as defined in the Final Negative Declaration for the purpose of filing the Notice of Determination

Background

The Project consists of raising the existing outfall pipeline and flap gate above high tide to avoid future maintenance issues, as well as to construct a new outfall concrete apron structure at the outlet of the raised pipeline. Figure 1 shows the location of the emergency outfall at the Old Alameda Creek.

Brown and Caldwell was selected as the design consultant for the Project, which is currently in the final design and permitting phase. Construction is anticipated to begin in the spring/summer of 2019.

Scheidegger and Associates, subconsultant to Brown and Caldwell, prepared the Initial Study for the proposed Project. The Initial Study concluded that while several potential adverse environmental impacts could result from the Project, measures could be used to effectively mitigate these impacts. Accordingly, it has been determined that a Mitigated Negative Declaration is appropriate for the Project. Pursuant to the California Environmental Quality Act (CEQA), the subconsultant analyzed the Project's potential impact with respect to various environmental factors (e.g., air quality, biological resources, cultural resources, etc.) and identified measures to be included in the Project to mitigate impacts to the environment.

Staff circulated the Initial Study and Mitigated Negative Declaration (IS/MND) to local and state agencies for review during the period of June 8 through July 9, 2018. On June 25, 2018, a public hearing was held during the Board meeting to allow for public comment. Staff did not receive any comments during the public hearing.

During the review period, staff received comments from three agencies, which are summarized in Table 1. The original adoption date of July 23, 2018 was postponed in order to work with the agencies to develop the response to their comments. The Response Document was developed and distributed to the commenting agencies for review in October 2018 and the agencies were satisfied with the response. Please refer to the attached Response Document for copies of the comment letters, responses to the comments, and changes made to the text of the IS/MND and Mitigation Monitoring and Reporting Plan. The changes do not require recirculation of the MND under CEQA Guidelines 15073.5, as the changes do not constitute substantial revisions, but merely clarify, amplify or make insignificant modifications to the terms of the previously circulated MND.

The District received a letter from the California State Clearinghouse, dated July 10, 2018, indicating that they received comments from the San Francisco Bay Regional Water Quality Control Board by the comment period end date. These comments are the same ones listed in Table 1. The letter also acknowledges that the District complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Following adoption of the final Mitigated Negative Declaration for the Project, staff will prepare and file the attached Notice of Determination with the Governor's Office of Planning and Research and the Alameda County Clerk.

Staff recommends the Board consider a resolution to adopt the Final Mitigated Negative Declaration of environmental impacts and Mitigation Monitoring and Reporting Plan for the

Emergency Outfall Improvements Project and approve the Emergency Outfall Improvements Project as defined in the Final Negative Declaration for the purpose of filing the Notice of Determination.

PRE/SEG/RC/AB;dl

Attachments: Figure 1 – Site Plan
Table 1 – Comments and Responses
Initial Study/Mitigated Negative Declaration (link below)
Response Document – Initial Study/Mitigated Negative Declaration
Letter from State Clearinghouse
Notice of Determination
Resolution

The following document(s) can be downloaded at the link below:

[Initial Study/Mitigated Negative Declaration](#)

Figure 1. Emergency Outfall Location



Table 1
Comments and Responses
Initial Study and Mitigated Negative Declaration
Emergency Outfall Improvements Project

Agency	Comment	Response
San Francisco Bay Regional Water Quality Control Board	1-1. The IS/MND acknowledges impacts to waters of the State at the Project but does not discuss mitigation measures for those impacts.	1-1. Temporary impacts will be addressed through revegetation. USD elected to address permanent impacts through payment of a mitigation fee to purchase from an approved mitigation bank.
Alameda County Water District (ACWD)	2-1. Approval of proposed sheet pile installation and removal for ACWD review prior to start of field work.	2-1. USD will submit plans for ACWD review and approval prior to start of any field work.
	2-2. Apply for permit for any potential wells used for construction dewatering, coordinate drilling efforts with ACWD.	2-2. USD will obtain a permit from ACWD for installation of dewatering wells.
	2-3. Estimate and document amount of groundwater to be dewatered in the IS/MND.	2-3. Brown and Caldwell estimates about 518,000 gallons of groundwater will be extracted during construction.
	2-4. Include language in IS/MND to state that if contaminated soil and groundwater is observed to report to Regional Board and ACWD.	2-4. Regional Board and ACWD will be notified immediately.
	2-5. Modify language in the Hydrology and Water Quality section stating that the groundwater within Niles Cone has beneficial uses as identified in the Basin Plan.	2-5. Language in the IS/MND modified.
	2-6. Include language in IS/MND that the existing well in close proximity to the project site shall be protected and accessible during the construction activities.	2-6. ACWD monitoring well 4S/2W-09P010 is not located in the immediate area of the work and will be avoided during construction. Plans will require contractor to provide construction fencing around the well to exclude equipment and materials from the area of the well.

Table 1
Comments and Responses
Initial Study and Mitigated Negative Declaration
Emergency Outfall Improvements Project

Agency	Comment	Response
Alameda County Water District (Continued)	<p>2-7. The following ACWD contacts are provided so that USD can coordinate with ACWD as needed during the CEQA process:</p> <ul style="list-style-type: none"> - Michelle Meyers, Groundwater Resources Manager at (510) 668-4454, or by email at michelle.myers@acwd.com, for coordination regarding ACWD's groundwater resources. - Kit Soo, Well Ordinance Supervisor at (510) 668-4455, or by email at kit.soo@acwd.com, for coordination regarding groundwater wells and drilling permits. 	2-7. Thank you for the contact information.
California State Lands Commission (SLC)	<p>3-1. Identify depth of pipe to be abandoned and clarify "flowable fill."</p>	3-1. Burial depth is 0 feet at the outlet to 8 feet. "Flowable fill" definition provided in Response Document.
	3-2. SLC recommends that MND provide clarification on the amount of accumulated sediment scheduled for removal.	3-2. Brown and Caldwell calculates about 250 cubic yards of accumulated sediment to be removed.
	3-3. Include California SLC to the list of agencies whose approval is required. USD to secure a lease with SLC prior to occupying or disturbing State sovereign land in the Alameda Creek channel.	3-3. See Section 3 of the Response Document for edits to the IS/MND.
	3-4. Include SLC to the list of jurisdiction agencies under BIO-5.	3-4. See Section 3 of the Response Document for edits to the IS/MND.

Table 1
Comments and Responses
Initial Study and Mitigated Negative Declaration
Emergency Outfall Improvements Project

Agency	Comment	Response
California State Lands Commission (continued)	3-5. Review existing conditional use permit (UP-5-95) with the City of Union City regarding limits of construction activity.	3-5. In instances where construction activities would extend beyond those stipulated in USD's existing conditional use permit (UP-5-95) provisions in the City's Noise Ordinance would apply.
	3-6. Include an additional mitigation measure to be included in the MND, that addresses the potential for unknown archaeological and paleontological finds.	3-6. Mitigation Measure Arch 1 provides for archeologist to prepare an alert sheet in the event of accidental discovery of resources.
	3-7. Include language in the MND to consult with SLC staff attorney should any cultural resources on state lands be discovered during construction.	3-7. Comments noted, see Sections 3 and 4 of the Response Document for edits to the IS/MND and MMRP.
	3-8. Provide greenhouse gas emissions analysis results in MND.	3-8. Brown and Caldwell estimates about 94 metric tons of CO2e will be generated during construction. See Response Document for further explanation.
	3-9. Include discussion in MND on how the outfall and adjacent levee might be affected by sea-level rise.	3-9. Attachment A provides a discussion of sea level rise considerations that were addressed in Project design. This same discussion will be included in the lease application package.
	3-10. SLC will request additional information concerning the potential effects of sea-level rise on the proposed project, require explanation on how sea-level rise will be addressed, and recommend project modifications to eliminate or reduce potentially adverse impacts from sea-level rise.	3-10. Comment noted.

RESPONSE DOCUMENT

**INITIAL STUDY/MITIGATED
NEGATIVE DECLARATION
(SCH NO. 2018062006)**

Union Sanitary District

Emergency Outfall Improvements Project

October 2018

TABLE OF CONTENTS

Section 1. Introduction

Section 2. Comment Letters and Responses

Section 3. Text Revisions Based on Revised Comments

Appendix A. Revised Mitigation Monitoring and Reporting Plan

Attachment A. Summary of Sea Level Rise Considerations

Section 1

Introduction

The Initial Study and Mitigated Negative Declaration for Union Sanitary District's Emergency Outfall Improvement Project was published in June 2018. The IS/MND was submitted to the State Clearinghouse for review by selected state agencies. The review period was from June 8 through July 9, 2018. A Notice of Document Availability and Intent to Adopt a MND appeared in the *Tri City News* on June 6, 2018 and *The Argus* on June 8, 2018. A public hearing was held on July 23, 2018, and no oral comments were received.

Section 2

Comment Letters and Responses

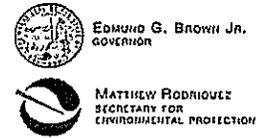
During the public and agency review period, three comment letters were received by USD. The comment letters are as follows:

1. San Francisco Bay Regional Water Quality Control Board. July 5, 2018.
2. Alameda County Water District. July 9, 2018.
3. California State Lands Commission. July 9, 2018.

For each letter, substantive comments are identified by number. Each comment letter is followed by responses to the numerically identified comment. If the responses indicate a change in the text of the IS/MND has been made, those are included in Section 3 by page number of the IS/MND. Any changes to the text of the Mitigation Monitoring and Reporting Plan are included in Section 4.



Letter 1



San Francisco Bay Regional Water Quality Control Board

July 5, 2017
CIWQS Place ID No. 847191
CIWQS Reg. Meas. ID No. 421360

Sent via electronic mail: No hardcopy to follow

Union Sanitary District
ATTN: Andrew Baile (Andrewb@unionsanitary.ca.gov)
5072 Benson Road
Union City, CA 94587

Subject: San Francisco Bay Regional Water Quality Control Board Comments on the Initial Study / Mitigated Negative Declaration for the Emergency Outfall Improvements Project, Union Sanitary District, Alameda County, California SCH No. 2018062006

Dear Mr. Baile:

San Francisco Bay Regional Water Quality Control Board (Water Board) staff appreciates the opportunity to review the Initial Study / Mitigated Negative Declaration for the Emergency Outfall Improvements Project, Union Sanitary District (ISMND). The ISMND evaluates the potential environmental impacts associated with replacing the existing emergency outfall to Old Alameda Creek with a new outfall to be located higher up the bank of Old Alameda Creek.

Summary

As is discussed below, the ISMND does not provide an adequate discussion of mitigation measures for impacts to waters of the State at the project site.

Comment 1. The ISMND acknowledges impacts to waters of the State at the Project, but does not discuss mitigation measures for those impacts.

1-1

Mitigation Measure BIO-5a states that:

Impacts to wetlands and other waters of the U.S. and State typically require a Corps Section 404 Individual or Nationwide Permit and a RWQCB Section 401 Water Quality Certification. Additionally, impacts below the top of bank of Old Alameda Creek may require a 1602 Lake and Streambed Alteration Agreement form CDFW.

Text on page 25 of the ISMDN acknowledges that up to 0.031 acres of permanent impacts may occur below the top of bank at the project site. In addition, Figure 5 in the Biological Resources Assessment USD Emergency Outfall Project (WRA, March 2018), indicates that about 0.07 acres of temporary impacts may occur below the top of bank. However, the ISMND does not discuss

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

1515 Clay St., Suite 1400, Oakland, CA 94612 | www.waterboards.ca.gov/sanfranciscobay



mitigation for these permanent and temporary impacts to waters of the State. Mitigation is discussed for construction-related impacts to water quality and to special status species and their habitat. The text of the ISMND and Mitigation Measure BIO-5a should be revised to discuss mitigation for permanent impacts to 0.031 acres of waters of the State, as well as for the acreage of temporary impacts that will occur below top of bank.

In a CEQA document, a project's potential impacts and proposed mitigation measures should be presented in sufficient detail for readers of the CEQA document to evaluate the likelihood that the proposed remedy will actually reduce impacts to a less than significant level. CEQA requires that mitigation measures for each significant environmental effect be adequate, timely, and resolved by the lead agency. In an adequate CEQA document, mitigation measures must be feasible and fully enforceable through permit conditions, agreements, or other legally binding instruments (CEQA Guidelines Section 15126.4). Mitigation measures to be identified at some future time are not acceptable. It has been determined by court ruling that such mitigation measures would be improperly exempted from the process of public and governmental scrutiny which is required under the California Environmental Quality Act. The current text of the ISMND does not discuss mitigation measures for permanent and temporary impacts to waters of the State at the project site.

Conclusion

The current version of the ISMND does not provide sufficient detail with respect to mitigation for permanent and temporary impacts to waters of the State. The ISMND should be revised to quantify temporary impacts to waters of the State on the Project site, and to discuss specific mitigation measures for all impacts to waters of the State. These mitigation measures should be in-kind and on-site mitigation measures to the maximum extent possible. The amount of proposed mitigation should include mitigation for temporal losses of any impacted waters of the State. If mitigation is out-of-kind and/or off-site, then the amount of the proposed mitigation should be increased.

If the MND is adopted without providing more detail related to mitigation proposals for the project's impacts to waters of the State, the ISMND may not be adequate to support the issuance of CWA Section 401 certification for the Project.

If you have any questions, please contact me at (510) 622-5680, or via e-mail at bwines@waterboards.ca.gov.

Sincerely,

Brian Wines

Digitally signed by Brian Wines
Date: 2018.07.05 15:36:46
-07'00'

Brian Wines
Water Resources Control Engineer
South and East Bay Watershed Section

cc: State Clearinghouse (state.clearinghouse@opr.ca.gov)
CDFW, Attn: Marcia Grefsrud (mgrefsrud@dfg.ca.gov)

Letter San Francisco Bay Regional Water Quality Control Board
1 Brian Wines
Response July 5, 2017

1-1 It was assumed that mitigation of identified temporary and permanent impacts to waters of the State would be developed during the ongoing permitting process. However, through discussions between WRA staff and yourself, temporary impacts would be addressed through revegetation. Revegetation of the marsh zone will consist of native plantings from plants salvaged on-site and/or purchased from a local nursery. Marsh plantings will be monitored for five years or until success criteria are met. Upland areas, which are characterized by ruderal, non-native annual species, will be allowed to revegetate naturally. The issue of mitigation of permanent impacts received further consideration and USD has elected to pay a mitigation fee to an approved mitigation bank of the San Francisco Regulatory Division of the U.S. Army Corps of Engineers. Appropriate edits to the IS/MND text are included in Section 3 and edits to the Mitigation Monitoring and Reporting Plan in Section 4.



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Engineering and Technology Services
JONATHAN WUNDERLICH
Finance

Letter 2

July 9, 2018

Andrew Baile
Union Sanitary District
5072 Benson Road
Union City, CA 94587

Dear Mr. Baile:

Subject: Notice of Availability of an Initial Study/Mitigated Negative Declaration for Union Sanitary District’s Emergency Outfall Improvements Project

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to comment on the Initial Study/Mitigated Negative Declaration (IS/MND) for the Union Sanitary District’s (USD) Emergency Outfall Improvement Project (Project) dated June 2018. ACWD has reviewed the IS/MND and offers the following comments for your consideration:

1. Project Description (pages 3-8): Based on information in the IS/MND, approximately 160 linear feet of temporary sheet piles will be installed for the temporary cofferdam. Since groundwater is relatively shallow beneath the Project area, there is a potential that the proposed sheet piles may create an interconnection of aquifers or water-bearing zones, specifically the shallow water-bearing zone to the Newark Aquifer. In order to protect the Niles Cone Groundwater Basin (Niles Cone), ACWD requests the IS/MND include a provision that requires Project Proponents to submit details on the sheet pile installation and eventual removal for ACWD’s review and approval prior to the start of any field work.

2-1

2. Section I. Hazards and Hazardous Materials (pages 34-39):

a. The IS/MND states that it may be necessary to install a dewatering system, including dewatering wells and piezometers. Prior to the installation of any wells, a permit must be submitted to the appropriate permitting agency: ACWD, if the wells are located within Union City; and, Alameda County Public Works Agency, if the wells are located within the City of Hayward. Since ACWD manages the Niles Cone, coordination with ACWD is required for all permitted drilling in the Project area, including ACWD’s review and approval for the well construction and eventual destruction. As a result, ACWD requests the IS/MND include a provision that all drilling activities be coordinated with ACWD prior to the start of any field work.

2-2

In addition, since groundwater is an important component of ACWD’s water resources, it is critical that the amount of water that may be extracted by dewatering be estimated and documented in the IS/MND. Groundwater losses due to dewatering should be measured and may be subject to a replenishment assessment fee.

2-3



- b. The IS/MND states, "In addition, a series of control measures will be included in the Contract Documents to address contaminated soil and groundwater if encountered during excavation and to regulate the quality of imported fill (Control Measures (I12-15))." If contaminated soil and groundwater is observed, it should be reported the San Francisco Bay Regional Water Quality Control Board (Regional Board) and ACWD immediately.

2-4

3. Section J. Hydrology and Water Quality (page 40 and 43):

- a. The ISMND states, "Local groundwater is of poor quality and not beneficially used." All groundwater within the Niles Cone has existing beneficial or potential beneficial uses as defined in the San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). Therefore, ACWD requests the IS/MND be modified to indicate that although groundwater is not currently being used as a water supply at the Project site, it is located in a groundwater basin that has beneficial uses as identified in the Basin Plan.

2-5

- b. There is an ACWD monitoring well, 4S/2W-09P010, located in the vicinity of the Project area. ACWD's monitoring well is currently used as part of ACWD's Groundwater Monitoring Program and the information collected is used in the management of the Niles Cone. Therefore, ACWD requests that the IS/MND address maintaining access to ACWD's facilities including a provision that the well must be protected against being buried and/or damage during construction activities.

2-6

4. ACWD Contact: The following ACWD contacts are provided so that USD can coordinate with ACWD as needed during the CEQA process:

- Michelle Myers, Groundwater Resources Manager at (510) 668-4454, or by e-mail at michelle.myers@acwd.com, for coordination regarding ACWD's groundwater resources.
- Kit Soo, Well Ordinance Supervisor at (510) 668-4455, or by e-mail at kit.soo@acwd.com, for coordination regarding groundwater wells and drilling permits.

2-7

Sincerely,



Steven D. Inn
Manager of Water Resources

mm/jm
By E-mail

cc: Raymond Chau, USD
Michelle Myers, ACWD
Kit Soo, ACWD
Eileen Chen, ACWD

Letter Alameda County Water District
2 Steven D. Inn, Manager of Water Resources
Response July 9, 2018

- 2-1 USD will submit plans for sheet pile installation for ACWD review and approval prior to start of any field work. See Section 3 for edits to the IS/MND.
- 2-2 USD will obtain a permit from ACWD for installation of any dewatering wells and piezometers and all drilling activities will be coordinated with ACWD prior to start of any field work. See Section 3 for edits to the IS/MND.
- 2-3 Brown and Caldwell estimates that about 518,000 gallons of groundwater will be extracted during construction. The Contractor will be required to document all groundwater extractions. See Section 3 for edits to the IS/MND.
- 2-4 If any contaminated soil and groundwater is encountered, the RWQCB and ACWD will be notified immediately. See Section 3 for edits to the IS/MND.
- 2-5 See Section 3 for edits to the IS/MND.
- 2-6 ACWD monitoring well 4S/2W-09P010 is not located in the immediate area of the work and will be avoided during construction. The plans will require the Contractor to provide construction fencing around the well to exclude equipment and materials from the area of the well. See Section 3 for edits to the IS/MND.
- 2-7 Thank you for the contact information.

Letter 3

STATE OF CALIFORNIA

EDMUND G. BROWN JR., Governor

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



Established in 1938

JENNIFER LUCCHESI, Executive Officer
(916) 574-1800 Fax (916) 574-1810
California Relay Service TDD Phone 1-800-735-2929
from Voice Phone 1-800-735-2922

Contact Phone: (916) 574-1890
Contact FAX: (916) 574-1885

July 9, 2018

File Ref: SCH #2018062006

Andrew Baile
Union Sanitary District
5072 Benson Road
Union City, CA 94587-2508

VIA REGULAR & ELECTRONIC MAIL (ContactUSD@unionsanitary.ca.gov)

Subject: Mitigated Negative Declaration (MND) of the Emergency Outfall Improvements Project

Dear Mr. Baile:

The California State Lands Commission (Commission) staff has reviewed the subject MND for the Emergency Outfall Improvements Project (Project), which is being prepared by the Union Sanitary District (USD). The USD, as the public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq). The Commission is a trustee agency for projects that could directly or indirectly affect sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on sovereign land, the Commission will act as a responsible agency.

Commission Jurisdiction and Public Trust Lands

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c); 6009.1; 6301; 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust Doctrine.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all

people of the state for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

After review of the information contained in the MND, Commission staff has determined that the Alameda Creek channel is State-owned sovereign land. The State received clear title to the channel in a land exchange with Leslie Salt Co. in 1962 (SLL 32). Any portion of the existing facilities and proposed Project extending into the Alameda Creek channel will require a lease from the Commission. In addition to the lease application, Union Sanitary District shall provide written verification from the Alameda County Flood Control and Water Conservation District that the existing and proposed uses do not interfere with their lease of the Alameda Creek channel (Lease No. PRC 2380.9).

Project Description

The USD proposes to replace a portion of an existing outfall pipe located under the access road and within a portion of the banks of Old Alameda Creek at a higher discharge elevation. The goal of the Project is to raise the emergency outfall pipe and flap gate above high tide to avoid future maintenance issues. This would require up to approximately 0.2 acre of ground disturbance. Equipment and materials are expected to be staged within the Project area boundaries and on the adjacent wastewater treatment plant (WWTP) site. The portions of the Project anticipated to be conducted within the Commission's jurisdiction include:

- Abandonment of old USD outfall pipe
- Stabilization of creek banks by installing riprap below the mean high tide line
- Construction of new outfall concrete apron structure at outlet of new pipeline
- Installation of sheet piles for temporary cofferdam

Environmental Review

Commission staff requests that the USD consider the following comments on the MND, to ensure that impacts to State sovereign land are adequately analyzed for the Commission's use of the final MND to support a future lease approval for the Project.

General Comments

1. Project Description: Page 7 of the MND states that one of the Project elements includes "Abandonment of approximately 40 linear feet of 48-inch diameter pipeline by filling with about 20 cubic yards of flowable fill." Commission staff recommends that the MND provide clarification on the following information:

- Identify the burial depth of the abandoned pipeline located within the Commission's jurisdiction
- Clarify what "flowable fill" means

3-1

Page 7 of the MND says, "Placement of approximately 112 cubic yards of stone rip rap for bank and channel protection at the end of the concrete outlet structure. This will involve the removal of approximately 250 cubic yards of accumulated sediment to facilitate placement of the rip rap on the more solid channel bank that has been covered by sediment." Commission staff recommends that the MND provide clarification on the amount of accumulated sediment scheduled for removal that is located on land under the Commission's jurisdiction.

3-2

- 2. Public Agency Approvals: On page 10 of the MND, please add the California State Lands Commission to the list under No. 11 Other Public Agencies Whose Approval is Required. The USD must secure a lease from the Commission before occupying or disturbing State sovereign land in the Alameda Creek channel.

3-3

Biological Resources

- 3. Impact BIO-5 states, "Additionally, the installation of a new outfall structure and rip rap to stabilize the bank will result in permanent fill in wetland and non-wetland water features potentially under the jurisdiction of the Corps, BCDC, RWQCB and CDFW." Please include the Commission to this statement, as the activities noted would affect lands under the jurisdiction of the Commission.

3-4

- 4. Mitigation Measure (MM) BIO-1f states that, "Work hours shall be limited to half an hour after sunrise to half an hour prior to sunset. Night work shall be avoided to the maximum extent feasible." This measure is not consistent with the USD's existing Conditional Use Permit (UP-5-95) with the City of Union City regarding limits of construction activity, as noted on page 45 of the MND. Commission staff recommends that the USD should address this inconsistency in the MND.

3-5

Cultural Resources

- 5. Page 27 of the MND states that there would be no impacts relative to Criteria E1-E3 because, "Fill exists throughout the Alvarado WWTP and adjoining areas, and there is a high level of soil disturbance in and around the Project site which contains recently deposited sediments that are periodically removed." Fill areas have been known to contain cultural resources, as the fill may have been taken from other areas containing items of archeological significance. Therefore, Commission staff strongly suggest an additional MM be included in the MND, that addresses the potential for unknown archeological and paleontological finds.

3-6

- 6. Title to Resources: The MND should mention that the title to all archaeological sites and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the Commission (Pub. Resources Code, § 6313). Commission staff requests that the USD consult with Staff Attorney Jamie Garrett, should any cultural resources on state lands be discovered during construction of the proposed Project. In addition, Commission staff requests that the following statement be included in the EIR's Mitigation and Monitoring Program (MMP), "The final disposition of archaeological, historical, and paleontological

3-7

resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission."

3-7

Climate Change

7. Greenhouse Gas (GHG): A GHG emissions analysis consistent with the California Global Warming Solutions Act (Assembly Bill 32) and required by the State CEQA Guidelines should be included in the MND. This analysis should include the following:

- Identify a threshold for significance for GHG emissions
- Calculate the level of GHGs that will be emitted as a result of construction and ultimate build-out of the Project
- Determine the significance of the impacts of those emissions
- If impacts are significant, identify mitigation measures that would reduce impacts to the extent feasible

Even though the Project is a short-term construction activity with a six-week construction schedule, the Project would use excavators, backhoes, cranes, truck haulers, and other large equipment. At a minimum, a CalEEMod estimate should be included in the analysis.

3-8

8. Sea-Level Rise: A tremendous amount of state-owned lands and resources under the Commission's jurisdiction will be impacted by rising sea levels. With this in mind, the USD should consider including a discussion in the MND on how the outfall and adjacent levee might be affected by sea-level rise. Although the goal of the Project is to raise the emergency outfall pipe and flap gate above high tide, the Old Alameda Creek Channel and its surroundings are in a low-lying, flood-prone area that will be affected by rising sea levels. The discussion should include sea-level rise projections to ensure the outfall designs are sufficient to ensure function, safety, and protection of the environment. Note that the State of California released the final "Safeguarding California: Reducing Climate Risk, an Update to the 2009 California Climate Adaptation Strategy" (Safeguarding Plan) on July 31, 2014, to provide policy guidance for state decision-makers as part of continuing efforts to prepare for climate risks. The Safeguarding Plan sets forth "actions needed" to safeguard ocean and coastal ecosystems and resources as part of its policy recommendations for state decision-makers.

3-9

In addition, Governor Brown issued Executive Order B-30-15 in April 2015, which directs state government to fully implement the Safeguarding Plan and factor in climate change preparedness in planning and decision making. Please note that when considering lease applications, Commission staff will:

3-10

- Request information from applicants concerning the potential effects of sea-level rise on their proposed projects

- If applicable, require applicants to indicate how they plan to address sea-level rise and what adaptation strategies are planned during the projected life of their projects
- Where appropriate, recommend project modifications that would eliminate or reduce potentially adverse impacts from sea-level rise

3-10

Thank you for the opportunity to comment on the MND for the Project. As a responsible and trustee agency, the Commission will need to rely on the adopted MND for the issuance of any amended or new lease as specified above; therefore, we request that you consider our comments prior to adoption of the MND.

Please send copies of future Project-related documents, including electronic copies of the adopted MND, MMP, Approving Resolution, and Notice of Determination, when they become available. Please refer questions concerning environmental review to Cynthia Herzog, Senior Environmental Scientist, at (916) 574-1310 or via email at cynthia.herzog@slc.ca.gov. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Jamie Garrett, Staff Attorney, at (916) 574-0398 or via email at jamie.garrett@slc.ca.gov. For questions concerning Commission leasing jurisdiction, please contact Nick Lavoie, Public Land Manager I, at (916) 574-0452 or via email at nicholas.lavoie@slc.ca.gov.

Sincerely,



Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
N. Lavoie, Commission
C. Herzog, Commission
J. Garrett, Commission

Letter California State Lands Commission
3 Cy R. Oggins, Chief
Response Division of Environmental Planning
July 9, 2018

3-1 The burial depth of the existing pipeline to be abandoned ranges from approximately 0 feet at the outlet to 8 feet.

With regards to the meaning of "flowable fill," Federal Highway Administration defines flowable fill as: "a cementitious slurry consisting of a mixture of fine aggregate or filler, water, and cementitious material(s), which is used primarily as a backfill in lieu of compacted earth. This mixture is capable of filling all voids in irregular excavations and hard to reach places (such as under and around pipes), is self-leveling, and hardens in a matter of a few hours without the need for compaction in layers. Flowable fill is sometimes referred to as controlled density fill (CDF), controlled low strength material (CLSM), lean concrete slurry, and unshrinkable fill."

3-2 Brown and Caldwell calculates that about 250 cubic yards of accumulated sediment will be removed from land under SLC jurisdiction.

3-3 See Section 3 for edits to the IS/MND.

3-4 See Section 3 for edits to the IS/MND.

3-5 As noted in page 45, in instances where construction activities would extend beyond those stipulated in USD's existing Conditional Use Permit (UP-5-95), provisions in the City's Noise Ordinance would apply.

3-6 Mitigation Measure ARCH 1 provides for an archaeologist to prepare an Alert Sheet which will include procedures to follow in the event of accidental discovery of resources.

3-7 Comment noted. See Section 3 and 4 for edits to the IS/MND and MMRP.

3-8 Brown and Caldwell estimates that about 94 metric tons of CO₂e will be generated during construction. Emission estimates are based on anticipated equipment types and durations of use and EPA guidance on equipment fuel consumption and emission factors. The BAAQMD has no emissions threshold for significance for GHG emissions. This minimal amount of GHG emissions from an abbreviated construction period will have no impact on AB 32 GHG reduction goals or to the City of Union City's Climate Action Plan GHG reduction goals.

- 3-9 Attachment A provides a discussion of sea level rise considerations that were addressed in Project design. This same discussion will be included in the lease application package.
- 3-10 Comment noted.

Section 3

Text Revisions Based on Review Comments

Chapter 1. Introduction and Project Description

- Page 3. Add the following to the end of the fourth paragraph.

"Figure 2 (revised) shows the location of ACWD monitoring well 4S/2W-09P010 which is in the vicinity of the Project Site. While the well is outside the immediate construction zone, the contractor will provide appropriate protection of the well including use of construction fencing."

- Page 7. Add the following sentence at the end of the last paragraph.

"USD will submit plans for sheet pile installation to ACWD for review and approval prior to start of any field work."

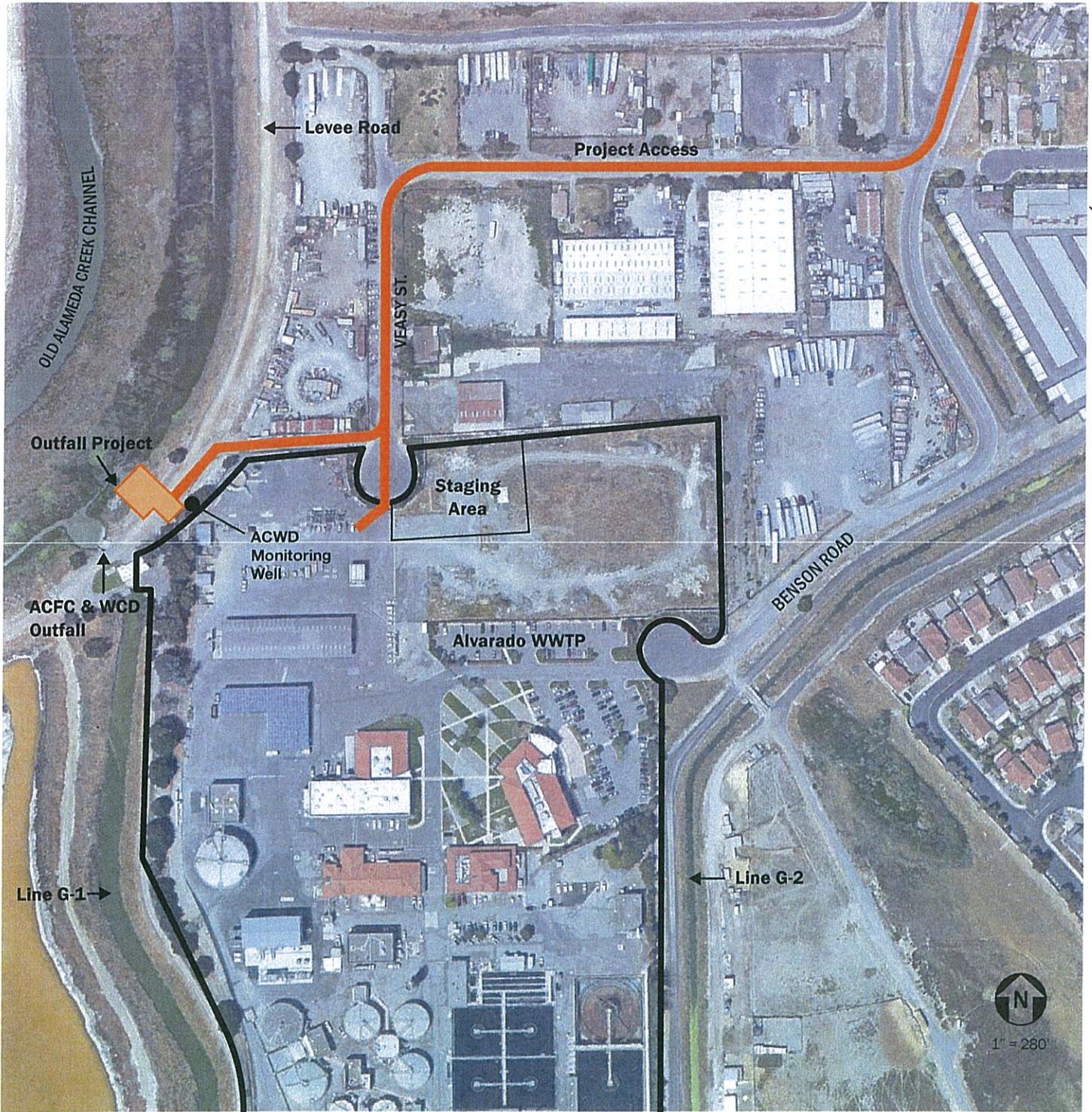
- Page 7. Add the following after the second sentence of the last paragraph.

"Approximately 518,000 gallons of groundwater will be extracted during the construction period. The Contractor will be required to measure extracted groundwater using a flow meter. Extracted quantities will be reported to the ACWD."

- Page 10. Add the following bullets at the end of Subsection 11.

" • Permit for installation of any dewatering wells and piezometers–ACWD. "

" • Lease–California State Lands Commission"



Source: Scheidegger & Associates, March 2018

Figure 2. Emergency Outfall Location (Revised)

Chapter 3. Discussion of Environmental Checklist

- Page 25. Add the following sentence at the end of the third paragraph, Mitigation Measure BIO-5a.

"Temporary impacts to waters of the State will be mitigated through revegetation of affected areas. Revegetation of the marsh zone will consist of native plantings from plants salvaged on-site and/or purchased from a local nursery. Marsh plantings will be monitored for five years or until success criteria are met. Upland areas, which are characterized by ruderal, non-native annual species, will be allowed to revegetate naturally. Mitigation of permanent impacts to waters of the State will be made through payment of a required fee to an approved mitigation bank of the San Francisco Regulatory Division of the U.S. Army Corps of Engineers."

- Page 25. Add the following statement at the end of the second sentence of Impact BIO-5.

"RWQCB, CDFW, and the SLC."

- Page 27. Add the following to the last sentence of Mitigation Measure ARCH 1.

"The final disposition of archaeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission."

- Page 36. Add the following edit to Control Measure I12.

...with the following codes "and will be reported to the RWQCB and ACWD immediately."

- Page 40. Add the following sentence prior to the last sentence of the first paragraph.

"Although groundwater is not currently used as a water supply at the Project site, it is located in a groundwater basin that has beneficial uses as identified in the Basin Plan."

- Page 40. Add the following Control Measure J3 to the bottom of the page.

"J3. The Contractor will be required to document extracted groundwater quantities using a flow meter and report them to the ACWD."

- Page 42. Add the following sentence after the third sentence of the second paragraph.

"Although groundwater is not currently used as a water supply at the Project site, it is located in a groundwater basin that has beneficial uses as identified in the Basin Plan."

- Page 42. Add the following after the fourth sentence of the second paragraph.

"Control Measure J3 requires the Contractor to document extracted groundwater quantities and report them to the ACWD."

