



BOARD MEETING AGENDA
Monday, August 11, 2014
Regular Meeting - 7:00 P.M.

Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Richard B. Currie
*General Manager/
District Engineer*

David M. O'Hara
Attorney

1. Call to Order.
-

2. Pledge of Allegiance.
-

3. Roll Call.
-

Motion

4. Approval of the Minutes of the Regular Meeting of July 28, 2014.
-

5. Written Communications.
-

6. 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

7. Authorizing the General Manager to Execute an Agreement and Task Order No. 1 with RMC Water and Environment for the Alvarado Wastewater Treatment Plant Site Use Study *(to be reviewed by the Construction Committee)*.
-

Motion

8. Authorizing the General Manager to Execute Task Order No. 2 with the RMC Water and Environment for the Irvington Basin Sewer Master Plan Update *(to be reviewed by the Construction Committee)*.
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- Information 9. Information Items:
- a. Check Register.
 - b. Employee Turnover Rate for FY14 *(to be reviewed by the Personnel Committee)*.
 - c. Future Newsletter Options and Costs *(to be reviewed by the Legal/Community Affairs Committee)*.
 - d. Report from the Regional Water Board on Sanitary Sewer Overflows *(to be reviewed by the Legal/Community Affairs Committee)*.
 - e. Schedule of Board Workshops/Special Meetings through October 2014.
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- Information 10. Committee Meeting Reports. *(No Board action is taken at Committee meetings):*
- a. Legal/Community Affairs Committee – scheduled for Wednesday, 8/6/14, 4:30 p.m.
 - b. Construction Committee – scheduled for Thursday, 8/7/14, 8:45 am
 - c. Personnel Committee – scheduled for Friday, 8/8/14 at 9:30 a.m.
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- Information 11. General Manager's Report. *(Information on recent issues of interest to the Board)*.
-

- Information 12. 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.
-

13. Adjournment - The Board will adjourn to a Special Meeting on the USD Forcemain Alignment in the Boardroom on Monday, August 18, 2014.
-

14. Adjournment - The Board will adjourn to the next Regular Meeting in the Boardroom on Monday, August 25, 2014 at 7:00 p.m.
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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 "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

**NOTICE OF
COMMITTEE MEETING**

All meetings will be held in
the General Manager's Office



BOARD MEETING OF AUGUST 11, 2014

Committee Membership:

Budget and Finance	Directors Anjali Lathi and Tom Handley (Alt. – Pat Kite)
Construction Committee	Directors Pat Kite and Jennifer Toy (Alt. – Manny Fernandez)
Legal/Community Affairs	Directors Pat Kite and Tom Handley (Alt. –Anjali Lathi)
Legislative Committee	Directors Manny Fernandez and Jennifer Toy (Alt–Tom Handley)
Personnel Committee	Directors Manny Fernandez and Anjali Lathi (Alt. – Jennifer Toy)
Audit Committee	Directors Manny Fernandez and Tom Handley (Alt. Jennifer Toy)

Legal/Community Affairs Committee, Wednesday, August 6, 2014 at 4:30 pm

- 9c. Future Newsletter Options and Costs.
- 9d. Report from the Regional Water Board on Sanitary Sewer Overflows.

Construction Committee, Thursday, August 7, 2014 at 8:45 a.m.

- 7. Authorizing the General Manager to Execute an Agreement and Task Order No. 1 with RMC Water and Environment for the Alvarado Wastewater Treatment Plant Site Use Study.
- 8. Authorizing the General Manager to Execute Task Order No. 2 with the RMC Water and Environment for the Irvington Basin Sewer Master Plan Update.

Personnel Committee, Friday, August 8, 2014 at 9:30 a.m.

- 9b. Employee Turnover Rate for FY14.

Committee meetings may include teleconference participation by one or more Directors.
(Gov. Code Section 11123)
Committee Meetings are open to the public. Only written comments will be considered. No action will be taken.

**MINUTES OF THE MEETING OF THE
BOARD OF DIRECTORS OF
UNION SANITARY DISTRICT
July 28, 2014**

CALL TO ORDER

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

PLEDGE OF ALLEGIANCE

**SWEARING IN OF REAPPOINTED BOARDMEMBERS JENNIFER TOY AND
TOM HANDLEY**

Richard Currie, General Manager, administered the Oath of Office to Jennifer Toy, reappointed to the office of Director, Union Sanitary District, Ward Three, Seat 5, and Tom Handley, reappointed to the office of Director, Union Sanitary District, Ward Three, Seat 4, at the June 3, 2014 election. Their term expires in 2018.

There was a short recess to take pictures and offer congratulations to Directors Toy and Handley.

ROLL CALL

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

STAFF: Richard Currie, General Manager/District Engineer
Richard Cortes, Business Services Manager
Andy Morrison, Collection Services Manager
Dave Livingston, Treatment & Disposal Services Manager
Sami Ghossain, Technical Services Manager
Jason Yeates, Environmental Compliance Inspector II
David O'Hara, Legal Counsel
Carol Rice, Assistant to the General Manager/Board Secretary

VISITORS: Paul Eldredge, New General Manager, effective August 11, 2014
Bill Harrison, Director Toy's Husband and Mayor of Fremont
Paul Lopez, KB South Bay Homes

APPROVAL OF THE MINUTES OF JULY 14, 2014.

On a motion made by Director Kite and seconded by Director Toy, the minutes of the Board of Directors' Meeting of July 14, 2014 were unanimously approved.

The next agenda item, No. 9, was moved up on the agenda.

RESOLUTION NO. 2737, ADOPTING THE INITIAL RESOLUTION FOR ANNEXATION NO. U-292, TRACT 8035 PATTERSON RANCH.

The Legal/Community Affairs Committee reviewed this item. Rich Currie introduced visitor Paul Lopez from KB Homes. Mr. Lopez attended the meeting to answer any questions.

Sami Ghossain stated that KB Homes South Bay, Inc. submitted a request to annex Tract 8035, 119.21 acres, to the District. The area to be annexed is located in Fremont and is within the Alameda County Water District boundary, so joint annexation is not needed.

Tract 8035 is a residential development where 500 single family homes will be constructed. The area to be annexed lies outside the District's boundaries but is within the City of Fremont limits. Annexation of this development is needed to provide sanitary sewer service to the proposed lots. Service will be provided through construction of new sanitary sewer mains by KB Homes. Additionally, a portion of the property to be annexed is the future pump station property owned by the District and intended to serve as a future site in the event the existing 33-inch sanitary sewer main crossing the Alameda Creek Flood Control Channel must be relocated.

In accordance with the California Environmental Quality Act (CEQA), the City of Fremont, as Lead Agency, has prepared a Final Environmental Impact Report for the Project. Staff reviewed the documents and found them to be adequate.

On a motion made by Director Handley and seconded by Director Kite, the Board unanimously approved Resolution No. 2737, adopting the initial resolution for Annexation No. U-292, Tract 8035, Patterson Ranch.

MONTHLY OPERATIONS REPORT FOR JUNE 2014.

The Budget and Finance Committee reviewed this item. Rich Currie reported the following:

- There was one odor complaint resulting from a category 3 spill of approximately 900 gallons. Staff discovered the odor was coming from the storm drain and that one of our pipes was damaged. The sewage was captured and returned to the sewer, and the pipeline was repaired.

- USD received a six-month extension through January 2015 of our grant application from PG&E for the Cogeneration Project.
- The hours worked, 35.2, exceeded the target and sick leave usage hours of 45 was well under the target of 47. As a result, the District's Sick Leave Incentive Pay Program will award employees based on the number of sick leave hours used for the year.

Rich Cortes reported the following:

- Revenue targets were met or exceeded; capacity fees are at 144% including accruals for industrial customers Specialized Laundry and Rich Products.
- Under operating revenues, instead of \$50K there will be a \$64K 4th quarter billing for the City of Fremont contract. Field inspection fees came in at double of budget - \$220K versus \$120K; Plan check fees came in at \$126K vs. \$30K.
- Under CIP expenditures, capacity is at 101% and R&R is at 110% of budget. For June \$800K was spent, mostly on Cogen, MCC Replacement and Lift Station No. 1 Projects. The GM noted that excess expenditures on the CIP were offset with additional SRF loan proceeds. Special Projects spent \$200K; ISRR spent \$100K mostly on Hansen 8 Upgrade Project; Vehicle R&R spent \$14K on Drop Deck Tilt Trailer; all debt payments have been made and the Plant's \$30M SRF loan was paid off. This is a preliminary report and a final report will be provided when the year is closed.
- Under investments, there were two maturities – one CD and a Federal Home Loan Bank. LAIF continues at .228%.

WRITTEN COMMUNICATIONS.

The Board received the following: A CSDA Publication and Palm Springs Annual Conference Catalog, and a notice of USD's Public Information Meeting regarding the Newark Backyard Sanitary Sewer Restoration Project.

ORAL COMMUNICATIONS.

There were no oral communications.

AWARDING THE CONSTRUCTION CONTRACT FOR THE PRIMARY DIGESTER NO. 5 REHABILITATION PROJECT TO D. W. NICHOLSON CORPORATION.

The Construction Committee reviewed this item. Sami Ghossain stated that Primary Digester No. 5 was taken out of service and cleaned in June 2014, as part of the District's regular maintenance program. A condition assessment of the digester, conducted by V&A Consulting Engineers, Inc. in July 2014 revealed the interior wall and floor concrete and coating in very good condition with a

minor crack on the wall and groundwater infiltration, the coating on most of the dome interior surface area in good condition; however, the dome coating has failed at the sharp edges and crevices and as part of the condition assessment, the dome will be lifted to expose the dome side skirt for inspection and repair as needed.

Staff advertised the Project for bids on June 17, 2014 and received three bids. D. W. Nicholson (DWN) was the low bidder at \$759,600, which is \$219,600 above the Engineer's Estimate of \$540,000. Since the three bidders submitted amounts that varied widely, staff discussed with them the wide disparity and learned the biggest unknown for two of the bidders was the hydraulic system for lifting the dome. Staff believes DWN's bid to be realistic and re-bidding the Project may not guarantee a lower bid and would delay putting Digester No. 5 back into service before the peak wet weather months.

The Project's bid schedule included one bid alternate that provides the cost for the contractor to procure builder's risk insurance coverage. DWN submitted a bid amount of \$20,000 for this insurance. Staff recommends including this bid alternate in the construction contract.

The Project's construction period will be 120 calendar days with an estimated completion in December 2014. Staff will provide construction management services.

On a motion made by Director Kite and seconded by Director Toy, the Board unanimously awarded the construction contract for the Primary Digester No. 5 Rehabilitation Project to D. W. Nicholson Corporation.

INFORMATION ITEMS:

Check Register. The Board asked for clarification on an entry to ServTech for \$4,633. Staff will research the entry and respond back to the Board. All other questions were answered to the Board's satisfaction.

Report on the EBDA Commission Meeting of July 17, 2014. Tom Handley reported there were guests from the Bay Conservation and Development Commission who gave a presentation on Adapting to Rising Tides. In addition, a resolution authorizing the general manager to enter into an account agreement with Wells Fargo Banking Advisory Program for investment services to purchase brokered Certificates of Deposit was approved. New committee assignments were given and Director Handley will serve on the O&M and the Ad Hoc Committee

Board of Directors Expenditure Report. The Budget & Finance Committee reviewed this item. The Board had no questions.

Status Report on Computer Purchase and Student Loan Program. The Budget & Finance Committee reviewed this item. Rich Cortes reported on the status of the Computer Purchase and Student Loan Program. Currently there is approximately \$27,000 in available funds for the Computer Purchase Loan Program.

Cal-Card Quarterly Activity Report. The Budget & Finance Committee reviewed this item. Rich Cortes stated the report covers transactions for the Cal-Card billing period of March 25, 2014 through June 23, 2014. During this quarter there were 244 transactions totaling \$60,803.14. All questions were answered to the Board's satisfaction.

Board Committee Assignments for FY15. The Board received new committee assignments effective July 29, 2014 as follows:

Budget & Finance	Anjali Lathi Tom Handley	Pat Kite
Construction	Pat Kite Jennifer Toy	Manny Fernandez
Legal/Community Affairs	Pat Kite Tom Handley	Anjali Lathi
Legislative	Jennifer Toy Manny Fernandez	Tom Handley
Personnel	Anjali Lathi Manny Fernandez	Jennifer Toy
Audit Committee	Tom Handley Manny Fernandez	Jennifer Toy

COMMITTEE MEETING REPORTS:

The Budget & Finance Committee, Legal/Community Affairs Committee, and Construction Committee met.

GENERAL MANAGER'S REPORT:

Rich Currie reported the following:

- The District has a Leadership School Program where employees attend internal classes, leadership classes at Ohlone College, and work with a member of the Executive Team as part of a mentoring program. This is the second round of the program. A recent graduation ceremony was held for the following employees: Mike Hovey, Louis Rivera, Tim Teale, Chris Pachmeyer, Al Bunyi, Michelle Powell, Maurice Fortner, and Rufus Tai. The program has been very successful.
- There was a pipeline failure in the Thickener Building at 2:30 p.m. on Friday, July 25th. USD crew stepped up and did a great job to get everything shut off so repairs could be done. They completed the work on Saturday and there were no significant adverse impacts.

- The Collection Systems Workgroup has worked over 600 days without an accident or injury.
- The Thickener Building Project with GSE will begin this week. We received a letter from the Carpenters Union indicating that the contractors do not pay standard wages and benefits. USD's contract requires payment of State of California prevailing wage rates. GSE contacted the District last week and indicated the carpenters union may picket our facility.
- The Notice to Proceed will be issued this week on the Jarvis Avenue Project and we will begin Phase 2 of the Newark Backyard Project. A public meeting will be held on July 31, 2015 in Newark.

OTHER BUSINESS:

In response to a question from Director Kite about meeting with ACWD, Rich Currie stated he left a message with the General Manager.

ADJOURNMENT:

The meeting was adjourned at 7:51 p.m. to a Board Workshop on the Transport System Alternatives in the Boardroom on Wednesday, July 30, 2014 at 6:30 p.m.

The Board will then adjourn to a USD Video Board Workshop in the Boardroom on Monday, August 4, 2014 at 6:30 p.m.

The Board will then adjourn to the next Regular Meeting in the Boardroom on Monday, August 11, 2014 at 7:00 p.m.

SUBMITTED:

ATTEST:

CAROL RICE
SECRETARY TO THE BOARD

TOM HANDLEY
SECRETARY

APPROVED:

MANNY FERNANDEZ
PRESIDENT

Adopted this 11th day of August, 2014



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Richard B. Currie
General Manager
District Engineer

David M. O'Hara
Attorney

DATE: August 4, 2014

MEMO TO: Board of Directors - Union Sanitary District

FROM: Richard B. Currie, General Manager/District Engineer
Sami Ghossain, Manager of Technical Services
Raymond Chau, CIP Coach
Curtis Bosick, Associate Engineer

SUBJECT: Agenda Item No. 7 - Meeting of August 11, 2014
Authorizing the General Manager to Execute an Agreement and Task Order No. 1 with RMC Water and Environment for the Alvarado Wastewater Treatment Plant Site Use Study

Recommendation

Staff recommends the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with RMC Water and Environment in the amount of \$199,681 for the Alvarado Wastewater Treatment Plant Site Use Study.

Background

USD's Alvarado Wastewater Treatment Plant (WWTP) treats approximately 26 million gallons of wastewater per day and contains a total of 53 facilities located within the 33-acre site. Over the next ten years, the District has planned the construction of several process, electrical, maintenance, storage, and green-energy facilities. In addition, staff anticipates that future environmental regulations will reduce the ammonia discharge limits in the plant's final effluent that will require new process facilities.

The planned facilities are summarized below:

1. Future Process Facilities
 - a. Effluent Equalization Storage
 - b. Biological Nutrient Removal
 - c. Fats, Oil, and Grease Receiving Station
 - d. Storm Water Diversion Pump Station
 - e. Primary Digester No. 7

- f. Secondary Clarifier Nos. 7 and 8
- g. Recycled Water
- h. Headworks Degritter System
- 2. Future Maintenance Facilities
 - a. Facilities Maintenance Building, including maintenance shop areas for the mechanics, electricians, and instrument technicians
 - b. Paint Shop
- 3. Future Storage Facilities
 - a. Collection Services Vehicle/Material Storage
 - b. Facilities Maintenance Storage
- 4. Future Green Energy Facilities
 - a. Solar Panels at Alvarado
- 5. Future Electrical Projects
 - a. 12-kilovolt and 5-kilovolt Switchgear Replacement
 - b. Backup Diesel Generator Replacement
- 6. Provisions for Studies
 - a. USD Seismic Study
 - b. USD Rising Tides Study

Prior to proceeding with the design of these facilities, staff deemed it important to evaluate and properly plan for the long term site layout of the WWTP. On May 15, 2014, staff issued Request for Proposals to four firms with expertise in site use planning. The firms were Brown and Caldwell, Carollo Engineers, RMC Water and Environment, and Water Works Engineers. On June 24, 2014, staff conducted interviews with three of the four consultants and selected RMC Water and Environment due to their proposed approach of cost evaluating the different land use alternatives, and their experience working on similar studies for other wastewater utilities including East Bay Municipal Utility District, Novato Sanitary District, and Sausalito-Marin City Sanitary District.