APPENDIX A

Mitigation Monitoring and Reporting Plan (Revised)

MITIGATION MONITORING AND REPORTING PLAN

The following mitigation measures shall be implemented to reduce the impact to less than significant levels:

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>D. Biological Resources</p> <p>D1. Impact to Special-Status Species</p> <p>BIO-1: The SMHM and SMWS could be impacted through vegetation removal, entrapment in excavations or staged equipment, and vehicle or equipment strikes.</p>	<p>BIO-1a: Prior to the initiation of construction, the biological monitor shall provide an endangered species training program to all personnel involved in Project construction. At a minimum, the employee education program shall consist of a brief presentation by persons knowledgeable about the biology and legislative protection of protected species with potential to occur in or adjacent to the Project area, to explain concerns to contractors, their employees, and agency personnel involved with implementation of the Project. The program shall include the following: a description of such species and their habitat needs, any reports of occurrences in the action area, an explanation of the status of these species and their protection under state and federal legislation, and a list of measures being taken to reduce impacts to protected species during the work. Fact sheets containing this information shall be provided to the Project foreman.</p>	<p>Contractor* USD</p> <p>* hire qualified biologist</p>	<p>Sensitive species training program</p>	<p>Prior to start of construction</p>
	<p>BIO-1b: Prior to ground disturbance, all ruderal non-native grassland and coastal brackish marsh shall be carefully removed from the impact footprint under the supervision of a qualified biologist. The biologist will first conduct a thorough nest search within vegetation to be removed. If active small mammal nests with potential to be SMHM or SMWS nests are observed, a 50-foot buffer will be established around the nest until the biologist has determined that the young are independent of the nest. Vegetation will then be removed using only hand tools or hand-operated power tools to carefully remove vegetation down to bare ground.</p>	<p>Contractor* USD</p> <p>* hire qualified biologist</p>	<p>Survey to clear small mammals and hand removal of marsh vegetation</p>	<p>Prior to ground disturbance</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
	BIO-1c: The access road within the Project area is used by USD and the AFC&WCD, and thus the installation of effective wildlife exclusion fencing in the Project area has low feasibility. To prevent wildlife entrapment, equipment and materials shall be staged in developed areas within the USD WWTP; they shall not be staged adjacent to Old Alameda Creek where they could provide cover for small mammals that normally reside in the adjacent vegetation. Alternatively, exclusion fencing may be installed along the top of bank of Old Alameda Creek for 200 feet in either direction from the center of the Project area, and the fencing shall be inspected weekly by the qualified biologist. Exclusion fencing may double as erosion control as described in Mitigation Measure BIO-5b.	USD Contractor	Determine staging area location and install exclusion fencing if the alternate location is chosen	Prior to arrival of equipment and materials.
	BIO-1d: A qualified biologist will be present for initial ground disturbance within the banks of Old Alameda Creek. Following initial ground disturbance, the biologist will monitor on an as-needed basis for any new ground breaking within the banks of the creek.	Contractor* USD * hire qualified biologist	Biologist to monitor initial ground disturbance	Conclusion of all initial ground disturbance
	BIO-1e: If excavations or trenches are not backfilled on the same day as excavation, they shall either be covered so as to prevent small mammals from falling in, or they shall be provided with exit ramps suitable for small mammals to escape on their own.	Contractor USD	Fill or cover excavations or provide means of animal escape	Daily during construction
	BIO-1f: Work hours shall be limited to half an hour after sunrise to half an hour prior to sunset. Night work shall be avoided to the maximum extent feasible.	Contractor USD	Observe work hour restrictions	Daily during construction
	BIO-1g: If any mouse or shrew is observed at any time during construction, work shall not be initiated or shall be stopped immediately until the animal leaves the vicinity of the work area on its own volition. The Project biologist shall direct the contractor on how to proceed accordingly. Neither the biologist nor any other persons at the site shall pursue, capture, handle or harass any potential protected species observed.	Contractor USD	Crew to watch for small mammals, stop work if observed, notify biologist.	Daily during construction

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>BIO-2: Noise and other disturbances resulting from the construction-related activities could disrupt CRR and CBR nesting and breeding activity in the adjacent marsh.</p>	<p>BIO-2a: Construction work shall be limited to the period between September 1 and January 31 to avoid the rail nesting season. If construction work is proposed after January 31 or prior to September 1, protocol-level surveys for rails shall be conducted to determine the extent and location of nesting rails.</p> <p>The methodology of this survey effort was developed utilizing the survey protocol for CRR published by the U.S. Fish and Wildlife Service (USFWS 2015). Three listening stations shall be utilized to cover the area of potential rail habitat within 700 feet of the proposed work. Four surveys shall be conducted, with the first beginning before February 1. All surveys shall be conducted no less than 14 days apart from each other.</p> <p>If rail activity centers are identified, a suitable buffer (700 feet for CRR; CBR buffers vary) shall be established and maintained around the activity center until September 1. If no rail nesting activity is observed during protocol-level surveys during a given year, construction may proceed adjacent to potential nesting habitat during the breeding season of the same year. Surveys are typically finalized by the beginning of April and results accepted by the USFWS by the end of April, in a given year. The USFWS typically requires receipt and confirmation of survey results prior to authorizing work during the rail breeding season. Additionally, Mitigation Measure BIO-1a shall be implemented to avoid impacts to these species..</p>	<p>USD* Contractor</p> <p>* hire qualified biologist</p>	<p>Determine construction schedule. Conduct rail survey if construction is to begin between January 31 and August 31.</p>	<p>Upon confirmation of survey results by USFWS (usually by late April) if surveys need to be conducted.</p>
<p>BIO-3: Project activities including vegetation clearing and earth work have potential to directly impact nests of common and special-status avian species.</p>	<p>BIO-3a: No surveys or other avoidance measures for nesting bird species are necessary for Project activities conducted during the non-breeding season (i.e., between September 1 and January 31). For any vegetation removal and/or ground-disturbing activities that are proposed to occur during the avian breeding season (February 1 through August 31), nesting surveys shall be conducted. Specifically, pre-construction surveys shall be conducted</p>	<p>Contractor* USD</p>	<p>Determine construction schedule. Conduct bird nesting survey if construction begins between</p>	<p>Upon conclusion of nesting bird surveys or nests are no longer active.</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
	within 14 days of ground disturbance to avoid disturbance to active nests, eggs, and/or young of native birds. It is also recommended that any trees, shrubs, or grasses in or adjacent to the Project area that are proposed for removal and that could be used as avian nesting sites be removed during the non-breeding season (September 1 through February 1). Surveys can be used to detect the nests of special-status as well as non-special-status birds. An exclusion zone shall be established around any active nests of any native avian species found in the Project area until a qualified biologist has determined that all the young have fledged. Buffer zone distances differ depending on species, location, and placement of nest.	* hire qualified biologist	February 1 and August 31.	
BIO-4: In-water work has extremely limited potential to impact green sturgeon and Central California Coast steelhead fish species through increased turbidity and situation that could potentially stress respiratory function in fish. It may also temporarily impact an extremely limited area of potential rearing habitat during construction. Permanent impacts to the creek banks and mapped critical habitat from installation of rip rap and the new outfall structure are anticipated to be negligible, particularly as listed fish are unlikely to occur in the Project footprint.	BIO-4a: Impacts to these species can be avoided by scheduling Project activities during the work windows established by National Marine Fisheries Service (NMFS) for Bay dredging work. In-water work activities shall occur between June 1 and November 30 to avoid impacts to listed fish species, as per NMFS Programmatic Biological Opinion guidance for dredging in the San Francisco Bay. Temporary and permanent impacts to the creek bed and channel shall be minimized.	Contractor USD	Work only during work window (June 1 to November 30) and minimize creek and channel impacts.	When construction is completed or November 30
	BIO-4b: For in-water work outside this work window (i.e., for in-water work that occurs between December 1 and May 31, a coffer dam as noted above shall be installed at low tide with the oversight from a qualified biologist to prevent or minimize increases in turbidity during in-water work. If any standing water remains inside the Project area within the coffer dam, the biologist will dip net the area to ensure that no fish have been trapped within the coffer dam prior to dewatering. If listed fish species are observed within the coffer dam area, NMFS shall be contacted immediately and the coffer dam carefully opened to allow the fish to escape.	Contractor USD * hire qualified biologist	Determine work window; install coffer dam if construction is between December 1 and May 31	When construction is completed

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>D2 and D3. Impact to Sensitive Natural Communities and Wetlands</p> <p>BIO-5: Construction activities within coastal brackish marsh and open water are anticipated to result in temporary disturbance during construction. Additionally, the installation of a new outfall structure and rip rap to stabilize the bank will result in permanent fill in wetland and non-wetland water features potentially under the jurisdiction of the Corps, BCDC, RWQCB and CDFW. Ground disturbance adjacent to Old Alameda Creek may also result in unintentional fill or discharge into wetlands or non-wetland waters. Project activities within these sensitive areas would likely require permits from the Corps, BCDC, RWQCB, and CDFW.</p>	<p>BIO-5a: Impacts to wetlands and waters of the U.S. and State typically require a Corps Section 404 Individual or Nationwide Permit and a RWQCB Section 401 Water Quality Certification. Additionally, impacts below the top of bank of Old Alameda Creek may require a 1602 Lake and Streambed Alteration Agreement from CDFW. The BCDC may also require a new permit or update to an existing permit for impacts to Bay and Shoreline Band jurisdiction.</p> <p>Temporary impacts to waters of the State will be mitigated through revegetation of affected areas. Revegetation of the marsh zone will consist of native plantings from plants salvaged on-site and/or purchased from a local nursery. Marsh plantings will be monitored for five years or until success criteria are met. Upland areas, which are characterized by ruderal, non-native annual species, will be allowed to revegetate naturally. Mitigation of permanent impacts to waters of the State will be made through payment of a required fee to an approved mitigation bank of the San Francisco Regulatory Division of the U.S. Army Corps of Engineers.</p> <p>BIO-5b: Best management practices shall be used to lessen potential impacts to sensitive habitats. This includes the use of silt fencing, wattles, and other appropriate stormwater pollution prevention measures. For in-water work, a coffer dam or similar shall be installed at low tide with oversight from a qualified biologist to prevent or minimize increases in turbidity during work in open water. Implementation of the proposed Project will also result in much less frequent maintenance than is currently required, and reducing maintenance-related disturbance will benefit the habitat and associated species in this part of the Creek.</p>	USD	Obtain necessary regulatory agency permits and certifications Pay required mitigation fee	Prior to start of construction, after construction
		Contractor* USD * hire qualified biologist for in water work monitoring	Install appropriate erosion control BMPs, coffer dams, or other measures to protect water quality	Daily during construction
<p>D5. Impact to Local Policies and Ordinances</p>	<p>BIO-6a: To modify or remove any tree on public lands, the Contractor shall apply to the City of Union City Director of Public Works for a permit. The Director may require an inspection and will issue or refuse</p>	Contractor USD	Obtain permit for tree removal or	Prior to tree removal or modification

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
BIO-6. If necessary for the Contractor, landscape trees within the Project area may be trimmed or removed to accommodate heavy machinery or excavation for pipeline placement.	to issue the permit with appropriate conditions.		modification	
E. Cultural Resources				
E4. Impact to Disturbed or Redeposited Human Remains	<p>ARCH 1: An archaeologist shall be retained to prepare an archaeological "Alert Sheet" which will be distributed to the construction crew. A brief, on-site education session with the construction crew shall be conducted. The final disposition of archaeological, historical, and paleontological resources recovered on state lands under jurisdiction of the California State Lands Commission must be approved by the Commission.</p> <p>ARCH 2: If human remains are encountered, the following procedures will be implemented:</p> <p>a. Per the stipulations of the California Health and Safety Code Section 7050.5(b), the Alameda County Coroner's Office will be contacted immediately; this will occur whether or not a Most Likely Descendant has already been appointed.</p> <p>b. The Coroner's Office has two working days in which to examine the identified remains. If the Coroner determines that the remains are Native American, then—if a Most Likely Descendant has not yet been appointed—the Office will notify the Native American Heritage Commission (NAHC) within 24 hours.</p> <p>c. Following receipt of the Coroner's Office notice, the NAHC will contact a Most Likely Descendant. The Most Likely Descendant</p>	<p>Contractor* USD * hire qualified archaeologist</p> <p>Contractor USD</p>	<p>Prepare "Alert Sheet," have session</p> <p>Follow requirements of Health and Safety Code</p>	<p>Prior to start of construction</p> <p>During construction</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
	<p>then has 48 hours in which they can make recommendations to the project sponsor and consulting archaeologist regarding the treatment and/or re-interment of the human remains and any associated grave goods.</p> <p>d. Appropriate treatment and disposition of Native American human remains and associated grave goods will be collaboratively determined in consultation between the appointed Most Likely Descendant, the consulting archaeologist, and the landowner or authorized representative. The treatment of human remains may potentially include the preservation, excavation, analysis and/or reburial of those remains and any associated artifacts.</p> <p>e. If the remains are determined not to be Native American, the Coroner, archaeological research team, and USD will collaboratively develop a procedure for the appropriate study, documentation, and ultimate disposition of the historic human remains.</p>			

Attachment A

Summary of Sea Level Rise Considerations

Summary of Sea Level Rise Considerations

Prepared For: Union Sanitary District, Emergency Outfall Improvements Project

The following is a summary of sea level rise considerations for the Emergency Outfall Improvements Project prepared for inclusion with a State Lands Commission lease application package associated with the project.

Prepared By:

Colin Dudley, P.E.
Brown and Caldwell

Date: September 2018

Introduction:

The Union Sanitary District (District) is currently designing improvements to their existing emergency outfall in Old Alameda Creek. Since it was constructed in the 1960’s, sediment deposition in the creek has blocked the flap gate on the outfall discharge requiring periodic maintenance to clear the sediment. The intent of the project is to raise the outfall outlet above the sediment to reduce maintenance and provide a concrete outlet structure to better facilitate any future maintenance activities. Due to the tidal influence of Old Alameda Creek at the outfall location, sea level rise has been considered during design. A summary of those considerations is presented below.

Projection of Sea Level Rise:

The District completed the Preliminary Study of the Effect of Seal Level Rise on District Infrastructure (Study) in 2013 to plan for sea level rise for district facilities and projects. The Study includes a range of sea level rise projections but used the higher range for the vulnerability analysis in the Study. The Study notes that projections beyond 2050 become more uncertain and the useful life of projects should be considered when selecting a sea level rise projection. The existing emergency outfall has been in service approximately 50 years. It would be prudent to expect a service life of the improved outfall to be at least 50 years, if not longer. This would suggest the minimum sea level rise projections to be used should be for the year 2070.

The projected water surface elevations for the area of Old Alameda Creek are presented in Table 4-10 of the Study and are shown below.

TABLE 4-10. RECURRENCE INTERVAL STATISTICS FOR STILLWATER ELEVATIONS IN SECTION 4

Year	SLR relative to 2000 (in)	Recurrence Intervals for Stillwater (ft NAVD88)								
		MHHW	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year	200 Year	500 Year
1916	-5.3	7.46	8.29	8.66	8.95	9.27	9.76	10.18	10.66	11.38
2000	0.0	7.90	8.73	9.10	9.39	9.71	10.20	10.62	11.10	11.82
2030	7.0	8.49	9.31	9.68	9.97	10.30	10.78	11.20	11.68	12.41
2050	14.0	9.07	9.89	10.27	10.56	10.88	11.36	11.79	12.26	12.99
2070	27.0	10.15	10.98	11.35	11.64	11.96	12.45	12.87	13.35	14.07
2100	55.0	12.49	13.31	13.68	13.97	14.30	14.78	15.20	15.68	16.41

NOTE: Values provided are for FEMA Point ID 502, Old Alameda Creek.

(Source: Preliminary Study of the Effect of Seal Level Rise on District Infrastructure, ESA PWA, 2013)

The State of California recently released the “State of California Sea-Level Rise Guidance 2018 Update” (Guidance). The projections used in the District’s Study correspond to the updated projections in the revised Guidance with a 5% probability of occurrence (See Table 1 from the State Guidance below).

TABLE 1: Projected Sea-Level Rise (in feet) for San Francisco

Probabilistic projections for the height of sea-level rise shown below, along with the H++ scenario (depicted in blue in the far right column), as seen in the Rising Seas Report. The H++ projection is a single scenario and does not have an associated likelihood of occurrence as do the probabilistic projections. Probabilistic projections are with respect to a baseline of the year 2000, or more specifically the average relative sea level over 1991 - 2009. High emissions represents RCP 8.5; low emissions represents RCP 2.6. Recommended projections for use in low, medium-high and extreme risk aversion decisions are outlined in blue boxes below.

		Probabilistic Projections (in feet) (based on Kopp et al. 2014)				H++ scenario (Sweet et al. 2017) "Single scenario"
		MEDIAN	LIKELY RANGE	1-IN-20 CHANCE	1-IN-200 CHANCE	
		50% probability sea-level rise meets or exceeds...	66% probability sea-level rise is between...	5% probability sea-level rise meets or exceeds...	0.5% probability sea-level rise meets or exceeds...	
				Low Risk Aversion	Medium - High Risk Aversion	Extreme Risk Aversion
High emissions	2030	0.4	0.3 - 0.5	0.6	0.8	1.0
	2040	0.6	0.5 - 0.8	1.0	1.3	1.8
	2050	0.9	0.6 - 1.1	1.4	1.9	2.7
Low emissions	2060	1.0	0.6 - 1.3	1.6	2.4	
High emissions	2060	1.1	0.8 - 1.5	1.8	2.6	3.9
Low emissions	2070	1.1	0.8 - 1.5	1.9	3.1	
High emissions	2070	1.4	1.0 - 1.9	2.4	3.5	5.2
Low emissions	2080	1.3	0.9 - 1.8	2.3	3.9	
High emissions	2080	1.7	1.2 - 2.4	3.0	4.5	6.6
Low emissions	2090	1.4	1.0 - 2.1	2.8	4.7	
High emissions	2090	2.1	1.4 - 2.9	3.6	5.6	8.3
Low emissions	2100	1.6	1.0 - 2.4	3.2	5.7	
High emissions	2100	2.5	1.6 - 3.4	4.4	6.9	10.2
Low emissions	2110*	1.7	1.2 - 2.5	3.4	6.3	
High emissions	2110*	2.6	1.9 - 3.5	4.5	7.3	11.9
Low emissions	2120	1.9	1.2 - 2.8	3.9	7.4	
High emissions	2120	3	2.2 - 4.1	5.2	8.6	14.2
Low emissions	2130	2.1	1.3 - 3.1	4.4	8.5	
High emissions	2130	3.3	2.4 - 4.6	6.0	10.0	16.6
Low emissions	2140	2.2	1.3 - 3.4	4.9	9.7	
High emissions	2140	3.7	2.6 - 5.2	6.8	11.4	19.1
Low emissions	2150	2.4	1.3 - 3.8	5.5	11.0	
High emissions	2150	4.1	2.8 - 5.8	5.7	13.0	21.9

*Most of the available climate model experiments do not extend beyond 2100. The resulting reduction in model availability causes a small dip in projections between 2100 and 2110, as well as a shift in uncertainty estimates (see Kopp et al. 2014). Use of 2110 projections should be done with caution and with acknowledgement of increased uncertainty around these projections.

(Source: State of California Sea-Level Rise Guidance 2018 Update, State of California, 2018)

Future Sediment levels:

The existing sediment elevation appears to be approximately 2 feet below the higher high tide elevation. It would be reasonable to expect this relationship to continue as the sea level rises. Even with

higher water levels, the emergency outfall will still be able to function as it is a pressurized system. However, if the sediment rises to a level where it again blocks the flap gate on the outfall, maintenance will need to be resumed to keep the gate clear. It should be noted that future maintenance would be easier to perform since the new outlet structure is concrete and located closer to the top of the levee.

Design of Improvements:

The projected sea level rise from the District’s Study for the year 2070 will be used for design of the outfall improvements, resulting in a projected mean higher high tide (MHHT) elevation of 10.15. Assuming the sediment in the channel will be approximately 2 feet below the MHHT, the projected sediment elevation for the year 2070 would be approximately El. 8.15. Therefore, the top of the slab of the new emergency outlet structure will match this elevation as shown in Figure 1. It should be noted that the bottom of the outlet pipe is several inches above the slab.

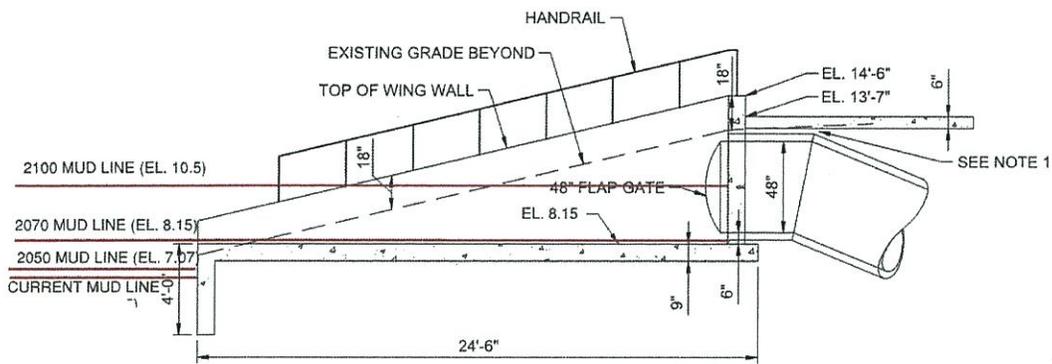


Figure 1 – Potential Mud Line Elevations based on District sea level rise Study water level projections

Due to the uncertainty of sea level rise projections given the design life of the improvements, the improved emergency outfall will allow adaptation to future conditions as suggested in the State Guidance. An example of a potential adaptation could be the addition of a fabricated steel riser to the outfall pipeline should the sea level and sediment rise faster than projected. This is shown in Figure 2. The benefit of this approach is that the elevation of the riser section can be adjusted as needed based on observed sediment levels. This may be important as projections beyond the year 2050 become more uncertain.

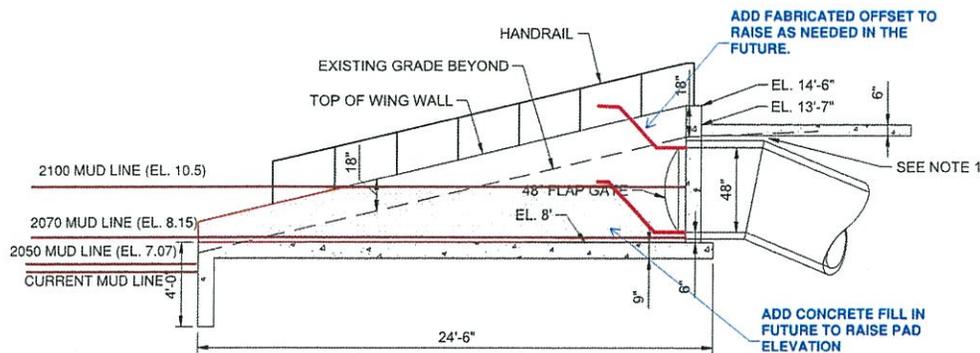


Figure 2 – Potential Outfall Adaptations

The walls of the outlet structure are being constructed above the surrounding grade of the flood control levee to accommodate an increase in levee height in the future to adapt to sea level rise. Should the levee need to be raised higher than the top of the outlet structure walls, the wall height could be extended by pouring additional concrete on top of them.



STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH



EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

July 10, 2018

Andrew Baile
Union Sanitary District
5072 Benson Road
Fremont, CA 94587

Subject: Emergency Outfall Improvements Project
SCH#: 2018062006

Dear Andrew Baile:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 9, 2018, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

“A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation.”

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
1-916-322-2318 FAX 1-916-558-3184 www.opr.ca.gov

Notice of Determination

Appendix D

To:

Office of Planning and Research
U.S. Mail: Street Address:
P.O. Box 3044 1400 Tenth Street, Rm 113
Sacramento, CA 95812-3044 Sacramento, CA 95814

From:

Public Agency: Union Sanitary District
Address: 5072 Benson Road
Union City, CA 94587
Contact: Raymond Chau
Phone: (510) 477-7606

County Clerk

County of: Alameda
Address: 1106 Madison Street, First Floor
Oakland, CA 94607

Lead Agency (if different from above):

Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2018062006

Project Title: Emergency Outfall Improvements Project

Project Applicant: Union Sanitary District

Project Location (include county): Alvarado WWTP, Union City, Alameda County

Project Description: The Project borders USD's Alvarado Wastewater Treatment Plant along Old Alameda Creek. The existing emergency outfall was constructed in the 1960s, and under certain conditions, USD is permitted to discharge treated effluent via the outfall to the creek during wet weather. The outfall flap gate is submerged below water during high tides and partially exposed during low tides. This condition brings in sediment and promotes vegetative growth which impede operation of the flap gate and creates a maintenance issue. A new outfall structure is proposed at the same location to address these issues.

This is to advise that the Union Sanitary District has approved the above
Lead Agency or Responsible Agency

described project on December 10, 2018 and has made the following determinations regarding the above
(Date)

described project:

- 1. The project will not have a significant effect on the environment.
2. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan was adopted for this project.
5. A Statement of Overriding Considerations was not adopted for this project.
6. Findings were made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the Negative Declaration, is available to the General Public at:

Union Sanitary District, 5072 Benson Road, Union City, CA 94587

Signature (Public Agency) Title

Date Date Received for filing at OPR

RESOLUTION NO. ____

ADOPT THE FINAL MITIGATED NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACTS AND MITIGATION MONITORING AND REPORTING PLAN FOR THE EMERGENCY OUTFALL IMPROVEMENTS PROJECT AND APPROVE THE EMERGENCY OUTFALL IMPROVEMENTS PROJECT AS DEFINED IN THE FINAL MITIGATED NEGATIVE DECLARATION FOR THE PURPOSE OF FILING THE NOTICE OF DETERMINATION

WHEREAS, the Union Sanitary District (the "District") has prepared and distributed for comment the Initial Study and Mitigated Negative Declaration (the "IS/MND") of potential environmental impacts of the Emergency Outfall Improvements Project (the "Project"); and

WHEREAS, the District provided a public comment period from June 8, 2018 through July 9, 2018 and conducted a public hearing on June 25, 2018; and

WHEREAS, the Mitigated Negative Declaration was noticed in accordance with Title 14, California Code of Regulations, Sections 15072 and 15105; and

WHEREAS, the District received written comments from certain agencies and prepared a Response Document to address the comments; and

WHEREAS, the District did not receive comments from any other selected state agencies by the review date of July 9, 2018, as determined by the State Clearinghouse and Planning Unit of the Governor's Office of Planning and Research; and

WHEREAS, although the proposed Project could have a significant effect on the environment, mitigation measures included in the IS/MND would reduce all of the impacts to a less than significant level.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the Union Sanitary District that:

1. The Board hereby makes the following findings and determinations with respect to the Emergency Outfall Improvements Project IS/MND:
 - a. The Board has reviewed and considered the draft MND, comments received during the public review period, and the District's written responses to any comments prior to acting on the project.
 - b. The revisions to the MND in response to comments constitute clarifying or amplifying revisions or insignificant modifications, under CEQA Guidelines Section 15073.5, and no recirculation of the MND is required.

- c. The MND adequately describes the environmental impacts of the Project. On the basis of the whole record before it, the Board finds that there is no substantial evidence that the project, as mitigated, will have a significant effect on the environment.
 - d. The MND has been completed in compliance with CEQA and the CEQA Guidelines.
 - e. The MND is complete and adequate and reflects the Board's independent judgment and analysis as to the environmental effects of the Project.
2. The Board hereby adopts the MND for the proposed Emergency Outfall Improvements Project and hereby approves the Emergency Outfall Improvements Project.
 3. The Board hereby adopts the Mitigation Monitoring and Reporting Program included in the IS/MND, which is incorporated herein by reference.
 4. The Board directs staff to file a notice of determination with the County Clerk of Alameda County.
 5. Pursuant to CEQA Guidelines section 15091(e), the documents and other materials that constitute the record of proceedings upon which the Board of Directors has based its recommendations are located in and may be obtained from, the Office of the Union Sanitary District at 5072 Benson Road, Union City, 94587. The Board Clerk is the custodian of records for all matters before the Board.

CERTIFICATION

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the Board of Directors of the Union Sanitary District, in Alameda County, California, held on the 10th day of December 2018.

AYES:

NOES:

ABSENT:

ABSTAIN:

ANJALI LATHI
President, Board of Directors
Union Sanitary District

Attest:

JENNIFER TOY
Secretary, Board of Directors
Union Sanitary District



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: December 3, 2018

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Sami E. Ghossain, Manager of Technical Services
Raymond Chau, CIP Coach
Curtis Bosick, Associate Engineer

SUBJECT: Agenda Item No. 10 - Meeting of December 10, 2018
Consider a Resolution to Adopt the Final Mitigated Negative Declaration of Environmental Impacts for the Primary Digester No. 7 Project and Approve the Primary Digester No. 7 Project as Defined in the Final Mitigated Negative Declaration for the Purpose of Filing the Notice of Determination

Recommendation

Staff recommends the Board consider a resolution to adopt the Final Mitigated Negative Declaration of environmental impacts and Mitigation and Monitoring and Reporting Plan for the Primary Digester No. 7 Project (Project) and approve the Project as defined in the Final Mitigated Negative Declaration for the purpose of filing the Notice of Determination.

Background

The Project was one of the outcomes of the Plant Solids System/ Capacity Assessment – Phase 1 that was completed in November 2016. The assessment concluded that the Plant’s anaerobic digestion process was at or nearing capacity and Primary Digester No. 6, the largest existing digester, could not reliably be taken out of service for cleaning and maintenance until additional digestion capacity is provided.

The Project’s major scope items include:

- Construction of a new anaerobic digester, Primary Digester No. 7, with an effective volume of approximately 2.4 million gallons.

- Installation of new heating, mixing, and conveyance equipment and piping within or adjacent to existing Heating and Mixing Building No. 4.
- Integration of new digester equipment and piping with existing digester feed, withdrawal, transfer, heating and gas systems.
- Improvements to the existing sludge conveyance and transfer systems.
- Improvements to existing digester heat generation and conveyance systems.
- Installation of electrical and instrumentation equipment for interfacing with existing electrical systems and controls.
- Replacement of existing boiler and related plant hot water loop improvements.
- Installation of a new iron salts chemical storage and pumping facility for the purposes of hydrogen sulfide and struvite management.

Brown and Caldwell was selected as the design consultant for the Project. The Project is currently in the design phase with construction anticipated to begin in the summer of 2019.

Scheidegger and Associates, subconsultant to Brown and Caldwell, prepared the Initial Study for the proposed Project. The Initial Study concluded that while several potential adverse environmental impacts could result from the Project, measures could be used to effectively mitigate these impacts. Accordingly, it has been determined that a Mitigated Negative Declaration is appropriate for the Project. Pursuant to the California Environmental Quality Act (CEQA), the consultant analyzed the Project's potential impact with respect to various environmental factors (e.g., air quality, biological resources, cultural resources, etc.) and identified measures to be included in the Project to mitigate impacts to the environment.

Staff circulated the Initial Study and Mitigated Negative Declaration (IS/MND) to local and state agencies for review during the period of October 23, 2018 through November 26, 2018. On November 12, 2018, a public hearing was held during the Board meeting to allow for public comment. Staff did not receive any comments during the public hearing.

During the review period, staff received comments from two agencies, which are summarized in Table 1. Please refer to the attached Response Document for copies of the comment letters, responses to the comments, and changes made to the text of the IS/MND and Mitigation Monitoring and Reporting Plan. The changes do not require recirculation of the MND under CEQA Guidelines 15073.5, as the changes do not constitute substantial revisions, but merely clarify, amplify or make insignificant modifications to the terms of the previously circulated MND.

The District received a letter from the California State Clearinghouse, dated November 27, 2018, indicating that they received comments from the Native American Heritage Commission

by the comment period end date. These comments are the same ones listed in Table 1. The letter also acknowledges that the District complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Following adoption of the Final Mitigated Negative Declaration for the Project, staff will file the attached Notice of Determination with the Governor's Office of Planning and Research and the Alameda County Clerk.

Staff recommends the Board consider a resolution to adopt the Final Mitigated Negative Declaration of environmental impacts and Mitigation Monitoring and Reporting Plan for the Primary Digester No. 7 Project and approve the Primary Digester No. 7 Project as defined in the Final Mitigated Negative Declaration for the purpose of filing the Notice of Determination.

PRE/SEG/RC/CB;dl

Attachments: Figure 1 – Site Plan
Table 1 – Comments and Responses
Initial Study/Mitigated Negative Declaration (link below)
Response Document – Initial Study/Mitigated Negative Declaration
Letter from State Clearinghouse
Notice of Determination
Resolution

The following document(s) can be downloaded at the link below:

[Initial Study/Mitigated Negative Declaration](#)

FIGURE 1 – PRIMARY DIGESTER NO. 7 PROJECT

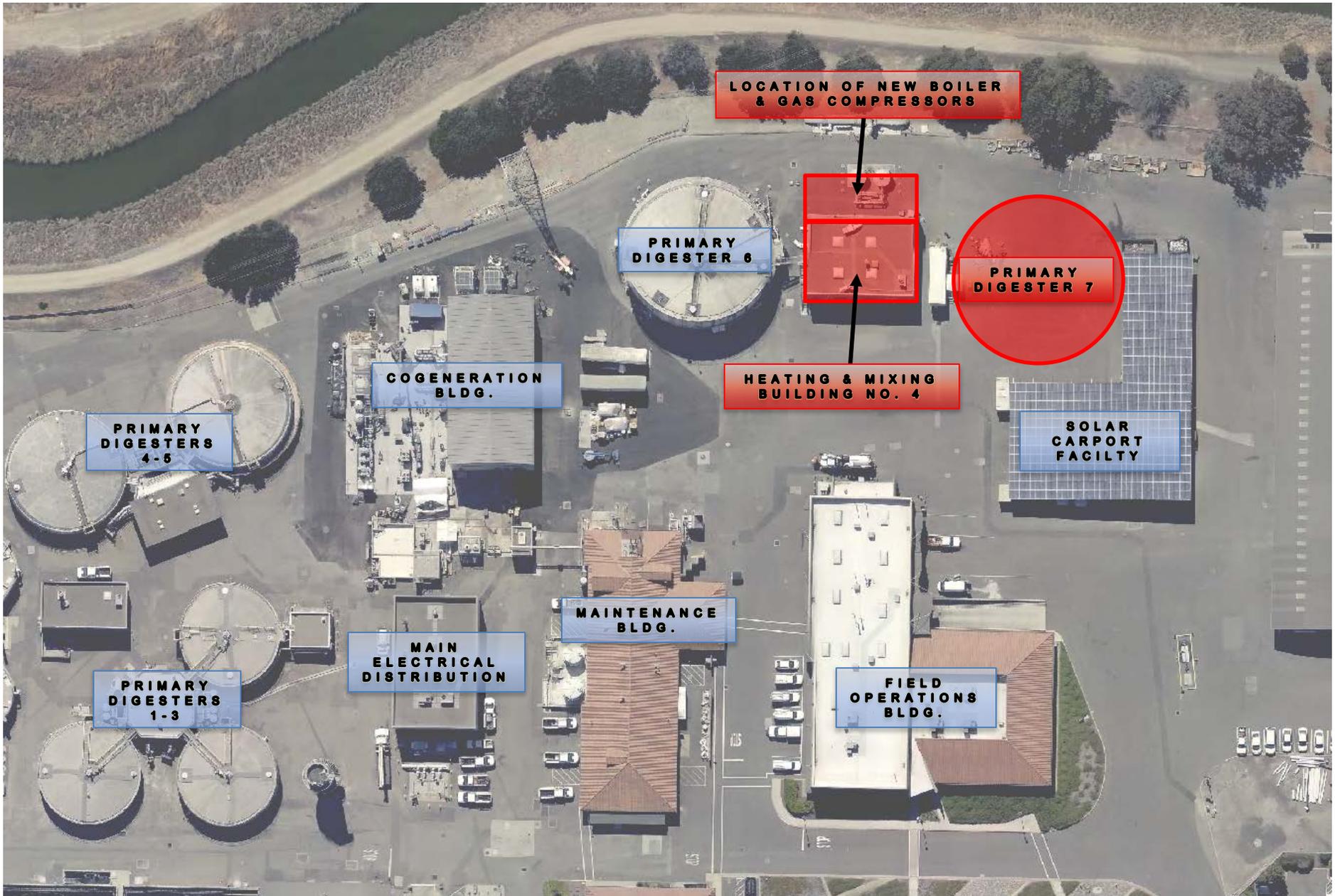


Table 1
Comments and Responses
Initial Study and Mitigated Negative Declaration
Primary Digester No. 7 Project

Agency	Comment	Response
Native American Heritage Commission	1-1. Mitigated Measure Arch 3 for inadvertent finds of human remains is inaccurate. Subsection (a) and (b): The NAHC does not name a Most Likely Descendant (MLD) until remains are found on a project. There is no pre-determined MLD. The Most Likely Descendant timeline in Mitigated Measure Arch 3, subsection (c) is inaccurate. Public Resources Code section 5097.98 specifically states “the descendants shall complete their inspection and make their recommendations or preferences within 48 hours after being allowed access to the site”.	1-1. The intentions of the “if an MLD has not yet been determined” language was to allow for multiple instances of human remains being found on a property. Usually, the MLD for the first remains found will remain the MLD for all remains on site. However, the language change recommended by the commenter is acceptable. Please refer to Sections 3 and 4 of the attached Response Document.
Alameda County Water District (ACWD)	2-1. ACWD requires permits for the installation of sheet piles in order for them to be constructed in a manner that will prevent the creation of: 1) a preferential pathway that could allow runoff to rapidly infiltrate the subsurface and bypass solids which have the capacity to remove pollutants and protect the groundwater supply, or 2) an interconnection of aquifers or water-bearing zones.	2-1. Comment noted. Installation of sheet piles, or support piers, require a permit from ACWD pursuant to Ordinance No. 2010-01. This permit is acknowledged in Section 11 of Chapter 1 of the IS/MND.
	2-2. In order to protect the groundwater basin, ACWD requests the IS/MND include the provision that project proponents coordinate and consult with ACWD regarding the design and construction of the shoring system (including the possibility of permanent installation), prior to final design approval.	2-2. Please refer to Section 3 of the attached Response Document for edits to the IS/MND.

Table 1
Comments and Responses
Initial Study and Mitigated Negative Declaration
Primary Digester No. 7 Project

Agency	Comment	Response
Alameda County Water District (continued)	2-3. ACWD recommends that, at a minimum, all backfill material comply with recommendations in the Department of Toxic Substances Control's (DTSC's) Information Advisory Clean Imported Fill Material (October 2001).	2-3. The DTSC Advisory is a good source for evaluation of backfill sources though the Contractor will be given the option of cement-treating and recompacting excavated soils. The Contractor will also comply with the Geotechnical Design Report which specifies that soil for engineered fill must have an organic content of less than 3 percent by weight, free of any hazardous or deleterious materials, and meet specified gradation requirements. Please refer to Section 3 of the attached Response Document for edits to the IS/MND.
	2-4. Because a portion of the proposed piping may be intersecting impacted groundwater, project proponents should take steps to ensure that the piping and associated trench do not act as a conduit for the mitigation of contaminated groundwater.	2-4. The proposed buried piping is shallow and not connected to the deeper digester excavation; therefore, it is not expected to act as a conduit for the migration of contaminated groundwater. The buried piping trench excavation in the area will be less than five feet deep and will be constructed with conventional digging equipment. The buried piping trench will be sealed and capped with compacted backfill and asphalt pavement. In addition, borings included in the Geotechnical Design Report indicate that a continuous thick clay sequence underlies the Project site at a depth of from 25 to 28 feet below ground surface (bgs) to 55 feet bgs, thus providing further protection of underlying groundwater.

Table 1
Comments and Responses
Initial Study and Mitigated Negative Declaration
Primary Digester No. 7 Project

Agency	Comment	Response
Alameda County Water District (Continued)	2-5. Drilling permits are required prior to the start of any subsurface drilling activities for the installation of support piers or sheet piles. As a result, ACWD requests the IS/MND also include this requirement.	2-5. Comments noted. See response to Comment 2-1.
	2-6. ACWD has identified several monitoring wells within the Project area. In order to protect the groundwater basin, each well located within the property must be in compliance with ACWD Ordinance No. 2010-01. If the well is to remain, a letter so indicating must be sent to ACWD and will require a permit for inactive classification if the well will not be used for a period of twelve (12) months. In addition, any abandoned well located within the project area must be properly destroyed prior to construction activities.	2-6. The Contractor will comply with ACWD Ordinance No. 2010-01 and requirements for commissioning and decommissioning dewatering wells.
	2-7. The following ACWD contacts are provided for coordination during the CEQA process: - Michelle Myers, Groundwater Resources Manager, at (510) 668-4454 or by email at michelle.myers@acwd.com - Kit Soo, Well Ordinance Supervisor, at (510) 668-4455 or by email at kit.soo@acwd.com	2-7. Thank you for the contact information.

RESPONSE DOCUMENT

**INITIAL STUDY/MITIGATED
NEGATIVE DECLARATION
(SCH NO. 2018102059)**

Union Sanitary District

Primary Digester No. 7 Project

December 2018

TABLE OF CONTENTS

Section 1. Introduction

Section 2. Comment Letters and Responses

Section 3. Text Revisions Based on Revised Comments

Section 4. Revised Mitigation Monitoring and Reporting Plan

Section 1

Introduction

The Initial Study and Mitigated Negative Declaration (IS/MND) for Union Sanitary District's Primary Digester No. 7 Project was published in October 2018. The IS/MND was submitted to the State Clearinghouse for review by selected state agencies. The review period was from October 23 through November 26, 2018. A Notice of Document Availability and Intent to Adopt a MND appeared in the *Tri City News* on October 23, 2018 and *The Argus* on October 26, 2018. A public hearing was held on November 12, 2018, and no oral comments were received.

Section 2

Comment Letters and Responses

During the public and agency review period, two comment letters were received by USD. The comment letters are as follows:

1. State of California Native American Heritage Commission, October 31, 2018.
2. Alameda County Water District, November 21, 2018.

For each letter, substantive comments are identified by number. Each comment letter is followed by responses to the numerically identified comment. If the responses indicate a change in the text of the IS/MND has been made, those are included in Section 3 by page number of the IS/MND. Any changes to the text of the Mitigation Monitoring and Reporting Plan are included in Section 4.

Letter 1

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1650 Harbor Blvd., Suite 100
West Sacramento, CA 95681
Phone (916) 373-3710
Fax (916) 373-5471



October 31, 2018

Curtis Bosick
Union Sanitary District
5072 Benson Road
Union City, CA 94507

Re: SCH# 2018102059, Primary Digester No. 7 Project, City of Union City; Alameda County, California

Dear Mr. Bosick:

The Native American Heritage Commission (NAHC) has reviewed the Mitigated Negative Declaration (MND) prepared for the project referenced above. The review included the Project Description; the Discussion of Environmental Checklist, section E, Cultural Resources, and section F, Tribal Cultural Resources prepared by Scheidegger and Associates / Archeo-Tec for the Union Sanitary District. We have the following concerns:

- Mitigation Measure Arch 3 for inadvertent finds of human remains is inaccurate. Subsection (a) and (b): The NAHC does not name a Most Likely Descendant (MLD) until remains are found on a project. There is no pre-determined MLD.
- The Most Likely Descendant timeline in Mitigation Measure Arch 3, subsection (c) is inaccurate. Public Resources Code section 5097.98 specifically states "the descendants shall complete their inspection and make their recommendations or preferences within 48 hours after being allowed access to the site".

1-1

Please contact me at gayle.totton@nahc.ca.gov or call (916) 373-3714 if you have any questions.

Sincerely,

Handwritten signature of Gayle Totton in cursive.

Gayle Totton, B.S., M.A., Ph.D.
Associate Governmental Project Analyst

Attachment

cc: State Clearinghouse

ADDITIONAL INFORMATION

The California Environmental Quality Act (CEQA)¹, specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.² If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.³ In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended in 2014 by Assembly Bill 52. (AB 52).⁴ **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** AB 52 created a separate category for "tribal cultural resources"⁵, that now includes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment."⁶ Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.⁷ Your project may also be subject to **Senate Bill 18 (SB 18)** (Burton, Chapter 905, Statutes of 2004), Government Code 65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. **Both SB 18 and AB 52 have tribal consultation requirements.** Additionally, if your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966⁸ may also apply.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

Agencies should be aware that AB 52 does not preclude agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices".

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

A brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments is also attached.

Pertinent Statutory Information:

Under AB 52:

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.

A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project,⁹ and **prior to the release of a negative declaration, mitigated negative declaration or environmental impact report.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18).¹⁰

The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects.¹¹

1. The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.

¹ Pub. Resources Code § 21000 et seq.

² Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)

³ Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)

⁴ Government Code 65352.3

⁵ Pub. Resources Code § 21074

⁶ Pub. Resources Code § 21084.2

⁷ Pub. Resources Code § 21084.3 (a)

⁸ 154 U.S.C. 300101, 36 C.F.R. § 600 et seq.

⁹ Pub. Resources Code § 21080.3.1, subds. (d) and (e)

¹⁰ Pub. Resources Code § 21080.3.1 (b)

¹¹ Pub. Resources Code § 21080.3.2 (a)

c. Significance of the project's impacts on tribal cultural resources.

If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency.¹²

With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.¹³

If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.¹⁴

Consultation with a tribe shall be considered concluded when either of the following occurs:

- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.¹⁵

Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.¹⁶

If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b).¹⁷

An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
- b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
- c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days.¹⁸

This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:

Government Code § 65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of "preserving or mitigating impacts to places, features, and objects described § 5097.9 and § 5097.993 of the Public Resources Code that are located within the city or county's jurisdiction. Government Code § 65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_822.pdf
- **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.**¹⁹
- **There is no Statutory Time Limit on Tribal Consultation under the law.**

¹² Pub. Resources Code § 21080.3.2 (a)

¹³ Pub. Resources Code § 21082.3 (c)(1)

¹⁴ Pub. Resources Code § 21082.3 (b)

¹⁵ Pub. Resources Code § 21080.3.2 (b)

¹⁶ Pub. Resources Code § 21082.3 (a)

¹⁷ Pub. Resources Code § 21082.3 (e)

¹⁸ Pub. Resources Code § 21082.3 (d)

¹⁹ (Gov. Code § 65352.3 (e)(2)).

archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

Letter Native American Heritage Commission
1 Gayle Totton, Associate Governmental Project Analyst
Response October 31, 2018

1-1 The intentions of the "if an MLD has not yet been determined" language was to allow for multiple instances of human remains being found on a property. Usually, the MLD for the first remains found will remain the MLD for all remains on site. However, the language change recommended by the commenter is acceptable. See Section 3 for the edits to the IS/MND and Section 4 Revised Mitigation Monitoring and Reporting Plan in Section 4.



DIRECTORS

43885 SOUTH GRIMMER BOULEVARD • FREMONT, CALIFORNIA 94538
(510) 668-4200 • FAX (510) 770-1793 • www.acwd.org

MANAGEMENT

AZIZ AKBARI
JAMES G. GUNTHER
JUDY C. HUANG
PAUL SETHY
JOHN H. WEED

ROBERT SHAVER
General Manager
STEVEN D. INN
Water Resources
STEVE PETERSON
Operations and Maintenance
ED STEVENSON
Engineering and Technology Services
JONATHAN WUNDERLICH
Finance

Letter 2

November 21, 2018

Curtis Bosick
Union Sanitary District
5072 Benson Road
Union City, CA 94587-2508

Dear Mr. Bosick:

Subject: Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration for Union Sanitary District’s Primary Digester No. 7 Project, located at Union Sanitary District’s Alvarado Wastewater Treatment Plan, Union City, CA

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to comment on the Initial Study and Proposed Mitigated Negative Declaration (IS/MND) for Union Sanitary District’s (USD) Primary Digester 7 Project (Project).

ACWD staff has reviewed the IS/MND and offers the following comments for your consideration:

1. **Groundwater Protection:** The project includes the placement of Digester 7 which will be a tank constructed of conventionally reinforced concrete, with a submerged fixed cover constructed of concrete. The tank portion will extend to approximately 30 feet above the existing grade, and extend approximately 24.5 feet below ground surface (bgs). Some over-excavation to a depth of 27 feet bgs will be necessary to remove liquefiable soils and to provide space for pipelines. Due to the depth of the excavation and the presence of groundwater, interlocking steel sheet piles will be used to stabilize the excavation and to facilitate dewatering. The shoring for installation of the digester structure is reported to extend a minimum of 18 feet below the base of the planned excavation to reduce the potential for heaving of the excavation bottom due to artesian pressure.

Since the sheet piles are required to be advanced to at least 46 feet bgs (or at least 18 feet below the base of the proposed excavation), the sheet piles will extend through the shallow water-bearing zone to within a few feet above or within the Newark Aquifer. ACWD requires permits for the installation of sheet piles in order for them to be constructed in a manner that will prevent the creation of: 1) a preferential pathway that could allow runoff to rapidly infiltrate the subsurface and bypass soils which have the capacity to remove pollutants and protect the groundwater supply, or 2) an interconnection of aquifers or water-bearing zones.



2-1



The IS/MND also states that the sheet piles may be abandoned “in place to protect the overlying Newark Aquifer” (page 6). ACWD typically requires that sheet piles be removed once they are no longer needed in order to protect groundwater and prevent interconnection as previously stated. However, ACWD understands that some Project Proponents prefer to abandoned sheet piles in place for other reasons. ACWD has allowed sheet piles to be abandoned in place, but not without requiring mitigation of preferential pathways and interconnection issues. In addition, depending on the pressurization of the Newark Aquifer in the area, it is possible that the hydraulic issues experienced during USD’s Boyce Road pump station project may occur.

As a result, in order to protect the groundwater basin, ACWD requests the IS/MND include the provision that project proponents coordinate and consult with ACWD regarding the design and construction of the shoring system (including the possibility of permanent installation), prior to final design approval.

2-2

2. Hazardous Materials: The project proposes to use fill material from off-site borrow sources which meets the geotechnical properties and analytical quality characteristics that comply with Project specifications. It is unclear from the IS/MND what sampling and analytical characteristics are required of the backfill material. ACWD recommends that, at a minimum, all backfill material comply with recommendations in the Department of Toxic Substances Control’s *Information Advisory Clean Imported Fill Material* (October 2001).

2-3

In addition, because a portion of the proposed piping may be intersecting impacted groundwater, Project Proponent should take steps to ensure that the piping and associated trench do not act as a conduit for the migration of contaminated groundwater.

2-4

3. Drilling Permit Requirement: ACWD appreciates the inclusion of permit requirements and coordination with ACWD regarding drilling permits for dewatering wells in the IS/MND. In addition, drilling permits are also required prior to the start of any subsurface drilling activities for the installation of support piers or sheet piles. As a result, ACWD requests the IS/MND also include this requirement.

2-5

4. Groundwater Well Protection/Destruction: ACWD has identified several monitoring wells within the Project area. In order to protect the groundwater basin, each well located within the property must be in compliance with ACWD Ordinance No. 2010-01. If the well is to remain, a letter so indicating must be sent to ACWD and will require a permit for inactive classification if the well will not be used for a period of twelve (12) months. In addition, any abandoned wells located within the project area must be properly destroyed prior to construction activities.

2-6

5. **ACWD Contacts:** The following ACWD contacts are provided so that the City of Union City staff can coordinate with ACWD as needed during the California Environmental Quality Act (CEQA) process:

- Michelle Myers, Groundwater Resources Manager, at (510) 668-4454 or by email at michelle.myers@acwd.com, for coordination regarding ACWD's groundwater resources.
- Kit Soo, Well Ordinance Supervisor, at (510) 668-4455 or by email at kit.soo@acwd.com, for coordination regarding groundwater wells and drilling permits.

2-7

Thank you again for the opportunity to comment on the Initial Study/Notice of Intent to Adopt a Mitigated Negative Declaration for the Primary Digester 7 Project.

Sincerely,



Steven D. Inn
Manager of Water Resources

ks/cs

By E-mail

cc: Michelle Myers, ACWD
Kit Soo, ACWD
Juni Rotter, ACWD

Letter Alameda County Water District
2 Steven D. Inn, Manager of Water Resources
Response November 21, 2018

- 2-1 Comment noted. Installation of sheet piles, or support piers, require a permit from ACWD pursuant to Ordinance No. 2010-01. This permit is acknowledged in Section 11 of Chapter 1 of the IS/MND.
- 2-2 See Section 3 for edits to the IS/MND.
- 2-3 The DTSC Advisory is a good source for evaluation of backfill sources though the Contractor will be given the option of cement-treating and recompacting excavated soils. The Contractor will also comply with the Geotechnical Design Report which specifies that soil for engineered fill must have an organic content of less than 3 percent by weight, free of any hazardous or deleterious materials, and meet specified gradation requirements. Also, see Section 3 for edits to the IS/MND.
- 2-4 The proposed buried piping is shallow and not connected to the deeper digester excavation; therefore, it is not expected to act as a conduit for the migration of contaminated groundwater. The buried piping trench excavation in the area will be less than five feet deep and will be constructed with conventional digging equipment. The buried piping trench will be sealed and capped with compacted backfill and asphalt pavement. In addition, borings included in the Geotechnical Design Report indicate that a continuous thick clay sequence underlies the Project site at a depth of from 25 to 28 feet below ground surface (bgs) to 55 feet bgs, thus providing further protection of underlying groundwater.
- 2-5 Comments noted. See Response to Comment 2-1.
- 2-6 The Contractor will comply with ACWD Ordinance No. 2010-01 and requirements for commissioning and decommissioning dewatering wells.
- 2-7 Thank you for the contact information.

Section 3

Text Revisions Based on Review Comments

Chapter 1. Introduction and Project Description

- Page 6. Add the following to the last sentence of the first paragraph.

", including the design and construction of the shoring system (including the possibility of permanent installation) prior to final design approval."

Chapter 3. Discussion of Environmental Checklist

- Page 31. Replace Mitigation Measure ARCH 3 with the following.
 - a. **Per the stipulations of the California Health and Safety Code 7050.5(b), the Alameda County Coroner's Office will be contacted immediately.**
 - b. **The Coroner's Office has two working days in which to examine the identified remains. If the Coroner determines that the remains are Native American, then the Office shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination.**
 - c. **Following receipt of the Coroner's Office notice, the NAHC will contact a Most Likely Descendant (MLD). The MLD may, with the permission of the landowner or authorized representative, inspect the site and make recommendations regarding the treatment and/or re-interment of the human remains and any associated grave goods within 48 hours of being granted access to the site.**
 - d. **Appropriate treatment and disposition of Native American human remains and associated grave goods will be collaboratively determined in consultation between the MLD, the consulting archaeologist, and the landowner or authorized representative. The treatment of human remains may potentially include the preservation, excavation, analysis and/or reburial of those remains and any associated artifacts.**
 - e. **If the remains are determined not to be Native American, the Coroner, archaeological research team, and USD will collaboratively develop a procedure for the appropriate study, documentation, and ultimate disposition of the historic human remains.**

- Page 43. Add the following to the last sentence of Control Measure I16.

"and comply with the recommendations in the Department of Toxic Substances Control's Information Advisory Imported Fill Material (October 2001)."

Section 4
Mitigation Monitoring and Reporting Plan
(Revised)

MITIGATION MONITORING AND REPORTING PLAN

The following mitigation measures shall be implemented to reduce the impact to less than significant levels:

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>D. Biological Resources</p> <p>D1. Impact to Special-Status Species</p>	<p>BIO-1. Adequate measures shall be taken to avoid inadvertent take of bird nests protected under the federal Migratory Bird Treaty Act and State Fish and Game Code when in active use. This shall be accomplished by taking the following steps.</p> <ul style="list-style-type: none"> • If initial construction is proposed during the nesting season (February 1 to August 31), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of construction in order to determine whether any active nests are present in the APE and surrounding area within 100 feet of proposed construction. The survey shall be reconducted any time construction has been delayed or curtailed for more than 7 days during the nesting season. • If no active nests are identified during the construction survey period, or development is initiated during the non-breeding season (September 1 to January 31), construction may proceed with no restrictions. • If bird nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from the CDFW, and may vary depending on species and sensitivity to disturbance. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated elsewhere in the APE. • A report of findings shall be prepared by the qualified biologist and submitted to the District for review and approval prior to initiation of construction during the nesting season (February 1 to August 31). The report shall either confirm absence of any active nests or should confirm that any young are located within a designated no-disturbance zone and construction can proceed. No report of 	<p>Contractor* USD</p> <p>*Hire qualified biologist</p>	<p>Conduct pre-construction survey</p>	<p>Prior to start of construction</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
<p>E. Cultural Resources</p> <p>E1-E4. Impact to historic, archaeological, and paleontological resources and disturbed or redeposited human remains</p>	<p>findings is required if construction is initiated during the non-nesting season (September 1 to January 31) and continues uninterrupted according to the above criteria.</p> <p>ARCH 1: An archaeologist shall be retained to prepare an archaeological "Alert Sheet" which will be distributed to the construction crew. A brief, on-site education session with the construction crew shall be conducted. The Alert Sheet will identify the procedures to be followed in the event of accidental discovery of historic, archaeological, or paleontological resources in compliance with the California Health and Safety Code and the Public Resources Code.</p> <p>ARCH 2: Excavation within the Digester No. 7 footprint shall be spot-monitored (i.e. inspected by an on-site archaeologist) at least once during the initial excavation of the upper 10 feet of soil.</p> <p>ARCH 3: If human remains are encountered, the following procedures will be implemented:</p> <ol style="list-style-type: none"> Per the stipulations of the California Health and Safety Code 7050.5(b), the Alameda County Coroner's Office will be contacted immediately. The Coroner's Office has two working days in which to examine the identified remains. If the Coroner determines that the remains are Native American, then the Office shall notify the Native American Heritage Commission (NAHC) within 24 hours of the determination. Following receipt of the Coroner's Office notice, the NAHC will contact a Most Likely Descendant (MLD). The MLD may, with the permission of the landowner or authorized representative, inspect the site and make recommendations regarding the treatment and/or re-interment of the human remains and any associated grave goods within 48 hours of being granted access to the site. Appropriate treatment and disposition of Native American human remains and associated grave goods will be collaboratively determined in consultation between the MLD, the consulting archaeologist, and the landowner or authorized representative. The treatment of human remains may potentially include the preservation, excavation, analysis and/or reburial of those remains and any associated artifacts. 	<p>Contractor* USD</p> <p>*hire qualified archaeologist</p> <p>Contractor* USD</p> <p>*hire qualified archaeologist</p> <p>Contractor USD</p>	<p>Prepare "Alert Sheet," have session</p> <p>Spot monitoring</p> <p>Follow requirements of Health and Safety Code</p>	<p>Prior to start of construction</p> <p>During construction</p> <p>During excavation of upper 10 feet of soil within Digester No. 7 footprint</p> <p>During construction</p>

Potential Impact	Mitigation Measure	Responsibility	Action	Completion Date
	<p>e. If the remains are determined not to be Native American, the Coroner, archaeological research team, and USD will collaboratively develop a procedure for the appropriate study, documentation, and ultimate disposition of the historic human remains.</p>			



STATE OF CALIFORNIA

GOVERNOR'S OFFICE of PLANNING AND RESEARCH



EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

November 27, 2018

Curtis Bosick
Union Sanitary District
5072 Benson Road
Fremont, CA 94587

Subject: Primary Digester No. 7 Project
SCH#: 2018102059

Dear Curtis Bosick:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on November 26, 2018, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

“A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation.”

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures

cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
1-916-322-2318 FAX 1-916-558-3184 www.opr.ca.gov

Notice of Determination

Appendix D

To:

Office of Planning and Research
U.S. Mail: Street Address:
P.O. Box 3044 1400 Tenth Street, Rm 113
Sacramento, CA 95812-3044 Sacramento, CA 95814

From:

Public Agency: Union Sanitary District
Address: 5072 Benson Road
Union City, CA 94587
Contact: Curtis Bosick
Phone: (510) 477-7607

County Clerk

County of: Alameda
Address: 1106 Madison Street, First Floor
Oakland, CA 94607

Lead Agency (if different from above):

Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2018102059

Project Title: Primary Digester No. 7 Project

Project Applicant: Union Sanitary District

Project Location (include county): Alvarado WWTP, Union City, Alameda County

Project Description: The Project consists of a new Digester No. 7, transfer tank, iron salts facility, replacement boiler, and various pipeline and utility improvements within USD's Alvarado Wastewater Treatment Plant. In 2016, results from a capacity assessment indicated that current volatile solids loadings for anaerobic digestion are at original design capacity with all digesters in service. Additionally, it was determined that Digester No. 6, the largest existing digester, cannot reliably be taken out of service for cleaning until additional digestion capacity is provided.

This is to advise that the Union Sanitary District has approved the above
Lead Agency or Responsible Agency

described project on December 10, 2018 and has made the following determinations regarding the above
(Date)
described project:

- 1. The project will not have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan was adopted for this project.
5. A Statement of Overriding Considerations was adopted for this project.
6. Findings were made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the Negative Declaration, is available to the General Public at:

Union Sanitary District, 5072 Benson Road, Union City, CA 94587

Signature (Public Agency) Title

Date Date Received for filing at OPR

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011

RESOLUTION NO. _____

ADOPT THE FINAL MITIGATED NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACTS AND MITIGATION MONITORING AND REPORTING PLAN FOR THE PRIMARY DIGESTER NO. 7 PROJECT AND APPROVE THE PRIMARY DIGESTER NO. 7 PROJECT AS DEFINED IN THE FINAL MITIGATED NEGATIVE DECLARATION FOR THE PURPOSE OF FILING THE NOTICE OF DETERMINATION

WHEREAS, the Union Sanitary District (the “District”) has prepared and distributed for comment the Initial Study and Mitigated Negative Declaration (the “IS/MND”) of potential environmental impacts of the Primary Digester No. 7 Project (the “Project”); and

WHEREAS, the District provided a public comment period from October 23, 2018 through November 26, 2018 and conducted a public hearing on November 12, 2018; and

WHEREAS, the Mitigated Negative Declaration was noticed in accordance with Title 14, California Code of Regulations, Sections 15072 and 15105; and

WHEREAS, the District received written comments from certain agencies and prepared a Response Document to address the comments; and

WHEREAS, the District did not receive comments from any other selected state agencies by the review date of November 26, 2018, as determined by the State Clearinghouse and Planning Unit of the Governor’s Office of Planning and Research; and

WHEREAS, although the proposed Project could have a significant effect on the environment, mitigation measures included in the IS/MND would reduce all of the impacts to a less than significant level.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the Union Sanitary District that:

1. The Board hereby makes the following findings and determinations with respect to the Primary Digester No. 7 Project IS/MND:
 - a. The Board has reviewed and considered the draft MND, comments received during the public review period, and the District’s written responses to any comments prior to acting on the project.
 - b. The revisions to the MND in response to comments constitute clarifying or amplifying revisions or insignificant modifications, under CEQA Guidelines Section 15073.5, and no recirculation of the MND is required.
 - c. The MND adequately describes the environmental impacts of the Project. On the basis of the whole record before it, the Board finds that there is no

substantial evidence that the project, as mitigated, will have a significant effect on the environment.

- d. The MND has been completed in compliance with CEQA and the CEQA Guidelines.
 - e. The MND is complete and adequate and reflects the Board's independent judgment and analysis as to the environmental effects of the Project.
2. The Board hereby adopts the MND for the proposed Primary Digester No. 7 Project and hereby approves the Primary Digester No. 7 Project.
 3. The Board hereby adopts the Mitigation Monitoring and Reporting Program included in the IS/MND, which is incorporated herein by reference.
 4. The Board directs staff to file a notice of determination with the County Clerk of Alameda County.
 5. Pursuant to CEQA Guidelines section 15091(e), the documents and other materials that constitute the record of proceedings upon which the Board of Directors has based its recommendations are located in and may be obtained from, the Office of the Union Sanitary District at 5072 Benson Road, Union City, 94587. The Board Clerk is the custodian of records for all matters before the Board.

CERTIFICATION

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the Board of Directors of the Union Sanitary District, in Alameda County, California, held on the 10th day of December 2018.

AYES:

NOES:

ABSTAIN:

ABSENT:

Attest:

ANJALI LATHI
President, Board of Directors
Union Sanitary District

JENNIFER TOY
Secretary, Board of Directors
Union Sanitary District



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: December 3, 2018

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Sami E. Ghossain, Manager of Technical Services
Raymond Chau, CIP Coach
Curtis Bosick, Associate Engineer

SUBJECT: Agenda Item No. 11 - Meeting of December 10, 2018
Authorize the General Manager to Execute Amendment No. 1 to Task Order No. 1 with Hazen and Sawyer for the Secondary Treatment Process Improvements Project

Recommendation

Staff recommends the Board authorize the General Manager to execute Amendment No. 1 to Task Order No. 1 with Hazen and Sawyer in the amount of \$387,908 for the Secondary Treatment Process Improvements Project (Project).

Background

Carollo Engineers conducted an evaluation of the current capacity of the Alvarado Wastewater Treatment Plant. Phase I of the Solids System Capacity Assessment study focused on the solids side of the Plant, while phase II focused on all liquids processes, including but not limited to: headworks, primary clarifiers, aeration basins, secondary clarifiers, and disinfection. Among other things, the results of this assessment concluded that some of the Plant's secondary treatment processes are at/near capacity at current average dry weather flow (ADWF) and over capacity during certain peak flow events.

Concurrently, staff has been working with Woodard and Curran (formerly RMC Water and Environment) on the Plant Master Plan and Effluent Management Study. The objective of this work is to assess the District's near- and long-term projects, recommend the sequence of design and construction implementation based on capacity constraints as well as future regulatory

changes. The scope also will determine priorities and schedules of improvements, evaluate existing and future space and capacity needs, assess potential effluent management options, and summarize what is intended to be a road map for the Plant for the next 20 to 40 years. Additionally, the scope included the evaluation of new buildings (Administration, Operations Control, and FMC) versus retrofitting of the existing buildings.

Preliminary results from this effort identified two potential secondary improvement alternatives to the liquids processes: conventional activated sludge and membrane bioreactor (MBR). Both alternatives would include considerable retrofits and/or expansions to the existing aeration basins, as well as new infrastructure and some improvements to existing electrical, mechanical, communication, and conveyance systems. Please refer to Figures 1 and 3 for site plans of both alternatives that are similar to those presented to the Board during a workshop on March 19, 2018.

To help further develop and expedite the delivery of these two alternatives, staff conducted a consultant selection process for preliminary design services and invited Brown and Caldwell, Carollo Engineers, and Hazen and Sawyer (Hazen) to present their project team, related experience, and project approach. During their interview, Hazen presented staff with an alternate approach that further optimizes current secondary treatment processes and leverages the use of existing infrastructure. This concept, if successful, would provide additional capacity by producing better settling sludge and would allow for some level of nutrient reduction. These proposed improvements would still require substantial upgrades to the existing Plant infrastructure, but they could potentially minimize the overall project costs, and/or extend project costs over a longer period of time.

Hazen's approach would increase the Plant's secondary treatment capacity in the near-term, improve reliability, and address the anticipated nutrient removal limits required for possible wet weather shallow water discharge to the Old Alameda Creek. Staff was intrigued by this concept; however, it meant redirecting the Plant Master Plan efforts to focus on the buildings while this concept is further evaluated. Although a delay in the forward progress of the Plant Master Plan is not ideal, staff believed that it would be fiscally irresponsible not to fully evaluate this concept given the potential long-term benefits and cost considerations.

Task Order No. 1

On July 23, 2018, the Board authorized the General Manager to execute an Agreement and Task Order No. 1 in the amount of \$177,374 with Hazen and Sawyer. The purpose of Task Order No. 1 was to have Hazen validate the feasibility of their approach before staff considered implementation of the proposed near-term and long-term solutions from the plant capacity analysis. Task Order No. 1 included the following scope of services:

- Review historical operational data and reports as well as perform special sampling and stress testing to develop new and validate existing process models.

- Verify existing secondary treatment capacity and recommend near-term projects to increase capacity and/or reliability.
- Evaluate and recommend near-term improvements to reliably meet Bay Area Clean Water Agencies (BACWA) Level 2 nutrient limits.
- Perform microscopic filament analyses to categorize and document the quantity of dominant bacterial species observed.

Special sampling took place from August 6th through August 13th and was performed to obtain accurate, site specific wastewater characterization. This joint effort between staff and Hazen included the collection and analysis of approximately 1,200 samples, which were required to progress and calibrate the dynamic process model originally developed during the plant capacity analysis.

Secondary clarifier stress testing took place from August 20th through August 23rd. This effort included a comprehensive array of tests and evaluations, which would subsequently allow Hazen to develop and calibrate site specific two- and three-dimensional secondary clarifier models.

During a workshop with staff on September 18, 2018, Hazen presented their findings from the special sampling and stress testing efforts and discussed the ongoing validation of the process models. In summary, model simulations produced excellent correlations to historical data, which gave Hazen and staff a high level of confidence that the models would be able to accurately predict both solids production, treatment levels and nutrient removal.

During a second workshop on October 24, 2018, Hazen presented their findings from the modeling efforts. Some of the scenarios evaluated and their corresponding findings are summarized in the table below.

Scenario	Findings
<i>What is the capacity of the existing secondary system?</i>	Modeling simulations confirmed that the existing secondary system does not have sufficient capacity to maintain operations during wet weather with current flows and loads.
<i>What is the capacity of the existing secondary system with improved setting due to calcium nitrate addition?</i>	Calcium nitrate addition provided some improvement; however, does not improve settling enough to gain significant capacity.

<p><i>What is the capacity of the secondary system with modifications to existing infrastructure?</i></p>	<p>Existing aeration basins and secondary clarifiers can be modified to improve settling and increase capacity.</p>
<p><i>What is the nutrient removal capability of the modified system?</i></p>	<p>Existing aeration basins and secondary clarifiers can be modified to provide nutrient removal during dry weather; however, to treat nutrients year-round additional aeration basin volume and new secondary clarifiers are required.</p>

In addition to the above findings, Hazen also evaluated and recommended near-term improvements to reliably achieve BACWA Level 2 nutrient limits. These recommended improvements are smaller than previous master plan projections and include the following:

- Retrofit the existing aeration basins and construct a minimum of 5.3 million gallons of new aeration basin volume
- Construct a new sidestream treatment facility
- Construct four new 150-foot secondary clarifiers; or two new clarifiers with significant upgrades to the existing infrastructure

Please refer Figure 2 for an updated site plan of the conventional activated sludge alternative based on these recommendations.

For the MBR alternative, Hazen similarly evaluated the new infrastructure requirements to achieve BACWA Level 2 nutrient limits. These recommended improvements are similar to those from the master planning effort and include the following:

- Construct new MBR tanks, with building and supporting equipment
- Construct new Aeration Basin 8 and retrofit existing aeration basins
- Construct new fine screening facility

Please refer Figure 3 for a site plan of the MBR alternative.

Amendment No. 1 to Task Order No. 1

The purpose of Amendment No. 1 to Task Order No. 2 is to further develop the two secondary improvement alternatives, conventional activated sludge and MBR, to address how the recommended alternatives are synergistic with future nutrient limits, effluent management, and the Plant Master Plan. This includes the further refinement of process sizing, an assessment of the hydraulic profile, an evaluation of impacts to existing infrastructure and conveyance systems, and the development of capital and life cycle costs and construction phasing for both

alternatives. At the end of this phase, it is anticipated that the District will have sufficient information to make an informed decision and select the best site-specific alternative, if so desired.

The scope of services and fees for Amendment No. 1 are summarized below:

Task No.	Task Description	Fee
1	Project Management	\$17,540
5	MBR Alternative	\$53,456
6	Additional Scenarios and Services	\$14,800
7	Converge Phase	\$302,112
	Total Not-to-Exceed Fee	\$387,908

Tasks 5 and 6 are for additional services that were not included in the initial phases of the work. These services included the development and evaluation of an MBR alternative and the evaluation of some various other scenarios and services that were aimed at providing staff with partial, short-term improvements to the secondary treatment process.

Staff has reviewed the scope and fee and found the proposal to be reasonable, considering the required level of effort. It is currently anticipated that Hazen will conduct a workshop with staff to present their findings and recommendations in March 2019 with a presentation to the Board sometime thereafter. Additionally, the Plant Master Plan consultants are working in concert with Hazen and the findings and consultant recommendations will be incorporated into the Plant Master Plan. All work under this amendment is expected to be completed by May 2019.

The total fees for the Project's agreement with Hazen and Sawyer are summarized in the table below:

Description	Fee
Task Order No. 1 – Process Modeling and Approach Validation	\$177,374
Amendment No. 1 to Task Order No. 1 – Additional Services	\$387,908
Total Not-to-Exceed Fee for this Agreement	\$565,282

Staff recommends the Board authorize the General Manager to execute Amendment No. 1 to Task Order No. 1 with Hazen and Sawyer in the amount of \$387,908 for the Secondary Treatment Process Improvements Project.