Project Scope

The purpose of this Project is to develop the most logical site use plan that integrates both the District's existing and planned facilities. The study includes assessing the layout of the WWTP's existing facilities; evaluating the necessary land area needs and land areas available for planned facilities; coordinating the implementation of new facilities along with the findings from other USD studies, such as the Flow Equalization, Hayward Marsh, Seismic, and Rising Tides Studies; and proposing site use layouts that are beneficial to both the District's operational and maintenance needs.

The scope of work for this project includes the following Tasks:

Task 1 – Estimate of Land Area Needs

Task 1 will involve the review of existing information and the development of preliminary estimates for the land area needed for the expected buildout treatment plant process, operations & maintenance (O&M), and administration needs. This task includes a project kickoff meeting, data collection and review, and an estimate of probable land needs.

Task 2 – Land Purchase & Avoided Cost Evaluation

RMC will use PPC Land Consultants as a subconsultant for the evaluation of potential land purchases. RMC and PPC Land Consultants will assess the cost and requirements associated with purchasing land adjacent to the WWTP site. The land purchase evaluation will provide USD with a point of comparison relative to the effort that would be required to optimize and redevelop the existing WWTP site. This task includes land investigation and valuation of adjacent properties, assessment of permitting requirements, and evaluation of potential neighbor concerns.

RMC and PPC will use this information and results from Task 1 to develop an “avoided cost” baseline, which will encompass the costs, benefits, and difficulties associated with purchasing land adjacent to the WWTP site and expanding operations to that site. The costs included in the baseline determination will include cost of land, permitting requirements, restrictions on land use, impacts to neighbors, ability to expand operations on the new parcel (e.g., will the new parcel avoid the need to split plant flow), and others, as determined and agreed to by the RMC team and USD.

Task 3 – Develop & Assess Alternatives

RMC will develop and evaluate alternatives for future development of the WWTP site in relation to the avoided cost baseline developed in Task 2. RMC will develop up to three (3) alternative build-out scenarios for the WWTP. The alternatives will generally consist of one alternative to fit all future facilities on the existing site, one alternative to expand to adjacent land, and one alternative to implement satellite treatment off site to reduce needs at the existing site. With input from the USD team, RMC will develop alternatives that best match the priorities of USD, minimize cost, and meet the expected future regulatory requirements. Planning-level cost estimates will be developed using cost curves from industry standard references in order to understand relative cost differences between the alternatives. Evaluation shall include conceptual layout of facilities, and estimation of capital costs for each alternative.

This task will also include development of the evaluation criteria that will be used to score each alternative and assessment of the alternatives to determine the preferred alternative.

Task 4 – Implementation Plan & Site Use Study

With the results of the alternatives evaluation, RMC will develop an implementation plan, which will act as a roadmap with trigger points based on potential future scenarios for regulations, expanded water reuse, sea level rise, and other considerations. The implementation plan and results from previous tasks will be incorporated in the final Site Use Study report. RMC will present the findings of the draft report to USD staff. RMC will also present the findings from the final report to the USD Board of Directors.

Task 5 – Project Management & Coordination

RMC will hold regular project progress update conference calls with USD staff to discuss the work being down, request additional information, and monitor project on schedule. Other activities under this task include internal budget management, invoicing, and project controls.

The budget for this work is summarized in the following table:

Task	Description	Amount
1	Estimate of Land Area Needs	\$22,688
2	Land Purchase & Avoided Cost Evaluation	\$48,573
3	Develop & Assess Alternatives	\$73,196
4	Implementation Plan & Site Use Study	\$36,186
5	Project Management & Coordination	\$19,038
	Total	\$199,681

Staff has reviewed this price proposal and found it to be reasonable, considering the required scope of work. All work under this Task Order is expected to be completed by June 30, 2015.

Staff recommends the Board authorize the General Manager to execute an Agreement and Task Order No. 1 with RMC Water and Environment in the amount of \$199,681 for the Alvarado Wastewater Treatment Plant Site Use Study.

RBC/SG/RC/CB;ks

Attachment: Agreement and Task Order No. 1

AGREEMENT
BETWEEN
UNION SANITARY DISTRICT
AND
RMC WATER AND ENVIRONMENT
FOR
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT MADE AS OF AUGUST ____, 2014, BETWEEN UNION SANITARY DISTRICT (hereinafter referred to as District), and RMC WATER AND ENVIRONMENT (hereinafter referred to as Engineer).

WITNESSETH:

WHEREAS, District intends to evaluate land area needs and optimize the Plant site to meet future operational and maintenance needs (hereinafter referred to as Project), and,

WHEREAS, District requires certain professional services in connection with the Project (hereinafter referred as Services); and

WHEREAS, Engineer is qualified and prepared to provide such Services;

NOW, THEREFORE, in consideration of the promises contained herein, the parties agree as follows:

ARTICLE 1 - SERVICES TO BE PERFORMED BY ENGINEER

- 1.1 Specific Services and the associated scope of services, payment, schedule, and personnel will be defined in specific Task Order as mutually agreed by District and Engineer.
- 1.2 All Task Orders will by reference incorporate the terms and conditions of this Agreement, and become formal amendments hereto.

ARTICLE 2 - COMPENSATION

- 2.1 Compensation for consulting services performed under this Agreement shall include:

- (1) Direct labor costs, multiplied by an agreed upon fixed factor (the Multiplier), to compensate for fringe benefits, indirect costs, and profit.
- (2) Non-labor direct project charge not included in the fixed factor and acceptable, without any markup.
- (3) Subconsultant costs, with a maximum markup of 5%.

Definitions are as follows:

- (a) Direct labor is salaries and wages paid to personnel for time directly chargeable to the project. Direct labor does not include the cost of Engineer's statutory and customary benefits, such as sick leave, holidays, vacations, and medical and retirement benefits nor the cost of the time of executive and administrative personnel and others whose time is not identifiable to the project.
- (b) Fringe benefits include Engineer's statutory and customary benefits, such as sick leave, holidays, vacations, medical and retirement benefits, incentive pay, tuition, and other costs classified as employee benefits.
- (c) Indirect costs are allocations of costs that are not directly chargeable to a specific engagement and are commonly referred to as Engineer's overhead. Indirect costs include provisions for such things as clerical support, office space, light and heat, insurance, statutory and customary employee benefits, and the time of executive and administrative personnel and others whose time is not identifiable to the Project or to any other project. Under no circumstances can the same labor costs be charged as direct labor and also appear at the same time as indirect costs, and vice versa.
- (d) The Multiplier is a multiplicative factor which is applied to direct labor costs, and compensates Engineer for fringe benefits and indirect costs (overhead) and profit.
- (e) Other non-labor direct project charges shall be included in the overhead and these charges include typical expenses as cost of transportation and subsistence, printing and reproduction, computer time and programming costs, identifiable supplies, outside consultant's charges, subcontracts, and charges by reviewing authorities."

Alternatively, the District and the Engineer may agree to utilize the fully-encumbered hourly rates and fees for Services performed by the Engineer. These hourly rates and fees shall be based on the Engineer's rate schedule published at the time this Agreement or Task Order is executed and shall be attached to each applicable Task Order.

- 2.2 Reimbursement for mileage shall not exceed the prevailing Internal Revenue Service's standard mileage rate.
- 2.3 A *Cost Ceiling* will be established for each Task Order which is based upon estimated labor-hours and cost estimates. Costs as described above, comprising direct labor, overhead cost, and other direct costs, shall be payable up to a Cost Ceiling as specified in the Task Order. A *Maximum Fee Ceiling*, or *Task Order Firm Ceiling*, will also be established for each Task Order which includes the Cost Ceiling plus the Professional Fee.
- 2.4 Engineer shall invoice District monthly for the actual costs incurred, and a pro-rated portion of the Professional Fee for work performed during the previous month. If the Maximum Fee Ceiling is reached, the Engineer will complete the agreed-upon work for the Maximum Fee Ceiling. With District staff approval, labor hours may be reallocated within the tasks without renegotiation in such a manner so as not to exceed the Maximum Fee Ceiling.
- 2.5 The Engineer shall provide the District with a review of the budget amounts when 75 percent of the Cost Ceiling for any task has been expended. Engineer may request a revision in the Cost Ceiling for performance of this Agreement, and will relate the rationale for the revision to the specific basis of estimate as defined in the Scope of Services. Such notification will be submitted to the District at the earliest possible date. The authorized Cost Ceiling shall not be exceeded without written approval of the District.
- 2.6 The Professional Fee will not be changed except in the case of a written amendment to the Agreement which alters the Scope of Services. District and Engineer agree to negotiate an increase or decrease in Cost Ceiling and Professional Fee for any change in Scope of Services required at any time during the term of this Agreement. Engineer will not commence work on the altered Scope of Services until authorized by District.
- 2.7 Direct labor rates are subject to revision to coincide with Engineer's normal salary review schedule. Adjustments in direct labor rates shall

not affect the firm ceiling without prior written authorization of the District.

- 2.8 District shall pay Engineer in accordance with each Task Order for Services.
- 2.9 Engineer shall submit monthly statements for Services rendered. District will make prompt monthly payments in response to Engineer's monthly statements.

ARTICLE 3 - PERIOD OF SERVICE

- 3.1 Engineer's services will be performed and the specified services rendered and deliverables submitted within the time period or by the date stipulated in each Task Order.
- 3.2 Engineer's services under this Agreement will be considered complete when the services are rendered and/or final deliverable is submitted and accepted by District.
- 3.3 If any time period within or date by which any of the Engineer's services are to be completed is exceeded through no fault of Engineer, all rates, measures and amounts of compensation and the time for completion of performance shall be subject to equitable adjustment.

ARTICLE 4 - DISTRICT'S RESPONSIBILITIES

District will do the following in a timely manner so as not to delay the services of Engineer.

- 4.1 Provide all criteria and full information as to District's requirements for the services assignment and designate in writing a person with authority to act on District's behalf on all matters concerning the Engineer's services.
- 4.2 Furnish to Engineer all existing studies, reports and other available data pertinent to the Engineer's services, obtain or authorize Engineer to obtain or provide additional reports and data as required, and furnish to Engineer services of others required for the performance of Engineer's services hereunder, and Engineer shall be entitled to use and rely upon all such information and services provided by District or others in performing Engineer's services under this Agreement.

- 4.3 Arrange for access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services hereunder.
- 4.4 Perform such other functions as are indicated in each Task Order related to duties of District.
- 4.5 Bear all costs incident to compliance with the requirements of this Section.

ARTICLE 5 - STANDARD OF CARE

- 5.1 Engineer shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily provided by a professional Engineer under similar circumstance and Engineer shall, at no cost to District, re-perform services which fail to satisfy the foregoing standard of care.

ARTICLE 6 - OPINIONS OF COST AND SCHEDULE

- 6.1 Since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over contractors', subcontractors' , or vendors' methods of determining prices, or over competitive bidding or market conditions or economic conditions, Engineer's cost estimate and economic analysis shall be made on the basis of qualification and experience as a professional engineer.
- 6.2 Since Engineer has no control over the resources provided by others to meet contract schedules, Engineer's forecast schedules shall be made on the basis of qualification and experience as a professional Engineer.
- 6.3 Engineer cannot and does not guarantee that proposals, bids or actual project costs will not vary from his cost estimates or that actual schedules will not vary from his forecast schedules.

ARTICLE 7 - SUBCONTRACTING

- 7.1 No subcontract shall be awarded by Engineer until prior written approval is obtained from the District.

ARTICLE 8 - ENGINEER-ASSIGNED PERSONNEL

- 8.1 Engineer shall designate in writing an individual to have immediate responsibility for the performance of the services and for all matters relating to performance under this Agreement. Key personnel to be assigned by Engineer will be stipulated in each Task Order. Substitution of any assigned person shall require the prior written approval of the District, which shall not be unreasonably withheld. If the District determines that a proposed substitution is not responsible or qualified to perform the services then, at the request of the District, Engineer shall substitute a qualified and responsible person.

ARTICLE 9 - OWNERSHIP OF DOCUMENTS

- 9.1 All work products, drawings, data, reports, files, estimate and other such information and materials (except proprietary computer programs, including source codes purchased or developed with Engineer monies) as may be accumulated by Engineer to complete services under this Agreement shall be owned by the District.
- 9.2 Engineer shall retain custody of all project data and documents other than deliverables specified in each Task Order, but shall make access thereto available to the District at all reasonable times the District may request. District may make and retain copies for information and reference.
- 9.3 All deliverables and other information prepared by Engineer pursuant to this Agreement are instruments of service in respect to this project. They are not intended or represented to be suitable for reuse by District or others on extensions of this Project or on any other project. Any reuse without written verification or adaptation by Engineer for the specific purpose intended will be at District's sole risk and without liability or legal exposure to Engineer; and District shall indemnify and hold harmless Engineer against all claims, damages, losses, and expenses including attorney's fees arising out of or resulting from such reuse. Any such verification or adaptation will entitle Engineer to further compensation at rates to be agreed upon by District and Engineer.

ARTICLE 10 - RECORDS OF LABOR AND COSTS

- 10.1 Engineer shall maintain for all Task Orders, records of all labor and costs used in claims for compensation under this Agreement. Records shall mean a contemporaneous record of time for personnel; a methodology and calculation of the Multiplier for fringe benefits and

indirect costs; and invoices, time sheets, or other factors used as a basis for determining other non-labor Project charges. These records must be made available to the District upon reasonable notice of no more than 48 hours during the period of the performance of this Agreement.

- 10.2 After delivery of Services (completion of Task Orders) under this Agreement, the Engineer's records of all costs used in claims for compensation under this Agreement shall be available to District's accountants and auditors for inspection and verification. These records will be maintained by Engineer and made reasonably accessible to the District for a period of three (3) years after completion of Task Orders under this Agreement.
- 10.3 Engineer agrees to cooperate and provide any and all information concerning the Project costs which are a factor in determining compensation under this Agreement as requested by the District or any public agency which has any part in providing financing for, or authority over, the Services which are provided under the Agreement.
- 10.4 Failure to provide documentation or substantiation of all Project costs used as a factor in compensation paid under Article 2 hereof will be grounds for District to refuse payment of any statement submitted by the Engineer and for a back charge for any District funds, including interest from payment; or grant, matching, or other funds from agencies assisting District in financing the Services specified in this Agreement.

ARTICLE 11 - INSURANCE

Engineer shall provide and maintain at all times during the performance of the Agreement the following insurances:

- 11.1 Workers' Compensation and Employer's Liability Insurance for protection of Engineer's employees as required by law and as will protect Engineer from loss or damage because of personal injuries, including death to any of his employees.
- 11.2 Comprehensive Automobile Liability Insurance. Engineer agrees to carry a Comprehensive Automobile Liability Policy providing bodily injury liability. This policy shall protect Engineer against all liability arising out of the use of owned or leased automobiles both passenger and commercial. Automobiles, trucks, and other vehicles and equipment (owned, not owned, or hired, licensed or unlicensed for road use) shall be covered under this policy. Limits of liability for

Comprehensive Automobile Liability Insurance shall not be less than \$1,000,000 Combined Single Limit.

- 11.3 Comprehensive General Liability Insurance as will protect Engineer and District from any and all claims for damages or personal injuries, including death, which may be suffered by persons, or for damages to or destruction to the property of others, which may arise from the Engineer's operations under this Agreement, which insurance shall name the District as additional insured. Said insurance shall provide a minimum of \$1,000,000 Combined Single Limit coverage for personal injury, bodily injury, and property damage for each occurrence and aggregate. Such insurance will insure Engineer and District from any and all claims arising from the following:
1. Personal injury;
 2. Bodily injury;
 3. Property damage;
 4. Broad form property damage;
 5. Independent contractors;
 6. Blanket contractual liability.
- 11.4 Engineer shall maintain a policy of professional liability insurance, protecting it against claims arising out of negligent acts, errors, or omissions of Engineer pursuant to this Agreement, in an amount of not less than \$1,000,000. The said policy shall cover the indemnity provisions under this Agreement.
- 11.5 Engineer agrees to maintain such insurance at Engineer's expense in full force and effect in a company or companies satisfactory to the District. All coverage shall remain in effect until completion of the Project.
- 11.6 Engineer will furnish the District with certificates of insurance and endorsements issued by Engineer's insurance carrier and countersigned by an authorized agent or representative of the insurance company. The certificates shall show that the insurance will not be cancelled without at least thirty (30) days' prior written notice to the District. The certificates for liability insurance will show that liability assumed under this Agreement is included. The endorsements will show the District as an additional insured on Engineer's insurance policies for the coverage required in Article 11 for services performed under this Agreement, except for workers' compensation and professional liability insurance.
- 11.7 Waiver of Subrogation: Engineer hereby agrees to waive subrogation which any insurer of Engineer may acquire from Engineer by virtue of

the payment of any loss. Engineer agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the District for all work performed by the Engineer, its employees, agents and subconsultants.

ARTICLE 12 - LIABILITY AND INDEMNIFICATION

- 12.1 Having considered the risks and potential liabilities that may exist during the performance of the Services, and in consideration of the promises included herein, District and Engineer agree to allocate such liabilities in accordance with this Article 12. Words and phrases used in this Article shall be interpreted in accordance with customary insurance industry usage and practice.
- 12.2 Engineer shall indemnify and save harmless the District and all of their agents, officers, and employees from and against all claims, demands, or causes of action of every name or nature to the extent caused by the negligent error, omission, or act of Engineer, its agents, servants, or employees in the performance of its services under this Agreement.
- 12.3 In the event an action for damages is filed in which negligence is alleged on the part of District and Engineer, Engineer agrees to defend District. In the event District accepts Engineer's defense, District agrees to indemnify and reimburse Engineer on a pro rata basis for all expenses of defense and any judgment or amount paid by Engineer in resolution of such claim. Such pro rata share shall be based upon a final judicial determination of negligence or, in the absence of such determination, by mutual agreement.
- 12.4 Engineer shall indemnify District against legal liability for damages arising out of claims by Engineer's employees. District shall indemnify Engineer against legal liability for damages arising out of claims by District's employees.
- 12.5 Indemnity provisions will be incorporated into all Project contractual arrangements entered into by District and will protect District and Engineer to the same extent.
- 12.6 Upon completion of all services, obligations and duties provided for in the Agreement, or in the event of termination of this Agreement for any reason, the terms and conditions of this Article shall survive.
- 12.7 To the maximum extent permitted by law, Engineer's liability for District's damage will not exceed the aggregate compensation

received by Engineer under this Agreement or the maximum amount of professional liability insurance available at the time of any settlement or judgment, which ever is greater.

ARTICLE 13 - INDEPENDENT CONTRACTOR

Engineer undertakes performance of the Services as an independent contractor and shall be wholly responsible for the methods of performance. District will have no right to supervise the methods used, but District will have the right to observe such performance. Engineer shall work closely with District in performing Services under this Agreement.

ARTICLE 14 - COMPLIANCE WITH LAWS

In performance of the Services, Engineer will comply with applicable regulatory requirements including federal, state, and local laws, rules, regulations, orders, codes, criteria and standards. Engineer shall procure the permits, certificates, and licenses necessary to allow Engineer to perform the Services. Engineer shall not be responsible for procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Engineer in Task Order.

ARTICLE 15 - NONDISCLOSURE OF PROPRIETARY INFORMATION

Engineer shall consider all information provided by District and all drawings, reports, studies, design calculations, specifications, and other documents resulting from the Engineer's performance of the Services to be proprietary unless such information is available from public sources. Engineer shall not publish or disclose proprietary information for any purpose other than the performance of the Services without the prior written authorization of District or in response to legal process.

ARTICLE 16 - TERMINATION OF CONTRACT

- 16.1 The obligation to continue Services under this Agreement may be terminated by either party upon seven days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.
- 16.2 District shall have the right to terminate this Agreement or suspend performance thereof for District's convenience upon written notice to Engineer, and Engineer shall terminate or suspend performance of

Services on a schedule acceptable to District. In the event of termination or suspension for District's convenience, District will pay Engineer for all services performed and costs incurred including termination or suspension expenses. Upon restart of a suspended project, equitable adjustment shall be made to Engineer's compensation.

ARTICLE 17 - UNCONTROLLABLE FORCES

- 17.1 Neither District nor Engineer shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to uncontrollable forces, the effect of which, by the exercise of reasonable diligence, the nonperforming party could not avoid. The term "uncontrollable forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the control of the nonperforming party. It includes, but is not limited to, fire, flood, earthquake, storms, lightening, epidemic, war, riot, civil disturbance, sabotage, inability to procure permits, licenses, or authorizations from any state, local, or federal agency or person for any of the supplies, materials, accesses, or services required to be provided by either District or Engineer under this Agreement, strikes, work slowdowns or other labor disturbances, and judicial restraint.
- 17.2 Neither party shall, however, be excused from performance if nonperformance is due to uncontrollable forces which are removable or remediable, and which the nonperforming party could have, with the exercise of reasonable diligence, removed or remedied with reasonable dispatch. The provisions of this Article shall not be interpreted or construed to require Engineer or District to prevent, settle, or otherwise avoid a strike, work slowdown, or other labor action. The nonperforming party shall, within a reasonable time of being prevented or delayed from performance by an uncontrollable force, give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Agreement. The Engineer will be allowed reasonable negotiated extension of time or adjustments for District initiated temporary stoppage of services.

ARTICLE 18 - MISCELLANEOUS

- 18.1 A waiver by either District or Engineer of any breach of this Agreement shall not be binding upon the waiving party unless such waiver is in

writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

- 18.2 The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way effect the validity or enforceability of any other portion or provision of the Agreement. Any void provision shall be deemed severed from the Agreement and the balance of the Agreement shall be construed and enforced as if the Agreement did not contain the particular portion or provision held to be void.

ARTICLE 19 - INTEGRATION AND MODIFICATION

- 19.1 This Agreement (consisting of pages 1 to 13), together with all Task Orders executed by the undersigned, is adopted by District and Engineer as a complete and exclusive statement of the terms of the Agreement between District and Engineer. This Agreement supersedes all prior agreements, contracts, proposals, representations, negotiations, letters, or other communications between the District and Engineer pertaining to the Services, whether written or oral.
- 19.2 The Agreement may not be modified unless such modifications are evidenced in writing signed by both District and Engineer.

ARTICLE 20 - SUCCESSORS AND ASSIGNS

- 20.1 District and Engineer each binds itself and its directors, officers, partners, successors, executors, administrators, assigns and legal representatives to the other party to this Agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, in respect to all covenants, agreements, and obligations of this Agreement.
- 20.2 Neither District nor Engineer shall assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the other, except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Engineer from employing such independent engineers, associates, and subcontractors as he may deem appropriate to assist him/her in the

performance of the Services hereunder and in accordance with Article 7.

20.3 Nothing herein shall be construed to give any rights or benefits to anyone other than District and Engineer.

ARTICLE 21 – INFORMATION SYSTEM SECURITY

NOT USED.

ARTICLE 22 - EXCEPTIONS

No exceptions.

IN WITNESS THEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

UNION SANITARY DISTRICT

RMC WATER AND ENVIRONMENT

By: _____
Richard B. Currie
General Manager/District Engineer

By: _____
Name: _____

Title: _____

Date: _____

Date: _____

**ALVARADO WASTEWATER TREATMENT PLANT SITE USE STUDY
PROJECT NO. 800-438**

TASK ORDER NO. 1

to

AGREEMENT

BETWEEN

UNION SANITARY DISTRICT

AND

RMC WATER AND ENVIRONMENT

FOR

PROFESSIONAL SERVICES

Dated August ____, 2014

1. PURPOSE

The purpose of Task Order No. 1 is to commission a Site Use Study to identify land area needs and optimize the Plant site to meet future operational and maintenance needs.

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 task numbers in this Scope of Services are associated with the cost data presented in Exhibits A and B.

Task 1 – Estimate of Land Area Needs

Task 1 will involve the review of existing information and the development of preliminary estimates for the land area needed for the expected buildout treatment plant process, operations & maintenance (O&M), and administration needs. This task includes the following activities:

Subtask 1.1 – Kickoff Meeting

RMC will conduct a kickoff meeting with USD staff to discuss the project scope, approach, schedule, assumptions, and initial data needs for moving forward with the site planning activities. RMC will solicit input from USD internal teams to establish the list of facilities that will be included in the initial estimate of land area needs. At the kickoff meeting RMC will also solicit input on site needs, requirements, preferences and concerns from USD staff.

Subtask 1.2 – Data Collection & Review

USD shall provide RMC with data and previous work that will aid in development of the estimate of probable land area needs. RMC will review the 1994 Alvarado Wastewater Treatment Plant Master Plan as reference for future facility needs. Future site needs will be primarily based on previously developed studies to be provided by USD. For facilities with currently unidentified space needs, RMC will develop planning level space estimates as described in Subtask 1.3.

Subtask 1.3 – Estimate of Probable Land Needs

RMC will do a preliminary assessment of the probable land area needs for expected future improvements to the Alvarado plant. The land needs will be based on assumptions for future treatment process requirements, sea level rise, recycled water treatment facilities, and other assumptions discussed with USD during the kick-off meeting, and subsequent discussion based on previous plant planning work.

Land area needs for new process facilities will be based on the relevant study recommendations, and/or typical unit process sizing factors. A list of future land needs to be reviewed and prioritized as part of the scope work is presented below.

Future Site Requirement	Basis for Land Requirement
<u>Future Process Facilities</u>	
Effluent Equalization Storage	<ul style="list-style-type: none">• <u>Report</u>: Flow Equalization Storage Facilities Study (completed in 1999 and updated in 2013)• <u>Report</u>: Hayward Marsh Rehabilitation Options Study (scheduled to be completed in August 2014)
Nutrient Removal (Mainstream/Side stream Treatment)	<ul style="list-style-type: none">• RMC will develop space requirement based on typical unit process sizing factors and level of treatment required.

Future Site Requirement	Basis for Land Requirement
FOG Receiving Station	<ul style="list-style-type: none"> RMC will develop approximate space requirement with input from USD
Storm Water Diversion Pump Station	<ul style="list-style-type: none"> <u>Report:</u> Treatment Plant Drainage Study (2011). RMC will also develop an approximate space requirement for diverting and treating 1 – 2 MGD of storm water from the nearby flood control channel. It is assumed treatment would be accomplished through the existing wastewater treatment process.
Primary Digester No. 7	<ul style="list-style-type: none"> <u>Report:</u> District-Wide Master Plan (1994)
Secondary Clarifiers Nos. 7 and 8	<ul style="list-style-type: none"> <u>Report:</u> District-Wide Master Plan (1994)
Recycled Water Facilities	<ul style="list-style-type: none"> <u>Report:</u> ACWD-USD Recycled Water Feasibility Study (Last updated in 2010)
Degritting System (Headworks)	<ul style="list-style-type: none"> Degritting system will be sized to match existing
<u>Future Maintenance Facilities</u>	
Facilities Maintenance Building, including maintenance shop areas for the mechanics, electricians, and instrument technicians	<ul style="list-style-type: none"> RMC will develop approximate space requirement with input from USD
Paint Shop	<ul style="list-style-type: none"> RMC will develop approximate space requirement with input from USD
<u>Future Storage Facilities</u>	
Collection Services Vehicle/Material Storage	<ul style="list-style-type: none"> RMC will develop approximate space requirement with input from USD
Facilities Maintenance Storage	<ul style="list-style-type: none"> RMC will develop approximate space requirement with input from USD
<u>Future Green Energy Facilities</u>	
Alvarado Solar Panels – Phase II	<ul style="list-style-type: none"> RMC will develop approximate space requirement with input from USD

Future Site Requirement	Basis for Land Requirement
<u>Future Electrical Projects</u>	
Replacement of the 12kV and 5kV switchgears	<ul style="list-style-type: none"> • System will be sized to match existing
Replacement of Backup Diesel Generators	<ul style="list-style-type: none"> • Generator Controls Upgrade Project predesign which is estimated to be completed in the summer/fall of 2014.
<u>USD Seismic Study</u>	<ul style="list-style-type: none"> • <u>Report: Seismic Vulnerability Assessment</u> (scheduled to be completed in August 2014)
<u>USD Rising Tides Study</u>	<ul style="list-style-type: none"> • <u>Report: Seal Level Rise study (2013)</u>. RMC's effort will be focused on estimating the increased footprint required to raise the existing levees around the site.

Task 1 Assumptions:

- USD will provide all data and previous documentation relevant to planning of future facilities.
- USD will provide existing site and record drawings
- Projected flows will be based on previous collection system master plans

Task 2 – Land Purchase & Avoided Cost Evaluation

RMC will use PPC Land Consultants as a subconsultant for the evaluation of potential land purchases. RMC and PPC Land Consultants will assess the cost and requirements associated with purchasing land adjacent to the Alvarado plant site. The land purchase evaluation will provide USD with a point of comparison relative to the effort that would be required to optimize and redevelop the WWTP existing site.

Subtask 2.1 – Land Investigation and Valuation

Under this task, the project team will prepare Preliminary Title Reports and provide title analysis for the properties adjacent to the Alvarado plant site under consideration. The analysis will include identification of third party interests, including easements, lienholders, covenants, conditions and restrictions. A fence line evaluation of immediate area land values will be conducted as well, by examining comparable sales, listings and discussion with area real estate persons with knowledge.

Subtask 2.2 – Assessment of Permitting Requirements

Under this task, RMC will define the permitting requirements for development of purchased land adjacent to the Alvarado site. The RMC team will do a preliminary check of likely CEQA-related analysis that will be required based on the characteristics of parcels under consideration for future plant expansion. RMC will document the CEQA analysis needs, including, but not limited to, wetlands delineation, biological surveys, cultural resources surveys, as well as any potential impacts related to expanding operations at the plant onto adjacent sites. RMC will contact the City of Union City to discuss the City's potential permitting requirements for expansion of the WWTP site.

Subtask 2.3 – Evaluation of Potential Neighbor Concerns

RMC will determine the likely issues of concern to neighbors to parcels under consideration, and identify the likely steps needed to address those issues. RMC will solicit information from USD on existing reported concerns from plant neighbors, including odors, visual impacts, traffic, and others as indicated by USD staff. RMC will document this information for inclusion in the evaluation criteria for comparing alternatives as developed in Task 3.

Subtask 2.4 – Determination of Baseline Avoided Cost/Difficulties

RMC will use the information from the above subtasks, and results from Task 1 to develop an "avoided cost" baseline, which will encompass the costs, benefits, and difficulties associated with purchasing land adjacent to the Alvarado site and expanding operations to that site. The costs included in the baseline determination will include, cost of land, permitting requirements, restrictions on land use, impacts to neighbors, ability to expand operations on the new parcel (e.g., will the new parcel avoid the need to split plant flow), and others, as determined and agreed to by the RMC team and USD.

Subtask 2.5 – Workshop #1

Following definition of the avoided cost baseline, RMC will present the results to the USD team at Workshop #1 and solicit input from the team to begin development of the potential alternatives for long term development of the Alvarado site. The avoided cost baseline will be used as a basis of comparison to other alternatives developed in Task 3.

Task 2 Assumptions:

- The RMC team will investigate title reports for up to ten (10) parcels.
- RMC will identify CEQA-related analyses that will be required if parcels are purchased, but will not perform these analyses under this contract.

Task 3 – Develop & Assess Alternatives

RMC will develop and evaluate alternatives for future development of the USD site in relation to the avoided cost baseline developed in Task 2.

Subtask 3.1 – Alternatives Development & Costing

RMC will develop up to three (3) alternative buildout scenarios for the Alvarado Wastewater Treatment Plant. The alternatives will generally consist of one alternative to fit all future facilities on the existing site, one alternative to expand to adjacent land, and one alternative to implement satellite treatment off site to reduce needs at the Alvarado site. With input from the USD team, RMC will develop alternatives that best match the priorities of USD, minimize cost, and meet the expected future regulatory requirements. Planning-level cost estimates will be developed using cost curves from industry standard references in order to understand relative cost differences between the alternatives. Evaluation shall include conceptual layout of facilities, and estimation of capital costs for each alternative.

Subtask 3.2 – Evaluation Criteria Development

RMC will solicit input regarding evaluation criteria, in order to capture and understand the priorities of as alternatives are developed. Evaluation criteria will be used to score each alternative and compare them relative to each other and in doing so, reflect the priorities of the USD team.

Subtask 3.3 – Assessment of Alternatives

Using the evaluation criteria and planning-level cost estimates, the alternatives will be assessed to determine the preferred alternative. Each alternative will be evaluated for how they meet the established criteria. The results of the evaluation will be documented in the Site Use Study Report under Task 4.