PRE/SEG/RC/CB;dl

Attachment: Figure 1 – Conventional Activated Sludge Site Plan
 Figure 2 – Updated Conventional Activated Sludge Site Plan
 Figure 3 – MBR Site Plan
 Amendment No. 1 to Task Order No. 1



**Figure 1 -
Conventional Activated
Sludge Alternative**

Union Sanitary District
Alvarado WWTP Master Plan



Legend

- | | | |
|-----------------------|---|---|
| Existing Facilities | Personnel/ Maintenance Facilities | Phase III* |
| New Pavement | Phase I and II Process Facilities | Additional Area Needed for Lower Nutrient Limit |
| Property Line | Phase I on Existing Building | May Not Happen Depending on Study with ACWD |
| Adjacent Property | Required for Phosphorous Removal | Additional Area for Levee Expansion** |
| Land Purchased by USD | Required for Phosphorous Removal on Existing Building | |
| Storage Facilities | | |

*33.0 MGD Capacity with One Unit Out of Service

**New Levee would protect against the 100 year storm stillwater in the year 2050.



Figure 2 - Updated Conventional Activated Sludge Alternative

Union Sanitary District
Alvarado WWTP Master Plan

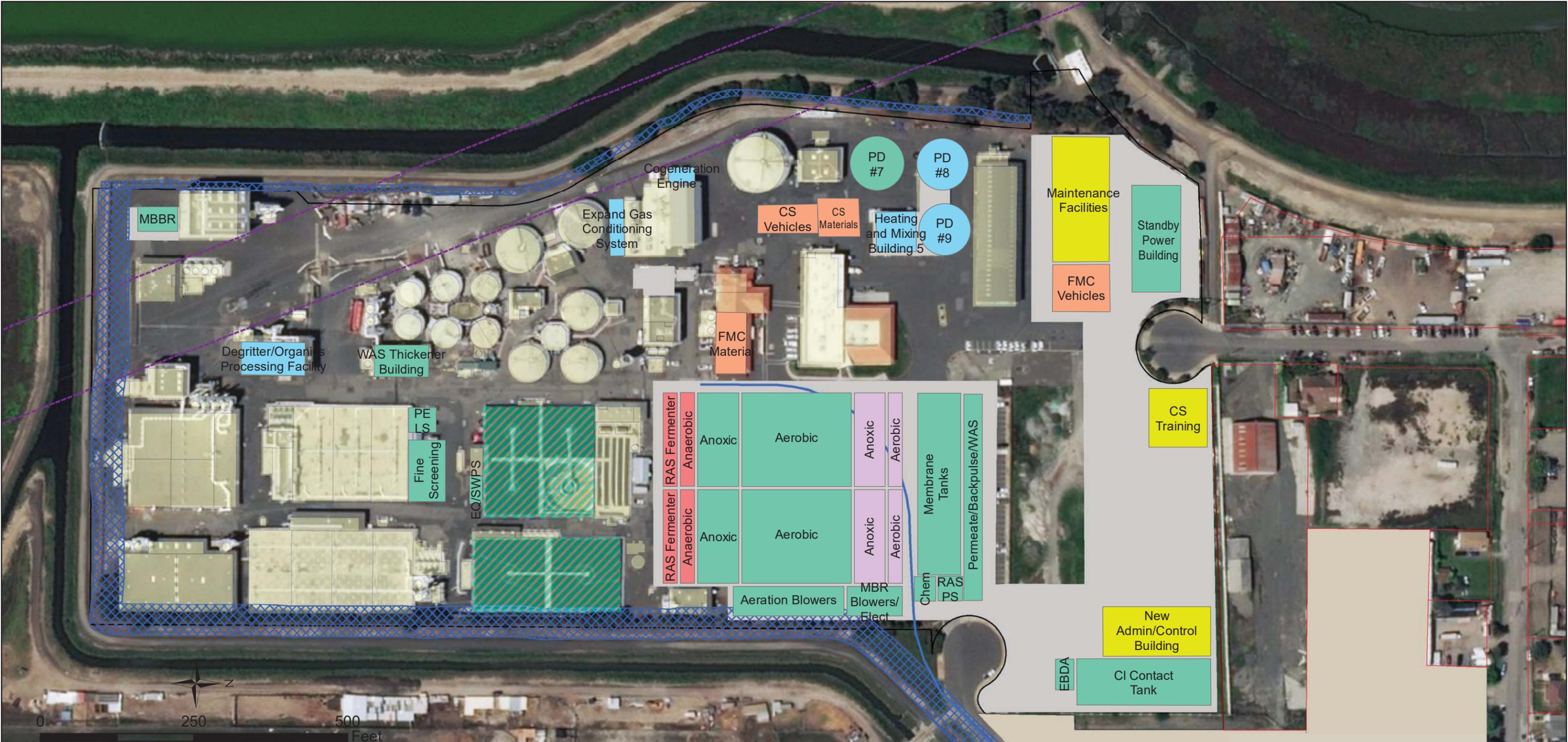


Legend

- | | | |
|-----------------------|---|---|
| Existing Facilities | Personnel/ Maintenance Facilities | Additional Area Needed for Lower Nutrient Limit |
| New Pavement | Phase I and II Process Facilities | May Not Happen Depending on Study with ACWD |
| Property Line | Required for Phosphorous Removal | Retrofitted Facilities |
| Adjacent Property | Required for Phosphorous Removal on Existing Building | EQ Storage |
| Land Purchased by USD | Phase III* | Additional Area for Levee Expansion** |
| Storage Facilities | | EBDA |

*33.0 MGD Capacity with One Unit Out of Service

**New Levee would protect against the 100 year storm stillwater in the year 2050.



**Figure 3 -
MBR Alternative**
Union Sanitary District
Alvarado WWTP Master Plan

Legend

- | | | |
|-----------------------|---|---|
| Existing Facilities | Phase I and II Process Facilities | Phase III* |
| New Pavement | EQ Storage | Additional Area Needed for Lower Nutrient Limit |
| Property Line | Required for Phosphorous Removal | May Not Happen Depending on Study with ACWD |
| Adjacent Property | Required for Phosphorous Removal on Existing Building | Additional Area for Levee Expansion** |
| Land Purchased by USD | | |
| Storage Facilities | | |

*33.0 MGD Capacity with One Unit Out of Service

**New Levee would protect against the 100 year storm stillwater in the year 2050.



SECONDARY TREATMENT PROCESS IMPROVEMENTS PROJECT

AMENDMENT NO. 1
TO
TASK ORDER NO. 1
TO
AGREEMENT
BETWEEN
UNION SANITARY DISTRICT
AND
HAZEN AND SAWYER
FOR
PROFESSIONAL SERVICES

Dated July 24, 2018

1. PURPOSE

The purpose of Amendment No. 1 to Task Order No. 1 is to authorize Hazen and Sawyer to perform additional preliminary design services for the Secondary Treatment Process Improvements Project (Project). These services include the further development of near-term alternatives, integration with the Plant Master Plan, evaluating membrane bioreactors, and other various scenarios and services intended to aid the Alvarado Wastewater Treatment Plant's (WWTP) existing secondary treatment process.

2. PROJECT COORDINATION

All work related to this task order shall be coordinated through the District's Project Manager, Curtis Bosick.

3. SCOPE OF SERVICES

The Scope of Services for Task Order No. 1 are amended as follows:

Task 1 Project Management

1.1 Project Management

The Engineer shall provide additional project management services to accomplish the work associated with this amendment.

1.2 Meetings and Workshops

Additional anticipated meetings include:

- Coordination Meetings: The Engineer shall attend various meetings with key District and Engineer staff to discuss Converge Phase tasks and alternative concepts.
- Monthly Progress Meetings: If required by the District, the Engineer shall participate in Monthly Progress meetings on a designated day/time at the District. Project progress, schedule, budget, variances, and action items will be discussed.
- Converge Phase Workshop: The Engineer shall facilitate a workshop to present technical findings. The workshop is described in Task 7, below.
- Unscheduled Meetings: The Engineer shall, upon direction from District, conduct additional meetings as needed to effectively complete the work.

1.3 Quality Management Plan

Additional quality management reviews will be conducted by Engineer's staff who are not directly involved in the project.

Task 5 Membrane Bioreactor (MBR) Alternative

5.1 Comprehend Phase

The Engineer shall review relevant drawings, reports, and calculations including hydraulic grade line, structural, and mechanical drawings. The

Engineer shall review process data collected during Task 2 as it relates to sizing and processes development for an MBR alternative.

5.2 Explore Phase

The Engineer shall use the process model calibrated and validated in Task 2 to accurately size treatment processes for an MBR alternative. Scenarios will be evaluated using the flows and loads information contained within the modeling assumptions memorandum. The modeling assumptions memorandum will be revised to include "Scenario 4: MBR Alternative".

Scenarios to be evaluated for the MBR alternative will include:

- Full MBR: Treatment of wet weather and peak flows through membrane tanks.
- MBR with Equalization: Equalization of wet weather and peak flows to optimize the size of membrane tanks and reduce costs.
- Each scenario will identify sizing, redundancy requirements, and effluent water quality under dry and wet weather flows and during maintenance.
- Note that hybrid options such as combining conventional activated sludge and MBR options will not be included in this analysis.

The Engineer shall develop a presentation summarizing the evaluation and findings for the MBR alternative. This presentation will be incorporated into the Explore Phase Workshop in Task 3. The presentation will summarize improvements needed to implement the MBR scenarios.

5.3 Reporting

Draft Project Report: The Engineer shall develop an additional section in the draft report that summarizes work performed in Task 5. Modeling of MBR scenarios will be included in the appendix.

Draft Report Meeting: This task provides additional funds associated with developing presentation materials specific to the MBR alternative.

Final Project Report: The Engineer shall receive and incorporate comments from the District and incorporate them into the final report.

Task 6 Additional Explore Phase Scenarios and Services

6.1 Scenario 1A: Existing System Capacity with Calcium Nitrate Addition

The Engineer shall perform an analysis to determine how calcium nitrate addition impacts the WWTP's influent wastewater characteristics and secondary treatment capacity. This analysis will require some additional coordination with engineering, operations, and laboratory staff and modeling. In addition, findings from this analysis will be incorporated into the Explore Phase Workshop and the Project Report.

6.2 RAS Chlorination Assistance

The Engineer shall evaluate the RAS chlorination system and applied dosages to determine if there are any economical improvements that can be completed to increase the effectiveness of existing system.

6.3 Center Well Scum Baffle Modifications

The Engineer shall provide recommendations and sketches for modifying the design of the Secondary Clarifier No. 5 center well scum baffle to a new target baffle design similar to Secondary Clarifier No. 6.

Task 7 Converge Phase

The Converge Phase will further develop the two secondary improvement alternatives, conventional activated sludge and MBR, to address how the recommended alternatives are synergistic with implementation of the BACWA Level 3 nutrient limits, effluent management, and the Plant Master Plan. This includes the development of capital and life cycle costs and construction phasing for both alternatives. At the end of this phase, it is anticipated that the District will have enough information to comfortably select the best, site-specific alternative.

7.1 Refinement of Near-Term Solution

The Engineer shall refine the near-term improvements for the two secondary improvement alternatives. The refinement will include multi-day, on-site sessions to assess options such as: constructing Aeration Basin 8, constructing a sidestream treatment facility, when and/or where should new disinfection basins be constructed, bio-P versus Chemical P, diurnal equalization versus no equalization, etc. The on-site sessions will also allow the Engineer to understand existing infrastructure and their impact on sequencing. The refinement will include the following:

- Refinement of process sizing
- Hydraulic profile analysis
- Conveyance requirements
- Existing infrastructure impacts
- New infrastructure requirements
- Old Alameda Creek current discharging procedure
- Further development of siting requirements including ancillary process impacts
- Consideration of peracetic acid (PAA) for Old Alameda Creek discharge
- Identifying Maintenance of Plant Operations (MOPO) sequencing
- Development of Level 4 estimates of probable capital and life cycle costs

7.2 Synergy with Future Nutrient Limits

The Engineer shall assess the implementation of near-term improvements with future expansion/modifications to meet BACWA Level 3 nutrient limits. The near-term projects will be synergistic with plans for future processes to achieve BACWA Level 3 nutrient limits (i.e. 4-stage with disc filters or MLE with denitrification filters).

7.3 Integration with the District's Master Plan

The Engineer shall integrate proposed near-term and long-term solutions with the District's master planning efforts as follows:

- Master Plan Layouts – The Engineer shall prepare a plant site layout for each of the two proposed improvements. The layouts will be on the same base sheets as current master planning efforts.
- MOPO Plan - The Engineer shall prepare a construction sequencing/ MOPO plan for each of the two proposed improvements.
- Trigger-Based Logic Sequences – In support of creating the Master Plan layouts, the Engineer will develop a logic sequence for each identified trigger. This sequence will identify what solution elements would require implementation based on activation of the specific trigger.

- Implementation Schedule – The Engineer shall develop an implementation schedule for planning purposes based upon the anticipated timing for the identified triggers for each proposed improvement. A plan will be developed to combine individual improvements into proposed implementation phases to logically progress the District to meet its goals. In support of creating a living document, the Engineer shall provide the implementation schedule in a format to allow convenient reprioritizing of proposed improvements in the future should the timing for specific triggers change over time.
- Estimate of Probable Costs – In support of the District's decision-making, the Engineer shall prepare Level 4 capital and life cycle cost estimates for both alternatives.

7.4 Converge Phase Workshop

A half-day workshop will be held with District staff to present the findings from the Converge Phase. The Engineer shall develop a presentation summarizing the refinement of the near-term improvements, synergy with BACWA Level 3 nutrient removal, effluent management, and integration into the Plant Master Plan.

7.5 Reporting

Draft Project Report: The Engineer shall develop an additional chapter in the draft report that summarizes the work performed in Task 7.

Draft Report Meeting: This task provides additional funds associated with developing presentation materials specific to the Converge Phase.

Final Project Report: The Engineer shall receive and incorporate comments from the District and incorporate them into the final report.

4. DELIVERABLES

Project deliverables not included in the original task order and/or amendments are listed below:

Summary of Task 1 Deliverables

- Meeting agendas and minutes
- Monthly invoices and reports

Summary of Task 5 Deliverables

- Presentation materials to be incorporated in **Task 3** deliverables
- MBR model output
- Draft Report Section (incorporated in Draft Report as part of **Task 4**)
- Final Report Section (incorporated in Final Report as part of **Task 4**)

Summary of Task 6 Deliverables

- Presentation materials to be incorporated in **Task 3** deliverables
- Secondary Clarifier No. 5 center well scum baffle modification sketches

Summary of Task 7 Deliverables

- Master Plan layout for each alternative
- MOPO Sequencing
- Trigger-Based Logic Sequences
- Implementation Schedule/Phasing Plan
- Converge Phase Workshop agenda and presentation
- Draft Report Chapter (incorporated in Draft Report as part of **Task 4**)
- Final Report Chapter (incorporated in Final Report as part of **Task 4**)

5. PAYMENT TO THE ENGINEER

Payment to the Engineer shall be as called for in Article 2 of the Agreement. The Multiplier for this work shall be 3.15, the profit shall be 10 percent, and the not-to-exceed amount shall be \$387,908. A summary of the anticipated distribution of cost and manpower between tasks is shown in Exhibit A.

The following table summarizes the previously-executed and proposed task orders and amendments under the Agreement:

Task Order / Amendment	Not to Exceed Amount	Board Authorization Required?	District Staff Approval
Task Order No. 1 – Predesign Services	\$177,374	Yes	Paul Eldredge
Amendment No. 1 to Task Order No. 1 – Additional Predesign Services	\$387,908	Yes	Paul Eldredge
Total	\$565,282		

6. TIME OF COMPLETION

All work defined in this Task Order amendment shall be complete in 120 calendar days after the execution of this Task Order amendment and subject to the conditions of Article 3 of this Agreement. The anticipated milestone dates are as follows:

Notice to Proceed	December 11, 2018
On-site Charette	Week of December 17 th
Converge Phase Workshop	Week of February 25 th
Draft Project Report	March 2019
Final Project Report	April 2019

IN WITNESS WHEREOF, the parties hereto have made and executed this Amendment No. 1 to Task Order No. 1 as of December ____, 2018 and therewith incorporate it as part of the Agreement.

DISTRICT

ENGINEER

Union Sanitary District

Hazen and Sawyer

By: _____
Paul R. Eldredge, P.E.
General Manager/District Engineer

By: _____
Marc Solomon, P.E.
Vice President

Date: _____

Date: _____

Exhibit A - Cost Breakdown

Union Sanitary District		Project Manager	Technical Lead	Process Mechanical/Utilities	Nutrient Removal Lead	Clarifiers	QAQC Reporting	MBR	Process	Clarifier Engr	Hydraulics	Disinfection	Struct	Elec	Construction Sequencing	Utilities	Costing Engr	Staff Engr	Admin	H&S Labor Cost	Other Direct Costs (ODCs)	Subconsultant Markup (5%)	Total Fee
Secondary Treatment Process Improvement Project		Marc Solomon	Paul Pitt	Allan Briggs	Ron Latimer	Alonso Griborio	Joe Rohrbacher	Tony Greiner	Irene Chu	Will Martin	Jared Hartwig	Melanie Mann	Wyatt Dressler	Ian Waters	Elisabeth Girma	Justin Irving	Chris Portner	Melissa Meyer		\$119			
Billing Rate		\$290	\$290	\$215	\$225	\$215	\$200	\$225	\$165	\$150	\$150	\$215	\$155	\$240	\$200	\$160	\$165	\$120					
1	Project Management	44	2	0	0	0	0	0	20	0	0	0	0	0	0	0	4	0	0	\$ 17,120	\$ 420	\$ -	\$ 17,540
1.01	Project Management (3 months)	36							12											48	\$ 288		\$ 12,708
1.02	Meetings and Workshops	6	2						6											14	\$ 84		\$ 3,394
1.03	Quality Management Plan	2							2								4			8	\$ 48		\$ 1,438
5	MBR Alternative	20	12	0	12	0	0	64	24	0	44	0	0	0	0	72	0	8	0	\$ 49,420	\$ 4,036	\$ -	\$ 53,456
5.01	Comprehend Phase	2						24	2		4					8				40	\$ 240		\$ 8,430
5.02	Explore Phase	12	8		8			32	12		40					56				168	\$ 3,508		\$ 35,248
5.03	Reporting	6	4		4			8	10							8		8		48	\$ 288		\$ 9,778
6	Additional Scenarios and Services	0	14	0	6	18	0	0	20	12	0	0	0	0	0	0	0	0	0	\$ 14,380	\$ 420	\$ -	\$ 14,800
6.01	Scenario 1A: Calcium Nitrate Addition		4		6	6			12	12										40	\$ 240		\$ 7,820
6.02	RAS Chlorination Assistance		8			8			8											24	\$ 144		\$ 5,504
6.03	Center Well Scum Baffle Modifications		2			4														6	\$ 36		\$ 1,476
7	Converge Phase	36	78	112	120	108	12	88	280	16	76	32	24	12	72	180	104	112	32	\$ 280,648	\$ 21,464	\$ -	\$ 302,112
7.01	Refinement of Near-Term Solution																						
	Refinement of Process Sizing (On-site Charette)	16	16	16	16	16		16	32				8	4		24				164	\$ 8,984		\$ 43,664
	Hydraulic Profile Analysis			4				4	8		60									76	\$ 456		\$ 12,536
	Conveyance Requirements (Pumping Systems, Control Boxes, Piping)		4	12	8	8		8	12		16		8			40				116	\$ 696		\$ 21,776
	Existing Infrastructure Impacts		4	8	8			8	12				8	8		40				96	\$ 576		\$ 18,596
	New Infrastructure Requirements		4	8	8	8		8	12	8						12				68	\$ 408		\$ 13,708
	Siting and Ancillary Process Impacts		8		8	8		8	12							12				56	\$ 336		\$ 11,876
	Old Alameda Creek - PAA and Discharge Sequence		8	12	12	12			12			32								88	\$ 528		\$ 19,568
	MOPO Sequencing			16	8	8		8	12	8					24	12				96	\$ 576		\$ 19,236
	Development of Probable Costs				4				12								40			56	\$ 336		\$ 9,816
7.02	Synergy with Future Nutrient Limits		4	8	8	8			16											44	\$ 264		\$ 9,304
7.03	Integration with the District's Master Plan																						
	Master Plan Layouts			16	4	4		4	8							8				44	\$ 264		\$ 8,964
	MOPO Plan		4	4	4	4		4	8						24					52	\$ 312		\$ 11,112
	Trigger Based Logic Sequences	4	4		4	4		4	8							8				36	\$ 216		\$ 7,796
	Implementation Schedule		4		4	4		4	8						24		16	8		72	\$ 432		\$ 13,972
	Estimate of Probable Costs		4		4	4		4	8								40			64	\$ 384		\$ 12,124
7.04	Converge Phase Workshop	8	8	8	8	8		8	40							24		24		136	\$ 5,316		\$ 30,316
7.05	Reporting																						
	Draft Project Report	8	4		8	8	8		40								8	40	16	140	\$ 840		\$ 24,064
	Final Project Report		2		4	4	4		20									40	16	90	\$ 540		\$ 13,684
	TOTAL	100	106	112	138	126	12	152	344	28	120	32	24	12	72	252	104	124	32	\$ 361,568	\$ 26,340	\$ -	\$ 387,908



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: December 3, 2018

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Sami E. Ghossain, Manager of Technical Services
Raymond Chau, CIP Coach
Curtis Bosick, Associate Engineer

SUBJECT: Agenda Item No. 12 - Meeting of December 10, 2018
Authorize the General Manager to Execute Amendment No. 4 to Task Order No. 1 with RMC Water and Environment for the Plant Master Plan

Recommendation

Staff recommends the Board authorize the General Manager to execute Amendment No. 4 to Task Order No. 1 with RMC Water and Environment in the amount of \$141,861 for the Plant Master Plan.

Background

On December 12, 2016, the Board authorized the General Manager to execute an Agreement and Task Order No. 1 with RMC Water and Environment (RMC) for the Plant Master Plan. The purpose of the Plant Master Plan is to review and assess the District's near- and long-term projects, evaluate the need to retrofit or replace existing facilities (e.g. Operations and Administration Buildings), recommend the sequence of design and construction implementation based on future regulatory changes, determine priorities and schedules of improvements, re-affirm previous recommendations, evaluate existing and future space and capacity needs, optimize process adjacencies, determine economic feasibility of options, and summarize what is intended to be a road map for the Alvarado Wastewater Treatment Plant for the next 20 to 40 years.

On March 21, 2017, staff executed Amendment No. 1 to Task Order No. 1 with RMC for additional services related to the evaluation of the Administration Building. Under this amendment, RMC

evaluated the capital and operation and maintenance costs of retrofitting the existing Plant Operation Control Building in conjunction with the costs of retrofitting the existing Administration Building. The costs of retrofitting the existing buildings were compared to the cost of constructing a new combined building and the results were presented to the Board during a workshop on July 11, 2017.

In summary, capital costs for constructing a new building were estimated to be 14 percent higher than retrofitting the existing buildings; however, the life cycle costs were estimated to be 29 percent less. Furthermore, a new building would also provide: a longer life span; a facility built to the latest building codes; an opportunity for more efficient space planning; a construction sequence that significantly minimizes disruptions to staff, productivity, and customer service; consolidation of shared functions; and, most importantly, unlocking of valuable real estate that could be used to expand the existing secondary treatment process.

Concurrently, staff had been working with Carollo Engineers to determine the current solids capacity of the treatment Plant. Phase I of the Solids System Capacity Assessment study focused on the solids side of the Plant, while phase II focused on all liquids processes, including but not limited to: headworks, primary clarifiers, aeration basins, secondary clarifiers, and disinfection. Among other things, the results of this assessment concluded that some of the Plant's secondary treatment processes are at/near capacity at current average dry weather flow (ADWF) and over capacity during certain peak flow events. The capacity analysis was completed in early 2018 and the results were provided to RMC for incorporation into the master planning effort.

Preliminary results from the master planning effort identified two potential secondary improvement alternatives to the liquids processes: conventional activated sludge and membrane bioreactor (MBR). Both alternatives would include considerable retrofits and/or expansions to the existing aeration basins, as well as new infrastructure and some improvements to existing electrical, mechanical, communication, and conveyance systems. To help further develop and expedite the delivery of necessary capacity improvements, staff proceeded with the consultant selection process for the preliminary design services for both alternatives.

- During the consultant selection interview process, Hazen and Sawyer (Hazen) presented staff with another approach to the conventional activated sludge alternative that would optimize current secondary treatment processes and leverage the use of existing infrastructure. Staff was intrigued by Hazen's approach; however, it meant redirecting the Plant Master Plan efforts to focus on the buildings while this concept is further evaluated. Although a delay in the forward progress of the Plant Master Plan was not ideal, staff believed that it would be fiscally irresponsible not to fully evaluate this concept given the potentially long-term benefits and cost considerations. The Board authorized the General Manager to execute a task order with Hazen to validate the feasibility of their approach before staff considered implementation of the proposed near- and long-term solutions from the Plant capacity analysis.

On July 12, 2018, staff executed Amendment No. 2 to Task Order No. 1 with RMC for additional services related to the evaluation of three new building alternatives. Under this amendment, RMC developed planning level layouts of approximate building footprints and related site areas, such as parking and materials storage for each of the following alternatives:

- New combined Plant Operation Control/FMC building plus new Administration Building
- New combined Administration/Plant Operation Control Building plus new FMC building
- New Campus with three separate buildings adjacent to each other

On September 24, 2018, staff met with RMC to review and discuss the layouts for the three new building alternatives. From the perspective of optimizing the footprint, it was determined that there are few benefits associated with combining buildings. As each building supports various District functions, there are limited spaces that can be consolidated and shared between the different workgroups. Additionally, except for office and conference spaces, most of the customer service, operations, laboratory, and maintenance workspaces are better suited on the ground floor due to the nature of the work. In addition, there are little to no cost benefits as the square footage requirements are comparable between alternatives and any costs related to constructing multiple buildings is insignificant when compared to the costs associated with constructing taller buildings.

Consequently, both staff and RMC believe that the New Campus is the alternative that corresponds best with the District's needs. Although there will be three separate buildings, the buildings will be adjacent to each other which allows for some consolidation of shared functions, such as conference rooms, locker rooms, parking, etc. The only caveat is whether there will be adequate space for this alternative to fit along with the necessary process improvements on the District's existing property. Please refer to Figure 1 for a site plan of the New Campus alternative.

During a workshop on October 24, 2018, Hazen presented findings from their modeling efforts. Among other things, their findings included recommended near-term improvements that would be needed to reliably achieve BACWA Level 2 nutrient limits. These recommended improvements require significantly less infrastructure than previous master plan projections and include the following:

- Retrofit the existing aeration basins and construct a minimum of 5.3 million gallons of new aeration basin volume
- Construct a new sidestream treatment facility
- Construct four new 150-foot secondary clarifiers; or two new clarifiers with significant upgrades to the existing infrastructure.

For the MBR alternative, Hazen similarly evaluated the new infrastructure requirements to achieve BACWA Level 2 nutrient limits. These recommended improvements require infrastructure similar to the master planning effort and include the following:

- Construct new MBR tanks, with building and supporting equipment
- Construct new Aeration Basin 8 and retrofit existing aeration basins
- Construct new fine screening facility

Based on Hazen’s findings, staff currently believes that the New Campus approach will work for either conventional activated sludge or MBR alternatives. Accordingly, staff has asked RMC to proceed with further refinement of the New Campus alternative to develop concept level building layouts and related site areas (parking, materials storage, etc.) and a summary of architectural design assumptions (materials, level of finish, number of stories) to inform planning-level cost estimates of the occupied buildings.

Amendment No. 4 to Task Order No. 1

The purpose of Amendment No. 4 to Task Order No. 1 is for RMC to further develop the two secondary treatment alternatives, conventional activated sludge or MBR by integrating Hazen’s findings into the Plant Master Plan. This amendment also includes additional services that exceeded the original scope of work, such as the development of MBR alternatives, two site visits to existing MBR facilities, further development of concept level building layouts and related site areas for the New Campus building alternative, and coordination with the Regional Water Quality Control Board (RWQCB) to develop and discuss potential discharge requirements.

The scope of services and fees for Amendment No. 4 are summarized below:

Task No.	Task Description	Fee
1	Meetings and Workshops	\$28,404
2	Plant Master Plan	\$53,096
4	Project Management	\$18,142
7	New Building Evaluation	\$9,937
9	Converge Phase	\$32,282
	Total Not-to-Exceed Fee	\$141,861

Staff has reviewed the scope and fee and found the proposal to be reasonable, considering the required level of effort. All work under this task order is expected to be completed by June 2019 and will be done in concert with Hazen’s evaluation of the treatment plant process units. It is currently anticipated that RMC will conduct a workshop with staff to present their findings and recommendations in with a presentation to the Board sometime thereafter.

The total fees for the Project’s agreement with RMC Water and Environment are summarized in the table below:

Description	Fee
Task Order No. 1 – Plant Master Plan	\$265,217
Amendment No. 1 to Task Order No. 1 – Additional Evaluation of Buildings	\$39,700
Task Order No. 2 – Effluent Management	\$69,877
Amendment No. 1 to Task Order No. 2 – Effluent Management Study - EBDA Model Review	\$10,825
Amendment No. 2 to Task Order No. 2 – Effluent Management Study - Early Action Nutrient Removal	\$74,518
Amendment No. 2 to Task Order No. 1 – New Building Evaluation	\$48,831
Amendment No. 3 to Task Order No. 1 – Title Report Searches	\$14,253
Amendment No. 4 to Task Order No. 1 – MBR Alternatives and Converge Phase	\$141,861
Total Not-to-Exceed Fee for this Agreement	\$665,082

Staff recommends the Board authorize the General Manager to execute Amendment No. 4 to Task Order No. 1 with RMC Water and Environment in the amount of \$141,861 for the Plant Master Plan.

PRE/SEG/RC/CB;dl

Attachment:

- Figure 1 – New Campus Alternative Site Plan
- Figure 2 – Updated Conventional Activated Sludge Site Plan
- Figure 3 – MBR Site Plan
- Amendment No. 4 to Task Order No. 1

Figure 1 - New Campus Alternative Site Plan

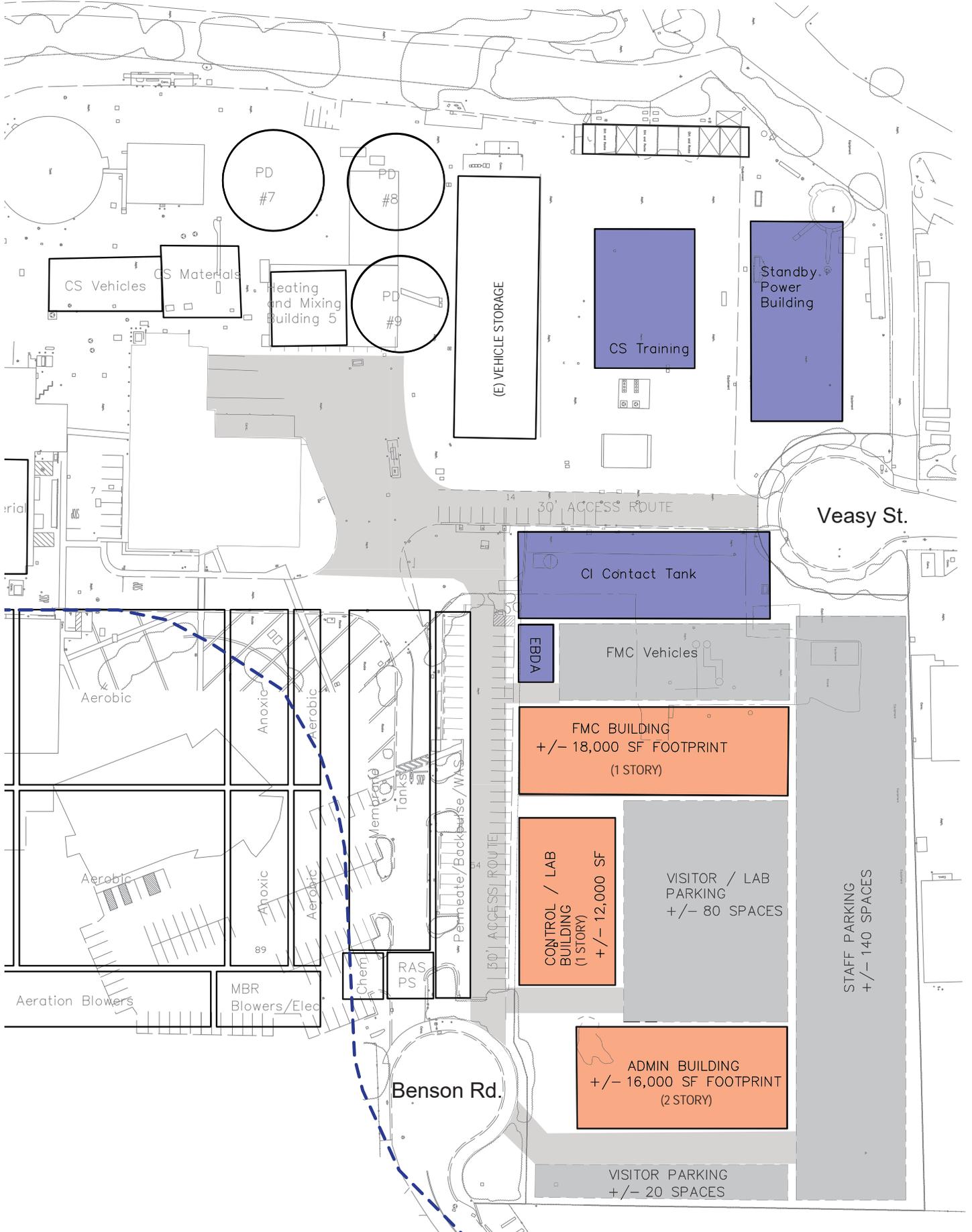




Figure 2 - Updated Conventional Activated Sludge Alternative

Union Sanitary District
Alvarado WWTP Master Plan

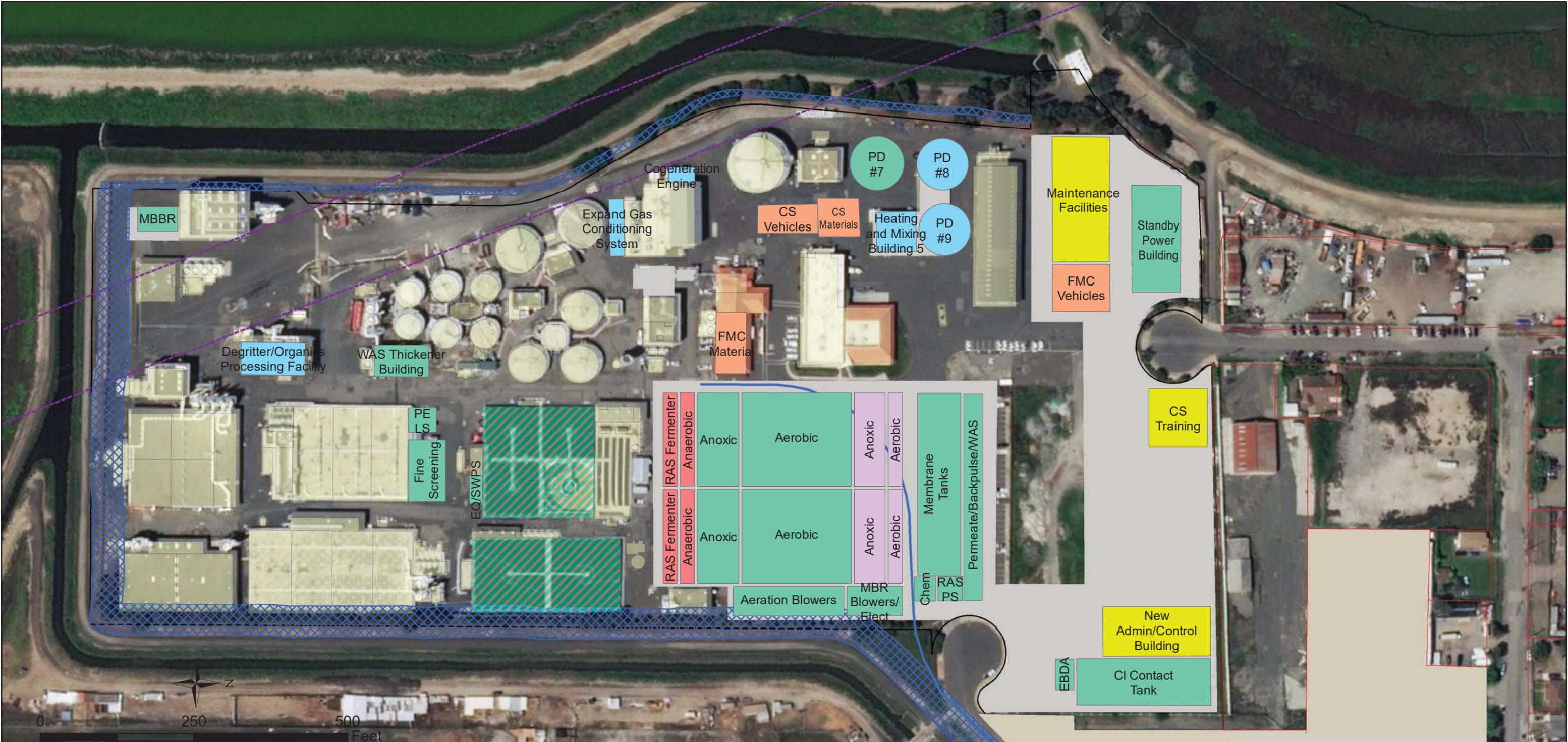


Legend

- | | | |
|-----------------------|---|---|
| Existing Facilities | Personnel/ Maintenance Facilities | Additional Area Needed for Lower Nutrient Limit |
| New Pavement | Phase I and II Process Facilities | May Not Happen Depending on Study with ACWD |
| Property Line | Required for Phosphorous Removal | Retrofitted Facilities |
| Adjacent Property | Required for Phosphorous Removal on Existing Building | EQ Storage |
| Land Purchased by USD | Phase III* | Additional Area for Levee Expansion** |
| Storage Facilities | | EBDA |

*33.0 MGD Capacity with One Unit Out of Service

**New Levee would protect against the 100 year storm stillwater in the year 2050.



**Figure 3 -
MBR Alternative**
Union Sanitary District
Alvarado WWTP Master Plan

Legend

- | | | |
|-----------------------|---|---|
| Existing Facilities | Phase I and II Process Facilities | Phase III* |
| New Pavement | EQ Storage | Additional Area Needed for Lower Nutrient Limit |
| Property Line | Required for Phosphorous Removal | May Not Happen Depending on Study with ACWD |
| Adjacent Property | Required for Phosphorous Removal on Existing Building | Additional Area for Levee Expansion** |
| Land Purchased by USD | | |
| Storage Facilities | | |

*33.0 MGD Capacity with One Unit Out of Service

**New Levee would protect against the 100 year storm stillwater in the year 2050.



ALVARADO WASTEWATER TREATMENT PLANT MASTER PLAN

AMENDMENT NO. 4

TO

TASK ORDER NO. 1

TO

AGREEMENT

BETWEEN

UNION SANITARY DISTRICT

AND

RMC WATER AND ENVIRONMENT

FOR

PROFESSIONAL SERVICES

Dated December 14, 2016

1. PURPOSE

The purpose of Amendment No. 4 to Task Order No. 1 is to authorize Woodard & Curran (Engineer), formerly RMC Water and Environment, to complete services requested by Union Sanitary District (District) that were not included in previous task orders and amendments. These services include:

- Assessment, and planning level cost estimating of Membrane Bioreactor (MBR) alternatives for the Plant Master Plan.
- Development of two “Converge Phase” secondary treatment improvement alternatives, conventional activated sludge (CAS) and Membrane Bioreactor (MBR), where findings from the secondary process analysis conducted by Hazen and Sawyer (Hazen) will be integrated into the Plant Master Plan.
- Attendance and/or facilitation of additional meetings and board workshops that are associated with the Secondary Treatment Process Improvements Project.

2. PROJECT COORDINATION

All work related to this task order shall be coordinated through the District's Project Manager, Raymond Chau.