Subtask 3.4 – Workshop #2

RMC will meet with the USD team for Workshop #2 to review the alternatives, develop recommendations, confirm evaluation criteria

definitions and weighting, and discuss the implementation plan for the preferred alternative.

Task 3 Assumptions:

- Evaluation criteria and weighting will be finalized at Workshop #2

Task 4 – Implementation Plan & Site Use Study

With the results of the alternatives evaluation, RMC will develop an implementation plan, which will act as a roadmap with trigger points based on potential future scenarios for regulations, expanded water reuse, sea level rise, and other considerations. The implementation plan and results from previous tasks will be incorporated in a draft Site Use Study report for USD review. RMC will incorporate comments from USD on the draft Site Use Study into a final Site Use Study report. RMC will present the findings of the draft report to USD staff. RMC will also present the findings from the final report to the USD board.

Task 4 Assumptions:

- Evaluation criteria and weighting will be finalized at Workshop #2

Task 5 – Project Management & Coordination

RMC will hold regular project progress update conference calls with USD staff to discuss the work being done, request additional information, and monitor project on schedule.

Other activities under this task include internal budget management, invoicing, and project controls.

Task 5 Assumptions:

- Up to six (6) conference calls to review project progress
- Progress Reporting and Invoicing for up to eight (8) months

4. DELIVERABLES

Project deliverables are listed below:

Task 1 – Estimate of Land Area Needs

Deliverables:

- Agenda and meeting minutes for the Kick-Off Meeting

- Table listing projected future land needs, including process, O&M, and administration facilities
- One (1) site map showing the existing plant site and potential buildout facilities on the existing site.

Task 2 – Land Purchase & Avoided Cost Evaluation

Deliverables:

- Agenda and meeting minutes for Workshop #1
- Up to four (4) maps showing the potential parcels and related costs, issues, and difficulties related to purchasing and developing the parcels.
- One (1) table summarizing the avoided cost and difficulties associated with purchasing potential adjacent parcels.

Task 3 – Develop & Assess Alternatives:

Deliverables:

- Agenda and meeting minutes for Workshop #2
- Table of evaluation criteria definition and weighting
- Planning level cost estimate spreadsheets for up to three (3) alternatives
- Up to three (3) figures showing the alternative layouts

Task 4 – Implementation Plan & Site Use Study

Deliverables:

- Draft Site Use Study report in electronic (pdf) format
- Agenda, presentation, and meeting minutes for draft report presentation to USD staff.
- Final Site Use Study report in electronic (pdf) format
- Presentation of Final Report to USD board.

Task 5 – Project Management & Coordination

Deliverables:

- Monthly progress reports and invoices

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 \$199,681. 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? (Yes/No)	District Staff Approval
Task Order No. 1 – Site Use Study	\$199,681	Yes	Rich Currie
Total	\$199,681		

6. TIME OF COMPLETION

All work defined in this Task Order shall be complete in 200 calendar days after the execution of this Task Order and subject to the conditions of Article 3 of this Agreement. A summary of the anticipated schedule of work is shown in Exhibit C.

7. KEY PERSONNEL

Engineering personnel assigned to this Task Order No. 1 are as follows:

<u>Role</u>	<u>Key Person to be Assigned</u>
Principle-In-Charge	Steve Clary
Project Manager	Dave Richardson
Project Engineer	Mark Takemoto

Key personnel shall not be changed except in accordance with Article 8 of the Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Task Order No. 1 as of August ____, 2014 and therewith incorporate it as part of the Agreement.

DISTRICT

ENGINEER

Union Sanitary District

RMC Water and Environment

By: _____
Richard B. Currie
General Manager/District Engineer

By: _____
Name: _____

Title: _____

Date: _____

Date: _____



EXHIBIT A

Cost Proposal

Union Sanitary District
Alvarado Wastewater Treatment Plant Site Use Study

7/28/14

Tasks	Labor									Total Hours	Total Labor Costs (1)	PPC Land Consultants Land Valuation	Outside Services		ODCs	Total
	Steve Clary	Dave Richardson	Mark Takemoto	Robin Cort	Monica Oakley	Matt Hoeft	Drafter	Graphics	Admin.				Subtotal	Sub Consultant Total Cost (2)	ODCs	Total Fee
	PIC	PM	PE	Environmental	Permitting	PE	CAD	Graphics and Support Team								
	\$297	\$286	\$236	\$250	\$286	\$194	\$156	\$135	\$114							
Task 1: Estimate of Land Area Needs																
1.1 Kick Off Meeting	4	6	8			12			2	32	\$7,348		\$0	\$0	\$200	\$7,548
1.2 Data Collection & Review		2	8			20				30	\$6,340		\$0	\$0		\$6,340
1.3 Estimate of Probable Land Area Needs		4	16			20				40	\$8,800		\$0	\$0		\$8,800
Subtotal Task 1:	4	12	32	0	0	52	0	0	2	102	\$22,488	\$0	\$0	\$0	\$200	\$22,688
Task 2: Land Purchase & Avoided Cost Evaluation																
2.1 Land Investigation and Valuation		4	4			2				10	\$2,476	\$23,542	\$23,542	\$24,719		\$27,195
2.2 Assessment of Permitting Requirements		4	2	12		2				20	\$5,004		\$0	\$0		\$5,004
2.3 Evaluation of Potential Neighbor Concerns		4	4	6		2				16	\$3,976		\$0	\$0		\$3,976
2.4 Determination of Baseline Avoided Cost/Difficulties	2	4	6			2				14	\$3,542		\$0	\$0		\$3,542
2.5 Workshop #1	4	6	8			12		8	4	42	\$8,656		\$0	\$0	\$200	\$8,856
Subtotal Task 2:	6	22	24	18	0	20	0	8	4	102	\$23,654	\$23,542	\$23,542	\$24,719	\$200	\$48,573
Task 3: Develop & Assess Alternatives																
3.1 Alternatives Development and Costing	4	20	48		16	68	20	12		188	\$40,744		\$0	\$0		\$40,744
3.2 Evaluation Criteria Development	4	8	14			10				36	\$8,720		\$0	\$0		\$8,720
3.3 Assessment of Alternatives	4	8	22			32				66	\$14,876		\$0	\$0		\$14,876
3.4 Workshop #2: Assessment and Recommendations	4	6	8			12		8	4	42	\$8,656		\$0	\$0	\$200	\$8,856
Subtotal Task 3:	16	42	92	0	16	122	20	20	4	332	\$72,996	\$0	\$0	\$0	\$200	\$73,196
Task 4: Implementation Plan & Site Use Study Report																
4.1 Draft Report	4	8	20	4		32	8	4	4	84	\$17,648		\$0	\$0	\$300	\$17,948
4.2 Final Report	2	6	14	2		24	4	4	6	62	\$12,618		\$0	\$0	\$300	\$12,918
4.3 Present Draft Report Findings to USD Staff		6	6							12	\$3,132		\$0	\$0		\$3,132
4.4 Present Final Report to USD Board		6	2							8	\$2,188		\$0	\$0		\$2,188
Subtotal Task 4:	6	26	42	6	0	56	12	8	10	166	\$35,586	\$0	\$0	\$0	\$600	\$36,186
Task 5: Project Management & Coordination																
5.1 Coordination with USD Team	4	20	10						4	38	\$9,724		\$0	\$0	\$200	\$9,924
5.2 Project Management Activities	2	20	8						8	38	\$9,114		\$0	\$0		\$9,114
Subtotal Task 5:	6	40	18	0	0	0	0	0	12	76	\$18,838	\$0	\$0	\$0	\$200	\$19,038
TOTAL	38	142	208	24	16	250	32	36	32	778	\$173,562	\$23,542	\$23,542	\$24,719	\$1,400	\$199,681

1. The individual hourly rates include salary, overhead and profit.
2. Subconsultants will be billed at actual cost plus 5%.
3. 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.
4. RMC reserves the right to adjust its hourly rate structure and ODC markup at the beginning of the calendar year for all ongoing contracts.

EXHIBIT B

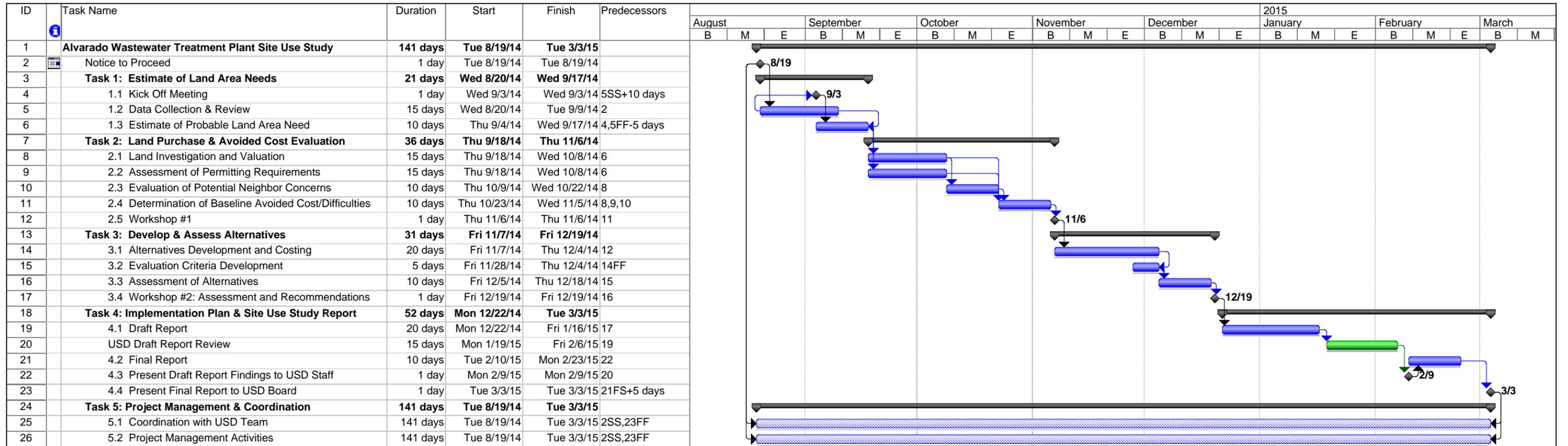


RMC Water and Environment 2014 Standard Billing Rates

Billing Classifications	2014 Rates
Engineer-Planner-Scientist	
EPS-1	\$ 146.00
EPS-2	\$ 156.00
EPS-3	\$ 168.00
EPS-4	\$ 184.00
EPS-5	\$ 194.00
EPS-6	\$ 205.00
EPS-7	\$ 215.00
EPS-8	\$ 226.00
EPS-9	\$ 236.00
EPS-10	\$ 250.00
EPS-11	\$ 265.00
EPS-12	\$ 276.00
EPS-13	\$ 286.00
EPS-14	\$ 297.00
Intern	\$ 53.00
Technician	
TECH-1	\$ 127.00
TECH-2	\$ 130.00
TECH-3	\$ 135.00
TECH-4	\$ 140.00
TECH-5	\$ 146.00
TECH-6	\$ 154.00
TECH-7	\$ 156.00
Administrative	
AD-1	\$ 94.00
AD-2	\$ 99.00
AD-3	\$ 104.00
AD-4	\$ 114.00
AD-5	\$ 125.00
AD-6	\$ 135.00
AD-7	\$ 146.00

Note: The individual hourly rates include salary, overhead and profit. Other direct costs (ODCs) such as reproduction, delivery, mileage (as allowed by IRS guidelines), and travel expenses will be billed at actual cost plus 10%. Subconsultants will be billed as actual cost plus 10%. RMC reserves the right to adjust its hourly rate structure at the beginning of each year for all ongoing contracts.

EXHIBIT C



Project: USD_site_study_schedule_2C
Date: Fri 8/1/14

Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Richard Currie
*General Manager/
District Engineer*

David M. O'Hara
Attorney

DATE: August 4, 2014

MEMO TO: Board of Directors - Union Sanitary District

FROM: Richard B. Currie, District Engineer/General Manager
Sami Ghossain, TS Work Group Manager
Rollie Arbolante, Customer Service Coach

SUBJECT: Agenda Item No. 8 - Meeting of August 11, 2014
Authorize the General Manager to Execute Task Order No. 2 with RMC Water and Environment for the Irvington Basin Sewer Master Plan Update

Recommendation

Authorize the General Manager to execute Task Order No. 2 with RMC Water and Environment for an amount not to exceed \$231,410 for the preparation of the Irvington Basin Sewer Master Plan Update.

Background

The goal of the sewer master plan is to develop a long-term capital improvement program for the Irvington Basin that will provide for adequate hydraulic capacity in the sewer system as well as address maintenance and structural problems in sewers within the basin.

The first Irvington Basin Sewer Master Plan was completed in 1995, followed by an update in 2004. An Agreement and Task Order No. 1 with RMC was signed on July 1, 2013, in the amount of \$29,150, to provide for a condition assessment of the Irvington basin sewers. Work under this Task Order will focus on the capacity assessment of the Irvington basin's sewer system.

The 2004 Irvington Basin Sewer Master Plan identified seven (7) Capital Improvement projects. Three (3) of the seven (7) projects were projects related to construction of the new Boyce Road Pump Station project, which was completed in 2013. The Master

Plan update under this Task Order will confirm to what extent the capacity deficiencies identified under the previous Irvington Master Plan have been corrected.

Project Scope

The scope of work for this project includes the following Tasks:

TASK	DESCRIPTION	AMOUNT
1	Review Existing Information and Interview Staff	\$5,380
2	Flow Monitoring	\$77,530
3	Update Land Use Data	\$27,080
4	Modeling and Capacity Analysis	\$56,610
5	Develop CIP for Capacity Improvements	\$25,800
6	Prepare Sewer Master Plan Update Report	\$23,190
7	Project Management and Coordination	<u>\$15,820</u>
	TOTAL	\$231,410

RMC was selected because of the knowledge, experience, and track record of their Project Manager, Gisa Ju. Ms. Ju was the Project Manager on the previous five (5) Master Plans conducted by Montgomery Watson and RMC.

RGC/SG/RA;ks

- Attachments: Task Order No. 2
 Exhibit A – Billing Rates
 Exhibit B – Fee Estimate
 Exhibit C – Project Schedule

IRVINGTON BASIN SEWER MASTER PLAN UPDATE

TASK ORDER NO. 2

to

AGREEMENT

BETWEEN

UNION SANITARY DISTRICT

AND

RMC WATER AND ENVIRONMENT

FOR

PROFESSIONAL SERVICES

Dated July 1, 2013

1. PURPOSE

The purpose of the Irvington Basin Sewer Master Plan Update is to update the 2004 Master Plan of the Irvington Basin collection system based on updated land use and flow estimates. The Sewer Master Plan Update will identify needed projects to correct capacity deficiencies in the Irvington Basin. The Irvington Basin includes portions of the cities of Newark and Fremont, and comprises that portion of the Union Sanitary District sanitary sewer collection system that drains to the Irvington Pump Station. The final product of this study will be a Sewer Master Plan Update report that updates the recommended program of capital improvements for the Irvington Basin collection system.

The analysis of capacity of the trunk sewer system in the Irvington Basin will utilize InfoWorksTM hydraulic modeling software. The Sewer Master Plan Update will follow the same general approach used in the previous master plan updates for the Alvarado and Newark Basins, completed in 2008 and 2012, respectively.

This Task Order addresses the hydraulic modeling and capacity analysis of the Irvington Basin collection system and preparation of the Sewer Master Plan Update. The Master Plan Update will include a chapter summarizing the results of the sewer condition assessment work conducted under a previous task order (Task Order No. 1) dated July 1st, 2013.

2. PROJECT COORDINATION

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

Task Order No. 2

3. SCOPE OF SERVICES

The task numbers in this Scope of Services are associated with the cost and schedule data presented in Exhibits B and C, respectively.

Task 1 – Review Existing Information and Interview Staff

In this task, available data and documents relevant to the study will be compiled and reviewed, and interviews will be conducted with District staff members familiar with the planning, design, operation, and performance of the collection system, and with the various relevant databases to be utilized in this study.

Subtask 1.1 - Compile and Review Existing Data and Documents. The DISTRICT will provide available pertinent information for the ENGINEER's use in the study, including the following:

- Latest District block book maps, sewer (pipes and manholes) and base map (streets, highways, railroads, water bodies, etc., as available) GIS files, including relevant attribute data, and digital orthophotography for the Irvington Basin.
- GIS parcel files and customer billing data (MS Excel or MS Access format) by parcel.
- Reports and plans for any trunk sewer projects in the Irvington Basin completed since the last update of the hydraulic model (and not included in the GIS files), currently under design or construction, or planned for construction in the near future.
- As-built drawings, pump curves, and operating data for pump stations in the Irvington Basin.
- Recent flow data in electronic format for the Irvington Pump Station and other pump stations in the Irvington Basin for which flow data is available, and any other recent flow monitoring studies conducted in the Irvington Basin.