3. SCOPE OF SERVICES

The Scope of Services for Task Order No. 1 is amended as follows:

Task 1 – Meetings and Workshops

Subtask 1.2: Workshops and Board Meetings

Engineer shall attend and facilitate additional meetings and workshops with District staff and Board members, and Hazen. Meetings will include regular project progress update conference calls with District's staff to discuss the work progress, request additional information, and monitor project on schedule. Engineer shall also attend one (1) half day meeting with Hazen to coordinate the findings from the secondary process improvement study and the Plant Master Plan. The workshops and the anticipated topics of discussion include:

- *Workshop No. 7 – MBR Alternative Discussion, February 28, 2018 (Engineer and District staff).* The purpose of this workshop is to present findings specific to the MBR Alternatives.
- *Workshop No. 8 – Secondary Treatment Upgrade Project Workshop, October 24, 2018 (Engineer, Hazen, and District Staff).* The purpose of this workshop is present the Explore Phase findings from Hazen's secondary process evaluation and present preliminary plant layouts based on those findings.
- *Workshop No. 9 – Converge Phase Coordination Workshop (Engineer, Hazen, and District Staff).* The purpose of this workshop is to present preliminary present the Converge Phase findings from Hazen's secondary process evaluation and present preliminary plant layouts based on those findings.
- *Workshop No. 10 – Preparation for Board Workshop No. 3 (Engineer and District staff).* The purpose of this workshop is to further discuss and obtain feedback on the Converge Phase layouts and cost estimates and prepare for Board Workshop No. 3.

- *Board Workshop No. 3 – Present Converge Phase Layout and Cost Estimate (Engineer, District staff, and Board).* The purpose of Board Workshop No. 3 is to present the Converge Phase findings including plant layout options, phasing, and cost estimates. Administrative Building layouts will also be presented. This workshop is expected to occur in February 2019.

Assumptions:

- Engineer shall participate in up to three (3) conference calls with the District to review project progress

Task 2 – Plant Master Plan

Subtask 2.3: Alternative Development and Evaluation

Engineer shall develop MBR alternatives for project implementation, including location and schedule. Up to two (2) MBR alternative buildout scenarios for the Alvarado WWTP will be developed. The alternatives will consist of one plant built around the existing Administration and Control Buildings and one plant with new Administration and Control Buildings. Planning-level lifecycle cost estimates will be developed. Alternative development shall include the conceptual layout of facilities, and estimation of capital costs for each alternative. MBR alternative development will include two (2) site visits to existing MBR facilities in Modesto, CA and Riverside, CA.

Engineer shall coordinate with the RWQCB to continue to develop and discuss potential discharge requirements for expanded use of the shallow water discharge at Old Alameda Creek. Engineer shall attend two meetings with the RWQCB. One meeting has been held on May 16, 2018.

Task 4 – Project Management

Engineer shall perform incremental additional project management services associated with this amendment and as required to integrate the findings from the Secondary Treatment Process Improvements Project into the Plant Master Plan. The scope of services described under Task Order No. 1 applies to this task.

Assumptions:

- Engineer shall provide progress reporting and invoicing for up to four (4) months

Task 7 – New Buildings Evaluation

Engineer shall provide concept level plan layouts of the functional areas and related site areas, i.e. parking and materials storage the preferred Master Plan Alternative (1 alternative only). The functional areas include:

- Administration Building – Two story, approximately 16,000 SF per floor.
- Control/Lab Building – Single story, approximately 12,000 SF
- FMC Building – Single story, approximately 18,000 SF

Assumptions:

- Concept plan layouts will reflect major plan elements, but will not include detailed layouts of Laboratory, Restroom or accessory/utility space.
- Concept plan layouts will be based on the Program Evaluation Summary information as updated by District staff.

Task 9 – Converge Phase (Refinement of Secondary Improvements for Plant Master Plan)

Subtask 9.1 – Refinement of Near-Term Solution

Engineer shall coordinate with Hazen to refine the near-term improvements for the CAS and MBR alternatives. Secondary process sizing shall be refined to reconcile the divergence in process sizing between the Plant Master Plan analysis and Hazen's secondary process analysis. A brief summary (2-page max) of the differences in process sizing between the Plant Master Plan analysis and the Hazen sizing will be developed for the District's review. Engineer shall consider the impacts of existing infrastructure on siting and project implementation sequencing. Regular weekly coordination emails and/or calls with Hazen are included in this subtask.

Subtask 9.2 – Synergy with Future Nutrient Limits

Engineer shall coordinate with Hazen to refine process sizing to meet future Level 3 nutrient limits.

Subtask 9.3 – Integration with the Secondary Process Improvement Study

Engineer shall integrate findings from Subtasks 2.1 and 2.2 with previous work performed under the Plant Master Plan. Two buildout alternatives will be developed. Plant site layouts considering construction and near-term phasing and lifecycle cost analyses will be provided for each alternative.

Work related to the Plant Master Plan developed under this amendment will be incorporated into the draft and final Plant Master Plan reports, which are included in Task Order No.1.

Assumptions:

- Hazen shall provide construction and annual operation and cost estimates for the two secondary treatment alternatives for Engineer's use in lifecycle cost analysis

4. DELIVERABLES

Project deliverables not included in previous task orders and amendments are listed below:

Task 1 – Meetings and Workshops

Deliverables:

- Meeting materials, including agenda, handouts, and meeting summary for five (5) workshops.

Task 2 – Plant Master Plan

Deliverables:

- Up to two (2) site plans showing the potential layout and related costs, issues, and difficulties related to the developed MBR alternatives.
- Up to four (4) lifecycle cost tables summarizing the annual and cumulative costs for the developed MBR alternatives.

Task 4 – Project Management

Deliverables:

- Monthly progress reports and invoices

Task 7 – New Building Evaluation

Deliverables:

- Draft and Final Concept level plan layouts for occupied buildings and related site areas in electronic (pdf) format
- Summary of architectural design, material and systems assumptions for occupied buildings as basis for costing effort.
- Planning Level Opinion of Probable Construction Cost for the preferred Master Plan Alternative, Draft and Final.

Task 9 – Converge Phase

Deliverables:

- A brief summary (2-page max) of the differences in process sizing between the Plant Master Plan analysis and the Hazen. Draft and final versions will be submitted in electronic format.
- Two (2) lifecycle cost tables summarizing the annual and cumulative costs for the CAS and MBR alternatives in electronic format.
- Two (2) WWTP site layouts, including phasing in electronic format.

5. PAYMENT TO THE ENGINEER

Payment to the Engineer shall be as called for in Article 2 of the Agreement. The billing rate schedule is equivalent to an overall labor multiplier of 3.22, including profit. Subconsultants and outside services will be billed at actual cost plus 5%; other direct costs will be billed at actual cost; and mileage will be billed at prevailing IRS standard rate.

Total charges to the DISTRICT not-to-exceed amount shall be \$141,861. A summary of the anticipated distribution of cost between tasks is shown in Exhibit A.

The following table summarizes the previously-executed and proposed task orders and amendments under the Agreement:

Alvarado Wastewater Treatment Plant Master Plan

Amendment No. 4 to Task Order No. 1

Page 7 of 8

Task Order / Amendment	Not to Exceed Amount	Board Authorization Required?	District Staff Approval
Task Order No. 1 – Plant Master Plan	\$265,217	Yes	Paul Eldredge
Amendment No. 1 to Task Order No. 1	\$39,700	No	Sami Ghossain
Task Order No. 2 – Effluent Management	\$69,877	Yes	Paul Eldredge
Amendment No. 1 to Task Order No. 2 – Effluent Management Study - EBDA Model Review	\$10,825	No	Sami Ghossain
Amendment No. 2 to Task Order No. 2 – Effluent Management Study - Early Action Nutrient Removal	\$74,518	Yes	Paul Eldredge
Amendment No. 2 to Task Order No. 1 – New Building Evaluation	\$48,831	No	Sami Ghossain
Amendment No. 3 to Task Order No. 1 – Title Report Searches	\$14,253	No	Sami Ghossain
Proposed Amendment No. 4 to Task Order No. 1 – MBR Alternatives and Converge Phase	\$141,861	Yes	Paul Eldredge
Total	\$665,082		

6. TIME OF COMPLETION

All new work defined in this Task Order amendment shall be completed within 120 calendar days after the execution of this Task Order amendment and subject to the conditions of Article 3 of this Agreement.

Alvarado Wastewater Treatment Plant Master Plan

Amendment No. 4 to Task Order No. 1

Page 8 of 8

IN WITNESS WHEREOF, the parties hereto have made and executed this Amendment No. 4 to Task Order No. 1 as of December ____, 2018 and therewith incorporate it as part of the Agreement.

DISTRICT

ENGINEER

Union Sanitary District

RMC Water and Environment

By: _____
Paul R. Eldredge, P.E.
General Manager/District Engineer

By: _____
Alyson Watson
President

Date: _____

Date: _____



Exhibit A - Fee Summary

Union Sanitary District Alvarado Wastewater Treatment Plant Master Plan - Amendment No. 4 to Task Order No. 1

12/3/18

Tasks	Labor									Outside Services					ODCs			Total				
	Steve Clary	Dave Richards on	Mark Takemoto	Susan Hsu	Christy Nelson	Mary Cousins	Carrie Del Boccio	Graphics	Admin.	Total Hours	Total Labor Costs (1)	OPC	Degenkolb	Burks Toma	PAE	TBD	Subtotal		Sub Consultant Total Cost (2)	ODCs	Total ODCs (3)	Total Fee
	PIC	PM	PE	Staff Eng.	Staff Eng.	Permitting	Recycled Water	Graphics and Support Team	Land Implementation			Structural	Architecture	Bldg MEP	Bldg Cost Estimating							
Task 1: Meetings and Workshops																						
1.2 Workshops and Board Meeting (Amendment 4)																						
+ MBR Alternative Discussion		8	8							16	\$4,512										\$0	\$4,512
+ Secondary SWAT Coordination Workshop		6	6	3						15	\$3,999										\$0	\$3,999
+ Converge Phase Coordination Workshop		8	8	3						19	\$5,127										\$0	\$5,127
+ Preparation for Board Workshop No. 3		8	8	3						19	\$5,127										\$0	\$5,127
+ Board Workshop No. 3		8	8	3						19	\$5,127										\$0	\$5,127
+ Project Coordination Meetings		8	8							16	\$4,512										\$0	\$4,512
Task 1.2 Amendment 4 Only	0	46	46	12	0	0	0	0	0	104	\$28,404	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$28,404
Task 2: Plant Master Plan																						
2.3 Alternative Development and Evaluation (Amendment 4)																						
+ MBR Alternative Development		20	40	36						96	\$23,780											\$23,780
+ Capital and Life-Cycle Cost Estimate		8	30	48						86	\$19,984											\$19,984
+ RWQCB Coordination for Early Action Nutrient Removal		12	4	4		16				36	\$9,332											\$9,332
Task 2.3 Amendment 4 Only	0	40	74	88	0	16	0	0	0	218	\$53,096	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,096
Task 4: Project Management																						
Task 4 Amendment 4 Only		26	26	16					2	70	\$18,142											\$18,142
Task 7: New Buildings Evaluation (Amendment 2)																						
Concept Level Building Plan Layouts (Amendment 4)										0	\$0			\$9,464			\$9,464	\$9,937		\$0		\$9,937
Task 9: Converge Phase (Amendment 4)																						
9.1 Refinement of Near-Term Solution		10	24	12						46	\$11,684						\$0	\$0		\$0		\$11,684
9.2 Synergy with Future Nutrient Limits		4	12	6						22	\$5,534						\$0	\$0		\$0		\$5,534
9.3 Integration with the District's Master Plan		8	30	24						62	\$15,064						\$0	\$0		\$0		\$15,064
Subtotal Task 9 (Amendment 4):	0	22	66	42	0	0	0	0	0	130	\$32,282	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$32,282
Amendment No. 4 Total	0	126	204	158	0	16	0	0	2	506	\$127,412	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$141,861

- The individual hourly rates include salary, overhead and profit.
- Subconsultants will be billed at actual cost plus 5%.
- Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be those allowed by current IRS guidelines), and travel expenses, will be billed at cost.
- Rates shown are projected 2017 rates (2016 standard rates plus 3%). RMC reserves the right to adjust its hourly rate structure and ODC markup at the beginning of the calendar year for all ongoing contracts.



Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: December 4, 2018

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
James Schofield, Manager, Collection Services
Richard Czapkay, Coach, Collection Services

SUBJECT: Agenda Item No. 13 – Meeting of December 10, 2018
Information Item: **Collection Services' Closed-Circuit Television Camera Operations and Maintenance**

Recommendation

Information only.

Background

On several occasions the Board has inquired about the costs and maintenance of the District's sewer inspection equipment. This informational Staff report provides a brief review of the District's Closed-Circuit Television (CCTV) inspection program and illustrates steps taken by staff to better manage costs.

The District has been performing CCTV inspections of its sewer mains for 40 years. The first CCTV van was purchased in 1978. CCTV inspections are performed for several reasons:

- Identify preventive maintenance Issues (grease build up, root intrusions etc.) before they result in a stoppage or sanitary sewer overflow.
- Locate structural Issues (broken, collapsed pipe, cracks etc.) before they result in a stoppage or sanitary sewer overflow.
- Inspect new housing/commercial developments to ensure they meet District standards.

- The condition assessment information collected during the CCTV process is used in Basin Master Plan updating and CIP projects.

The largest portion of our CCTV inspections are done as part of our Preventive Maintenance Program. Until 2017 we were on a 72-month Preventative Maintenance Program, which meant we inspected approximately 134 miles of pipe or 1/6th of our gravity system annually. This resulted in inspection of our entire system every six years. Since 2017 we have transitioned to an 84-month program where we inspect 1/7th (114 miles) of our gravity system, resulting in inspection of our entire system every seven years.

The information we gather is used to note defects and maintenance issues. Field crews then write up repair work orders for defects or look at the history and may add these to our selective maintenance program. The CCTV data is also used for Basin Master Planning for CIP projects.

All new construction development projects are inspected prior to acceptance in our permitting program. For CIP projects we inspect before and after a project is complete as well as prior to the warranty expiring.

All District staff operating a CCTV unit are certified through the National Association of Sewer Service Companies Pipeline Assessment Certification Program. NASSCO is the industry standard for pipeline condition assessment.



Root Intrusion



Grease Deposits

Equipment

The District currently has 2 trucks dedicated full time to our CCTV inspection program.

- Each truck is a 2012 box van body mounted on an F-550 truck chassis
- They are on a 10-year replacement cycle in the Vehicle R & R budget.
- Each truck is capable of inspecting sewer mains up to 48 inches in diameter and 1000' long per setup.
- Each Truck is equipped with the following:
 - 3 types of transporters (various transporters are needed for different diameter pipes and different pipe materials)
 - 2 cameras using HD quality video. Each camera has a built-in locating transmitter used to accurately determine the position of the camera. This feature is used for locating repairs and assisting in Underground Service Alert (811) locating.



Oz III camera on Steerable Pipe Ranger Transporter



Oz III camera on Ultra Shorty Transporter

Durability

The District uses very high-tech equipment in a very harsh environment. As our equipment ages the need for repairs increases, which also increases repair costs.

To better understand the issues, we reached out to other agencies and created a user group. The group consisted of seven agencies: Central Contra Costa Sanitary District, the City of Oakland, Vallejo, West Valley, and Castro Valley Sanitation Districts, the City of San Jose, and USD. This group met for about 12 months with the purpose of sharing best practices, common issues, and processes and procedures on how the equipment is used, repaired and maintained. Through these meetings, we discovered was that other agencies are having similar problems with decreasing dependability and increasing repair costs.

One thing staff noticed that sets us apart from other agencies is our ability to evacuate the cameras. Evacuating a camera is a process of applying vacuum to help remove any moisture from the electronic components in the camera head. Each time this is done the vendor charges \$500.

Changes staff has made to date to increase durability:

- The R & R schedule for replacement of cameras and transporters has been modified. The previous schedule had the cameras/transporters replaced on the same schedule as the vehicle (10 years). We now replace the cameras and transporters at 5 years.
- Staff received training on troubleshooting of issues. Also, trained staff developed SOP's that allow us to make the most common repairs in-house. These repairs include replacement of lights and termination of the cable.
- Staff created an on-site workstation to make repairs on the cameras and transporters here at the District rather than shipping them out.

Future Endeavors

- Continued training to include repair of transporters, and more technical repair of the cameras.
- Currently analyzing PM study results to evaluate our preventive maintenance program. This may affect a change in our CCTV schedules. Extending the CCTV schedules would decrease the work load and extend the life of the CCTV equipment.
- Exploring other technologies that provide the same level of detail but is more dependable with lower maintenance and repair costs.
- Negotiate extended warranties, labor and parts discounts and regular preventative maintenance on CCTV equipment at time of purchase.



Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: December 6, 2018

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Michelle Powell, Communications and Intergovernmental Relations Coordinator

SUBJECT: Agenda Item No. 14- Meeting of December 10, 2018
Information Item: **LEGISLATIVE UPDATE ON REGIONAL ISSUES OF INTEREST TO THE BOARD**

Recommendation

Information only

Background

The Board was last updated on regional issues at its June 4, 2018 meeting. This report will be followed by a report on state and national issues scheduled for a future meeting. If there are any additional information or a different format desired by the Board, staff will incorporate feedback into future reports.

Following are summaries of information staff believes would be most significant to the Board. This document contains the most updated information available as of the publishing date of this staff report.

Regional News:

Alameda County

- The County will eliminate many criminal justice fines and fees previously imposed on defendants. Officials in affected departments supported the change in ordinance, noting that costs were a burden to poor defendants. A change in ordinance requires two more readings before the Board of Supervisors. The two readings are scheduled for December and January.
- On June 29, 2018, The Alameda County Board of Supervisors approved a \$3.2 billion budget for FY 2018-2019 that is balanced and closes a \$65.9 million funding gap without significant reductions to services or staff.

The Final Budget includes funding increases to community service providers, allows the County to continue building its financial reserves, and supports a workforce of more than 9,700 employees. It also expands funding for initiatives addressing some of the county's most difficult challenges, including the lack of affordable housing, chronic homelessness, and maintenance and improvement of aging infrastructure.

Bay Area Rapid Transit District (BART)

- Transit officials presented plans to build a second Transbay Tube connecting San Francisco to the East Bay at a recent Board meeting, noting a possible beginning to construction in about ten years. Officials noted that an organization will be contracted to conduct a "feasibility study to narrow multiple alternatives." One option that may be studied includes tracks that would allow Caltrain, Amtrak and bullet trains to cross as well. The Board will vote on a contractor to study the proposal at a June 2019 meeting.

Peralta Community College District

- Bond measure G was passed with greater than the required supermajority of yes votes (74.48%) authorizing the District to issue up to \$800 million in bonds at an estimated tax rate of \$24.50 per \$100,000 of assessed property value to fund facilities and technology. The ad valorem property taxes will be collected for 40 years.
- In 2012, voters approved Measure B, a \$48 parcel tax for to fund academic programs in the Peralta Community Colleges; the tax will expire June 30, 2020. Measure E on the November 6, 2018 ballot proposed renewing the \$48 parcel tax effective July 1, 2020, and expiring June 30, 2028. The measure requires an annual report stating the amount of money received and expended from parcel tax proceeds, and the status of projects and programs funded by the parcel tax. Also required are two-year expenditure plans developed by staffs of the colleges and approved by the Board of Trustees every

October. Oversight is provided by a parcel tax oversight committee. Measure E passed with an 82.46% yes vote.

Alameda County Water District (ACWD)

- On Thursday, December 6, 2018 at 4:00 p.m., the District's Board of Directors will host a workshop at ACWD's headquarters in Fremont to receive an update on an Advanced Metering Infrastructure (AMI) project. The project will allow water meters to be read remotely, with hourly water consumption data transmitted directly to the District's billing systems. The new metering system will enable customers to access a web portal that allows them to monitor and analyze their water consumption.

The project will be executed in three phases over five years:

- Phase I: Planning and preliminary design (2018-2019)
- Phase II: Proof of Concept installation and evaluation (2019-2020)
- Phase III: Deployment and installation of AMI technology (2020-2022)

- The District held a workshop October 25, 2018 to consider key financial planning concepts before finalizing the District's plan for upcoming water rate proposals. The Board of Directors considered a number of issues during the workshop, including the District's long-term financial outlook, projected rate increases, residential fire service charges, and a concept to include a special rate structure for major water emergencies such as droughts. Proposals for water rates and charges, including fees for new connections to the water system, were also presented for discussion.
- In an effort to restore steelhead trout to Alameda Creek, ACWD and a number of Bay Area agencies have worked for more than a decade to make the creek a more fish-friendly waterway. To improve fish passage through the Alameda Creek Flood Control Channel, ACWD's fish passage projects at its water supply facilities include: the removal of one rubber dam; construction of fish ladders at two rubber dams; and the installation of fish screens at off-stream diversions. The latest update on November 13, 2018 reports the work within the creek channel has been completed and all equipment, materials, and the temporary dam have been removed so water can naturally flow past the job site. Work continues on the upper part of the fishway and on top of the embankment with electrical work. All construction projects are slated for completion by late 2021.
- The District held an Open House for the public at its Desalination Plant in Newark on October 13, 2018. Several hundred guests toured the facility and visited educational displays and activities for all ages.

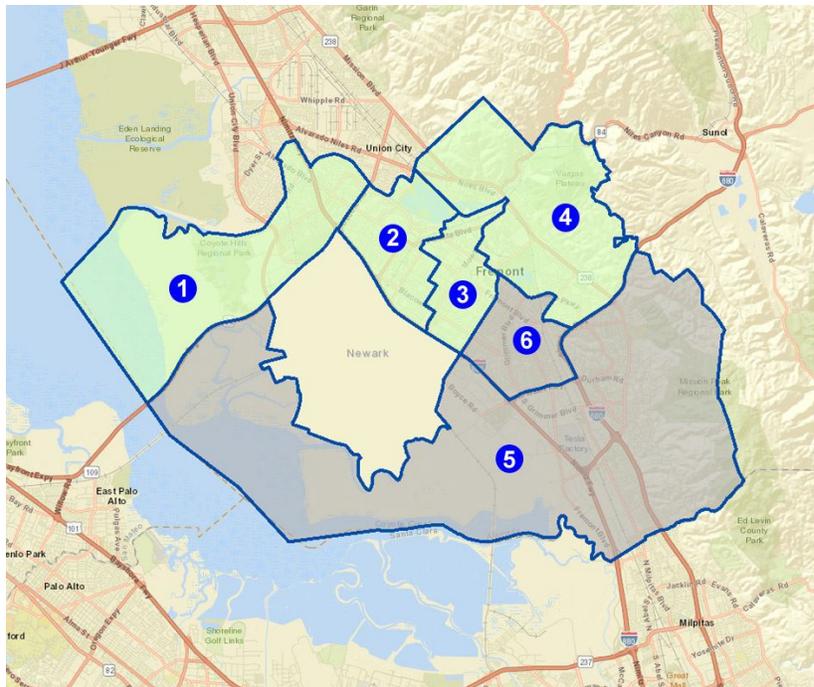
Community-Based Energy

- Beginning in November, East Bay Community Energy, also known as EBCE, is the new electricity provider for Fremont and Union City customers. EBCE was formed as a joint powers authority (JPA) by Alameda County and 11 of its cities. It operates as a not-for-profit public agency and is represented by local elected officials from its member agencies that serve on its Board of Directors. Meetings are open to the public, and earnings are reinvested back into the community to create clean energy jobs, local energy efficiency programs, and clean power projects. EBCE partners with PG&E, procuring electricity while PG&E continues to deliver power, handle customer billing, maintain power lines, and respond to new service requests and emergencies. Customers have the option to opt-out of the program. There will be no fee to opt-out before June 2019.

City of Fremont

- Mark Danaj was named the City of Fremont's eighth City Manager in July 2018. Previously, he held the position of Fremont's Assistant City Manager/Chief Operating Officer from 2011 to 2014. Before returning to Fremont, he served as Manhattan Beach's City Manager and was previously the City of San Jose's Director of Human Resources. He has over 20 years of public management executive experience, leading initiatives such as enhancing online civic engagement and improving accessibility to city services through tech tools.
- Voters chose their representatives in four of the City's six new Council Districts during the November 6, 2018 election. District 1 will be represented by Teresa Keng (2-year term), District 2 by incumbent Rick Jones, District 3 by Jenny Kassan, and District 4 by Yang Shao. Districts 2, 3, and 4 have four-year terms.

Districts 1, 5, and 6 will be on the 2020 Ballot, as will Mayoral candidates. The Mayor is elected at-large. A District map is below. Districts were drawn based on population, and will be redrawn, if necessary, after results of the 2020 census are made public.



- City Council will hold a public hearing at 7:00 p.m. Tuesday December 18, 2018 to receive the Annual Development Impact Fees Report and to consider adoption of a resolution to adjust the development Impact fees 2.78%, effective July 1, 2019, to reflect cost increases in 2018. The affected development impact fees include: Capital Facilities, Fire Facilities, Park Facilities, Parkland, and Traffic Impact Fees.
- Planning continues for the future Irvington BART Station, which will be located near the intersection of Washington Boulevard and Osgood Road approximately halfway between the Fremont BART Station and the Warm Springs/South Fremont BART Station. City of Fremont and BART staff held a community meeting Thursday, November 15, 2018, at the Fremont Main Library to share the updated Station Site Plan.

City of Newark

- Newark’s City Manager John Becker is retiring in December 2018. Current City Attorney David Benoun has been named his successor. The December 13, 2018 City Council agenda will include a commendation for Mr. Becker’s retirement and Mr. Benoun’s contract.
- As all candidates were unopposed, the City Council cancelled the General Election to be held on November 6, 2018, appointing Mayor Alan Nagy to a two-year term and council members Michael K. Hannon and Mike Bucci to four-year terms. The next municipal election will be held in 2020 for Mayor and two City Council seats.

City of Union City

- Measure DD on the November 6, 2018 Ballot was approved, with a 74.2% “yes” vote. The measure proposed establishing a Union City cannabis business tax at a maximum rate of \$12.00 per square foot for cultivation and 6% of gross receipts for others, until ended by voters, providing \$1,400,000 annually, requiring oversight and no money for Sacramento. The measure
- Measure EE on the November 6, 2018 Ballot failed with a 54.93% “no” vote. The measure proposed that voters adopt a charter organizing Union City as a Charter City under California law. A Charter City has authority to adopt laws regarding “municipal affairs” that are inconsistent with state statutes, which it would not have if it continued as a General Law City. Charter cities may adopt enhanced voter-approved real property transfer taxes. Measure EE including adoption of a real property transfer tax at the rate of \$10 per \$1,000 to fund general municipal services.
- Three seats on the Union City Council were on the November 6, 2018 ballot. Winners were Emily Duncan (incumbent), Jaime Patiño, and Pat Gacoscos (incumbent).
- The City continues its General Plan Update activities. Staff is updating the draft elements (policy document) and will bring them to the General Plan Advisory Committee, Planning Commission, and City Council at a date to be determined.
 - The draft Mobility Element was presented to City Council at its August 14, 2018 meeting. The Mobility element addresses the movement of people and goods in and around Union City. It works in tandem with the Land Use Element to enhance livability within the city. This element is the eighth of nine elements to be publicly released.
 - City Staff held a Parks and Recreation Workshop on October 2, 2018, to gather information on the community’s vision for the City’s parks and recreation facilities, prioritize needs, and discuss park funding options. Information from the workshop will be used to develop the policies in the General Plan Update as well as a future Parks and Recreation Master Plan.
 - On November 8, 2018, City staff held a public scoping meeting to solicit input on content to be included in the General Plan’s Environmental Impact Report.

Development Summary

- Below is a summary of information regarding development in USD’s service area. This information is the most up to date available as of the publishing date of this staff report.

	Planning			Entitled			Under Construction		
	Fremont	Union City	Newark	Fremont	Union City	Newark	Fremont	Union City	Newark
Single Family Dwelling	123	271	42	45	0	0	765	45	1,113
Multi-Family Dwelling	4,770	129	25	1,151	0	461	4,101	99	453
Comm/Ind (SQ FT)	2,279,763	183,036	0	1,408,974	0	604,796	399,481	35,189	384,470

- MFD = Townhomes, Condos, Apartments, Hotel rooms
- Planning (Future) = Has not been received by USD yet but has reached out to the Cities for planning
- Entitled (In review) = Has been received by USD, is either in plan review or has been approved, but has NOT paid any capacity fees
- Under Construction (Permitted) = Has been received by USD, has been approved and has paid capacity fees



Directors

Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers

Paul R. Eldredge
*General Manager/
District Engineer*

Karen W. Murphy
Attorney

DATE: December 10, 2018

MEMO TO: Board of Directors - Union Sanitary District

FROM: Paul R. Eldredge, General Manager/District Engineer
Laurie Brenner, Business Services Coach

SUBJECT: Agenda Item No. 15 - Meeting of December 10, 2018
Information Item: **2019-2022 Strategic Plan**

Recommendation

Information only.

Background

The District typically creates and maintain a new, formal Strategic Plan every three years and the Executive Team meets annually on the “off-years” to review and re-prioritize planned activities based on changes to any internal or external influencing factors (changing regulations, new treatment processes or equipment, staffing or other issues, etc.).

Due to transitions in the Executive Team and high staff turnover, the 2014-2016 plan was extended through FY 2018.

This new Strategic Plan was created following our standard process of engaging all stakeholders and capturing their feedback and ideas for potential inclusion.

The attached 2019-2022 Strategic Plan was developed as follows:

- March 2017- Begin collecting input from all teams
- May 2017- Capture Executive Team (ET) and Coach inputs and prioritize initiatives
- May 2017- Present DRAFT version of the plan to the JLMC and capture their inputs and feedback

- August 2017- Board Workshop to present the DRAFT plan and capture Board inputs and direction on the plan
- January 2018- Updated DRAFT presented to ET for feedback
- February-July 2018- Additional stakeholder review and individual meetings to finalize plan initiatives and timeline
- December 2018- Presentation of finalized plan to the Board

Attachment:

USD Strategic Plan FY2019-2022



Strategic Plan FY2019-2022

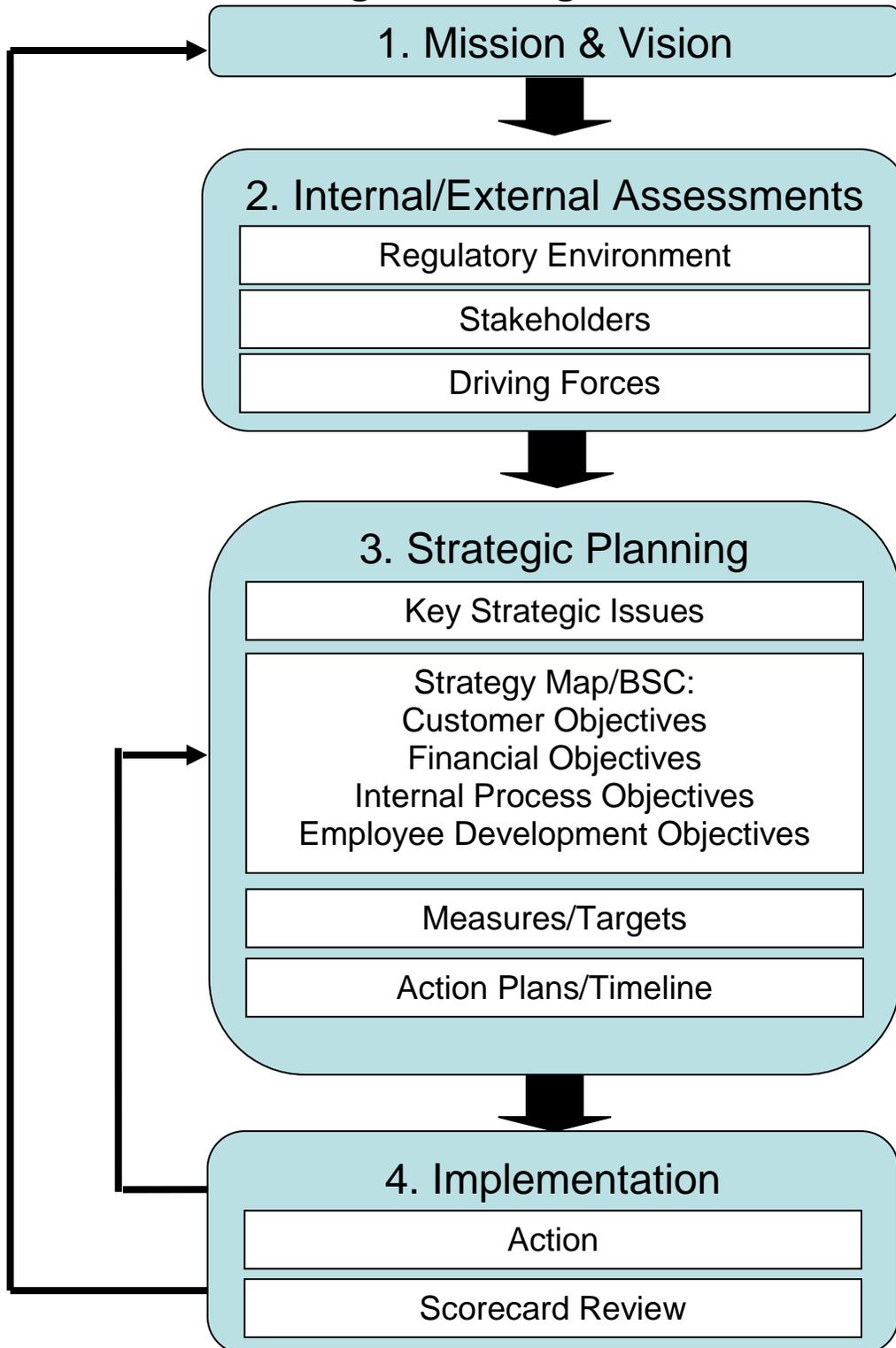


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Union Sanitary District Strategic Planning Framework



Union Sanitary District Strategic Plan FY 2019-2022

Background

Founded on May 27, 1918, the Union Sanitary District currently operates a 33 million gallon per day (MGD) wastewater treatment plant on the east side of San Francisco Bay, and maintains over 800 miles of sanitary sewers (the collection system). The District is currently focused solely on the activities supporting the continued provision of wastewater collection and treatment from residential, industrial and commercial rate payers within our service area. The USD service area encompasses 60 square miles, including the cities of Fremont, Newark and Union City (with a population of approximately 355,897, per CA Department of Finance January 2018 demographics). All 137 employees of the District work from our 33-acre Union City treatment plant.

The District provides services around six core processes:

- 1. Provide capacity:** Manage capital improvement projects to increase or maintain capacity in the collections system and at the treatment plant.
- 2. Allow connections:** Provide construction permits, inspect and approve connections.
- 3. Regulate connections:** Provide wastewater discharge permits to industrial dischargers, regulate commercial discharges, and educate the public about allowable wastewater discharges.
- 4. Collect wastewater:** Maintain sewers by cleaning, televising and repairing. Maintain pump stations.
- 5. Treat wastewater:** Operate and maintain the treatment plant in compliance with discharge regulations.
- 6. Beneficial recovery/reuse of treated:** Recover/reuse treated wastewater and bio-solids and other waste streams in compliance with regulations.

Organizational Structure

Union Sanitary District is an independent, enterprise special district, governed by an elected, five-member Board of Directors. Day-to-day operations are managed by the Executive Team (ET), consisting of the General Manager and five workgroup managers. Each manager oversees several teams, all of which are assigned a Coach who serves as the first-level manager, directing staff activities. In addition, many cross-functional committees (including, but not limited to Safety, Coaches, and the Joint Labor-Management Committee) share information and coordinate activities across the District.

Strategic Planning Process

Formal strategic planning (SP) is typically done every three to four years; a compressed version of the process called SP Lite is used in other years. Formal, comprehensive planning for the new FY 2019-2022 began in February 2017, based on the 2014-2016 plan that was extended by agreement to enable the newly formed Executive Team to develop synergy. During the first few meetings, the Executive Team reviewed input from stakeholders, past performance on strategic objectives,

benchmarking data (where available), new/potential regulations and industry trends, economic projections, political climate and internal challenges. During subsequent meetings, the ET prioritized driving forces and internal challenges, and identified strategies, objectives and initiatives to address them. A map of strategic objectives was developed, along with measures and initiatives to support those objectives.

1. Mission & Vision

The Mission & Vision Statements were last modified during the Strategic Planning Lite sessions in June of 2015 to include the goal of recovering resources from our process waste streams. These statements serve as the foundation of our strategic planning efforts and are always reviewed at the beginning of the process to ensure that they are in alignment with our core values and resultant activities.

MISSION STATEMENT:

To safely and responsibly collect and treat wastewater, and to recover resources from process waste streams, while protecting human health and improving the environment in a way that benefits the Tri-Cities and all USD stakeholders.

See Appendix A for the full text of the District’s Mission & Vision statement.



Regulatory Environment

The District currently holds three National Pollution Discharge Elimination System (NPDES) permits from the California State Water Resources Control Board (SWRCB); one for the main plant discharge through the East Bay Dischargers Authority (EBDA), one for discharge to the Hayward Marsh, a fresh water marsh restoration project, and one for peak wet weather discharges to Old Alameda Creek.

These permits set limits for wastewater discharged, including the contaminants that are allowable in the discharge, operating conditions, and reporting requirements. The District is required to file quarterly and annual reports on the activities covered under the NPDES permits. Union Sanitary District recently received the Platinum Award from the National Association of Clean Water Agencies (NACWA) for “Peak Performance” in the 2017 calendar year. This is the 25th consecutive year (2017) that USD has been recognized by NACWA. District facilities are also regulated by the three city governments for hazardous material management and other local regulations.

Other applicable regulations include OSHA requirements, including regulations for entering confined spaces, Federal Environmental Protection Agency (EPA) and SWRCB regulations for controlling sewer overflows and discharges from industrial sources, air permits from the Bay Area Air Quality Management District (BAAQMD), and rules established by the Governmental Accounting Standards Board (GASB) and Generally Accepted Accounting Principles (GAAP) for financial and asset management.

Regulatory issues facing the District during this planning cycle include the potential future requirement for nutrient removal from the wastewater, changing air quality regulations, any additional changes in sanitary sewer overflow reporting requirements, increasing medical benefits costs, and mandated reporting changes in the financial statements related to pension and other costs resulting in unfunded liabilities.

Stakeholders

Input and feedback were solicited from employees throughout the strategic planning process. Input was collected from the Coaches, Joint Labor Management Committee (JLMC), Executive Team and Board members. Focus groups were held to obtain input from teams and program coordinators.

Major *employee* concerns identified during the focus groups included:

- Impacts of retirements; knowledge transfer to new staff (to minimize)
- Recruiting and retirements; getting quality people trained up to the level of the retiree
- Need to invest more time and money on training new employees
- Community growth and impacts to the District
- Our infrastructure is old and failing
- CalPERS future employer rate increases
- Staffing levels to absorb new projects, investigations, and changes in regulations
- Employee burn-out
- Nutrient removal from effluent; District readiness for changing regulations
- Loss of Hayward Marsh due to sedimentation and age of containment berms
- Capital Improvements budget over the next 20 years; staffing levels should be reviewed
- Work that EBDA is doing, how it impacts USD (plant shutdowns, etc.)
- Making the District attractive as an employer; to existing and potential new staff; cost of living in the area is very high;
- Fresh water/lower water usage trends; affects our processes with more solids concentration and fees are based on water usage, lower usage = less revenue
- California Environmental Laboratory Accreditation Program (ELAP) and its adoption of the National Environmental Laboratory Accreditation Conference Institute standard (NELAC/TNI)

Driving Forces

The Executive Team performed a comprehensive SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis to identify driving forces with the potential to affect the District. All District teams, the Board of Directors and the Joint Labor Management Committee (JLMC) participated in formal, facilitated workshops to capture their inputs for inclusion as well (see Appendix B). The input from stakeholders and the findings from the SWOT analysis were used to identify the Key Strategic Issues facing the District.



Strategic Issues Defined

The District has created a clear guideline and criteria for why an issue should be considered strategic:

1. Directly impacts ability to achieve Mission (ex. the need to attract and retain employees)
2. More than one Workgroup must work together to address; opportunity to create synergy
3. High consequences if not addressed
4. High dollar impact
5. Related to the big 4 for costs: labor, chemicals, energy, cost of funding
6. Factors outside our control
7. Likely to get bigger, more urgent if not addressed
8. We need to do something differently to effectively address, requires change
9. Threatens USD's compliance record
10. Customer or stakeholder driven
11. Creates an opportunity for improvement that will have a long-term impact

Key strategic issues for the next 3-5 years:

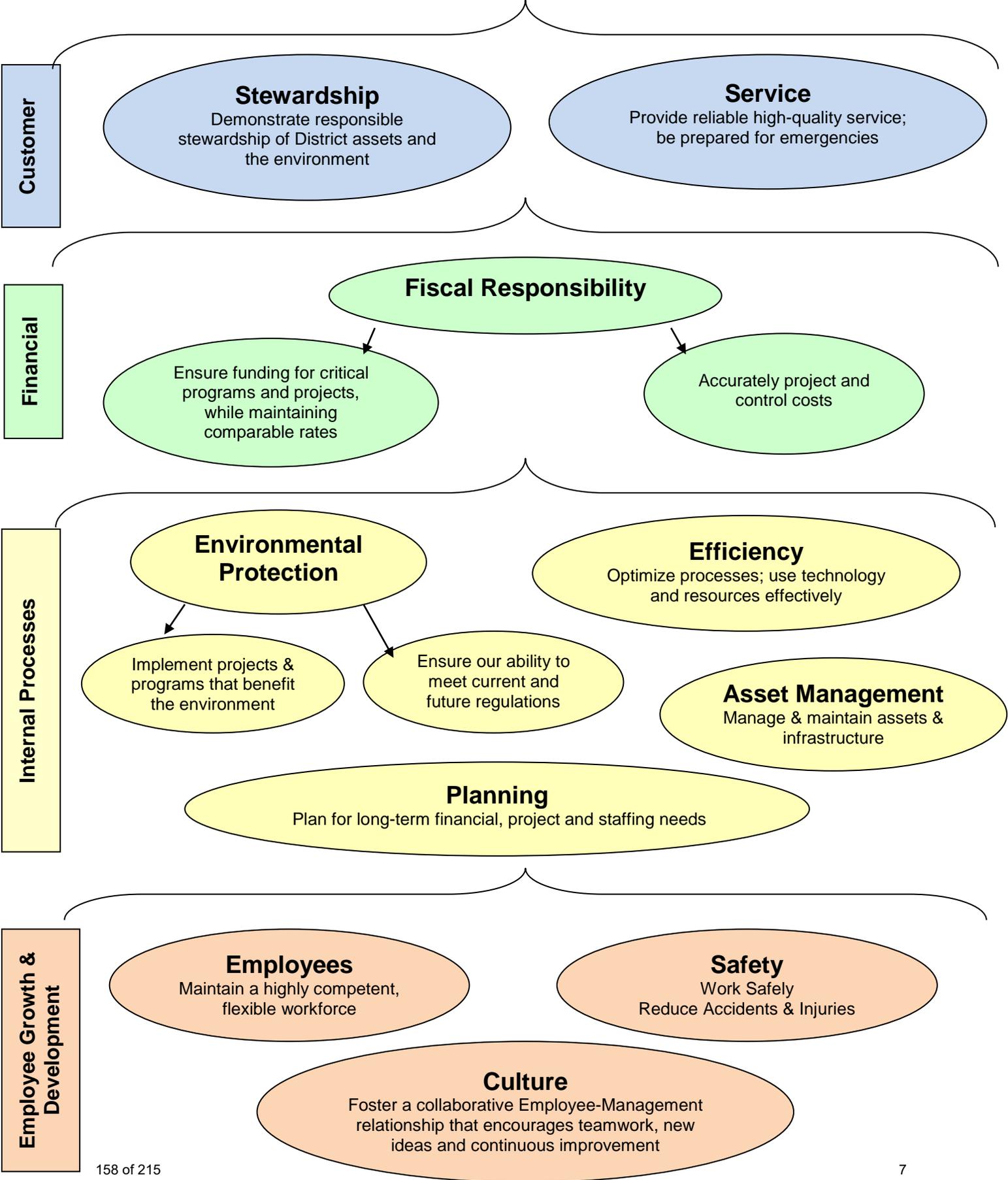
- Completing ongoing Master Plans and Studies
- Retrofitting vs. New Plant
- Maintaining Wet Weather Capacity
- EBDA Joint Powers Authority (JPA)
- Long-term staffing, including knowledge capture/transfer and planning for retirements
- Balancing affordability of rates with adequate funds for continued provision of service
- Maintaining compliance
- Emergency preparedness
- Addressing new and changing regulations
- Asset management
- Changing technology
- Sustainability: environmental, financial, social (includes green projects)
- Unfunded liability
- Data and records management and analysis (includes document mgmt.)
- Internal communication and coordination
- Maintaining a positive team culture
- Maintaining improvement in health & safety programs
- Balancing employee workloads
- External Customer Service and customer relations

Strategies and approaches were developed and agreed on for each Key Strategic Issue (see Appendix C). The new strategies were incorporated into District objectives and timeline initiatives.

Strategy Map

A strategy map was created, incorporating the key issues. The strategy map is the expression of the District's strategic plan, showing the relationship between customer, financial, internal process and employee growth & development objectives. The map focuses on operational issues. The safety strategy, objectives and measures were reviewed in a separate process that included the Environmental Health and Safety Program Manager (see attachment D).

USD Strategy Map



Goals and Measures

Detailed goal statements were developed for each objective:

Customer objectives:

Service:

Provide reliable high-quality service

- Customers can easily contact the District and be connected to the correct person to receive the service they need in a timely manner (in person, by e-mail, through web site)
- We respond promptly to customer complaints, including odor reports
- Services are provided in manner that meets all regulatory requirements and minimizes adverse impacts of our activities on customers

Be prepared for emergencies

- Equipment and processes are in place and tested and employees are prepared to respond to emergencies (including activating the EOC).
- Ensure adequate funds are maintained for emergency response

Stewardship:

Demonstrate responsible stewardship of District assets and the environment

- Assets are maintained in a manner that provides adequate capacity, prevents failures and minimizes disruption to service.
- USD's outreach/education activities deliver a consistent, positive message (branding) and target messages to specific audiences
- Outreach activities differentiate USD from other government agencies and emphasize our role in environmental & health protection
- We conserve natural resources and protect the environment (see Environmental Protection objective)

Financial Objectives:

Fiscal responsibility:

Ensure funding for critical programs and projects, while maintaining comparable rates

- Sewer service charges are established to adequately fund operations, and provide the maximum value to customers
- It is the goal of the District to keep rates as low as possible and frequently compare rates with other agencies as a barometer
- Capacity Fees are set appropriately to equitably cover costs of capacity enhancing projects
- Alternative sources of funding (grants, loans) are pursued

Accurately project and control costs

- Master Plans are developed, and special studies conducted to project future needs and avoid cost spikes
- We develop accurate budgets and control expenses to stay within the budget
- Employees include financial and ethical considerations when making decisions
- Our ability to control costs is enhanced by participation in regional projects and committees affording the District financial benefits

Internal Business Process Objectives:

Asset Management:

Manage and maintain assets and infrastructure

- Master Plans are developed to project future needs and avoid cost spikes
- Assets are maintained in a manner that provides adequate capacity, prevents failures and minimizes disruption to service
- We understand the condition and value of District assets and optimize life-cycle costs of maintenance and replacement

Efficiency:

Optimize processes

- Processes are regularly evaluated and improved to reduce cost while maintaining or enhancing level of service

Use technology and resources effectively

- Technology and computer automation are used appropriately to control costs while maintaining or enhancing level of service
- Communication technology (GIS, mobile) is used appropriately to control costs while maintaining or enhancing level of service and providing data and operational security
- Data, documents and records are managed effectively to make decisions and enhance level of service

Environmental Protection:

Maintain our ability to meet current and future regulations

- We are 100% compliant with permit and other regulatory requirements
- Wet weather capacity is adequate to meet demand
- We are aware of and prepared for developments with new regulations & emerging pollutants
- Our ability to meet current and future regulations is enhanced by participation in regional projects and committees

Implement projects and programs that benefit the environment

- We conserve natural resources and reduce wastes and pollutants
- Adverse environmental impacts are measurably reduced

Planning:

Plan for long-term financial, project and staffing needs

- The strategic plan is developed and implemented
- Master Plans are developed to project future needs and avoid cost spikes
- Future workforce needs are met through long-term staffing and succession planning
- Projects are planned to consider the impact on operations and staff (to avoid employee burn out)

Employee Growth & Development Objectives:

Employees:

Maintain a highly competent, flexible workforce

- We are planning for an increasing number of retirements
- Hiring practices are designed to grow-our-own; hire for abilities and train for skill
- Hiring, promotion and training processes are aligned with the competency-based model
- Appropriate Long-term Staffing (LTS) recommendations are implemented
- Job knowledge is captured and transferred
- Employees are increasingly competent to do their job and to train others
- Employees include financial and ethical considerations when making decisions

Culture:

Foster a collaborative employee-management relationship that encourages teamwork, new ideas and continuous improvement

- Employee input is solicited and utilized
- Employee are involved in projects, committees and taskforces
- Union –Management issues are collaboratively addressed through the JLMC and during MOU contract negotiations
- Employees are recognized for their contributions

Safety

- Employees work safely
- The number and severity of accidents & injuries are reduced

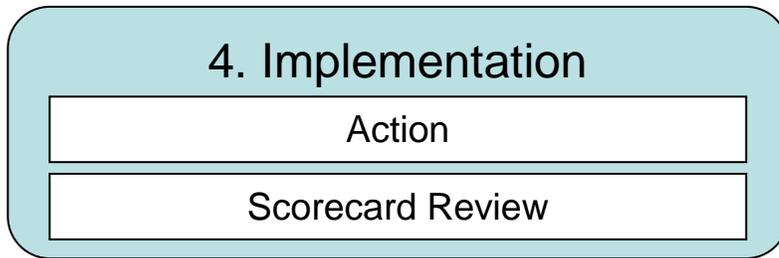
Measures and targets

To track progress and performance, metrics (measures) were developed for each of the strategic objectives. Targets were developed for each measure. Targets are determined by looking at past performance, reviewing customer expectations and, where comparable data is available, comparing our performance to other agencies and organizations. Many existing measures continue to provide meaningful insights and support managerial decision-making, and are therefore, retained. Targets are reviewed on an annual basis and performance dictates revision of targets for continual improvement.

Operational strategic objectives, measures, and initiatives are summarized in Appendix E, including annual targets.

Strategic Timeline

Initiatives to support the strategic objectives are included in the Initiatives Timeline (see Appendix F). The timeline is reviewed quarterly by the Executive Team with the scorecard results and modified as necessary.



Ongoing Performance Management

Through the District’s Star Point Program, employees in each workgroup and team are assigned responsibility for collecting, summarizing and reporting performance measure data from their groups. The Organizational Performance Manager (OPM) has overall responsibility for administering, evaluating and improving the performance measurement process. Once a quarter, the OPPM prepares a report for the Executive Team meeting and indicates by color code whether the measure is on target (green), likely to be below target if trend continues (yellow) or not meeting target (red). At the review meeting, progress on initiatives to support objectives and measures is also reviewed. If corrective action is needed, it is assigned to a Workgroup Manager and discussed at subsequent meetings.

The General Manager and OPM present a quarterly report on District performance measures to the Board of Directors as part of the Operations Report.

Process scorecards have been developed for the Collection Services, Fabrication Maintenance and Construction, and Treatment & Disposal workgroups by groups of staff and management. Business Services and Technical Services teams develop scorecards focused on their core functions.

Teams and process scorecard groups are empowered to change or adjust their measures to make them more representative, accurate, or useful. Scorecard measures, when appropriately designed, implemented and tracked, should result in behavioral or process changes, generation of baseline data for framing new initiatives or measures, or otherwise support managerial and/or operational decision-making. All process and team scorecards are reviewed once a year during team chartering to ensure they contain meaningful measures that are aligned with District-wide objectives.

Communication of the Strategic Plan, Scorecards and Timeline

Changes to the balanced scorecard and timeline are presented to employees by the General Manager and Workgroup Managers, focusing on how the District-wide objectives apply to each team's work and how team and process scorecards will be affected.

The final plan and all supporting documents are available to all employees through the Share Point Portal. The final Strategic Plan was presented to the USD Board of Directors and the public on September 10, 2018.

Appendices:

- A. District Mission Statement
- B. SWOT Analysis
- C. Key Issues and Strategies
- D. Safety Strategy and Scorecard
- E. Table of Operational Objectives, Measures and Initiatives
- F. Strategic Initiatives w/ Timeline

Appendix A



VISION/MISSION STATEMENT April 10, 2017 revision

To safely and responsibly collect and treat wastewater, and to recover resources from process waste streams, while protecting human health and improving the environment in a way that benefits the Tri-Cities and all USD stakeholders.

How we continue to accomplish our Vision:

Commitment to safety:

- Continually reviewing our safety program for opportunities to improve
- Focusing on protecting employees and the community in all our activities
- Allocating resources to ensure safe operations (equipment, training, staff)
- Collaboratively promoting a safe work environment

Responsibility:

- Being accountable for our actions and decisions
- Being fiscally prudent
- Maintaining and upgrading infrastructure
- Anticipating and meeting future District and stakeholder needs
- Compliance with laws and regulations (local, state, federal)
- Effective asset management
- Effective use of technology
- Looking for innovative ways to reduce or reuse our waste streams

Collect, treat, and recover/reuse wastewater:

- Providing capacity in the collection system and plant
- Regulating connections
- Increasing efforts for resource recovery (biogas, biosolids, etc.)
- Exploring ways to maximize water reclamation and reuse potential

Human health and environmental stewardship

- Preventing sewer spills and back-ups
- Limiting health risks through treatment of wastewater
- Responding to emergencies
- Enhancing water quality in the San Francisco Bay estuary
- Meeting or exceeding all water and air quality standards

Appendix A



VISION/MISSION STATEMENT

April 10, 2017 revision

- Promoting pollution prevention and pretreatment through outreach and educational programs
- Maximizing use of green energy sources when feasible
- Working towards energy neutrality

We benefit our stakeholders by:



Appendix B

SWOT ANALYSIS- All Stakeholders merged version from multiple sessions with color legend

Strengths	Weaknesses	Opportunities	Threats
1. EE knowledge, skills and abilities	1. Extreme resistance to change	1. In a stable, relatively affluent area with a well balanced customer base	1. Competing for resources (HR, \$ et al)
2. Recruitment process (collaborative nature; getting quality people onboard)	2. Complacency- need to re-evaluate in the world today (process et al)	2. Reconvening Long Term Staffing TF	2. Hayward Marsh and wet weather storage in general
3. We know our collection system (rotation, cleaning, etc.)	3. Metrics for BSC (program perception/naming conventions)	3. Resetting District direction for all stakeholders	3. Availability of SRF \$/funding
4. We know and understand our District-wide systems, equipment, processes	4. We make up "stuff" (rumors, info, data, et al) absent actual information	4. Improve communication during times of change (fear of the unknown); dispel rumors/myths	4. New regulatory issues/requirements/decisions
5. Proactive versus reactive approach	5. Trust is sketchy now (EE's versus management)	5. Labor negotiations	5. Activated sludge system is overtaxed
6. Anticipating needs based on knowledge	6. Identity crisis with customers in the service area (Santa effect)	6. Take advantage of new staff ideas/perspectives	6. Land use changes- City of Union City et al
7. Training program(s)	7. Bandwidth (from the top down- all resources)	7. Reach out to customers/stakeholders to rebrand who we are	7. Labor negotiations (impasse or strike potential)
8. Solid financial foundation	8. Uncertain future; EBDA JPA, Plant, WW storage, et al	8. Recommitment to teams/chartering (letting people know)	8. Cost of commodities (power, fuel, chemicals)
9. Good reputation in industry; goodwill and good track record	9. Aging infrastructure	9. Preserving/growing trust w/in the Board (in us; communication to staff)	9. Economic uncertainty (recession predicted)
10. Good relationship with District's Board, regulatory, peer agency, and political entities (Tri-Cities, etc.)	10. Dated and mismatched systems, networks, software, etc.,	10. New stuff- WW storage, energy neutrality, nutrient removal, etc.)	10. War(s)
11. Run lean compared to other agencies	11. Lack of physical space for growth	11. EBDA JPA restructure or change	11. Not staying competitive as an employer/service provider
Compliance record is good	12. Uncertain regulatory environment	12. Growth of the service area and customer base	12. Loss of tenured staff/tacit knowledge
12. Strong customer service focus	13. We get in our own way; getting core business done	13. Expanding services (collections example- COF contract for EC); expanding FTE's on someone else's dime	13. Failure to execute on plans (various reasons)
13. Willing to challenge the status quo; CI approach and willingness to examine past practices	14. Lack of perspective throughout District	14. Exploring alternative revenue sources; based on core competencies	14. Local environment (traffic, water use/scarcity, etc.)
14. Collaborative culture	15. Odor issues still plague us	15. Capitalizing on existing waste stream; reuse sale, etc.	15. Equipment/facility failures
15. Serve as a resource for other agencies; good processes to emulate	16. Public outreach; doing better, but still needs more work	16. Engaging in pilot programs for process/technology, et al	16. Inflation; cost of living (\$ for housing et al increases; EE's cannot remain in area)
16. Very conscious of stakeholder inputs	17. Culture change due to turnover	17. Development of Master Plans	17. Acts of God- earthquakes, sea level rise, sporadic weather patterns (drought followed by heavy rains)
17. Decent approach to sizing solutions based on our unique set up	18. Seismic vulnerabilities	18. Efficiency/CI projects; examples include state vehicle program (looking beyond), WHSE, parts acquisitions, standardization of equipment et al.,	18. Possible building/use on adjacent properties
18. In a stable, relatively affluent area with a well balanced customer base	19. Master Planning efforts/Admin Building replacement	19. Emergency storage in transport system; predictive maintenance, better data and data control	19. Sea level rise
19. Temperament and job satisfaction of staff		20. Document/records management	20. Climate change
20. Conservative organization		21. Local area development	21. Rising interest rates
22. Team culture; working well together		22. Rebranding USD	22. System capacity
23. Good Board of Directors; no dysfunction at this level		23. Ability to lead industry in reuse efforts	23. Competition for staff
24. Management openness/willingness to engage staff		24. Marketing and selling biosolids	24. Public acceptance/perception
25. Award winning District reflects staff pride		25. Increasing biogas production	25. ADU's (in-law) units; if a lot are built
26. Productivity		26. Facility Master Planning (to build a more efficient plant)	
27. "Quiet" company		27. Near shore discharge of effluent	
28. Good relationships with the media		28. Groundwater recharge	
29. Transparency		29. Showcase our process to the world (Afghanistan example)	
30. Good relationships with the Cities we service (and beyond)		30. New funding possibilities	
		31. Partnering with Cities on Outreach (newsletter et al)	
		32. Partnering with Cities on catastrophes/emergencies	
		33. Training or certifications to help others	
		34. New technologies for processing, capturing, reusing biosolids	
		35. Internships- BAYWOR< BACWWE, CVACE, etc.	
		36. Work with community colleges to develop staff	

Legend	
May also be perceived as weakness, or have other negative consequences	May also be perceived as an opportunity
May also be perceived as both Opportunity and Weakness	May also be perceived as a threat
May also be perceived as both Strength and Opportunity	May also be perceived as both Opportunity and Threat

Customer Perspective

- External Customer Service/Relations
 - Additional external web site upgrades
 - Doing business with USD
 - EBDA Joint Powers Authority
 - Transparency
- Internal Customer Service/Relations
 - Internal communication and coordination
 - Employee morale issues (post negotiations)
- Emergency preparedness

Financial perspective

- Balancing affordability of rates with adequate funds for continued provision of service
- Seismic retrofitting versus new treatment plant
 - Funding alternatives
 - Timing
- Unfunded liability
 - Mitigating impacts for sustainability

Internal Process Perspective

- Maintaining compliance
- Addressing new, changing regulations
- Maintaining wet weather capacity
 - Hayward marsh
 - Other viable options
- Asset management
 - CS PM Program
 - Project priorities
 - Condition assessments
 - Master Plans/Studies
 - Transport system and pump stations
 - IT support
- Changing technology
 - Exploring available solutions/interfaces
 - Staying current/with support
- Sustainability: environmental, financial, social (includes green projects)
- Data and records management, analysis (includes document management)
 - Converting data to information

Appendix C- Key Strategic Issues and Strategies

- Document management
- Access vs. security
- QC, reliability

Employee Growth Perspective

- Long-term Staffing (succession planning, training, attracting/retaining employees, leadership development, etc.)
 - Knowledge capture/transfer (including tacit knowledge)
- Balancing employee workloads
- Internal communication and coordination
- Maintaining healthy teams
 - Re-commitment to team concept
 - Collaboration/communication between teams
 - Maintaining positive team culture
- Employee Health & Safety
 - Sustaining and expanding improvements in health & safety programs

External Customer Service/Relations

Strategies:

- Look for ways to make doing business with USD easier: on-line permitting, etc.
- Continue to refine, communicate consistent message through public outreach
- Improve external web site: find out what customers are asking for, use to increase transparency and communicate key messages
- Remain engaged in EBDA JPA group dialog; seek common ground
- Expand transparency initiatives; post and share additional operational and financial information whenever possible

Internal Customer Service/Relations

Appendix C- Key Strategic Issues and Strategies

Strategies:

- Increase management communications to staff (email, Town Hall sessions, etc.)
- Clearly and regularly communicate MOU negotiation issues and status to staff
- Host additional ice-breakers and District-wide events promoting relationship building

Emergency Preparedness

Strategies:

- Schedule drills, training and exercises; continue to track in BSC
- Maintain emergency fund
- Review and clarify role of Emergency Preparedness Committee periodically (verify continued suitability and effectiveness)
- Evaluate a future position for Emergency Response/Haz Mat management
- Perform regular outside assessments of the IT Disaster Recovery Plan
- Complete seismic and conditional assessment of assets
- Improve communications between the plant and pump stations

Balancing affordability of rates with adequate funds for continued provision of service

Strategies:

- Planning: understand and project costs accurately/ensure funding availability
 - Incremental rate increases; avoid spikes
 - Perform scenario based financial modeling analyses to assist with decision-making
 - Communicate options with Board of Directors early and often
 - Utilize financial advisors (potentially) to assist in managing investment portfolio
- Apply for SRF loans when appropriate, focusing on local match option
- Efficiency:
 - Alternative energy
 - Chemical costs
 - Operational processes
- Educate public about value of service
- Prepare for changes in nutrient removal requirements
 - Understand impacts
 - Stay involved in political, regulatory process

Seismic retrofitting versus new treatment plant

Strategies:

Appendix C- Key Strategic Issues and Strategies

- Use all available data to make the best decision
- Map out planned activities
 - Get ahead of timelines for funding
- Verify CIP budget accuracy as new data is received

Unfunded Liability

Strategies:

- Focus on long-term sustainability
 - Pension
 - Medical
 - (Other post-employment benefits) OPEB
- Communicate with staff/ensure understanding of costs
- Engage actuarial service provider to run scenarios comparing trust options

Maintaining Compliance/New Regulations

Strategies:

- Continue to participate in outside groups and committees that give us access to information on new regs
- Create and maintain a list of current regs and requirements and staff responsible for compliance
- Take advantage of training (webinars and in-person)
- Maintain required employee certifications
 - Improve tracking process

Maintaining wet weather capacity, options for disposal

Strategies:

- Continue to evaluate options, including costs
- Continue discussions with partners (SWRCB, EBRPD)
- Have an option in place by end of current Marsh Permit cycle
 - Identify some options that are independent of other agencies
 - Budget funds for options

Asset Management

Strategies:

- Populate Hansen CMMS database
 - Asset Inventory

Appendix C- Key Strategic Issues and Strategies

- Condition assessment (including training and QC)
- Complete risk assessments
- Hire an Asset Manager
- Use data to generate reports, analyses, projections
- Collection System PM Program Assessment
 - Frequency of TV, cleaning
 - Manhole inspection
 - Root control, easement maintenance, corrosion control, grease removal/prevention
 - Appropriate level of QC
- Using condition assessment data to assign risk scores, prioritize projects, analyze data and project needs.

Technology

Strategies:

- Continue to have the ITSC evaluate proposed IT projects and new software
- Continue to evaluate emerging technologies for fit with current systems and available resources
 - Cost effectiveness/ ROI
 - Right-sized for USD
- Continue to keep up with trends in technology with potential benefit to USD
- Assess priorities for funding IT projects and implementing mobile technology

Sustainability- environmental, financial, social (includes green projects)

Strategies:

- Expand scope of Lean & Green task force to include identification of larger environmentally positive projects
- Continue to evaluate alternative energy projects where appropriate
- Re-evaluate opportunities to use recycled water
- Continue to include green requirements in new project work
- Consider additional nutrient removal pilot projects
- Remain engaged/visible in social event and activities
 - Earth Day, Bay Clean up's, etc.

Data/Document Management

Strategies:

- Develop archival standards; move away from microfiche
- Expand records management to include electronic documents
- Improve document management on the Portal; develop standards or alternatives

Appendix C- Key Strategic Issues and Strategies

- Address oversight of Hansen data (security, QC)
- Complete implementation of IT Master Plan components

Long-term Staffing, maintaining a highly competent workforce

Strategies:

- Be the employer of choice
- Implement priority recommendations of the LTS Taskforce
 - Formalize succession planning
 - Employ training/knowledge transfer strategies
 - Focus on tacit knowledge capture/documentation
 - Employ additional technologies to support training
- Management succession planning, transition
- Continue offering and adapting Leadership School to prepare internal candidates
- Maintain collaborative, customer focused culture

Balancing Employee Workloads

Strategies:

- Retain CIP 20-Year Planning cycle
- Adjust work plan every 6 months, considering:
 - CIP Projects Workload
 - Impact on global operations (shut-downs, document changes, training, etc.)
 - Potential of project to reduce workload due to improvements
- Meet with Ops groups to discuss impacts before projects go out to bid
- Incorporate operational impacts into 100% design submittals
- Review all positions periodically and solicit input from staff on workload balancing

Internal communication and coordination

Strategies:

- Explore additional methods of communication with staff
- Continue to ensure the “right people” are in the room for policy, SOP, and project work
- Continue hosting Work Group and “all hand on deck” meetings

Maintaining healthy work teams

Strategies:

- Tie team structure and processes to strategic plan. Include a review in each cycle of strategic planning.
- Initiate discussions on team boundaries and responsibilities (ex: TPO-FMC)
 - Use SLA process to frame conversations

Appendix C- Key Strategic Issues and Strategies

- Evaluate effectiveness of team chartering
 - Periodically start from scratch
 - Use an outside facilitator
 - Identify what's working/what needs improvement (strengths/ weaknesses)
 - Address team specific issues
 - Discuss with Coaches at Sept Management Meeting

Employee Health & Safety

Strategies:

- Sustain improvements made to date
- Continue to improve safety record and processes
- Sustain changing culture
- Foster employee ownership of the safety program
 - Team safety strategies
 - Input into SOPs, equipment, etc.
 - Involvement of EHSPM at team level
 - Recognition
 - Identification of best practices industry trends
 - Visits to other agencies and organizations we can learn from
- Continue to hold employees accountable for violations of policy
- Continue to demonstrate commitment to safety and operational training
- Streamline paperwork and improve reporting for accidents/incidents

Appendix D

Union Sanitary District

Safety Strategy for FY2019

The following is a description of the key elements in the Districts Safety Strategy for Fiscal Year 2019.

Worksite Inspection Program. This program provides for coaches and managers to make visits to their employees work sites for observing work practices relative to safety. It promotes more frequent contact between management and employees specifically related to safety. During inspections, coaches and managers identify good safety practices observed and areas for improvement by engaging employees in discussions at their work sites. The Environmental Health and Safety Program Manager (EHSPM) will accompany those performing the inspections at least once per quarter. Each manager will evaluate whether it is appropriate to reduce the total number of inspections in their work group or teams for the new fiscal year, after which the Executive Team will set targets for the number of inspections to be conducted.

District Facilities Inspection Program. The Safety Inspection Team (SIT) is composed of members of the Districts Safety Committee. Each quarter, the SIT selects one physical area of the District (Collections Services, Treatment Plant, Shops, Pump Stations, or Office Buildings and Grounds) for an inspection. A list of safety deficiencies is developed, corrective action determined, and work is performed over the next 45-day period to complete all action items. Coaches are responsible for ensuring items in their team's jurisdiction are properly addressed. Training will be provided to Safety Committee members annually.

Training. The District will continue to emphasize safety in all elements of training. Continue with new employee orientation safety training and refresher training per the 5-year training plan. For FY19, Confined Space Entry, Excavation Safety, Construction Flagging, Blood Borne Pathogens, Ergonomics, CPR/First Aid and Defensive Driving will be emphasized, and accident investigation training will be provided as needed.

Communication and Recognition. This strategy is meant to ensure employees receive important information about the District safety program and have discussions on avoiding accidents and injuries. The General Manager and Work Group Managers will address safety on a regular basis through meetings and electronic communications.

The new Safety Recognition Program will be evaluated during FY19 to assess effectiveness of new District-wide, team, and individual recognition components. Evaluate new options for identifying employees with multiple years without an accident and display the total number of days without an OSHA Reportable accident or injury District-wide.

Learning from Successful Programs. USD staff, including Managers, Coaches, the EHSPM, Employees and Union Leadership will identify other agencies, including private industries such as refineries, which have successful safety programs. Arrangements will be made to visit those locations and discuss elements that contribute to their success. The group visiting those sites will develop recommendations for changes, if appropriate, in USD's Safety Best Practices to present to the Safety Committee and Executive Team. For FY19, two site visits will be conducted. In lieu of visits to discuss safety programs in general, arrangements may be made to observe other agencies field operations, such as traffic set-up, confined space entry, or fall protection.

Team Safety Strategies. Teams will review the safety strategies from FY14 and any new accidents or near misses that occurred in the prior year. Strategies will be modified to address any new areas of concern. The continuing purpose of the team safety strategies will be to promote increased awareness of safety in day to day activities at the District. Safety strategies may include joint team meetings between different work groups to discuss how the teams interact or how they address similar safety issues. (Applies to both operations and admin teams). This can be done with 3-4 members of one team meeting with 3-4 members of another team and reporting the results to the entire team.

Working with Contractors. In working with outside construction contractors, the responsible USD employees will:

- Ensure employees are aware of potential hazards associated with the projects on USD property
- Confirm that contractors have prepared appropriate site safety programs
- Ensure that contractors are made aware of hazards associated with USD facilities.

For FY19, this will include selected small contractors performing services at USD including the landscaping contractor, window washing contractor and others selected by the EHSPM.

Debriefing Major Events. Upon conclusion of project events or high-risk operations involving multiple teams or contractors, which includes a significant safety element, a debrief will be conducted. The EHSPM will facilitate the debrief and discuss what went well, what could be improved, lessons learned for future operations, and comments from individuals involved. The EHSPM will chose which events are debriefed or employees may suggest specific events that they feel warrant discussion.

Safety Audit. USD's insurance carrier, CSRMA, will conduct a survey and audit of USD's safety program and make recommendations for improvements. This information will be shared with the Executive Team and the Safety Committee.

Ongoing Elements. In addition to the above elements, the District will continue to conduct monthly Safety Committee meetings. Safety Star Points representing each team will attend the Safety Committee and be the point person for safety communication on their team. The District Safety Scorecard will continue to be used as the Strategic Plan for safety and will include safety performance measures. The Scorecard will be reviewed at least quarterly by the Executive Team and the Board of Directors. Teams will continue to use safety checklists.