The ENGINEER shall review the information for applicability to the tasks in the study.

Subtask 1.2 - Conduct Interviews with DISTRICT Staff. The ENGINEER shall conduct an interview session (approximately 2 hours) with selected members of the District's Technical Services and Collection Services Work Groups to obtain additional information that may not be contained in the data and documents collected in Subtask 1.1 and to identify problem areas in the Irvington Basin based on their field experience in the collection system. The interview session will be held in conjunction with the project kickoff meeting described under Subtask 7.1. Additional discussions will also be held as necessary with DISTRICT staff responsible for maintaining the GIS and billing databases to address any questions related to use of these databases for the project.

Task Order No. 2

Task 2 – Flow Monitoring

In this task, a wet weather flow monitoring program will be conducted in the Irvington Basin to obtain data to verify design flow criteria and calibrate the hydraulic model. The monitoring program will consist of fifteen (15) flow meters on major trunk sewers and three (3) rain gauges installed in the Basin for a period of sixty (60) days. The date for the start of flow monitoring will be determined jointly by the ENGINEER and DISTRICT and will depend on weather patterns in the 2014/15 winter season. It is anticipated that the flow meters and rain gauges will be installed in December 2014 or January 2015. If sufficient rainfall events do not occur during the 60-day monitoring period, then the DISTRICT may authorize extension of the monitoring in two-week increments based on the unit cost identified in Exhibit B.

Subtask 2.1 – Prepare Flow Monitoring Plan. The ENGINEER shall utilize the existing GIS and model of the existing Irvington Basin trunk sewer system to identify proposed flow monitoring locations. The ENGINEER shall submit the proposed flow monitoring plan for approval by the DISTRICT prior to the start of flow monitoring.

Subtask 2.2 – Conduct Flow Monitoring. The ENGINEER shall subcontract with an experienced flow monitoring firm for conducting the flow monitoring work. The flow monitoring will utilize depth-velocity type portable flow meters and continuous recording tipping bucket rain gauges. The ENGINEER's flow monitoring subcontractor will be responsible for providing, installing, monitoring, and retrieving all flow and rainfall monitoring equipment, including meters and gauges, mounting devices, portable velocity meter, and equipment needed for confined space entry and traffic control; and for obtaining necessary encroachment permits from the DISTRICT and cities for performing the flow monitoring work.

Prior to meter installation, the ENGINEER's flow monitoring subcontractor shall conduct a field reconnaissance to verify the suitability of the proposed sites for meter installation. Any sites deemed unsuitable due to safety, access, or hydraulic conditions will be discussed with the DISTRICT and an alternative site identified. The flow monitoring subcontractor shall install the flow meters at the approved locations, obtain field calibration measurements on at least two additional occasions during the flow monitoring period, interrogate the meters and gauges weekly, and remove the meters and gauges at the end of the flow monitoring period.

The interrogated meter and rain gauge data will be collected in electronic format for processing and analysis.

Task 3 - Update Land Use Data

This task will define the planning area and planning horizon for the Sewer Master Plan Update, and update the land use database (existing and projected land uses) for the sewer system model.

Task Order No. 2

Subtask 3.1 – Compile Planning Documents and Meet with City Planning Staff. The ENGINEER shall meet with the planning staff of the Cities of Newark and Fremont to obtain relevant planning documents and to discuss land use planning issues and the basis for the land use projections in the Irvington Basin, and to identify areas where more specific information may be available, such as planned developments with estimated numbers of housing units. The projected timing of new development will also be discussed with City planning staff to provide input for sewer improvement project phasing.

Subtask 3.2 - Update Basin Service Area Boundary and Land Use Mapping. The ENGINEER shall delineate the ultimate service area boundary for the Irvington Basin based on the discussions with Cities of Newark and Fremont staff. The ENGINEER shall develop GIS mapping showing projected future land uses (new development and redevelopment) based on the information provided by the cities.

Subtask 3.3 – Develop Model Loads. The ENGINEER shall compile existing data from the parcel GIS and customer billing databases and link these sources of information to develop a database that can be used as the basis for computing existing wastewater flows for the hydraulic model. The DISTRICT will provide parcel GIS data in ArcView/ArcGIS format and relevant information from the billing database (e.g., APN, user type, number of units, water use) in a format that ENGINEER can use to link this data to the parcel GIS. The ENGINEER shall conduct basic validation of the linked databases, e.g., to identify non-matching parcels and missing data, and generate exceptions lists for DISTRICT review. The DISTRICT will be responsible for rectifying any discrepancies found between the databases. The ENGINEER shall then convert the billing data to a “flow-equivalent population” for each parcel. The future equivalent population for currently vacant parcels will be determined based on the GIS land use mapping. The equivalent population data will be aggregated by subarea to develop loadings for the hydraulic model.

The ENGINEER shall update the table of point dischargers (large users) based on information on wastewater volume in the billing database. Through discussions with DISTRICT and city planning staff, the ENGINEER shall identify possible changes in flows for large users or potential new large users (industries or institutions). In general, large users will be considered to be those users with average flows greater than about 20,000 gallons per day.

The ENGINEER shall provide a table of parcels included in the District’s Irvington Basin and their corresponding assessor’s parcel number (APN), existing land use classification, existing unit flow factor, and estimated existing wastewater flows. A second table will be provided listing future developments and their corresponding APN, proposed land use classification, future unit flow factor, and estimated future wastewater flows. These tables will be provided as an Appendix in the Sewer Master Plan Update Report (Task 6).

Task Order No. 2

Task 4 – Modeling and Capacity Analysis

In this task, the existing hydraulic model of the Irvington Basin will be updated, and the model will be calibrated using the flow monitoring data collected in Task 2 and the billing and land use data developed in Task 3. The hydraulic model will then be used to analyze the capacity requirements of the trunk sewer system and evaluate alternatives for correcting capacity deficiencies.

Subtask 4.1 - Update and Expand Modeled System. The ENGINEER shall update the Irvington Basin trunk system model developed in the 2004 Master Plan Update. The model network will be recreated in InfoWorks by importing data from the District's current sewer GIS (pipe and manhole coverages). Any completed trunk sewer projects that have not yet been incorporated into GIS will be added to the model based on as-built drawings provided by the DISTRICT. The modeled network will include the 12-inch and larger pipes, most 10-inch pipes, and selected 8-inch pipes that effectively function as trunk sewers. The ENGINEER shall provide a map of the proposed modeled network to the DISTRICT for review. Additional pipes may be added to the modeled network at the request of the DISTRICT.

The ENGINEER shall conduct validation of the pipe and manhole data to identify missing or suspect data. Data problems will be resolved to the extent possible by comparison to the previous model network database or through available as-built drawings. ENGINEER shall notify the DISTRICT of missing or suspect data. The DISTRICT shall conduct any field verification that may be needed to resolve network questions. The ENGINEER shall also review and refine the delineation of model subareas and make adjustments if necessary. If adjustments are made, ENGINEER shall provide a shape file or other ESRI GIS format to the District.

Subtask 4.2 – Calibrate Model. The ENGINEER shall calibrate the hydraulic model by comparing model simulations with actual flow monitoring data for dry and wet weather conditions. ENGINEER shall use calibration to dry weather flows to refine base wastewater unit flow rates, dry weather diurnal curves, and groundwater infiltration rates. Calibration to wet weather flows will be used to adjust parameters used for simulating rainfall-dependent infiltration/inflow flows. The ENGINEER shall compare model results with problem areas (e.g., surcharge conditions during wet weather events) identified by DISTRICT Collection Services staff. Once the ENGINEER calibrates the model to existing conditions, it will be ready to use for simulating design storm conditions and future scenarios.

Subtask 4.3 – Conduct Model Runs for Existing Trunk System and Identify Capacity Deficiencies. The ENGINEER shall run the model to identify capacity deficiencies and resulting hydraulic gradeline elevations in the existing Irvington Basin trunk sewer system under existing and buildout dry and wet weather flow conditions. Wet weather conditions will represent the 10-year design rainfall event used in previous Master Plans.

Task Order No. 2

Subtask 4.4 – Identify Potential Solutions for Capacity Deficiencies and Refine Solutions Model. Based on the model runs, the ENGINEER shall develop potential solutions to the identified capacity deficiencies. Solutions may include upsizing or paralleling existing sewers, or diverting flow to other trunk sewers with excess capacity. The solutions model will be refined to include these solutions, and the model will be run to verify that the proposed solutions will effectively correct the capacity deficiencies.

Task 5 - Develop Capital Improvement Program for Capacity Improvements

This task will use the results of the previous tasks to develop a capital improvement program (CIP) for needed capacity improvements in the Irvington Basin.

Subtask 5.1 – Update Sewer Improvement Projects. The ENGINEER shall develop recommended sewer improvement projects to address the capacity deficiencies identified in Task 4. Refinements to uncompleted projects (e.g., refinements to design flows, pipe sizes, and location and alignment of proposed facilities) and updates to smaller capacity projects will be made as necessary.

Subtask 5.2 – Develop Cost Estimates. The ENGINEER shall review the unit cost criteria developed for the previous basin master plans. Needed adjustments or refinements to the cost criteria will be discussed with DISTRICT staff. The ENGINEER shall update the cost criteria as needed based on recent cost data provided by the DISTRICT and/or from the ENGINEER's database of construction bids. Using the updated cost criteria, the ENGINEER shall develop preliminary opinions of probable construction costs and estimated capital costs for each of the recommended capacity improvement projects.

Subtask 5.3 - Determine Project Groupings and Priorities. In conjunction with DISTRICT staff, the ENGINEER shall group the recommended capacity improvement projects into priorities for construction. Prioritization criteria will include such factors as the severity of existing problems (e.g., percent capacity), the relative risk associated with potential failure (e.g., sewage backup or overflow), the timing of future development to be served by the project, etc. The capacity project groupings and priorities will later be reviewed in conjunction with recommended rehabilitation projects based on the condition assessment to develop an overall recommended sewer system CIP for the Irvington Basin.

Task 6 - Prepare Irvington Basin Sewer Master Plan Update Report

The Sewer Master Plan Update will consist of a brief report summarizing the findings and recommendations of the study, supplemented by an appendix with supporting information such as flow data tables and plots, model output, and project cost estimates. It is anticipated that the report will be approximately 20 to 25 pages in length, and will summarize the changes to land uses, design flows, model results, and recommended CIP projects and costs since the previous Master Plan. The Report will incorporate the Irvington Basin sewer system condition assessment chapter, dated May 2014 and developed under Task Order No. 1. It is assumed this chapter is final and changes will be limited to formatting edits.

Task Order No. 2

Subtask 6.1 - Prepare Draft Report. Two (2) hard copies and one (1) digital copy of the Draft Sewer Master Plan Update Report will be prepared and delivered to the DISTRICT for review.

Subtask 6.2 - Prepare Final Report. The ENGINEER shall review and incorporate DISTRICT comments on the Draft Sewer Master Plan Update Report into the final document. Five (5) hard copies and one (1) digital copy of the Final Sewer Master Plan Update Report and three (3) sets of appendices will be delivered to the DISTRICT.

Task 7 - Project Management and Coordination

This task includes meetings, project management, and project quality control.

Subtask 7.1 - Meetings. A project kickoff meeting attended by DISTRICT staff and the ENGINEER project team will be held to review the project scope and schedule and discuss key issues and the respective roles and responsibilities of all team members. Progress meetings with DISTRICT staff will be held on an as-needed basis during the study. Budget for four (4) meetings, including the kickoff meeting, is included. The ENGINEER shall prepare an agenda and minutes for each meeting.

Subtask 7.2 - Project Management. This subtask includes day-to-day project management activities, including schedule and budget monitoring, subcontract administration, and invoice preparation. The ENGINEER shall submit a brief progress memorandum to the DISTRICT at the beginning of each month, describing the work completed during the previous month and summarizing the status of the project budget and schedule.

Subtask 8.3 - Quality Control. The ENGINEER shall identify members of its senior staff with specialized experience in sewer improvement planning, design, and construction to provide technical review for the project. At least one or more of these individuals will review all major technical documents as well as engineering and cost calculations.

4. SERVICES PROVIDED BY DISTRICT

The DISTRICT shall provide the following services and furnish information as required for the project. The DISTRICT shall provide these services in accordance with the project schedule shown in Exhibit C.

1. Provide all existing DISTRICT data and documents related to the project, as specified under Subtask 1.1 above and identified in other tasks and subtasks.
2. Provide assistance for flow monitoring program, including locating manholes and cleaning sewers if requested by flow monitoring contractor, assistance with traffic control in areas where extra personnel are needed, and obtaining permits/permissions if required from other jurisdictions.

Task Order No. 2

3. Provide field assistance in verifying system configuration (e.g., flow splits at diversion manholes) as needed by ENGINEER for the hydraulic model.
4. Resolve discrepancies between parcel GIS and billing databases as needed by ENGINEER for use in hydraulic model.
5. Provide timely review of all project deliverables.

5. DELIVERABLES

Project deliverables for the project are listed below by task. All relevant GIS files and computer databases will be provided at the conclusion of the project.

Task 2	Flow monitoring plan Flow data (electronic files)
Task 3	GIS mapping of the Irvington Basin service area and projected land uses
Task 4	Updated model database and associated GIS files (pipes, manholes, and subareas)
Task 5	Descriptions and estimated costs of recommended capacity improvement projects
Task 6	Draft and Final Sewer Master Plan Update Reports
Task 7	Meeting agenda and minutes; monthly invoices and progress reports

6. PAYMENT TO THE CONSULTANT

Compensation shall be on a time and materials cost basis for services provided under this Agreement. Labor costs shall be billed in accordance with rates shown in Exhibit A. The billing rate schedule is generally comparable to a labor multiplier of approximately 3.22. 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.

The estimated costs for Tasks 1 through 7 of this Task Order are presented in Exhibit B. Total charges to the DISTRICT shall not exceed the total cost of \$231,410 without written authorization from the DISTRICT.

Task Order No. 2

7. TIME OF COMPLETION

All work defined in this Task Order shall be complete in 300 calendar days after the execution of this Task Order and subject to the conditions of Article 3 of this Agreement. A summary of the anticipated schedule of work is shown in Exhibit C.

8. KEY PERSONNEL

Engineering personnel assigned to this Task Order No. 2 are as follows:

<u>Role</u>	<u>Key Person to be Assigned</u>
Principal-In-Charge/Technical Review	Gisa Ju
Project Manager	Nuria Bertran-Ortiz
Project Engineer	Jennifer Chang

Key personnel shall not be changed except in accordance with Article 8 of the Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Task Order No. 2 as of August ____, 2014 and therewith incorporate it as part of the Contract.

DISTRICT

Union Sanitary District

By: _____

Richard Currie
General Manager

ENGINEER

RMC Water and Environment.

By: _____

Gisa Ju
Vice President



Exhibit A
RMC Water and Environment
Standard Billing Rates

Billing Classifications	2014 Rates
Engineer-Planner-Scientist	
EPS-1	\$ 146.00
EPS-2	\$ 156.00
EPS-3	\$ 168.00
EPS-4	\$ 184.00
EPS-5	\$ 194.00
EPS-6	\$ 205.00
EPS-7	\$ 215.00
EPS-8	\$ 226.00
EPS-9	\$ 236.00
EPS-10	\$ 250.00
EPS-11	\$ 265.00
EPS-12	\$ 276.00
EPS-13	\$ 286.00
EPS-14	\$ 297.00
Intern	\$ 53.00
Technician	
TECH-1	\$ 127.00
TECH-2	\$ 130.00
TECH-3	\$ 135.00
TECH-4	\$ 140.00
TECH-5	\$ 146.00
TECH-6	\$ 154.00
TECH-7	\$ 156.00
Administrative	
AD-1	\$ 94.00
AD-2	\$ 99.00
AD-3	\$ 104.00
AD-4	\$ 114.00
AD-5	\$ 125.00
AD-6	\$ 135.00
AD-7	\$ 146.00

Notes:

1. The individual hourly rates include salary, overhead and profit. Other direct costs (ODCs) such as reproduction, delivery, mileage (as allowed by IRS guidelines), and travel expenses will be billed at actual cost. Subconsultants will be billed as actual cost plus 5%. RMC reserves the right to adjust its hourly rate structure at the beginning of each year for all ongoing contracts.