Appendix E: Union Sanitary District
Table of Operational Objectives, Measures, and Initiatives

	Objectives	Measures	Targets	Activities/Initiatives
Customers	<p><u>Service:</u></p> <p>Provide reliable high-quality service</p> <ul style="list-style-type: none"> ○ Customers can easily contact the District and be connected to the person or service they need in a timely manner ○ Services are provided in manner that meets all regulatory requirements and minimizes adverse impacts of our activities on customers <p>Be prepared for emergencies</p> <ul style="list-style-type: none"> ○ Equipment and processes are in place and tested and employees are prepared to respond to emergencies. ○ We are prepared to activate and operate the Emergency Operations Center (EOC). 	<p>Response time to call-outs</p> <p>Response time to “Contact USD” email inquiries</p> <p># adverse impacts on customers (includes all claims filed)</p> <p># USD or local drills, training events, and/or debriefs</p>	<p>≥90% within 1 hour</p> <p>≥90%</p> <p>≤10 per yr.</p> <p>3 per yr.</p>	<p>Enhanced communication with and responsiveness to customers:</p> <p>External web site (ongoing)</p> <p>Odor control project/study</p>
	<p><u>Stewardship:</u></p> <p>Demonstrate responsible stewardship of District assets and the environment</p> <ul style="list-style-type: none"> ○ Assets are maintained in a manner that provides adequate capacity, prevents failures and minimizes disruption to service. ○ USD’s outreach/education activities deliver a consistent, positive message (branding) and targets the message to the audience ○ Outreach activities differentiate USD from other government agencies and emphasize our role in environmental & health protection ○ We conserve natural resources and protect the environmental (see Environmental Protection objective) 	<p># critical asset failures- both with and without impacts (2 measures)</p> <p># priority CIP project milestones completed vs. planned</p> <p>Progress implementing outreach program- % planned outreach activities completed</p>	<p>≤2 per yr., none with negative impact on customers or the environment</p> <p>85% CIP milestones completed as planned</p> <p>≥90% completed</p>	<p>Coordinated strategic outreach program</p>

Appendix E: Union Sanitary District
Table of Operational Objectives, Measures, and Initiatives

	Objectives	Measures	Targets	Activities/Initiatives
Internal Business Processes	<p>Asset Management: Manage and maintain assets and infrastructure Some of the ways we measure:</p> <ul style="list-style-type: none"> ○ Master Plans are developed to project future needs and avoid cost spikes ○ Assets are maintained in a manner that provides adequate capacity, prevents failures and minimizes disruption to service. ○ We understand the condition and value of District assets and optimize life-cycle costs of maintenance and replacement. 	<p># critical asset failures</p> <p># priority CIP projects completed</p> <p>% asset renewal/year (Collections and Plant measures)</p>	<p>≤2 per yr., none with negative impact on customers or the environment</p> <p>85%</p> <p>Track & Report</p>	<ul style="list-style-type: none"> ● IT Master Plan ● Network Master Plan ● Irvington Basin Master Plan ● Pump / Lift Station Master Plan ● Evaluation of CMMS ● Hansen asset hierarchy implementation ● Classify new assets ● Updating, control and red-lining of schematics, drawings, etc. ● Review of process for obtaining accurate as-built drawings for new projects

Appendix E: Union Sanitary District
Table of Operational Objectives, Measures, and Initiatives

	Objectives	Measures	Targets	Activities/Initiatives
	<p>Efficiency:</p> <p>Optimize processes</p> <p>Some of the ways we measure:</p> <ul style="list-style-type: none"> ○ Processes are regularly evaluated and improved to reduce cost while maintaining or enhancing level of service. <p>Use technology effectively</p> <ul style="list-style-type: none"> ○ Technology and computer automation are used appropriately to control costs while maintaining or enhancing level of service. ○ Communication technology (GIS, mobile) is used appropriately to control costs while maintaining or enhancing level of service. 	<p>New: # processes evaluated</p> <p>Process specific measures TBD</p> <p>Also see Team and Process scorecards</p> <p>See measures on the IT Team scorecard</p>		<p>Benchmarking level of service and best practices with other agencies, where reliable data is available</p> <p>Enterprise Content Management (document/data control) exploring alternatives to Portal and other systems</p> <p>Collection Systems preventive maintenance program review</p> <p>Study on optimizing existing tankage for capacity</p>

Appendix E: Union Sanitary District
Table of Operational Objectives, Measures, and Initiatives

	Objectives	Measures	Targets	Activities/Initiatives
Internal business Processes	<p><u>Environmental Protection:</u> Maintain our ability to meet current and future regulations Some of the ways we measure:</p> <ul style="list-style-type: none"> ○ We are 100% compliant with permit and other regulatory requirements ○ Wet weather capacity is adequate to meet demand ○ We are aware of and prepared for developments with new regulations & emerging pollutants ○ Our ability to meet current and future regulations is enhanced by participation in regional projects and committees. <p>Implement projects and programs that benefit the environment Some of the ways we measure</p> <ul style="list-style-type: none"> ○ We conserve natural resources and reduce wastes and pollutants. ○ Adverse environmental impacts are measurably reduced. 	<p># adverse impacts on the environment</p> <p>New: # regional projects/ initiatives with environmental benefit to District</p>	<p>Cat 2/3 SSOs: ≤10 All others: 0</p> <p>Minimum of 3</p>	<ul style="list-style-type: none"> • Permit renewals: <ul style="list-style-type: none"> ○ Wet Weather ○ Plant ○ Hayward Marsh • Equalization study • Land acquisition where appropriate • Coordination of regulatory compliance • Participation in regional groups • AB 32-carbon footprint reporting • Recycled water study • Lean & Green Taskforce • “Green” projects: fuel cells; solar panel; Fleet retrofit; biodiesel • Certification of underground tank for biodiesel storage
	<p><u>Planning:</u> Plan for long-term needs: Financial, Project, Staffing Some of the ways we measure:</p> <ul style="list-style-type: none"> ○ The strategic plan is developed and implemented. ○ Master Plans are developed to project future needs and avoid cost spikes ○ Future workforce needs are met through long-term staffing and succession planning. 	<p>Progress developing plans will be tracked on Timeline</p>		<p>Strategic Planning Master Plans Leadership succession planning 2019 (projected) LTS Study</p>

Appendix E: Union Sanitary District
Table of Operational Objectives, Measures, and Initiatives

	Objectives	Measures	Targets	Activities/Initiatives
Employee Growth & Development	<p><u>Employees:</u> Maintain a highly competent, flexible workforce Some of the ways we measure:</p> <ul style="list-style-type: none"> ○ Hiring practices are designed to grow-our-own; hire for abilities and train for skill ○ Hiring, promotion and training processes are aligned with the competency-based model ○ Long-term staffing (LTS) recommendations for knowledge capture and transfer are implemented ○ Job knowledge is captured and transferred ○ Employees are increasingly competent to do their job and to train others ○ Employees include financial and ethical considerations when making decisions. 	<p># Training Modules developed vs. planned</p> <p># Assessments completed</p>	<p>8</p> <p>65</p>	<p>Design of processes to attract and retain effective employees and Integrate competencies</p> <p>Effective management of new hires</p> <p>LTS knowledge capture and transfer, Cross Training Projects</p> <p>Training module development; Assessments (Operational teams) Train-the Trainer sessions</p> <p>Investigation of apprenticeship programs for operator, mechanics, electricians</p> <p>Finance/budget education</p> <p>Annual Star Point Orientations</p>
	<p><u>Labor Relations:</u> Foster a collaborative Employee-Management relationship that encourages new ideas and continuous improvement Some of the ways we measure:</p> <ul style="list-style-type: none"> ○ Employee input is solicited and utilized. ○ Employee are involved in projects, committees and taskforces ○ Union –Management issues are collaboratively addressed through JLMC and during MOU negotiations ○ Employees are recognized for their contributions 	<p>New: #/% employees participating in District committees or taskforces</p> <p>New: #/% employees participating in alternate compensation</p>	<p>45-55%</p> <p>Track & Report (if program is retained)</p>	<p>Problem-solving/ interest-based training</p> <p>Salary survey</p> <p>MOU Negotiations</p>

Appendix F- Strategic Initiatives w/Timeline

Perspective	Sub-Category	Project Name	Ranking (Priority)	Description	Work Group(s)	Owner(s)	Planned Start Date	Expected End Date
Customer Service	Service	CS Lateral Outreach	Low	Educational piece (video) to share related to trouble calls; outreach related (brochures to direct to website and link on website)	CS	James	3/1/2018	3/1/2019
Customer Service	Service	Forcemain Relocation	Medium	Service arrangement to enable Developer project (William Lyon Homes) to relocate a section of our forcemain to facilitate a development. Side benefit to negotiation is the developer has assumed responsibility for the demolition of the old Newark treatment plant.	TSCS, FMC	Sami, Robert	9/1/2017	10/15/2019
Customer Service	Employee Growth	GM Presentation for Staff	Business Necessity	Annual or Bi-Annual "State of the District" communication by GM to all staff	GM	Paul	3/1/2018	9/1/2018
Customer Service	Service	Rebranding Initiative	High	Cross-functional effort to explore options for rebranding and updating the District's public image and logo; Kick off meeting and Committee selected	GM	Paul, BOD	3/1/2018	3/1/2020
Customer Service	Service	Odor Study	High	Ongoing; Comprehensive odor study in plant and throughout the USD service area (collection system) to determine types and intensity of odors potentially impacting the public; late summer 2018 report due from CH2M Hill	T&D, TSCS	Armando, Sami	1/1/2017	12/1/2018

Financial	Fiscal Responsibility	EBDA JPA Renewal	High	Involvement in ongoing negotiations related to USD inclusion in and share of the EBDA system capacity and related services/responsibilities	GM	Paul, BOD	1/1/2017	12/1/2019
Financial	Planning	Plant Master Plan	High	New plant versus rehab; based on financial modeling; inputs from many sources (Solids capacity etc.	All	ET (Paul or Sami contact)	7/1/2016	12/30/2018
Internal Process	Asset Management	Back-Up Power Generation	High	Design phase (B&C); pre-design completed; late winter design then out to bid for construction (contingent on permits); build may start 2019	TSCS, T&D, FMC	Sami, Armando, Robert	2/1/2018	6/30/2021
Internal Process	Service	Evaluation of Lab Certification (TNI)	Business Necessity	Gap analysis, determination to proceed with certification; activities for conformance to standard identified and implemented, certification by third party registrar, if we move forward	T&D	Armando	9/1/2018	6/1/2019
Internal Process	Planning	IT Master Plan (update)	Business Necessity	Complete update of plan; technology moves rapidly		Robert	FY 19	12 months
Internal Process	Efficiency	Document & Records Management System	Business Necessity	Reassemble a cross-functional TF to review options for this important function; research and propose viable solutions to management for budgeting, acquisition, implementation and training	GM, FMC	Paul, Regina M., Robert	4/1/2017	TBD

Internal Process	Capacity	Digester 7	Business Necessity	Design phase (B&C); pre-design completed; late summer design then out to bid for construction (contingent on permits); build may start 2019	TSCS, T&D	Sami, Armando	2/1/2018	12/30/2020
Internal Process	Asset Management	Forcemain Location Strategy	Medium	Where are they? USA Markings et al; ongoing; should be completed by late summer	CS, TSCS, FMC	James, Sami, Robert	9/1/2017	10/1/2018
Internal Process	Asset Management	Forcemain Corrosion Repair	Medium	Let's fix it; Phase 1 complete (East side North of Newark); Phase II is West side North of Newark ;	TSCS, FMC	Sami, Robert	3/1/2016	6/1/2021
Internal Process	Asset Management	Forcemain Condition Assessment	Low	To perform destructive testing on relocated sections ; also other work spanning relocation area	TSCS	Sami	3/1/2016	6/1/2021
Internal Process	Environmental	Operating Permits	Business Necessity	NPDES (3) plus BAAQMD and Watershed (multiple-Nutrient, Mercury and PCB)	T&D	Armando	Varies	Varies
Internal Process	Environmental	Wet Weather Effluent Management	High	Future of Hayward Marsh, equalization, et al	GM, TSCS, T&D	Paul, Sami, Armando	7/1/2016	12/30/2018

Internal Process	Asset Management	IT Disaster Plan Assessment	Business Necessity	Needs definition; Robert to get more info; recovery plan is completed; need to look at rebalancing physical components	FMC	Robert	TBD	12 months
Internal Process	Efficiency	CS PM Schedule Review	Low	TF evaluating West Yost study recommendations to determine if we can modify our existing business practices and still maintain acceptable risk	CS	James	Feb-18	24-36 months
Internal Process	Efficiency	Mobile Technologies	Low	Phase II still needs to be implemented (EC, CST, other field inspectors); likely still only tablets involved	FMC	Robert	7/1/2018	7/2/2019
Internal Process	Asset Management	Hansen PM Project	Low	Ongoing; matching O&M's with tasks and ensuring serial and model #s are accurate in Hansen	FMC	Robert	3/1/2018	3/1/2020
Internal Process	Planning	Newark Basin Master Plan	Medium	Condition assessment in FY18 and capacity assessment in FY19	TSCS	Sami	7/1/2017	6/1/2019
Internal Process	Asset Management	Plant Condition Assessment	Medium	Determining the overall condition of treatment plant infrastructure and assets; CIP study	TSCS,T&D, FMC	Sami, Armando, Robert	7/1/2017	6/30/2018
Internal Process	Capacity	Plant Solids Capacity Study	High	Ongoing, study almost completed; results will feed into many other initiatives (interim RAS control, aeration system rehab- both near term and long-term)	TSCS, T&D	Sami, Armando	7/1/2016	6/30/2018
Safety/Employee Growth	Emergency Response	Emergency Preparedness	Business Necessity	Establish a continuing and robust schedule for ER training and related activities to promote awareness, including quarterly activities	BS	Gene	6/6/2016	

Safety/Employee Growth	Stewardship	Regional Workforce Development	Low	Collaboration with various external entities and development of internship programs and other conduits for trained and skilled staff for succession planning and future District needs	BS, T&D	Gene, Laurie, Armando		
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**UNION SANITARY DISTRICT
CHECK REGISTER
11/03/2018-11/30/2018**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169586	11/29/2018		8402.1	ROBSON HOMES LLC	REFUND # 21522		
						\$228,710.69	\$228,710.69
169583	11/29/2018	143	2700CP01	NORCAL PIPELINE SERVICES	CAST IRON PIPE LINING PHASE VII	\$188,753.36	\$188,753.36
169470	11/20/2018		20181001	SWRCB - STATE WATER RESOURCES	SRF LOAN #C065045110 - LOWER HETCH	\$139,663.70	\$139,663.70
169471	11/20/2018		20181001.1	SWRCB - STATE WATER RESOURCES	SRF LOAN #C065053110 - WILLOW/CENTRAL	\$108,384.73	\$108,384.73
169451	11/15/2018	110	170120181106	PACIFIC GAS AND ELECTRIC	SERV TO 10/21/2018 PLANT	\$101,630.78	\$102,436.39
	11/15/2018	170	898220181106		SERV TO 10/30/18 FREMONT PS	\$349.74	
	11/15/2018	110	892820181106		SERV TO 10/30/18 HAYWARD MARSH	\$58.28	
	11/15/2018	170	140120181106		SERV TO 11/01/18 IRVINGTON PS	\$25.75	
	11/15/2018	170	666720181106		SERV TO 10/30/18 PASEO PADRE PS	\$371.84	
169434	11/15/2018		3130	EAST BAY DISCHARGERS AUTHORITY	O&M ASSESSMENT, OCT-DEC 2018	\$102,149.34	\$102,149.34
169391	11/8/2018	171	21934	PROMINENT SYSTEMS INC	GAS SKID MEDIA CHANGE OUT	\$57,723.00	\$57,723.00
169517	11/21/2018	143	201180003	HAZEN AND SAWYER	SECONDARY TREATMENT CAP. IMPROV - DESIGN	\$52,031.00	\$52,031.00
169364	11/8/2018	143	11328632	BROWN & CALDWELL CONSULTANTS	PRIMARY DIGESTER NO. 7	\$47,909.56	\$47,909.56
169569	11/29/2018	173	17001100002219	GE DIGITAL LLC	ANNUAL SCADA SOFTWARE SUPPORT	\$31,809.11	\$31,809.11
169561	11/29/2018	143	11330136	BROWN & CALDWELL CONSULTANTS	PRIMARY DIGESTER NO. 7	\$28,027.56	\$28,344.54
	11/29/2018	143	11329897		STANDBY POWER SYSTEM UPGRADE	\$316.98	
169461	11/15/2018		533620181022	US BANK CORP PAYMENT SYSTEM	MONTHLY CAL-CARD STMT - OCT 2018	\$28,121.14	\$28,121.14

**UNION SANITARY DISTRICT
CHECK REGISTER
11/03/2018-11/30/2018**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169368	11/8/2018	143	171281	CAROLLO ENGINEERS	ALVARADO INFLUENT PS PUMPS AND VFDS		
	11/8/2018		171331		DIGESTER NO. 3 INSP & REHAB	\$21,112.66	\$26,911.17
						\$5,798.51	
169388	11/8/2018	110	224720181029	PACIFIC GAS AND ELECTRIC	SERV TO 10/22/18 CS TRAINING TRAILER		
	11/8/2018	170	761520181025		SERV TO 10/24/18 NEWARK PS	\$87.02	\$24,264.59
	11/8/2018	170	096020181031		SERV TO 10/30/18 CATHODIC PROJECT	\$23,861.81	
	11/8/2018	170	380420181031		SERV TO 10/30/18 CHERRY ST PS	\$52.02	
						\$263.74	
169507	11/21/2018	110	903757848	EVOQUA WATER TECHNOLOGIES	4548 GALS HYDROGEN PEROXIDE		
						\$22,411.52	\$22,411.52
169564	11/29/2018		10274365620	DELL MARKETING LP C/O DELL USA	SERVER RAM		
						\$22,315.64	\$22,315.64
169552	11/21/2018	143	155945	WOODARD & CURRAN INC	NEWARK BASIN MASTER PLAN/PACP UPDATE		
						\$21,335.05	\$21,335.05
169543	11/21/2018	110	910293	UNIVAR USA INC	4797 GALS SODIUM HYPOCHLORITE		
						\$3,442.59	\$20,986.60
	11/21/2018	110	910219		4798.2 GALS SODIUM HYPOCHLORITE		
						\$3,443.45	
	11/21/2018	110	911376		4799.10 GALS SODIUM HYPOCHLORITE		
						\$3,444.10	
	11/21/2018	110	910554		4947.9 GALS SODIUM HYPOCHLORITE		
						\$3,550.88	
	11/21/2018	110	910655		4950 GALS SODIUM HYPOCHLORITE		
						\$3,552.40	
	11/21/2018	110	911384		4951.1 GALS SODIUM HYPOCHLORITE		
						\$3,553.18	
169545	11/21/2018	171	906852	VINCENT ELECTRIC MOTOR CO	REPAIR GENERATOR		
						\$19,830.75	\$19,830.75
169527	11/21/2018	150	55606	NACWA	FY2019 MEMBERSHIP DUES (10/1/18 - 9/30/19)		
						\$19,345.00	\$19,345.00
169455	11/15/2018	110	3019311	SAN FRANCISCO ESTUARY INST	ANNUAL PARTICIPANT FEE FOR RMP 2019		
						\$17,360.00	\$17,360.00
169581	11/29/2018	132	11	MUSGRAVES CONSULTING SERVICES	SPECIALTY FINANCIAL SERVICES CONSULTANT		
						\$16,024.00	\$16,024.00

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169400	11/8/2018	110	908433	UNIVAR USA INC	4800.9 GALS SODIUM HYPOCHLORITE		\$13,921.30
	11/8/2018	110	907937		4950.6 GALS SODIUM HYPOCHLORITE	\$3,445.39	
	11/8/2018	110	908208		4800.2 GALS SODIUM HYPOCHLORITE	\$3,552.83	
	11/8/2018	110	908910		4846.6 GALS SODIUM HYPOCHLORITE	\$3,444.89	
						\$3,478.19	
169444	11/15/2018	173	11189652	HACH COMPANY	LAB\PLANT OPERATIONS DATA MANAGEMENT SYSTEM (ODMS)	\$13,425.00	\$13,425.00
169576	11/29/2018	170	442815	KAMAN INDUSTRIAL TECHNOLOGIES	IPS HEADGATE 2 HYDRAULIC CYLINDER	\$12,971.06	\$12,971.06
169592	11/29/2018	143	218155	TANNER PACIFIC INC	PROJ: FORCE MAIN CORROSION REPAIR - PHASE 2	\$12,610.25	\$12,610.25
169372	11/8/2018		3106778A	DELTA DENTAL SERVICE	OCTOBER 2018 DENTAL	\$1,504.51	\$12,351.71
	11/8/2018		3106778C		OCTOBER 2018 DENTAL	\$10,847.20	
169604	11/29/2018	143	11326199	BROWN & CALDWELL CONSULTANTS	EMERGENCY OUTFALL OUTLET IMPROVEMENTS	\$11,572.79	\$11,572.79
169534	11/21/2018	143	26586	RMC WATER AND ENVIRONMENT	USD PLANT MASTER PLAN	\$11,571.95	\$11,571.95
169366	11/8/2018		34118	CALIFORNIA WATER TECHNOLOGIES	42,040 LBS FERROUS CHLORIDE	\$5,450.82	\$10,990.09
	11/8/2018		34106		41,920 LBS FERROUS CHLORIDE	\$5,539.27	
169472	11/21/2018	121	68280	3T EQUIPMENT COMPANY INC	ASTD PARTS & MATERIALS	\$3,173.97	\$10,644.52
	11/21/2018	121	68267		(10) NOZZLE EXTENSIONS	\$820.82	
	11/21/2018		68269		(8) PIPE PATCH KITS	\$3,540.73	
	11/21/2018		68268		(10) MANHOLE HOOKS / (6) LEADER HOSE COUPLINGS	\$3,109.00	

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169593	11/29/2018	110	912659	UNIVAR USA INC	4801.8 GALS SODIUM HYPOCHLORITE		
						\$3,446.04	\$10,514.29
	11/29/2018	110	911935		4898.6 GALS SODIUM HYPOCHLORITE		
						\$3,515.50	
	11/29/2018	110	912506		4950.5 GALS SODIUM HYPOCHLORITE		
						\$3,552.75	
169487	11/21/2018	110	34174	CALIFORNIA WATER TECHNOLOGIES	42,200 LBS FERROUS CHLORIDE		
						\$5,297.10	\$10,324.89
	11/21/2018	110	34200		40,540 LBS FERROUS CHLORIDE		
						\$5,027.79	
169468	11/15/2018	170	3946044	WESTERN ENERGY SYSTEMS	(2) COUPLINGS		
						\$10,225.00	\$10,225.00
169405	11/8/2018	121	42042	WECO INDUSTRIES LLC	MOTHERBOARD REPLACEMENT FOR CUES TRUCK		
						\$1,952.12	\$9,954.04
	11/8/2018		42089		TRACTOR CAMERA PARTS		
						\$1,208.83	
	11/8/2018	123	42022		CAMERA REPAIRS		
						\$5,214.48	
	11/8/2018	121	42045		CUES TRANSPORTER REPAIR		
						\$1,578.61	
169401	11/8/2018	170	42999	VALLEY OIL COMPANY	BULK OIL		
						\$153.92	\$9,054.10
	11/8/2018	170	43000		BULK OIL		
						\$8,900.18	
169603	11/29/2018	143	6542	BAY AREA COATING CONSULTANT	COATINGS INSPECTION FOR DIG 3 REHAB PROJECT		
						\$8,905.25	\$8,905.25
169421	11/15/2018	143	11328998	BROWN & CALDWELL CONSULTANTS	EMERGENCY OUTFALL OUTLET IMPROVEMENTS		
						\$8,699.23	\$8,699.23
169510	11/21/2018		201681804	GATEWAY PRODUCTS GROUP INC	24 SPARK PLUGS FOR JENBACHER		
						\$8,142.24	\$8,142.24
169382	11/8/2018		37432220181101	LINCOLN NATIONAL LIFE INS COMP	LIFE & DISABILITY INSURANCE - NOV 2018		
						\$7,674.74	\$7,674.74
169483	11/21/2018	143	11329079	BROWN & CALDWELL CONSULTANTS	STANDBY POWER SYSTEM UPGRADE		
						\$7,299.78	\$7,299.78
169501	11/21/2018	150	20181001	CSDA CAL SPECIAL DIST ASSOC	2019 MEMBERSHIP DUES		
						\$7,252.00	\$7,252.00

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169393	11/8/2018		117655	R-2 ENGINEERING INC	MOYNO PUMP REBUILD		\$7,132.18
	11/8/2018		117652		MOYNO PUMP REBUILD	\$3,634.73	
169459	11/15/2018	110	909173	UNIVAR USA INC	4947.9 GALS SODIUM HYPOCHLORITE	\$3,497.45	\$7,068.54
	11/15/2018	110	909950		4901.6 GALS SODIUM HYPOCHLORITE	\$3,550.88	
169385	11/8/2018	170	3695	M-I-C INC	DIGESTER 4 VAREC PARTS	\$3,517.66	\$6,897.28
169499	11/21/2018	131	511820	COMTEL SYSTEMS TECHNOLOGY	UPGRADE OLD SECURITY ACCESS PANELS	\$6,897.28	\$6,515.39
	11/21/2018	131	512929		UPGRADE OLD SECURITY ACCESS PANELS	\$4,791.37	
169397	11/8/2018	170	900088894	SUEZ TREATMENT SOLUTIONS INC	EAST BAR SCREEN REBUILD	\$1,724.02	\$6,152.74
169407	11/8/2018	143	155359	WOODARD & CURRAN INC	NEWARK BASIN MASTER PLAN/PACP UPDATE	\$6,152.74	\$5,807.39
169530	11/21/2018	110	1292801	POLYDYNE INC	42,540 LBS CLARIFLOC WE-539	\$5,807.39	\$5,781.19
169612	11/29/2018	141	181080	EXARO TECHNOLOGIES CORPORATION	FORCE MAIN POTHOLING CENTRAL AVE GRADE SEPARATION PRO.	\$5,781.19	\$5,762.11
169409	11/15/2018	144	53747	ABACUS PRODUCTS INC	5000 PLACEMATS FOR SCHOOL OUTREACH	\$5,762.11	\$5,664.62
169550	11/21/2018	171	3950993	WESTERN ENERGY SYSTEMS	COGEN 1 & 2 GENERATOR FAILURE TROUBLESHOOTING	\$5,664.62	\$5,492.70
169484	11/21/2018	150	232534	BURKE, WILLIAMS & SORENSON LLP	EBDA - SEPTEMBER 2018	\$5,492.70	\$5,390.52
	11/21/2018		232533		CIP - SEPTEMBER 2018	\$874.32	
	11/21/2018	150	232532		GENERAL LEGAL - SEPTEMBER 2018	\$2,457.00	
169423	11/15/2018	110	34142	CALIFORNIA WATER TECHNOLOGIES	41,460 LBS FERROUS CHLORIDE	\$2,059.20	\$5,204.22
169416	11/15/2018	143	4EA50	BAY AREA AIR QUALITY MGMT DIST	PRIMARY DIGESTER NO. 7 - PERMIT	\$5,204.22	\$5,109.00
169562	11/29/2018	110	34204	CALIFORNIA WATER TECHNOLOGIES	40,660 LBS FERROUS CHLORIDE	\$5,109.00	\$5,057.95
						\$5,057.95	

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169588	11/29/2018	110	18110841	S&S TRUCKING	GRIT BIN RENTAL 10/01/2018	\$750.00	\$4,735.24
	11/29/2018	110	18110720		GRIT HAULING 11/01, 11/05/2018	\$1,545.63	
	11/29/2018	110	18110906		GRIT HAULING 10/22, 10/25, 10/29/2018	\$2,439.61	
169358	11/8/2018	171	2000123526	AECOM TECHNICAL SERVICES INC	HAZMAT CONSULTING SERVICES	\$4,306.11	\$4,306.11
169610	11/29/2018	173	50024238	CORELOGIC INFORMATION SOLUTION	METROSCAN ONLINE RENEWAL	\$4,078.80	\$4,078.80
169414	11/15/2018		12076567	AT&T	SERV: 09/20/18 - 10/19/18	\$215.11	\$3,820.28
	11/15/2018		12076545		SERV: 09/20/18 - 10/19/18	\$3,584.35	
	11/15/2018		12076543		SERV: 09/20/18 - 10/19/18	\$20.82	
169481	11/21/2018	173	9338489370	BRADY WORLDWIDE, INC	LOTO ANNUAL SUBSCRIPTION	\$3,800.00	\$3,800.00
169386	11/8/2018	123	45	DAVID MICHAEL MOUTRAY	LATERAL OUTREACH VIDEO PROJECT	\$3,693.75	\$3,693.75
169605	11/29/2018	143	171769	CAROLLO ENGINEERS	PLANT ASSET CONDITION ASSESSMENT UPDATE	\$3,462.56	\$3,462.56
169365	11/8/2018		9580	BSM CONSTRUCTION	REFUND # 21468	\$3,300.00	\$3,300.00
169529	11/21/2018		8681	NEWARK 618 LP	REFUND # 21502	\$3,300.00	\$3,300.00
169396	11/8/2018		20181106	JOSE SOTO	COMPUTER NOTE	\$3,263.00	\$3,263.00
169419	11/15/2018	170	151301	BIGGE CRANE & RIGGING CO	CRANE EAST BAR SCREEN PICKS	\$1,600.00	\$3,200.00
	11/15/2018	170	151300		CRANE EAST BAR SCREEN PICKS	\$1,600.00	

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169599	11/29/2018	123	181102229	AIRTECH MECHANICAL INC	SERVICE CALL: BLDG 82 2ND FLOOR ODOR	\$415.00	\$3,160.00
	11/29/2018	170	180702226		JUL 2018: FILTER CHANGE BLDGS 54, 63, 81, 90	\$915.00	
	11/29/2018	170	180802227		AUG 2018: FILTER CHANGE BLDGS 54, 63, 81, 90	\$915.00	
	11/29/2018	170	180902228		SEP 2018: FILTER CHANGE BLDGS 54, 63, 81, 90	\$915.00	
169403	11/8/2018		20181101	VISION SERVICE PLAN - CA	NOVEMBER 2018 VISION STMT	\$3,152.16	\$3,152.16
169615	11/29/2018	173	231	FORMULA DESIGN	PUBLIC WEBSITE MAINTENANCE	\$3,100.00	\$3,100.00
169504	11/21/2018		5906	ENERGY CHOICE INC	5 FILTERS	\$3,023.43	\$3,023.43
169453	11/15/2018		9813	ROOTER HERO	REFUND # 21501	\$500.00	\$3,000.00
	11/15/2018		9758		REFUND # 21499	\$500.00	
	11/15/2018		9686		REFUND # 21495	\$500.00	
	11/15/2018		9794		REFUND # 21500	\$500.00	
	11/15/2018		9741		REFUND # 21498	\$500.00	
	11/15/2018		9711		REFUND # 21496	\$500.00	
169602	11/29/2018	172	5195350	ALL INDUSTRIAL ELECTRIC SUPPLY	APS VFD REPAIR	\$1,035.49	\$2,975.60
	11/29/2018	170	5195234		1 LATHE TRANSFORMER	\$1,699.36	
	11/29/2018	170	5195639		3 HPS-150R-1-KIT KEYSTONE 150W	\$115.24	
	11/29/2018	170	5195759		5 170F-G OCAL	\$125.51	
169584	11/29/2018	170	013720181109	PACIFIC GAS AND ELECTRIC	SERV TO 11/04/18 BOYCE RD PS	\$2,899.19	\$2,899.19
169395	11/8/2018	120	916003651019	REPUBLIC SERVICES #916	RECYCLE & ROLL OFF - NOV 2018	\$2,611.87	\$2,611.87

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169410	11/15/2018	123	181002213	AIRTECH MECHANICAL INC	HVAC QUARTERLY MAINT BLDGS 70, 82, 83		
						\$1,646.25	\$2,561.25
	11/15/2018	170	181002212		OCT 2018: FILTER CHANGE BLDGS 54, 63, 81, 90	\$915.00	
169548	11/21/2018	170	1952	WELCOME BUILDING MAINTENANCE	IPS SOLAR PANEL CLEANING	\$2,520.00	\$2,520.00
169450	11/15/2018		9873	LUIS ANDRES ORTIZ	REFUND # 21398	\$2,500.00	\$2,500.00
169458	11/15/2018		9314	THE NEW HOME CO, NOR CAL LLC	REFUND # 21484	\$2,500.00	\$2,500.00
169402	11/8/2018		9816902159	VERIZON WIRELESS	WIRELESS SERV 09/21/2018 - 10/20/2018	\$2,468.39	\$2,468.39
169503	11/21/2018		41522	DEL CONTE'S LANDSCAPING INC	LANDSCAPE MAINTENANCE SERVICES - NOVEMBER 2018	\$1,405.00	\$2,375.00
	11/21/2018		41521		WEED ABATEMENT WORK NOVEMBER 2018	\$970.00	
169601	11/29/2018	143	20181127	ALAMEDA COUNTY TREASURER	FILING FEE - EMERGENCY OUTFALL OUTLET IMPROVEMENTS	\$2,330.75	\$2,330.75
169387	11/8/2018		20181029	NAPA AUTO PARTS	MONTHLY AUTO PARTS STMT - OCTOBER 2018	\$2,327.24	\$2,327.24
169426	11/15/2018	144	53594279	CHANNING BETE COMPANY, INC.	3000 SCHOOL OUTREACH PLACEMATS	\$2,275.97	\$2,275.97
169439	11/15/2018	170	241249	FRANK A OLSEN COMPANY	1 NPS CHECK VALVE AIR CUSHION DAMPENER	\$2,221.85	\$2,221.85
169525	11/21/2018	170	181307	MITCH'S CERTIFIED CLASSES	BF PREVENTION ASSEMBLY TESTER COURSE - COOPER & SEPULV	\$2,200.00	\$2,200.00
169454	11/15/2018	110	18101820	S&S TRUCKING	GRIT HAULING 10/01, 10/04, 10/11/2018	\$2,162.86	\$2,162.86
169482	11/21/2018	121	890673	BRENNTAG PACIFIC, INC.	5128 LBS SODIUM HYDROXIDE	\$1,448.43	\$2,142.94
	11/21/2018	121	890672		2564 LBS SODIUM HYDROXIDE	\$694.51	

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169512	11/21/2018	122	1841085031	GOODYEAR COMM TIRE & SERV CTRS	6 TIRES		
						\$1,542.57	\$2,069.32
	11/21/2018	122	1841085053		4 TIRES	\$508.38	
	11/21/2018	122	1841085049		CREDIT FOR 2 TIRES	-\$922.37	
	11/21/2018	122	1841085064		2 TIRES	\$940.74	
169609	11/29/2018		72049813	COMCAST OF CALIFORNIA,	FIBER INTERNET BACKUP - NOVEMBER 2018	\$2,000.40	\$2,000.40
169536	11/21/2018		9792	ROOTER HERO	REFUND # 21507	\$500.00	\$2,000.00
	11/21/2018		9814		REFUND # 21508	\$500.00	
	11/21/2018		9861		REFUND # 21510	\$500.00	
	11/21/2018		9838		REFUND # 21509	\$500.00	
169506	11/21/2018	113	1135212	ENTHALPY ANALYTICAL LLC	31 LAB SAMPLE ANALYSIS	\$915.00	\$1,990.00
	11/21/2018	113	1134934		33 LAB SAMPLE ANALYSIS	\$1,075.00	
169571	11/29/2018	170	9942927675	GRAINGER INC	1 MOTOR	\$72.84	\$1,985.87
	11/29/2018	171	9944258582		1 CORDLESS IMPACT WRENCH	\$247.46	
	11/29/2018	170	9941935125		ASTD PARTS & MATERIALS	\$102.07	
	11/29/2018		9943250317		ASTD PARTS & MATERIALS	\$708.78	
	11/29/2018	170	9942718769		2 FUSES	\$45.86	
	11/29/2018	170	9943423872		1 DIGITAL DEPTH GAUGE	\$28.71	
	11/29/2018	170	9941832561		1 RATCHET CRIMPER	\$291.10	
	11/29/2018	170	9713955939		1 FULL BODY HARNESS	\$489.05	

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169492	11/21/2018	173	PVG3586	CDW GOVERNMENT LLC	DELL 2N1 MOBILE DEVICE FOR EVALUATION	\$1,980.50	\$1,980.50
169389	11/8/2018	173	17053	NICHOLAS J PEROS	REVIEW IT SECURITY POLICIES	\$1,860.00	\$1,860.00
169376	11/8/2018		9925772361	GRAINGER INC	ASTD PARTS & MATERIALS	\$1,659.35	\$1,795.65
	11/8/2018		9919944059		6 KNEE PADS	\$136.30	
169520	11/21/2018	173	201730592	IRON MOUNTAIN	DATA/MEDIA OFF-SITE STORAGE - OCT 2018	\$307.97	\$1,771.12
	11/21/2018	141	AGYD569		OFF-SITE STORAGE AND SERVICES - OCT 2018	\$1,124.62	
	11/21/2018	141	AGUH466		OFF-SITE STORAGE AND SERVICE - OCT 2018	\$338.53	
169466	11/15/2018	121	42171	WECO INDUSTRIES LLC	CAMERA REPAIRS	\$589.98	\$1,718.42
	11/15/2018	121	42176		CAMERA REPAIRS & PARTS	\$1,128.44	
169538	11/21/2018	110	18103015	S&S TRUCKING	GRIT HAULING 10/15, 10/18/18	\$1,696.31	\$1,696.31
169606	11/29/2018	173	PRR0965	CDW GOVERNMENT LLC	RSA TWO-FACTOR SECURITY ANNUAL SUPPORT	\$1,621.20	\$1,621.20
169417	11/15/2018	143	101866	BEECHER ENGINEERING	ALVARADO INFLUENT PS PUMPS AND VFDS	\$1,600.00	\$1,600.00
169514	11/21/2018	110	20181119	TIMOTHY GRILLO	EXP REIMB: WEFTEC CONF - REGIS/AIRFARE/LODGING/PER DIEM	\$1,590.53	\$1,590.53
169515	11/21/2018	123	1954950	HANSON AGGREGATES INC	10.39 TONS 1/2 MED TYPE A AC-R	\$802.77	\$1,582.60
	11/21/2018	120	1954471		10.09 TONS 1/2 MED TYPE A AC-R	\$779.83	
169532	11/21/2018	170	1782335001	R&B COMPANY	ASTD PARTS & MATERIALS	\$519.34	\$1,535.63
	11/21/2018	123	1792314001		(12) COUPLINGS	\$1,016.29	
169425	11/15/2018	170	21605334	CARBOLINE COMPANY	PAINT & RELATED PAINT SUPPLIES	\$851.59	\$1,508.48
	11/15/2018	170	21605780		PAINT & RELATED PAINT SUPPLIES	\$656.89	

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169435	11/15/2018		9912	ECONOMY ROOTER & PLUMBING INC	REFUND # 21485		
						\$500.00	\$1,500.00
	11/15/2018		9913		REFUND # 21486		
						\$500.00	
	11/15/2018		9914		REFUND # 21487		
						\$500.00	
169446	11/15/2018		8948	KB HOME SOUTH BAY, INC.	REFUND # 21488		
						\$1,500.00	\$1,500.00
169374	11/8/2018		20181105	MAURICE FORTNER	COMPUTER NOTE		
						\$1,430.98	\$1,430.98
169428	11/15/2018	171	137676	CUMMINS PACIFIC LLC	NPS GEN TROUBLESHOOTING		
						\$1,370.19	\$1,370.19
169457	11/15/2018		720647905201	STAPLES CONTRACT & COMMERCIAL	JANITORIAL & BREAK ROOM SUPPLIES		
						\$1,169.36	\$1,353.70
	11/15/2018		720647905202		JANITORIAL SUPPLIES		
						\$184.34	
169597	11/29/2018	143	156365	WOODARD & CURRAN INC	NEWARK BASIN MASTER PLAN/PACP UPDATE		
						\$1,333.25	\$1,333.25
169580	11/29/2018	121	132600	MUNICIPAL MAINT EQUIPMENT INC	BULLDOG REPAIR - QUOTE #105727		
						\$1,316.41	\$1,316.41
169557	11/29/2018	170	148939	BABBITT BEARING CO INC	TPS MOYNO ROTOR REPAIRS		
						\$1,299.19	\$1,299.19
169394	11/8/2018	173	9524	RAB-COM LIMITED	VEHICLE GATE CALL BOX REPLACEMENT		
						\$1,274.25	\$1,274.25
169572	11/29/2018	123	1957003	HANSON AGGREGATES INC	8.06 TONS 1/2 MED TYPE A AC-R		
						\$624.58	\$1,247.63
	11/29/2018	123	1958186		8.04 TONS 1/2 MED TYPE A AC-R		
						\$623.05	
169579	11/29/2018	171	1785877	MOBILE MODULAR MANAGEMENT CORP	MONTHLY FMC BREAK TRAILER RENTAL - NOV 2018		
						\$1,245.43	\$1,245.43
169497	11/21/2018	141	183418101	CIVIL ENGINEERING ASSOC. INC	PREPARE LEGALS & PLATS FOR QUITCLAIM OF 4 SS EASEMENTS		
						\$37.83	\$1,237.83
	11/21/2018	141	183418102		PREPARE LEGALS & PLATS FOR QUITCLAIM OF 4 SS EASEMENTS		
						\$1,200.00	
169521	11/21/2018	173	17099	LOOKINGPOINT INC	ANNUAL PHONE AND NETWORK SUPPORT - NOV 2018		
						\$1,225.00	\$1,225.00
169554	11/29/2018	121	68301	3T EQUIPMENT COMPANY INC	(1) ROOT CUTTER		
						\$1,124.18	\$1,124.18