Exhibit B
Irvington Basin Sewer Master Plan Update
Fee Estimate

Tasks	PIC/ Technical Review EPS-12	Sr. Technical Support EPS-11	Project Manager EPS-6	Staff Engineer EPS-3	Sr. Admin. AD-5	Labor Total ¹		Other Direct Costs ² (\$)	Subconsultant ^{3,4} (\$)	TOTALS ⁵ (\$)
						Hours	(\$)			
Task 1: Review Existing Information and Interview Staff										
1.1 - Compile and Review Existing Data and Documents	2		8	8	2	20	\$ 3,786			\$ 3,790
1.2 - Conduct Interviews with District Staff			4	4		8	\$ 1,492	\$ 100		\$ 1,590
Subtotal Task 1	2	0	12	12	2	28	\$ 5,278	\$ 100	\$ -	\$ 5,380
Task 2: Flow Monitoring										
2.1 - Prepare Flow Monitoring Plan	2		8	8		18	\$ 3,536			\$ 3,540
2.2 - Conduct Flow Monitoring	2		8	36		46	\$ 8,487		\$ 65,500	\$ 73,990
Subtotal Task 2	4	0	16	44	0	64	\$ 12,023	\$ -	\$ 65,500	\$ 77,530
Task 3: Update Land Use Data										
3.1 - Compile Planning Documents and Meet with City Planning Staff			8	16	4	28	\$ 4,828	\$ 100		\$ 4,930
3.2 - Update Basin Boundary and Land Use Mapping			8	16		24	\$ 4,328			\$ 4,330
3.3 - Develop Model Loads	4		16	80		100	\$ 17,824			\$ 17,820
Subtotal Task 3	4	0	32	112	4	152	\$ 26,980	\$ 100	\$ -	\$ 27,080
Task 4: Modeling and Capacity Analysis										
4.1 - Update and Expand Modeled System			16	64		80	\$ 14,032			\$ 14,030
4.2 - Calibrate Model	4	8	24	96		132	\$ 25,000			\$ 25,000
4.3 - Conduct Model Runs and Identify Capacity Deficiencies			16	24		40	\$ 7,531			\$ 7,530
4.4 - Identify Potential Solutions and Refine Solutions Model	4		16	32		52	\$ 10,053			\$ 10,050
Subtotal Task 4	8	8	72	216	0	304	\$ 56,616	\$ -	\$ -	\$ 56,610
Task 5: Develop CIP for Capacity Improvements										
5.1 - Update Sewer Improvement Projects	4	16	32	40		92	\$ 19,183	\$ 200		\$ 19,380
5.2 - Develop Cost Estimates	1	4	8	8		21	\$ 4,450			\$ 4,450
5.3 - Determine Project Groupings and Priorities	1		8			9	\$ 1,973			\$ 1,970
Subtotal Task 5	6	20	48	48	0	122	\$ 25,606	\$ 200	\$ -	\$ 25,800
Task 6: Prepare Sewer Master Plan Update Report										
6.1 - Prepare Draft Report	8		32	40	4	84	\$ 16,468	\$ 160		\$ 16,630
6.2 - Prepare Final Report	2		8	16	8	34	\$ 6,056	\$ 500		\$ 6,560
Subtotal Task 6	10	0	40	56	12	118	\$ 22,524	\$ 660	\$ -	\$ 23,190
Task 7: Project Management and Coordination										
7.1 - Meetings	8		16	16		40	\$ 8,299	\$ 300		\$ 8,600
7.2 - Project Management	6		12		24	42	\$ 7,223			\$ 7,220
7.3 - Quality Control (included in above tasks)						0	\$ -			\$ -
Subtotal Task 7	14	0	28	16	24	82	\$ 15,521	\$ 300	\$ -	\$ 15,820
Total	48	28	248	504	42	870	\$ 164,549	\$ 1,360	\$ 65,500	\$ 231,410

1. Labor costs include salaries, overhead, and profit based on RMC's standard hourly rate schedule.

2. Other direct costs (ODCs) include mileage, travel, and major reproduction.

3. Subconsultant costs include 5% RMC markup.

4. Additional cost for additional meters (beyond the proposed 15 meters) would be \$3,650 per meter; additional cost for extension of flow monitoring beyond 2 months (for 15 meters) would be \$5,050 per week. Conversely, the District would be credited \$3,650 per meter if fewer than 15 meters are installed. This per meter credit would apply as long as a minimum of 12 meters are installed.

5. Work conducted in 2015 will be billed at 2015 hourly rates. For the purposes of developing the fee estimate, it was assumed the 2015 rates would have a 3% increase over 2014 rates.

EXHIBIT C
Irvington Basin Sewer Master Plan Update
Project Schedule

Task	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	
1 Review Existing Information and Interview Staff												
2 Flow Monitoring				<Potential Flow Monitoring Period>								
3 Update Land Use Data												
4 Modeling and Capacity Analysis												
5 Develop CIP for Capacity Improvements												
6 Prepare Sewer Master Plan Update Report											D	F
7 Project Management and Coordination												

D - Draft Report
F - Final Report

**UNION SANITARY DISTRICT
CHECK REGISTER
07/19/2014-08/01/2014**

Check No.	Date	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
154838	7/31/2014	3539	DW NICHOLSON CORP	COGENERATION PROJECT	\$593,259.52	\$593,259.52
154753	7/24/2014	5796	CAL SAN RISK MNGT AUTH	7/1/14-15 WC PROGRAM	\$371,757.00	\$449,108.37
	7/24/2014	5682		07/14 - 06/15 PROPERTY INSURANCE RENEWAL	\$77,351.37	
154810	7/24/2014	20140605.1	SWRCB - STATE WATER RESOURCES	SRF LOAN #C065222110 - BOYCE LIFT	\$411,063.52	\$411,063.52
154768	7/24/2014	2884	EAST BAY DISCHARGERS AUTHORITY	O&M ASSESSMENT, QUARTER BEGIN 07/01/2014	\$280,383.25	\$381,583.25
	7/24/2014	2890		RNWL & REPL FUND ASSES FY15	\$101,200.00	
154821	7/24/2014	2025470	WEST YOST & ASSOCIATES	UPPER HETCH HECTCHY SS REHABILITATION	\$7,463.50	\$76,988.78
	7/24/2014	2025469		NEWARK FLAT TOPS AREA SEWER RELOCATION	\$4,036.50	
	7/24/2014	2025468		UPPER HETCH HECTCHY SS REHABILITATION	\$602.50	
	7/24/2014	2025419		MISC SS SPOT REPAIRS PHASE V	\$42,515.19	
	7/24/2014	2025467		I-680 AT SABERCAT RD SEWER REPLACEMENT	\$2,317.09	
	7/24/2014	2025452		UPPER HETCH HECTCHY SS REHABILITATION	\$8,026.00	
	7/24/2014	2025382		NEWARK FLAT TOPS AREA SEWER RELOCATION	\$4,281.00	
	7/24/2014	2025420		NEWARK FLAT TOPS AREA SEWER RELOCATION	\$7,747.00	

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154763	7/24/2014	20140081	COVELLO GROUP INC	UPPER HETCH HECTCHY SS REHABILITATION	\$1,736.00	\$69,697.59
	7/24/2014	201300816		COGENERATION PROJECT	\$52,680.09	
	7/24/2014	20130352		THICKENER CONROL BUILDING IMPROVEMENTS PHASE II	\$14,049.50	
	7/24/2014	201002241		PRIMARY CLARIFIERS 1 - 4 REHABILITATION	\$1,232.00	
154796	7/24/2014	013720140709	PACIFIC GAS AND ELECTRIC	SERV TO 07/08/14 BOYCE RD PS	\$2,645.17	\$69,015.60
	7/24/2014	170120140710		SERV TO 06/22/14 PLANT	\$66,370.43	
154843	7/31/2014	20140715.1	HARVEST 6850 STEVENSON LLC	SEWER SERVICE CHARGE REFUND	\$41,819.45	\$41,819.45
154767	7/24/2014	3473	DW NICHOLSON CORP	MCC REPLACEMENT - PHASE 2	\$35,000.00	\$35,000.00
154765	7/24/2014	87088	DEGENKOLB ENGINEERS	SEISMIC STUDY	\$27,082.50	\$27,082.50
154830	7/31/2014	11219384	BROWN & CALDWELL CONSULTANTS	UPPER HETCH HECTCHY SS REHABILITATION	\$21,851.94	\$21,851.94
154771	7/24/2014	901766943	EVOQUA WATER TECHNOLOGIES	1,400 LB ACTIVATED CARBON CHANGE OUT BULK	\$4,537.63	\$15,615.35
	7/24/2014	901762344		2,386 GALS HYDROGEN PEROXIDE	\$11,077.72	
154856	7/31/2014	140304	RAFTELIS FINANCIAL CONSULTANTS	SSC COST OF SERVICE STUDY	\$14,538.75	\$14,538.75
154778	7/24/2014	25240	HARRIS & ASSOCIATES	NEWARK BACKYARD SANITARY SEWER - PHASE 1	\$13,390.00	\$13,390.00
154832	7/31/2014	135609	CAROLLO ENGINEERS	THICKENER CONROL BUILDING IMPROVEMENTS PHASE II	\$12,030.32	\$12,708.21
	7/31/2014	135602		COGENERATION PROJECT	\$677.89	

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154868	7/31/2014	628220	UNIVAR USA INC	5,017 GALS SODIUM HYPOCHLORITE	\$2,318.86	\$11,454.24
	7/31/2014	628135		4,955 GALS SODIUM HYPOCHLORITE	\$2,290.21	
	7/31/2014	629148		5,012 GALS SODIUM HYPOCHLORITE	\$2,316.55	
	7/31/2014	628228		4,953 GALS SODIUM HYPOCHLORITE	\$2,289.27	
	7/31/2014	629177		4,845 GALS SODIUM HYPOCHLORITE	\$2,239.35	
154854	7/31/2014	97720140702	DAVID M O'HARA ATTY AT LAW	CIP LEGAL - JUNE 2014	\$819.00	\$11,046.00
	7/31/2014	86420140702		GENERAL LEGAL - JUNE 14	\$10,227.00	
154825	7/31/2014	62016	3T EQUIPMENT COMPANY INC	20 PIPEPATCH KIT - WINTER	\$10,610.55	\$10,610.55
154855	7/31/2014	815197	PACHECO BROTHERS GARDENING INC	REMOVE ICE PLANT & INSTALL SMALL COBBLESTONE	\$9,275.00	\$9,411.00
	7/31/2014	WO6973		REPAIR POP UPS & REPLACE BUBBLERS/NOZZLES	\$136.00	
154814	7/24/2014	626951	UNIVAR USA INC	5,017 GALS SODIUM HYPOCHLORITE	\$2,360.05	\$9,296.28
	7/24/2014	626488		4,952 GALS SODIUM HYPOCHLORITE	\$2,329.48	
	7/24/2014	627630		4,951 GALS SODIUM HYPOCHLORITE	\$2,288.36	
	7/24/2014	627404		5,016 GALS SODIUM HYPOCHLORITE	\$2,318.39	
154746	7/24/2014	624	AUTOMATED NETWORK CONTROLS	SCADA / PLC PROGRAMMING SERVICES	\$8,872.88	\$9,112.88
	7/24/2014	622		BOYCE ROAD LIFT STATION PROJECT	\$240.00	
154772	7/24/2014	2014084	FARALLON GEOGRAPHICS INC	GIS INSPECTION AND DEFECTS LAYERS	\$8,812.50	\$8,812.50
154802	7/24/2014	11531	RALPH ANDERSEN & ASSOCIATES	RECRUIT FEES, GM, INSTALLMENT 4 OF 4	\$7,000.00	\$7,689.17
	7/24/2014	11532		CANDIDATE TRAVEL REIMBURSEMENT	\$689.17	

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154873	7/31/2014	2014029	WEST BAY SANITARY DISTRICT	COST SHARING AGREEMENT - CS OF THE FUTURE	\$6,667.00	\$6,667.00
154783	7/24/2014	9017398069	KEMIRA WATER SOLUTIONS, INC.	8.31 DRY TONS FERROUS CHLORIDE	\$5,606.84	\$5,606.84
154863	7/31/2014	20140716	SAN JOSE WATER CO FBO BAYWORK	ANNUAL FEE FOR FY 2014-2015	\$5,550.00	\$5,550.00
154848	7/31/2014	9017399249	KEMIRA WATER SOLUTIONS, INC.	8.36 DRY TONS FERROUS CHLORIDE	\$5,467.44	\$5,467.44
154872	7/31/2014	32121	WECO INDUSTRIES LLC	4 WEEK MONGOOSE TRAILER JETTER RENTAL	\$5,256.00	\$5,256.00
154799	7/24/2014	895003	POLYDYNE INC	41,300 LBS CLARIFLOC WE-539	\$4,703.24	\$4,703.24
154833	7/31/2014	25488	CDW GOVERNMENT LLC	REPLACEMENT CIP COLOR PRINTER	\$4,703.03	\$4,703.03
154807	7/24/2014	20140630	STATE BOARD OF EQUALIZATION	SALES & USE TAX 04/14-06/14	\$4,659.00	\$4,659.00
154860	7/31/2014	1050	ROCKWELL SOLUTIONS INC	ASTD PARTS & MATERIALS	\$4,534.75	\$4,534.75
154797	7/24/2014	20140717	PENINSULA CORR JOINT POWERS BD	UPPER HETCH HETCHY SS REHABILITATION	\$4,250.00	\$4,250.00
154822	7/24/2014	23952	WILEY PRICE & RADULOVICH LLP	LABOR & EMPLOYMENT LAW FEES	\$3,768.50	\$3,768.50
154798	7/24/2014	102963	PIIAN SYSTEMS LLC	6 ODOR NEUTRALIZER - INDUSTRIAL CONCENTRATE (5 GALLON PAIL)	\$3,584.25	\$3,584.25
154774	7/24/2014	241835	FUSIONSTORM	CCIE PROFESSIONAL SERVICES	\$3,120.00	\$3,120.00

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154764	7/24/2014	248145	CURTIS & TOMPKINS LTD	1 LAB SAMPLE ANALYSIS	\$60.00	\$2,869.00
	7/24/2014	248144		18 LAB SAMPLE ANALYSIS	\$273.00	
	7/24/2014	248276		8 LAB SAMPLE ANALYSIS	\$124.00	
	7/24/2014	248231		10 LAB SAMPLE ANALYSIS	\$154.00	
	7/24/2014	248275		8 LAB SAMPLE ANALYSIS	\$124.00	
	7/24/2014	248136		8 LAB SAMPLE ANALYSIS	\$124.00	
	7/24/2014	248135		30 LAB SAMPLE ANALYSIS	\$1,340.00	
	7/24/2014	248206		15 LAB SAMPLE ANALYSIS	\$670.00	
154739	7/24/2014	61963	3T EQUIPMENT COMPANY INC	6 PIPEPATCH KIT - WINTER	\$2,645.31	\$2,645.31
154818	7/24/2014	3078	VON EUW TRUCKING	47.83 TONS CRUSH & 47.83 TONS CLASS II	\$2,513.94	\$2,513.94
154758	7/24/2014	6236	CIRAULO PLUMBING	REFUND # 17321	\$2,500.00	\$2,500.00
154800	7/24/2014	7090	PULTE HOME CORPORATION	REFUND # 17333	\$2,500.00	\$2,500.00
154865	7/31/2014	1275	SIGNET TESTING LABS INC	NEWARK FLAT TOPS AREA SEWER RELOCATION	\$2,499.50	\$2,499.50
154845	7/31/2014	19836	HYDEC	2 EA SOLENOID VALVES	\$2,493.74	\$2,493.74
154829	7/31/2014	433323	BRENNTAG PACIFIC, INC.	3846 LBS SODIUM HYDROXIDE	\$2,125.41	\$2,125.41
154749	7/24/2014	14099	BLUE SKY ENVIRONMENTAL INC.	COGEN EMISSIONS TESTING 2014	\$1,990.00	\$1,990.00
154823	7/24/2014	20140721	WILSON WONG	TUITION REIMB - ONLINE COURSE	\$1,683.00	\$1,683.00
154760	7/24/2014	70189	COMMERCIAL MAINTENANCE CHEMICA	10 LIFSTATION DEGREASER	\$1,640.90	\$1,640.90
154775	7/24/2014	20140723	MOHAMMAD GHOURY	EXP REIMB: ESRI CONF EXPS - LODGING, MEALS, & TAXI	\$1,456.03	\$1,456.03

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154750	7/24/2014	431729	BRENNTAG PACIFIC, INC.	2564 LBS SODIUM HYDROXIDE	\$1,416.95	\$1,416.95
154781	7/24/2014	9897	IRON MOUNTAIN	OFF-SITE STORAGE AND SERVICE - JUNE/JULY 2014	\$827.45	\$1,412.51
	7/24/2014	200334287		DATA/MEDIA OFF-SITE STORAGE - JUNE 2014	\$225.12	
	7/24/2014	5771		OFF-SITE STORAGE AND SERVICE - JUNE/JULY 2014	\$359.94	
154755	7/24/2014	100000014268395	CALPERS	PREMIUM: MAY 2014	\$1,366.44	\$1,366.44
154795	7/24/2014	XCTZ002	PACHECO BROTHERS GARDENING INC	LANDSCAPE MAINTENANCE SERVICES JULY 2014	\$1,365.00	\$1,365.00
154861	7/31/2014	2439275003	S & S SUPPLIES & SOLUTIONS	3 CS GLOVES & 36 CHILL-ITS DEW RAGS	\$612.65	\$1,352.17
	7/31/2014	2439275004		40 SAFETY VESTS & 24 LEATHER GLOVES	\$739.52	
154849	7/31/2014	140713	KL BRAJENOVICH CONSULTING	COMMUNICATIONS COORDINATOR PHYS STDS	\$1,259.81	\$1,259.81
154790	7/24/2014	94323953	MCMASTER SUPPLY INC	ASTD PARTS & MATERIALS	\$839.10	\$1,206.74
	7/24/2014	94099967		ASTD PARTS & MATERIALS	\$256.40	
	7/24/2014	94605048		ASTD PARTS & MATERIALS	\$62.04	
	7/24/2014	94432354		ASTD PARTS & MATERIALS	\$31.08	
	7/24/2014	91515871		ASTD PARTS & MATERIALS	\$18.12	
154813	7/24/2014	120588769001	UNITED RENTALS NORTHWEST INC	FORKLIFT VARIABLE REACH 6000# 1 WEEK	\$1,181.40	\$1,181.40
154827	7/31/2014	6128546207	AT&T	SERV: 06/10/14 - 08/09/14	\$1,178.56	\$1,178.56
154766	7/24/2014	7418	DRAIN DOCTOR	REFUND # 17334	\$500.00	\$1,150.00
	7/24/2014	7438		REFUND # 17328	\$650.00	
154824	7/24/2014	1204520942	WRA ENVIRONMENTAL CONSULTANTS	FORCE MAIN CONSTRUCTION	\$1,127.38	\$1,127.38

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154752	7/24/2014	80833	BRUCE BARTON PUMP SERVICE INC	1 SUMP PUMP	\$1,044.30	\$1,044.30
154785	7/24/2014	18513533	LABOR READY	TEMP LABOR-PERRY R., WK END 06/27/14	\$1,020.36	\$1,020.36
154866	7/31/2014	7434	STAR ROOTER AND PLUMBING	REFUND # 17344	\$500.00	\$1,000.00
	7/31/2014	7453		REFUND # 17342	\$500.00	
154864	7/31/2014	4868173071714	SIERRA SPRING WATER COMPANY	WATER SERVICE 06/19/14 - 07/17/14	\$739.39	\$978.39
	7/31/2014	8122768071714		BOTTLESS COOLERS RENTAL	\$239.00	
154867	7/31/2014	576763640	TELEPACIFIC COMMUNICATIONS	WIRELESS INTERNET BACKUP - JULY	\$960.00	\$960.00
154871	7/31/2014	8058220400	VWR INTERNATIONAL LLC	1 LBOD PROBE 1 M CBL	\$879.07	\$914.24
	7/31/2014	8058240677		1 TUBING PVC 1/4X3/8IN 50FT	\$35.17	
154761	7/24/2014	20140627	COMMUNICATION & CONTROL INC	UTILITY FEE/ANTENNA RENTAL	\$903.51	\$903.51
154851	7/31/2014	18533536	LABOR READY	TEMP LABOR-PERRY R., WK END 07/04/14	\$834.84	\$834.84
154784	7/24/2014	2244218	LAB SUPPORT	TEMP LABOR-WINSOR, B., WKEND 06/29/14	\$828.00	\$828.00
154831	7/31/2014	2953	CAL SAN RISK MNGT AUTH	CLAIM: CIARDELLI FILE #1886821	\$813.65	\$813.65
154794	7/24/2014	8463372	OVIVO USA LLC	ASTD CLARIFIER PARTS	\$795.38	\$795.38
154740	7/24/2014	26523	ABACUS PRODUCTS INC	3000 POLLUTION PREVENTION MAGNETS	\$783.94	\$783.94
154743	7/24/2014	9919605123	AIRGAS NCN	CYLINDER RENTAL	\$771.15	\$771.15
154777	7/24/2014	3H5042	HARRINGTON INDUSTRIAL PLASTICS	3 EA SOCKET FUSION BENCH TOOL RENTAL	\$721.64	\$721.64
154751	7/24/2014	431730	BRENNTAG PACIFIC, INC.	1282 LBS SODIUM HYDROXIDE	\$708.46	\$708.46

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154853	7/31/2014	95048696	MCMASTER SUPPLY INC	ASTD ALUMINUM PARKING SIGNS	\$125.99	\$694.10
	7/31/2014	95282435		10EA FITTINGS	\$64.09	
	7/31/2014	95240627		1 SET SUPER-CUSHIONING POLYURETHANE FOAM	\$75.26	
	7/31/2014	95242009		ASTD PARTS & MATERIALS	\$292.36	
	7/31/2014	95426689		1 EA CURRENT SENSING RELAY	\$136.40	
154844	7/31/2014	601211170	HILLYARD/SAN FRANCISCO	ASTD JANITORIAL SUPPLIES	\$338.83	\$692.48
	7/31/2014	601212937		2 CASES PAPER PLATES	\$353.65	
154859	7/31/2014	1113184	ROCHESTER MIDLAND CORPORATION	HOT WATER LOOP SERVICE	\$685.90	\$685.90
154850	7/31/2014	2246194	LAB SUPPORT	TEMP LABOR-WINSOR, B., WKEND 07/06/14	\$662.40	\$662.40
154858	7/31/2014	244355	RKI INSTRUMENTS INC	LEVEL 2 INSTRUMENT INSPECT, SERVICE & CALIBRATE	\$639.18	\$639.18
154773	7/24/2014	9467	FREMONT EXPRESS COURIER SVC	COURIER SERVICES: JUN 2014	\$630.00	\$630.00
154834	7/31/2014	32675	CLAREMONT BEHAVIORAL SERVICES	AUG 2014 EAP PREMIUM	\$611.80	\$611.80
154745	7/24/2014	5528757	AT&T	SERV: 06/01/14 - 06/30/14	\$566.31	\$566.31
154747	7/24/2014	157950	BAY CENTRAL PRINTING	2500 LETTERHEAD	\$558.45	\$558.45
154769	7/24/2014	8453	EAST BAY MUNI UTILITY DISTRICT	6 LAB SAMPLE ANALYSIS	\$543.00	\$543.00
154846	7/31/2014	1005416	INDUSTRIAL SAFETY SUPPLY	3 CYLINDERS CAL GAS	\$527.50	\$527.50
154791	7/24/2014	20140722	STUART MORRISON	EXP REIMB: CWEA MID-SUMMER MTG - REGIS/LODGING/MEALS	\$527.33	\$527.33
154741	7/24/2014	6846645	ABC IMAGING, INC.	MISC. SS SPOT REPAIRS PHASE V	\$506.09	\$506.09

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154840	7/31/2014	74728	GORILLA METALS	ASTD METAL, STEEL, STAINLESS, AND ALUMINUM	\$68.38	\$500.27
	7/31/2014	74695		ASTD METAL, STEEL, STAINLESS, AND ALUMINUM	\$431.89	
154742	7/24/2014	7372	ABOVE ALL PLUMBING, INC.	REFUND # 17326	\$500.00	\$500.00
154757	7/24/2014	7419	CHANDLER BUILDING DEVELOPMENT	REFUND # 17323	\$500.00	\$500.00
154770	7/24/2014	7341	EVENFLOW PLUMBING CO. INC.	REFUND # 17325	\$500.00	\$500.00
154782	7/24/2014	7331	JD PLUMBING	REFUND # 17327	\$500.00	\$500.00
154786	7/24/2014	10200	LOOKINGPOINT INC	MONTHLY PREMIER SUPPORT - JULY 2014	\$500.00	\$500.00
154801	7/24/2014	7125	SUNDARA RADHAKRISHNAN	REFUND # 17322	\$500.00	\$500.00
154808	7/24/2014	7382	STREAMLINE PLUMBING & DRAIN	REFUND # 17324	\$500.00	\$500.00
154809	7/24/2014	7408	SUNZERI CONSTRUCTION INC	REFUND # 17335	\$500.00	\$500.00
154826	7/31/2014	6024	SHAGUETA N & AFAQUE AHMED	REFUND # 17346	\$500.00	\$500.00
154847	7/31/2014	7170	ISEA INTERNATIONAL	REFUND # 17345	\$500.00	\$500.00
154852	7/31/2014	7369	LALO'S SEWER & DRAIN	REFUND # 17343	\$500.00	\$500.00
154836	7/31/2014	248381	CURTIS & TOMPKINS LTD	3 LAB SAMPLE ANALYSIS	\$135.00	\$473.00
	7/31/2014	248332		1 LAB SAMPLE ANALYSIS	\$60.00	
	7/31/2014	248370		10 LAB SAMPLE ANALYSIS	\$154.00	
	7/31/2014	248371		8 LAB SAMPLE ANALYSIS	\$124.00	

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154874	7/31/2014	74893497	XEROX CORPORATION	MTHLY MAINTENANCE BASED ON USE	\$123.20	\$465.58
	7/31/2014	74893493		MTHLY MAINTENANCE BASED ON USE	\$22.68	
	7/31/2014	74893489		MTHLY MAINTENANCE BASED ON USE	\$290.55	
	7/31/2014	74893491		MTHLY MAINTENANCE BASED ON USE	\$29.15	
154759	7/24/2014	45581	CITYLEAF INC	PLANT MAINTENANCE - JUL 2014	\$429.65	\$429.65
154835	7/31/2014	53698	COAST CRANE COMPANY	BATTERY INSTALLATION ON LMI FOR CRANE	\$427.67	\$427.67
154744	7/24/2014	5099753	ALL INDUSTRIAL ELECTRIC SUPPLY	1 LEESON 1/2HP 1800RPM	\$399.68	\$399.68
154788	7/24/2014	1841	MATHESON ENVIRONMENTAL SERVICE	HAZARDOUS MATERIALS RECYCLING	\$396.00	\$396.00
154792	7/24/2014	102890	MUNIQUEIP, LLC	1EA TORUS BUSTER URETHANE	\$375.92	\$375.92
154839	7/31/2014	20140725	MICHAEL GILL	EXP REIMB: SOFTWARE SUPPORT	\$360.00	\$360.00
154756	7/24/2014	MCNRC6F2RDP	CALPERS	EDUCATIONAL FORUM 2014 REG - ROJO	\$350.00	\$350.00
154812	7/24/2014	20140722	UNION PACIFIC RAILROAD CO	SEWER SERVICE CHARGE REFUND	\$337.76	\$337.76
154841	7/31/2014	9469920210	GRAINGER INC	1 EA EMERGENCY LIGHT	\$229.91	\$309.23
	7/31/2014	9472507897		4 EA BACK PLATES	\$79.32	
154819	7/24/2014	28711	VOX NETWORK SOLUTIONS INC	FORWARD NUMBER TO CELL PHONE PROGRAMMING CHANGES	\$300.00	\$300.00
154870	7/31/2014	28891	VOX NETWORK SOLUTIONS INC	MOVE & BUILD NEW SETS	\$300.00	\$300.00
154762	7/24/2014	32127	CONTRACT OFFICE GROUP INC	REPAIR ELECTRICAL AT MODIFIED CUBICLE	\$286.00	\$286.00

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154817	7/24/2014	20140722.2	AUDREY VILLANUEVA	EXP REIMB: FOLDERS FOR AMMONIA REPORT	\$5.79	\$283.04
	7/24/2014	20140723		EXP REIMB: LUNCH FOR MANAGEMENT MTG	\$18.26	
	7/24/2014	20140722.1		EXP REIMB: ROLETTO RETIREMENT PARTY	\$258.99	
154828	7/31/2014	10310610	BLAISDELL'S	ASTD OFFICE SUPPLIES	\$87.70	\$272.73
	7/31/2014	10225480C		CREDIT 1 TONER	\$-155.48	
	7/31/2014	10312860		ASTD OFFICE SUPPLIES	\$340.51	
154862	7/31/2014	85340220140722	SAN FRANCISCO WATER DEPT	SERVICE 06/19/14 TO 07/18/14	\$160.19	\$160.19
154803	7/24/2014	8200000007568	RED WING SHOE STORE	SAFETY SHOES - PADILLA	\$134.33	\$134.33
154806	7/24/2014	20140723	JENNIFER SIO-KWOK	EXP REIMB: LUNCH PO III TRAINEE QAI	\$132.80	\$132.80
154804	7/24/2014	20140722	CAROL RICE	EXP REIMB: ROLETTO RETIREMENT PARTY	\$131.01	\$131.01
154805	7/24/2014	20140718	JAMIE ROJO	EXP REIMB: AIRFARE CALPERS EDUCATIONAL	\$127.50	\$127.50
154780	7/24/2014	5470591	HOSE & FITTINGS ETC	ASTD PARTS & MATERIALS	\$126.74	\$126.74
154779	7/24/2014	15998	HAYWARD PIPE AND SUPPLY	1 EA REDUCER	\$120.36	\$120.36
154811	7/24/2014	180663914	TRENCH PLATE RENTAL COMPANY	7 DAYS HD QUIK-SHOR RENTAL	\$100.80	\$100.80
154842	7/31/2014	77704	GREEN LEAF CLEANERS	DRY CLEANING ASTD UNIFORM ITEMS - FMC	\$92.50	\$92.50
154776	7/24/2014	9467897147	GRAINGER INC	ASTD PARTS & MATERIALS	\$80.21	\$80.21
154754	7/24/2014	44756	STATE OF CALIFORNIA	2 NEW HIRE FINGERPRINTS	\$64.00	\$64.00
154837	7/31/2014	615320140718	DISH NETWORK	AUG 2014 - SERVICE FEE	\$60.86	\$60.86
154787	7/24/2014	20140722	DUNG LU	EXP REIMB: CALL-OUT MILEAGE	\$57.61	\$57.61

**UNION SANITARY DISTRICT
CHECK REGISTER
07/19/2014-08/01/2014**

Check No.	Date	Invoice No.	Vendor	Description	Invoice Amt	Check Amt
154815	7/24/2014	9853264	UPS - UNITED PARCEL SERVICE	SHIPPING CHARGES W/E 06/28/14	\$52.35	\$52.35
154857	7/31/2014	66439	REMOTE SATELLITE SYSTEMS INT'L	IRIDIUM SVC FEE AUGUST 2014	\$48.95	\$48.95
154820	7/24/2014	8058120264	VWR INTERNATIONAL LLC	1 BRUCINE-SULFANILIC ACID 16OZ	\$45.99	\$45.99
154789	7/24/2014	77727201	MATHESON TRI-GAS INC	CYLINDER RENTAL - JUNE 2014	\$33.10	\$33.10
154748	7/24/2014	10301090	BLAISDELL'S	1 BX FOLDERS	\$11.50	\$24.18
	7/24/2014	10306880		2 PK POST IT PAGE MARKER	\$12.68	
154869	7/31/2014	9853274	UPS - UNITED PARCEL SERVICE	SHIPPING CHARGES W/E 07/05/14	\$18.27	\$18.27
154816	7/24/2014	9727803499	VERIZON WIRELESS	WIRELESS SERV 06/02/14-07/01/14	\$14.04	\$14.04

Invoices:

Credit Memos :	1	-155.48
\$0 - \$1,000 :	119	42,220.52
\$1,000 - \$10,000 :	57	196,950.87
\$10,000 - \$100,000 :	15	450,594.81
Over \$100,000 :	5	1,757,663.29
Total:	197	2,447,274.01

Checks:

\$0 - \$1,000 :	74	32,250.06
\$1,000 - \$10,000 :	43	149,190.33
\$10,000 - \$100,000 :	15	430,818.96
Over \$100,000 :	4	1,835,014.66
Total:	136	2,447,274.01



Directors
Manny Fernandez
Tom Handley
Pat Kite
Anjali Lathi
Jennifer Toy

Officers
Richard Currie
*General Manager/
District Engineer*

David M. O'Hara
Attorney

DATE: August 1, 2014
MEMO TO: Board of Directors - Union Sanitary District
FROM: Richard B. Currie, General Manager/District Engineer
SUBJECT: Agenda Item No. 9b - Meeting of August 11, 2014
Information Item: **Employee Turnover Rate for FY14**

Recommendation

Information Only.