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169430	11/15/2018		20181025	DALE HARDWARE INC	10/18 - ASTD PARTS & MATERIALS		
						\$1,112.91	\$1,112.91
169589	11/29/2018	143	9338541599	SETON	PIPE LABELS FOR THICKENER BLDG PROJECT		
						\$432.85	\$1,105.04
	11/29/2018	143	9338552634		PIPE LABELS FOR THICKENER BLDG PROJECT		
						\$672.19	
169560	11/29/2018	121	894048	BRENNTAG PACIFIC, INC.	1282 LBS SODIUM HYDROXIDE		
						\$366.54	\$1,096.30
	11/29/2018	121	892521		2564 LBS SODIUM HYDROXIDE		
						\$729.76	
169596	11/29/2018	143	2036676	WEST YOST ASSOCIATES	3RD SLUDGE DEGRITTER SYSTEM		
						\$1,046.25	\$1,046.25
169488	11/21/2018	113	589831	CALTEST ANALYTICAL LABORATORY	16 LAB SAMPLE ANALYSIS		
						\$604.80	\$1,032.30
	11/21/2018	113	591606		6 LAB SAMPLE ANALYSIS		
						\$427.50	
169575	11/29/2018		603224791	HILLYARD/SAN FRANCISCO	ASTD JANITORIAL SUPPLIES		
						\$963.80	\$1,025.44
	11/29/2018		800386449		CREDIT FOR FREIGHT FOR INV 603146370		
						\$-4.42	
	11/29/2018	122	800384511		CREDIT FOR 2 SEAT COVER DISPENSERS INV 603162900		
						\$-74.10	
	11/29/2018		603189653		ASTD JANITORIAL SUPPLIES		
						\$136.16	
	11/29/2018	122	603231129		2 SOAP DISPENSERS		
						\$16.23	
	11/29/2018		800390364		CREDIT FOR SOAP DISPENSERS INV 603189653		
						\$-12.23	
169498	11/21/2018	170	20181028	COMMUNICATION & CONTROL INC	UTILITY FEE/ANTENNA RENTAL		
						\$1,013.21	\$1,013.21
169413	11/15/2018	170	648689	A-PRO PEST CONTROL INC	OCTOBER PEST CONTROL		
						\$1,005.00	\$1,005.00
169590	11/29/2018		9893.1	STREAMLINE PLUMBING & DRAIN	REFUND # 21516		
						\$500.00	\$1,000.00
	11/29/2018		9893		REFUND # 21517		
						\$500.00	
169570	11/29/2018		881	GOKHALE METHOD ENTERPRISE INC	29 STRETCH-SIT GOKHALE BACK CUSHIONS		
						\$973.03	\$973.03

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169361	11/8/2018		12039483	AT&T	SERV: 09/13/18 - 10/12/18	\$87.35	\$954.07
	11/8/2018		12039479		SERV: 09/13/18 - 10/12/18	\$758.03	
	11/8/2018		12039482		SERV: 09/13/18 - 10/12/18	\$65.87	
	11/8/2018		12039481		SERV: 09/13/18 - 10/12/18	\$42.82	
169489	11/21/2018		99060606	CALTROL INC	HIGH PRESSURE GAUGES	\$935.07	\$935.07
169523	11/21/2018	170	78993184	MCMaster SUPPLY INC	2 PRESSURE GAUGES	\$35.18	\$931.61
	11/21/2018	170	79014448		8 RUBBER PARKING CURBS	\$451.57	
	11/21/2018	120	78977732		2 ROLLS LDPE FILM	\$143.00	
	11/21/2018	120	78945494		1 ROLL LDPE FILM	\$75.19	
	11/21/2018	170	79235322		2 CONTINUOUS USE RECHARGE NO MAINT BATTERIES	\$60.58	
	11/21/2018	170	79219895		2 CONTINUOUS USE RECHARGE NO MAINT BATTERIES	\$143.04	
	11/21/2018	170	79248826		2 PKS GLASS-TUBE FUSES	\$23.05	
169373	11/8/2018	113	1133224	ENTHALPY ANALYTICAL LLC	18 LAB SAMPLE ANALYSIS	\$450.00	\$880.00
	11/8/2018	113	1133223		16 LAB SAMPLE ANALYSIS	\$430.00	
169509	11/21/2018	141	10215	FREMONT EXPRESS COURIER SVC	COURIER SVCS: OCT 2018 DAILY MAIL/2 BOARDMEMBER DELIVERIE	\$830.00	\$830.00
169546	11/21/2018		8084232798	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$638.85	\$818.79
	11/21/2018	113	8084260697		LAB SUPPLIES	\$179.94	
169424	11/15/2018	136	4027403803	CANON SOLUTIONS AMERICA INC	MTHLY MAINTENANCE BASED ON USE	\$792.97	\$792.97
169485	11/21/2018	113	20181115	MARY GRACE CALANOG	TRAVEL REIMB: LODGING, PER DIEM, MILEAGE-ICAP OES OPERATI	\$790.44	\$790.44

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169505	11/21/2018	171	90108433346	ENTERPRISE GOV 43-1514861	RENTAL: E. TATOLA, LONG BEACH, CA	\$70.19	\$778.98
	11/21/2018	120	90107613508		RENTAL: S. NESGIS, ONTARIO, CA	\$167.44	
	11/21/2018	171	90108442323		RENTAL: L. RIVERA, ORLANDO, FL	\$194.55	
	11/21/2018	172	90107619315		RENTAL: R. AGBUYA, KENNER, LA	\$346.80	
169551	11/21/2018	132	29155	WILEY PRICE & RADULOVICH LLP	LABOR & EMPLOYMENT LAW FEES	\$767.00	\$767.00
169556	11/29/2018		20181010	AMAZON.COM LLC	10/18 - ASTD OFFICE SUPPLIES	\$759.88	\$759.88
169404	11/8/2018		8084065864	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$214.50	\$743.94
	11/8/2018		8084069510		LAB SUPPLIES	\$254.87	
	11/8/2018		8084062538		LAB SUPPLIES	\$172.83	
	11/8/2018	113	8084055346		LAB SUPPLIES	\$101.74	
169598	11/29/2018	170	9957471975	AIRGAS NCN	CYLINDER RENTAL	\$743.66	\$743.66
169406	11/8/2018	143	2036385	WEST YOST ASSOCIATES	FORCE MAIN CORROSION REPAIRS - PHASE 2	\$311.25	\$738.75
	11/8/2018	141	2036439		FM RELOCATION NEAR HICKORY STREET	\$427.50	
169613	11/29/2018	173	1481065	EXTENSIS	GEOEXPRESS SWM RENEWAL	\$710.00	\$710.00
169587	11/29/2018	170	84647	ROCHESTER MIDLAND CORPORATION	HOT WATER LOOP SERVICE	\$687.46	\$687.46
169491	11/21/2018	170	21609145	CARBOLINE COMPANY	PAINT & RELATED PAINT SUPPLIES	\$625.05	\$625.05
169524	11/21/2018	170	181153	METROMOBILE COMMUNICATIONS INC	METRO MOBILE ANNUAL RADIO SERVICE - NOV 2018	\$599.08	\$599.08

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169381	11/8/2018	170	54023	KAMAN INDUSTRIAL TECHNOLOGIES	2 BALL BEARINGS		
						\$224.41	\$596.03
	11/8/2018	170	54021		2 BALL BEARINGS		
						\$185.81	
	11/8/2018	170	853107		2 RADIAL BALL BEARINGS		
						\$185.81	
169526	11/21/2018	170	24048063	MOTION INDUSTRIES INC	ASTD NUTS & BOLTS		
						\$593.53	\$593.53
169390	11/8/2018		20181107	PETTY CASH	PETTY CASH REPLENISHMENT		
						\$558.13	\$558.13
169432	11/15/2018	173	409861	DLT SOLUTIONS, LLC	AWS CLOUD STORAGE - SEPTEMBER 2018		
						\$558.03	\$558.03
169436	11/15/2018	113	1133550	ENTHALPY ANALYTICAL LLC	24 LAB SAMPLE ANALYSIS		
						\$545.00	\$545.00
169433	11/15/2018		9727	E Z PLUMBING	REFUND # 21497		
						\$500.00	\$500.00
169477	11/21/2018		9874	BAYSHORE PLUMBERS	REFUND # 21513		
						\$500.00	\$500.00
169478	11/21/2018		9866	BENJAMIN FRANKLIN PLUMBING	REFUND # 21512		
						\$500.00	\$500.00
169479	11/21/2018		9863	BENJAMIN FRANKLIN PLUMBING	REFUND # 21511		
						\$500.00	\$500.00
169540	11/21/2018		9798	GYANENDRA PAL SINGH	REFUND # 21267		
						\$500.00	\$500.00
169553	11/21/2018		9879	CHI ZHANG	REFUND # 21505		
						\$500.00	\$500.00
169555	11/29/2018		9933	ABOVE ALL PLUMBING, INC.	REFUND # 21526		
						\$500.00	\$500.00
169565	11/29/2018		9898	E Z PLUMBING	REFUND # 21525		
						\$500.00	\$500.00
169519	11/21/2018	113	3038833770	IDEXX DISTRIBUTION INC	1 QUANTITRAY/2000, 100/BX		
						\$250.85	\$489.35
	11/21/2018	113	3038773588		1 WQC ENTEROCOCCI		
						\$238.50	
169378	11/8/2018		270836	HANIGAN COMPANY INC	5000 WINDOW ENVELOPES W/LOGO		
						\$486.65	\$486.65

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169542	11/21/2018	122	125730	TRI-SIGNAL INTEGRATION INC	FIRE PROTECTION SERVICE - MONTHLY CHARGE MONITORING AGI	\$133.34	\$483.34
	11/21/2018	123	125731		FIRE PROTECTION SERVICE - UL CERTIFICATE	\$350.00	
169377	11/8/2018	170	11162741	HACH COMPANY	CB4 TSS PROBE CALIBRATION	\$482.61	\$482.61
169495	11/21/2018	122	54K143575	CINTAS CORPORATION NO. 2	ASTD DUST MOPS, WET MOPS & TERRY TOWEL	\$17.22	\$480.21
	11/21/2018		54K143576		UNIFORM LAUNDERING & RUGS	\$192.35	
	11/21/2018		54K143574		UNIFORM LAUNDERING SERVICE	\$270.64	
169467	11/15/2018	143	2036440	WEST YOST ASSOCIATES	3RD SLUDGE DEGRITTER SYSTEM	\$480.00	\$480.00
169469	11/15/2018	170	15646	WESTERN MACHINE & FAB INC	(2) LOCKING SHAFTS	\$471.93	\$471.93
169578	11/29/2018	170	79868318	MCMASTER SUPPLY INC	1 STARRETT MULTI-PLANE PRECISION LEVEL	\$153.55	\$460.60
	11/29/2018	170	79763610		1 FLEXIBLE CYLINDER HONE	\$202.47	
	11/29/2018	170	79674319		2 LONG-LIFE RECHARGE NO MAINT LARGE-CELL BATTERIES	\$104.58	
169437	11/15/2018	170	903748417	EVOQUA WATER TECHNOLOGIES	DI WATER SYSTEM	\$451.98	\$451.98
169370	11/8/2018	122	54K141228	CINTAS CORPORATION NO. 2	ASTD DUST MOPS, WET MOPS & TERRY TOWEL	\$17.22	\$451.89
	11/8/2018		54K141227		UNIFORM LAUNDERING SERVICE	\$242.32	
	11/8/2018		54K141229		UNIFORM LAUNDERING & RUGS	\$192.35	
169533	11/21/2018	120	08K0036018380	NESTLE WATERS NO. AMERICA READYREFRESH WATER SERVICE 10/07/18 - 11/06/18		\$448.65	\$448.65
169547	11/21/2018	121	42175	WECO INDUSTRIES LLC	FREIGHT CHARGES	\$442.52	\$442.52
169496	11/21/2018		71332	CITYLEAF INC	PLANT MAINTENANCE - NOV 2018	\$431.86	\$431.86

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169422	11/15/2018	170	1775159	BUREAU VERITAS/ANALYSTS, INC.	4 LAB SAMPLE ANALYSIS		
						\$92.30	\$430.40
	11/15/2018	170	1775880		14 LAB SAMPLE ANALYSIS		
						\$338.10	
169420	11/15/2018	144	12967130	BLAISDELL'S	ASTD OFFICE SUPPLIES		
						\$64.67	\$430.18
	11/15/2018	120	12964630		ASTD OFFICE SUPPLIES		
						\$190.72	
	11/15/2018	120	12972950		ASTD OFFICE SUPPLIES		
						\$96.06	
	11/15/2018	120	12956830		ASTD OFFICE SUPPLIES		
						\$55.69	
	11/15/2018	144	12932751		1 PLANNER		
						\$23.04	
169473	11/21/2018	170	5195532	ALL INDUSTRIAL ELECTRIC SUPPLY	ASTD PARTS & MATERIALS		
						\$306.32	\$429.73
	11/21/2018	170	5195355		500 THHN-10-BLK-19STGR WIRE		
						\$123.41	
169427	11/15/2018		54K142339	CINTAS CORPORATION NO. 2	UNIFORM LAUNDERING SERVICE		
						\$214.00	\$423.57
	11/15/2018		54K142341		UNIFORM LAUNDERING & RUGS		
						\$192.35	
	11/15/2018	122	54K142340		ASTD DUST MOPS, WET MOPS & TERRY TOWEL		
						\$17.22	
169563	11/29/2018		54K144792	CINTAS CORPORATION NO. 2	UNIFORM LAUNDERING & RUGS		
						\$192.35	\$423.57
	11/29/2018		54K144790		UNIFORM LAUNDERING SERVICE		
						\$214.00	
	11/29/2018	122	54K144791		ASTD DUST MOPS, WET MOPS & TERRY TOWEL		
						\$17.22	
169448	11/15/2018	120	77118382	MCMMASTER SUPPLY INC	2 EA ROLLS LDPE FILM		
						\$151.92	\$404.59
	11/15/2018	170	78740537		1 ROPE		
						\$51.25	
	11/15/2018		79095695		ASTD PARTS & MATERIALS		
						\$89.35	
	11/15/2018	170	78852519		1 EXTERNAL RETAINING RING ASSORTMENT		
						\$112.07	

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169463	11/15/2018		9817459220	VERIZON WIRELESS	WIRELESS SERV 10/02/18-11/01/18 & (6) IPADS	\$377.49	\$377.49
169480	11/21/2018	111	12985930	BLAISDELL'S	ASTD OFFICE SUPPLIES	\$123.63	\$364.70
	11/21/2018	120	12982230		1 TONER	\$241.07	
169568	11/29/2018	113	6948545	FISHER SCIENTIFIC	ASTD PARTS & MATERIALS	\$233.40	\$358.81
	11/29/2018	113	6726163		ASTD PARTS & MATERIALS	\$125.41	
169369	11/8/2018	173	PQN9047	CDW GOVERNMENT LLC	2N1 MOBILE DEVICE FOR EVALUATION	\$355.19	\$355.19
169443	11/15/2018	170	9932963466	GRAINGER INC	2 FLOW CONTROL VALVES	\$177.71	\$354.19
	11/15/2018	170	9932645618		6 QUARTZ HALIDE LAMPS	\$176.48	
169412	11/15/2018	170	5194969	ALL INDUSTRIAL ELECTRIC SUPPLY	2 SHRAK-4-50W/D10 RAB	\$353.94	\$353.94
169440	11/15/2018	150	17081	FREMONT CHAMBER OF COMMERCE	MEMBERSHIP DUES	\$350.00	\$350.00
169367	11/8/2018	113	591253	CALTEST ANALYTICAL LABORATORY	4 LAB SAMPLE ANALYSIS	\$349.20	\$349.20
169531	11/21/2018		143033	PREFERRED ALLIANCE INC	OCTOBER 2018 SERVICE FEE	\$307.04	\$307.04
169408	11/8/2018		4856	ZELAYA DESIGNS	PUBLIC OUTREACH	\$280.00	\$280.00
169614	11/29/2018	170	1410770	FERGUSON ENTERPRISES, INC.	1 - 8 PTD GRV CAP 60	\$262.30	\$262.30
169452	11/15/2018	120	20181114	JOSE RODRIGUES JR	EXP REIMB: TEAM MEAL CONT WORK - CLEANING CB1	\$252.43	\$252.43
169399	11/8/2018		18101903	TELOG INSTRUMENTS INC	(2) BATTERY PACKS	\$250.76	\$250.76
169549	11/21/2018	173	6020974	WEST SAFETY SERVICES INC	E911 CLOUD SERVICE	\$250.00	\$250.00
169464	11/15/2018	150	20181108	AUDREY VILLANUEVA	EXP REIMB: SOCIAL CMTE HALLOWEEN EVENT	\$236.25	\$236.25
169415	11/15/2018	170	387624001	AUTO BODY TOOLMART	ASTD PARTS & MATERIALS	\$233.33	\$233.33

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169494	11/21/2018	141	54838609	CINTAS CORPORATION	3 JACKETS W/ LOGO	\$222.64	\$222.64
169462	11/15/2018	122	43099	VALLEY OIL COMPANY	1 DRUM DEF FLUID	\$214.29	\$214.29
169591	11/29/2018	121	92070385	SUBSITE ELECTRONICS	RST CAMERA REPAIR	\$210.69	\$210.69
169362	11/8/2018	144	21751000	BECK'S SHOES	SAFETY SHOES: A. PAREDES	\$208.00	\$208.00
169558	11/29/2018	123	21820400	BECK'S SHOES	SAFETY SHOES: B. MEDEIROS	\$208.00	\$208.00
169513	11/21/2018	122	9935620352	GRAINGER INC	2 MOBIL RARUS 427, COMPRESSOR	\$82.80	\$204.32
	11/21/2018	122	9935339243		ASTD PARTS & MATERIALS	\$40.01	
	11/21/2018	170	9936113811		1 BAND CLAMP	\$10.18	
	11/21/2018	170	9938196525		1 PATCH CORD	\$17.64	
	11/21/2018	170	9936039560		1 TWIST ON WIRE CONNECTOR	\$53.69	
169411	11/15/2018	170	4017275220181106	ALAMEDA COUNTY WATER DISTRICT	SERV TO: 11/03/18 - FREMONT BLVD	\$151.59	\$203.92
	11/15/2018	170	4017420220181106		SERV TO: 11/05/18 - FREMONT BLVD	\$52.33	
169465	11/15/2018	113	8084163656	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$201.48	\$201.48
169502	11/21/2018	123	12461	CUSTOM TOOL REPAIR	SERVICE THROTTLE VALVE ASSEMBLY	\$201.07	\$201.07
169449	11/15/2018		78391881	MCMASTER SUPPLY INC	ASTD PARTS & MATERIALS	\$196.98	\$196.98
169582	11/29/2018	122	20181127	SHAWN NESGIS	EXP REIMB: CS SUPPORT TEAM RECOG LUNCH 11/13/18	\$195.65	\$195.65
169577	11/29/2018	122	226117	MANSFIELD OIL CO OF GAINSVILLE	SALES TAX CORRECTION FOR INV 876830 7/11/18	\$48.36	\$190.67
	11/29/2018	122	226110		SALES TAX CORRECTION FOR INV 713429 3/8/18	\$65.07	
	11/29/2018	122	226121		SALES TAX CORRECTION FOR INV 180274 10/01/18	\$77.24	

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169476	11/21/2018	143	1160896	BAY AREA NEWS GROUP EAST BAY	AD: PRIMARY DIGESTER NO. 7	\$188.37	\$188.37
169383	11/8/2018	170	20181105	SCOTT MARTIN	EXP REIMB: FMC GROUP RECOGNITION	\$175.30	\$175.30
169566	11/29/2018	113	1136209	ENTHALPY ANALYTICAL LLC	6 LAB SAMPLE ANALYSIS	\$175.00	\$175.00
169539	11/21/2018	113	20181115	JOHN SEO	EXP REIMB: SAFETY SHOES	\$163.88	\$163.88
169442	11/15/2018	144	484977857	GLACIER ICE COMPANY INC	147 7-LB BAGS OF ICE	\$158.76	\$158.76
169418	11/15/2018	111	538791	BETE FOG NOZZLE INC	12 - 59185 1/4"TF8FC PVC NOZZLES	\$155.91	\$155.91
169493	11/21/2018	113	210467	CHEMETRICS INC	ASTD PARTS & MATERIALS	\$150.12	\$150.12
169541	11/21/2018	172	20181119	SWRCB - STATE WATER RESOURCES	GRADE II OPERATOR CERTIFICATE RENEWAL - S. COOPER	\$150.00	\$150.00
169375	11/8/2018	122	1841084910	GOODYEAR COMM TIRE & SERV CTRS	1 TIRE	\$148.65	\$148.65
169380	11/8/2018	122	603189652	HILLYARD/SAN FRANCISCO	3 DISPENSER SEAT COVER SS SURFACE MOUNTED	\$146.14	\$146.14
169608	11/29/2018	143	53011	COG GROUP LLC	3 OFFICE CHAIR ARM REPLACEMENTS	\$137.20	\$137.20
169516	11/21/2018	170	3M8249	HARRINGTON INDUSTRIAL PLASTICS	1 SHEET PVC	\$136.38	\$136.38
169359	11/8/2018	170	3601	ALL ABOUT BACKFLOW	ANNUAL BACKFLOW INSPECTION- NPS	\$125.00	\$125.00
169456	11/15/2018	141	20181031	SPOK INC	NOVEMBER 2018 PAGER SERVICE	\$124.08	\$124.08

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169363	11/8/2018	130	12950600	BLAISDELL'S	ASTD OFFICE SUPPLIES	\$28.02	\$123.48
	11/8/2018	130	12956950		ASTD OFFICE SUPPLIES	\$8.33	
	11/8/2018	170	12960500		ASTD OFFICE SUPPLIES	\$33.07	
	11/8/2018	130	12953680		1 WALL CALENDAR	\$15.24	
	11/8/2018	170	12948820		ASTD OFFICE SUPPLIES	\$27.43	
	11/8/2018	170	12953030		2 NOTEBOOKS	\$11.39	
169528	11/21/2018	170	198727	NAYLOR STEEL INC	ASTD METAL, STEEL, STAINLESS & ALUMINUM	\$85.61	\$112.21
	11/21/2018	170	199009		ASTD METAL, STEEL, STAINLESS & ALUMINUM	\$26.60	
169585	11/29/2018		97699	REMOTE SATELLITE SYSTEMS INT'L	IRIDIUM SVC FEE DECEMBER 2018	\$112.00	\$112.00
169360	11/8/2018		5194438	ALL INDUSTRIAL ELECTRIC SUPPLY	1 THN3361 GEDC	\$73.74	\$111.55
	11/8/2018		5194657		1 WMIE CORDSET	\$37.81	
169500	11/21/2018		89422	COPYMAT NEW BAY	500 SETS COPIES	\$109.00	\$109.00
169398	11/8/2018	170	967681	SWAGELOK NORTHERN CA	ASTD PARTS & MATERIALS	\$105.54	\$105.54
169607	11/29/2018	143	20181126	RAYMOND CHAU	EXP REIMB: CIP TEAM QTLY SAFETY STRATEGY RECOGNITION	\$102.63	\$102.63
169486	11/21/2018	120	18080011	CALIFORNIA REGIONAL CGA	STAKEHOLDER ANNUAL MEMBERSHIP 01/01/19-12/31/19	\$100.00	\$100.00
169535	11/21/2018	171	20181115	JOSE RODRIGUES JR	EXP REIMB: TEAM MEAL CONT WORK - CLEANING CB1	\$94.97	\$94.97
169522	11/21/2018	170	77911888	MATHESON TRI-GAS INC	MONTHLY CYLINDER RENTAL - OCT 2018	\$91.83	\$91.83
169511	11/21/2018	144	484977829	GLACIER ICE COMPANY INC	60 7-LB BAGS OF ICE	\$88.20	\$88.20
169441	11/15/2018	130	2949521	FREMONT FLOWERS	FLOWERS: P. JOHNSON	\$87.40	\$87.40

**UNION SANITARY DISTRICT
CHECK REGISTER
11/03/2018-11/30/2018**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169392	11/8/2018	170	1785409001	R&B COMPANY	(1) 8" GROOVED CAP FOR STEEL PIPE	\$83.19	\$83.19
169429	11/15/2018		3185805	DAILY JOURNAL CORPORATION	AD: DIGESTER 7 NEGATIVE MITIGATED DECLARATION	\$77.50	\$77.50
169384	11/8/2018	122	77816796	MCMASTER SUPPLY INC	1 RESPIRATOR WITH EXHALE VALVE	\$54.74	\$76.72
	11/8/2018	111	78220638		(1) FIRST AID SIGN	\$21.98	
169371	11/8/2018		20181102	CWEA	REG: CWEA TRAINING	\$65.00	\$65.00
169611	11/29/2018		615320181120	DISH NETWORK	DEC 2018 - SERVICE FEE	\$60.90	\$60.90
169537	11/21/2018		7758205700	RS HUGHES CO INC	ASTD SAFETY SUPPLIES	\$51.81	\$51.81
169574	11/29/2018	110	1365912	HAYWARD WATER SYSTEM	WATER SERV 09/07/18 - 11/06/18	\$46.18	\$46.18
169518	11/21/2018		603207846	HILLYARD/SAN FRANCISCO	2 CS FACIAL TISSUE	\$44.32	\$44.32
169559	11/29/2018	130	13003670	BLAISDELL'S	ASTD OFFICE SUPPLIES	\$40.75	\$40.75
169447	11/15/2018	170	62600000147984	KELLY-MOORE PAINT COMPANY	ASTD PAINTING SUPPLIES	\$40.40	\$40.40
169595	11/29/2018		8084293878	VWR INTERNATIONAL LLC	LAB SUPPLIES	\$37.76	\$37.76
169573	11/29/2018	111	3M8457	HARRINGTON INDUSTRIAL PLASTICS	15 COUPLINGS	\$34.25	\$34.25
169475	11/21/2018	170	7014741693	APPLIED INDUSTRIAL TECHNOLOGIE	4 O-RINGS	\$32.22	\$32.22
169431	11/15/2018	132	20181109	MICHAEL DELA ROSA	EXP REIMB: LIVESCAN FEE PRE-EMPLOYMENT	\$30.00	\$30.00
169474	11/21/2018	170	27311	ALLIED FLUID PRODUCTS CORP	6 - 1/32"X48:X48" TEFLON SHEETS	\$27.86	\$27.86
169379	11/8/2018	170	29709	HAYWARD PIPE AND SUPPLY	ASTD PARTS & MATERIALS	\$20.90	\$20.90
169445	11/15/2018	170	768520181028	HOME DEPOT CREDIT SERVICES	MONTHLY HARDWARE STMT - OCTOBER 2018	\$15.76	\$15.76
169460	11/15/2018	136	98XW53428	UPS - UNITED PARCEL SERVICE	SHIPPING CHARGES W/E 10/20/218	\$15.10	\$15.10

**UNION SANITARY DISTRICT
CHECK REGISTER
11/03/2018-11/30/2018**

Check No.	Date	Dept	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
169594	11/29/2018	136	98XW53448	UPS - UNITED PARCEL SERVICE	SHIPPING CHARGES W/E 11/03/18	\$12.44	\$12.44
169600	11/29/2018		1531	ALAMEDA COUNTY TREASURER	4 ASSESSOR MAPS	\$12.00	\$12.00
169544	11/21/2018	136	98XW53438	UPS - UNITED PARCEL SERVICE	SHIPPING CHARGES W/E 10/27/18	\$10.54	\$10.54
169567	11/29/2018	122	1120417	FASTENAL	ASTD PARTS & MATERIALS	\$4.46	\$10.42
	11/29/2018	122	1120428		ASTD PARTS & MATERIALS	\$5.96	
169508	11/21/2018	170	1120373	FASTENAL	ASTD PARTS & MATERIALS	\$6.10	\$10.33
	11/21/2018	122	1120381		ASTD PARTS & MATERIALS	\$1.27	
	11/21/2018	122	1120391		ASTD PARTS & MATERIALS	\$1.30	
	11/21/2018	122	1120407		ASTD PARTS & MATERIALS	\$1.66	
169490	11/21/2018	136	4027483607	CANON SOLUTIONS AMERICA INC	MTHLY MAINTENANCE BASED ON USE	\$5.11	\$5.11
169438	11/15/2018	122	1120344	FASTENAL	20 O-RINGS	\$1.31	\$1.31

Invoices:			Checks:		
Credit Memos :	4	-1,013.12			
\$0 - \$1,000 :	264	75,137.28	\$0 - \$1,000 :	131	43,143.84
\$1,000 - \$10,000 :	113	357,915.73	\$1,000 - \$10,000 :	93	302,685.97
\$10,000 - \$100,000 :	22	512,441.05	\$10,000 - \$100,000 :	28	597,845.52
Over \$100,000 :	6	869,292.60	Over \$100,000 :	6	870,098.21
Total:	409	1,813,773.54	Total:	258	1,813,773.54

NOVEMBER 7, 2018

Baltimore votes to become first large U.S. city to ban water privatization

Carey L. Biron

WASHINGTON (Thomson Reuters Foundation) - The city of Baltimore voted overwhelmingly Tuesday to ban the privatization of its water and sewerage systems, in what supporters say is the first large U.S. jurisdiction to take such a step.

Around 77 percent of more than 148,000 voters backed a proposal to alter the city's charter to declare the "inalienability" of its sewerage and water-supply systems, with most votes counted Wednesday morning.

A Baltimore official said multiple cities have expressed interest in similar provisions.

The measure "sends a strong message to private corporations," said Rianna Eckel, Maryland state organizer for Food & Water Watch, an advocacy group that promoted the ballot initiative.

"It prohibits any asset sales or leases of the system," she added. "It's not a sure-fire trick to prevent any privatization ever, but it prohibits the most dangerous efforts," she added.

Baltimore has one of the oldest water systems in the country, and decades of deferred maintenance have resulted in a quadrupling of water rates since 2000, Eckel said.

It has also prompted worries that privatization would cause further spikes, and that the city would have no control over who these most affected.

Eckel pointed to Food & Water Watch research finding that private water utilities tend to charge almost 60 percent more than public counterparts.

Baltimore's aging infrastructure has drawn increasing attention from private water companies seeking to take over management of parts of the city systems, according to Lester Davis, deputy

chief of staff for City Council President Bernard C. “Jack” Young, the amendment proposal’s chief proponent.

“There was a lot of chatter that we needed to close the door on,” said Davis, noting that Young doesn’t believe water systems “should be subject to the whims of the private market.”

The mayor and city council have already signed off on the new measure.

Water company Veolia North America was unable to provide comment for this story by deadline. Another key company, Suez North America, failed to respond to a request for comment. Both companies have approached Baltimore in recent years, according to Eckel.

Other cities are already taking note.

After the city council of Pittsburgh, another post-industrial city, recently hosted peers from Baltimore on the issue, Pittsburgh council member Erika Strassburger told the Thomson Reuters Foundation that the discussions were “enlightening” as her city undergoes its own conversations about the future of its water system.

Most members of the council, she noted, “appear resistant to privatizing our water system.”



<https://paloaltoonline.com/news/print/2018/11/20/city-looks-to-tap-into-the-value-of-wastewater>

Uploaded: Tue, Nov 20, 2018, 1:55 am

City looks to tap into the value of wastewater

Palo Alto explores building new plant to treat, sell recycled water

by Gennady Sheyner

Palo Alto's new plan for water management calls for building new plants, forging new partnerships and — trickiest of all — convincing residents that their wastewater is good enough to drink.

The city is now rethinking how it uses its wastewater, with the goal of converting it from a burden to a resource. The city's Regional Water Quality Control Plant, which serves Palo Alto, the East Palo Alto Sanitary District, Mountain View, Los Altos, Los Altos Hills and Stanford University, treated about 7.5 billion gallons of wastewater in 2017, of which 97 percent was dumped into the San Francisco Bay.

The remaining 3 percent was treated further and then ferried by the city's "purple pipes" to parks in Palo Alto and Mountain View, where it is used to irrigate the Shoreline Golf Links and the landscapes of corporations at North Bayshore area.

On Monday night, members of the City Council concurred with staff's assessment that given the recent drought, the raging wildfires and the general uncertainty brought about by climate change, resiliency should be at a premium. And with the Santa Clara Valley Water District looking to expand its own water portfolio, the city is hoping to make a tidy profit by making a deal with the district to build the new infrastructure.

In short, they want to take the "waste" out of wastewater.

To do that, city officials are exploring two separate strategies. One would effectively take existing recycled water and make it better while keeping it non-potable. While the council currently sells water to Mountain View, other entities — including Stanford Research Park — have been reluctant to tap into the water source because of high salt content, which they fear would damage redwoods.

Building a small plant on the west side of the regional water plant site would address that concern, said Phil Bobel, assistant director at Public Works. Using reverse osmosis to remove salt, the city would create "enhanced recycle water" that could be used principally in irrigation.

"It would feed higher quality water to our existing pipeline system so that we can get more customers along that pipeline but who aren't using it because they are concerned about salt," Bobel said.

The other, a far more ambitious, complex and controversial project, would use advanced treatment techniques to convert wastewater into the drinkable kind. Such a plant could take up to 10 years to plan out and construct, Bobel said, and it would require both a deal with the water district and — because the new water plant would have to occupy a parkland site — it would need the approval of Palo Alto voters.

Bobel said the if the city pursues a deal with the water district, a new plant to purify the water could either be constructed either at the Regional Water Quality Control Plant, on a piece of parkland that was "undedicated" by the voters in 2014 or farther south, in Sunnyvale or San Jose. Under the latter option, treated water would be shipped from Palo Alto Baylands to the advanced-treatment plant.

These challenges and complexities notwithstanding, staff believes that the new system could bring great benefits to Palo Alto. It would allow the city to get paid for its wastewater; it would help the city meet its water-supply needs; and, most importantly, it would dramatically reduce discharge into the Bay and help the city meet regulatory requirements.

"We know the regulations are going to get more and more stringent over discharging to the Bay," Bobel said. "We can probably reduce us some long-term grief if we can reduce the discharge to the Bay. And sending the water south would do that."

According to Public Works staff, the plant has the treatment capacity to produce 4.5 million gallons per year of non-potable water.

The city and water district have been talking about a possible deal for months. Both Palo Alto and the water district have representatives on the Joint Recycled Water Advisory Committee, which also includes officials from Palo Alto, East Palo Alto and Mountain View.

Garth Hall, deputy operating officer at the water district, said the district is looking for new supplies to meet an expected rise in countywide demand for water.

"We know from our planning that we have additional needs in 2050 and beyond that can't be directly served by imported water. We have to look at drought-proof sustainable supplies," Hall said. "And we know the City Council, like our district, has sustainability as one of its missions."

One point of negotiations will be the length of the contract. Bobel said he expects the agreement with the water district to cover a period of about 40 years, a period that several council members suggested was too long.

"We can understand why it has to be that long," Bobel explained. "If the district is going to spend big bucks either building the water plant and/or a pipeline system south, they've got to have this exist for long enough to recoup the investment."

While council members had some reservations about the potential terms with the county — including the prospect of locking in a rate for too long a period — they generally supported the idea of turning recycled water into potable water. Councilman Tom DuBois, who sits on the Joint Recycled Water Advisory Committee, argued that the city should consider ways to diversify its water supply over the long term.

"I believe as a council we should really look at coming together and analyzing how we can get a large potable water treatment plant in Palo Alto that help us decrease Hetch Hetchy water over 40 years," DuBois said.

Councilman Cory Wolbach, who also serves on the committee, concurred that "recycled water is the future." He lauded the goals of supporting neighbors and promoting sustainability but said his top priority is ensuring a secure supply for residents.

"We have to do everything we can to guarantee that our local community will have access to safe drinking water in perpetuity," Wolbach said. "For me, that value has primacy in all these discussions."

Several residents, including former mayors Pat Burt and Peter Drekmeier, also spoke in favor of exploring new ways to purify and reuse water. Burt pointed to the recent string of devastating wildfires as evidence that the city is already facing the impacts of climate change. In addition to threatening residents, the fires are decimating the forests that are essential to protecting snowpacks. This recent trend, Burt argued, underscores the importance of securing stable water supplies.

"Reducing our reliance on distant and vulnerable supplies makes us more sustainable and more self-reliant," Burt said.

In addition, he said, the plant could be the first to use 100 percent carbon-free electricity, a key feature for such an energy-dependent project.

Drekmeier, policy director for Tuolumne River Trust, made the case for "advanced purified water." In most communities, it would actually be an improvement over their current tap water.

"We're very fortunate that we get this pristine snowmelt from the Tuolumne River in Yosemite National Park," Drekmeier said. "But I think most people would agree that our drinking water is too high quality for flushing toilets and watering lawns. We need to diversify."

Like others, he acknowledged that the city would have to fight the "yuck" factor, but suggested this challenge is not insurmountable.

"A few years ago, we served beer made from advanced treated water at the Silicon Valley Water Conservation Awards," Drekmeier said. "It was more popular than the tap water."

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