Background

An important element of our strategic planning and long range staffing program is to attract and retain high quality employees at the District. One of our measures in the Balanced Scorecard used to monitor this objective is turnover rate. This is measured by dividing the number of employees separated from the District by the average total number of employees at the District during any given year. The turnover rate is expressed as a percentage.

For FY14, the District's turnover rate was 9.2% with 12 employees leaving the District during the year. Last year the rate was 7.7% with 10 employees leaving.

The reasons for employee separation for FY14 were as follows:

Retired from District	7
Resigned, job closer to home (less commute)	0
Resigned, returned to school	1
Terminated	0
Resigned to take promotion elsewhere	1
Separated, other	<u>3</u>
Total	12

Additional information will be provided to the Board on specifics of employee separation, if desired.

Trends and Discussion.

This year's rate, at 9.2%, is an increase from the past several years. The increase is primarily due to several employees electing to retire. In comparing with the last few years turnover, we see that non-retirement separations continue to be very low.

Year	Total Turnover	Non-retirement turnover
2007	14.8%	6.2%
2008	6.9%	4.6%
2009	4.5%	3.0%
2010	5.3%	3.1%
2011	5.4%	2.3%
2012	5.4%	3.8%
2013	7.7%	2.3%
2014	9.2%	3.8%

The most significant reason for employees leaving the District was retirement, with 7 of the 12 departing employees retiring. This is reflective of a trend where many USD employees are reaching retirement age. This trend is expected to continue over the next couple of years. There are a variety of reasons for departure of the remaining 5 employees, including one seeking a career change, one leaving for a promotion at another public agency, not available at USD, and one who was moving out of state.

Dublin San Ramon Services District regularly surveys local public agencies including several cities, water districts and sanitary districts. Last year, their survey indicated an average turnover rate of 6.5% overall, and a rate of 1.9% when excluding retirement. USD's turnover is higher than the average in total turnover in non-retirement turnover. The Executive Team will continue to monitor turnover and discuss exit interview comments with Human Resources.



Directors
Manny Fernandez
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Jennifer Toy

Officers
Richard Currie
*General Manager/
District Engineer*

David M. O'Hara
Attorney

DATE: August 4, 2014

MEMO TO: Board of Directors - Union Sanitary District

FROM: Richard B. Currie, General Manager/District Engineer

SUBJECT: Agenda Item No. 9c - Meeting of August 11, 2014
Information Item: **Cost of Options for Various Newsletter Formats**

Recommendation

None. Information only.

Background

As a follow-up to the recent Communications Workshop held between staff and the Board, staff was asked to assess options for alternatives to the 4-Page newsletter (11x17 folded) that was sent to all USD service area residents. The attached table illustrates the cost differences.

Last Fall's newsletter cost for printing and mailing was \$32,212 and included the words "Union Sanitary District Customer" and the individual addresses. Based on anticipated increase in postal rates, the cost for the next newsletter, scheduled for this Spring, would be \$33,887.

One alternative suggested by the Board was to have smaller, more frequent mailings. Because ACWD cannot accommodate including information from USD in their billings, USD would have to pay full cost of mail distribution. Cost for printing and mail distribution for various options are listed below. The cost is based on two mailings during the year.

Type of Mailer (size, in inches)	Printing & Postage with Individual Address	Printing & Postage to "Postal Customer"
8-1/2 x 11 paper folded in half	\$56,450	\$51,670
8.5 x 11 flat card	\$53,840	\$51,080
8.5 x 13 flat card	\$60,180	\$57,410
8.5 x 14 flat card	\$60,270	\$57,450
6 x 11 Postcard	\$53,450	\$49,780

Staff will show examples of the sizes of mailers taken from recent election materials.

It will soon be time to begin preparation of the next newsletter, and one of the first decisions will be which format to use and which topics to cover. Preliminary preferences on topics include:

- Announcement of USD Open House
- Announcement of USD's new website
- NACWA Platinum Award
- Message from New General Manager
- Tips for helping the environment (FOG and Prescriptions)

**Directors**

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Officers

Richard Currie
*General Manager/
District Engineer*

David M. O'Hara
Attorney

DATE: August 4, 2014

MEMO TO: Board of Directors - Union Sanitary District

FROM: Richard B. Currie, General Manager/District Engineer

SUBJECT: Agenda Item No. 9d - Meeting of August 11, 2014
Information Item: **Report from the Regional Water Board on Sanitary Sewer Overflows**

Recommendation

None. Information only.

Background

Last month, the Regional Water Quality Control Board staff presented a report to their Board of Directors summarizing improvements made since the implementation of the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WDR). The report focuses on the reduction in number and volume of Sanitary Sewer Overflows (SSOs) in the Bay Area.

The San Francisco Bay Region includes 132 collection systems consisting of approximately 17,900 miles of main sewer pipelines. Agencies have been required to formally report SSOs since 2008 under the WDR.

The report is attached for the Board's information. Highlights include the following:

- The SSO Rate (spills per 100 miles of pipeline per year) in the Region has declined between 2008 and 2013, a similar trend to Statewide SSOs.
- The median SSO rate for the Region for 2008 was 13
- The median SSO rate for the Region for 2013 was 9.3

- The median rate for large systems only (100 miles or more) was 4.5
- The Median SSO Rate for all systems in California was 4.5.

Note: The Regional Board staff attributes the higher numbers for the Bay Area primarily due to the age of the sewer system, on average 6 years older for large systems compared to statewide average age.

- The volume of SSOs is also trending downward, but may be attributed in large part due to the drought (fewer wet weather overflows).
- The largest single cause of SSOs is roots at 38%. Debris in the pipeline is the second largest cause at 19% and Fats, Oils and Grease at 18%.
- The Regional Board will expand its audits of local agencies to examine the adequacy of SSO response programs and Sanitary Sewer Management Plans in general. In the past two years, the Board audited 22 agencies and issued 11 notices of violation.

The attached report includes a summary of enforcement action taken by the Regional Board since 1987.

The table below compares regional data to USD.

Criteria	SF Bay Region	USD
2013 SSO Rate (for large systems)	4.5 per 100 miles of pipe	0.4 per 100 miles of pipe
Average unrecovered spill volume per 1000 population	Graph indicates approx. 500 gallons per 1000 population	<1
Largest Cause of SSOs	Roots	Grease
Median Budget for Capital Projects (large agencies)	\$4.0 million	\$5.4 million
Median Budget for O&M	\$4.3 million	\$5.9 million
SSO Reporting Compliance rate	82%	100%
Penalties Assessed	\$11.5 million	\$0

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Claudia Villacorta)
MEETING DATE: July 9, 2014

ITEM: 7

SUBJECT: **Sanitary Sewer Improvement Program – Status Report**

CHRONOLOGY: October 2003 – Resolution in Support of Efforts to Reduce Sewer Overflows
October 2005 – Resolution in Support of Private Sewer Lateral Programs
November 2008 – Sanitary Sewer Overflow Reduction Program Status Report
January 2013 - Sanitary Sewer Overflow Reduction Program Status Report

DISCUSSION: This report describes a continued improving trend in the reduction of sanitary sewer overflows (SSOs) and highlights adjustments to our strategy to effect improvements to sanitary sewer systems in the Region since the 2013 status report.

The goal of the program is to ensure that the owners and operators of sanitary sewer systems adequately operate, maintain, repair, and upgrade their sanitary sewer infrastructure. These efforts will lead to fewer SSOs and less leaky systems that spill over in the wet season. In the long term, the efforts will also lower spikes in wet weather flows going to wastewater treatment facilities.

Background

Sewer systems within the State are regulated under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (or Sanitary Sewer Order). The Sanitary Sewer Order requires notification and reporting of SSOs and sewer system management with the goal of reducing both the number and the volume of SSOs in the State. Currently within our Region, there are 132 sewer systems enrolled under the Sanitary Sewer Order. The agencies responsible for these systems manage about 17,900 miles of main sewer pipelines and approximately 1,850 miles of lateral pipelines.

The Sanitary Sewer Order requires self-reporting of all SSOs to a statewide database. This status report presents an analysis of data from the 132 sewer system agencies in our Region for the years 2008 to 2013 and corrects one point presented in our 2013 status report.

Decrease in Sanitary Sewer Overflows

The data show a continued decline in the number of SSOs in the Region. The Region's SSO volumes fluctuate from year to year but show a general decline. This decline may be partially due to the current drought because SSO volumes are largely wet-weather related and caused by inflow and infiltration (I&I).

Our detailed data observations are presented below:

General

- Essentially all sewage from the Bay Area's 7.1 million residents continues to be treated. The total SSO volume not recovered is quite small compared to the total treated wastewater discharged from the Region's wastewater treatment plants. For example, in 2012, less than 0.01 percent of the 183 billion gallons of sewage generated did not receive treatment.

Number of SSOs

- The Region's median SSO rate continues to decrease at a slightly faster rate than the statewide rate, though it remains above the statewide median (see **Figure 1**). The SSO rate is the total number of spills per 100-miles of sewer pipeline per year¹. The statewide median SSO rate is 4.5; the Region's median is 9.3 (based on 2013 data). In our 2013 status report, we incorrectly reported that our Region's SSO rates were comparable to the State's rates, when in fact our Region's rates are higher. This is because we unknowingly used higher State rates that had excluded those agencies reporting no SSOs. The analysis presented in this report corrects the error.
- Overall, small sewer systems continue to have a higher SSO rate than larger systems. The median SSO rate for small systems (systems with less than 100 miles of sewer pipeline) is 14.8; the median SSO rate for large systems (systems with 100 or more miles of sewer pipeline) is 4.5 (based on 2013 data).
- The Region's higher SSO rate is likely due in part to the age of the systems' sewer pipelines. Older pipes tend to have more defects per mile. Small systems in our Region have a median pipeline age that is four years older than the statewide median age for small systems (i.e., 43.6 versus 39.8 years). Large systems in our Region have a median pipeline age that is six years older than the statewide median (i.e., 49.6 versus 43.8 years).
- The Region's median SSO rate for systems that include sewer laterals continues to decrease but is still above the statewide median. The Region's median is 10; the statewide median is 8.2 (based on 2013 data). Sewer laterals are the pipelines that connect buildings to the main sewer pipelines that typically run down the middle of streets. Some sewer system agencies have responsibility for the "lower lateral," which is the portion of the sewer lateral between a building's cleanout and the main pipeline.

SSO Volume

- **Figures 2 and 3** show median and average SSO volumes, and there appears to be a slight downward trend though this trend is not consistent. This volume metric can be informative but only over a much longer time frame than five years. While volume decreases can indicate improvements in response to SSOs and in infrastructure rehabilitation, because SSO volumes are largely driven by wet-weather related SSOs, any short term trend down or up could be simply due

¹ The number of SSOs per 100 miles of pipe per year metric is used to compare the relative performance of sanitary sewer systems. This metric is a common indicator of overall sanitary sewer system performance and can provide insight on each agency's management, operations, and maintenance practices. A well-managed and maintained system with adequate capacity tends to have a lower spill rate than a poorly managed system or a system with inadequate capacity.

to a drought or a pattern of more spotty intense storms. Also, the reported volumes are all based on estimates, which can be inaccurate.

SSO Causes

- The majority of SSOs continues to occur as a result of root, debris, and “fats, oils, and grease” (FOG) blockages of sewer pipelines (75 percent over the past six years, see **Figure 4**).
- SSOs caused by I&I and insufficient capacity in wet weather continue to account for most of the SSO volume (71 percent of total SSO volume since 2008). I&I occurs from defects in sewer pipelines and illicit connections from storm drains. These occur both in publicly-owned pipelines and in private sewer laterals. The percentage from wet weather SSOs will fluctuate from year to year depending upon rainfall and, in the long term, from sewer system rehabilitation. With 2013 being a particularly dry year, the SSO volume from I&I resulted in less than 1 percent of the total SSO volume. **Figure 5** provides a breakdown of the total SSO volume by various causes since 2008.

Funding to Address SSOs

On average, our Region’s sewer system agencies continue to budget more on capital improvements and operation and maintenance (O&M) than the rest of the State:

- Our Region’s agencies that operate large sewer systems currently budget a median of \$4 million per year on capital improvements, which is twice the statewide median for similar size systems. Large systems budget a median of \$4.3 million per year on O&M, which is also close to twice the statewide median for similar size systems.
- Operators of small sewer systems in the Region budget a median of \$400,000 per year on capital improvements, which is eight times the statewide median for similar size systems. Small systems budget a median of \$880,500 per year on O&M, which is four times the statewide median for similar size systems.
- The total annual budget by the Region’s agencies for capital expenditures is \$301.4 million; for O&M, the total is \$343.3 million. This is about 18 percent of the total statewide annual capital and O&M budget.

SSO Reporting Compliance Rate

- Our Region’s reporting compliance rate is less than the State’s rate. Our Region’s average monthly reporting compliance rate during fiscal year, 2012-2013, is 82 percent; the State’s average is 92 percent. Monthly SSO reporting compliance rates are calculated by tallying how many individual agencies submitted either an SSO report or a no-spill certification for a given calendar month.

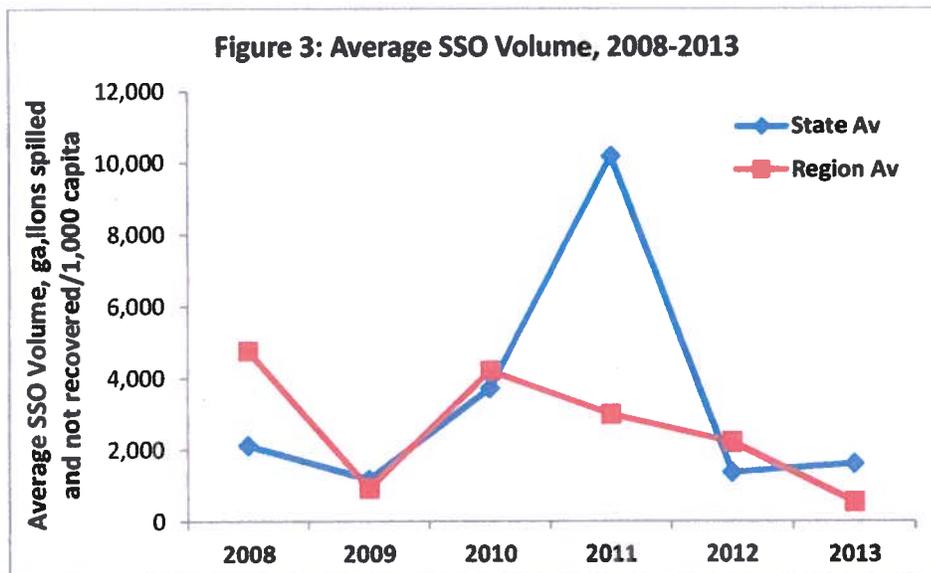
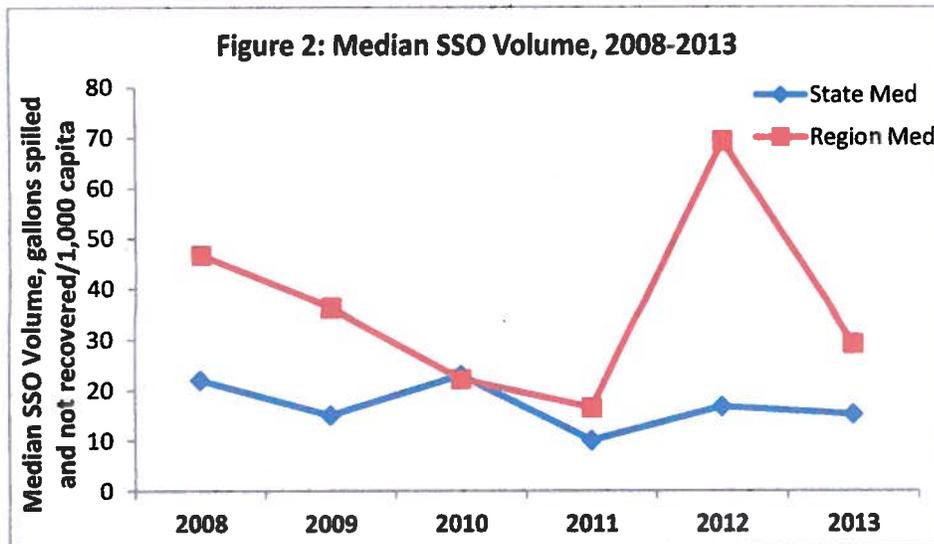
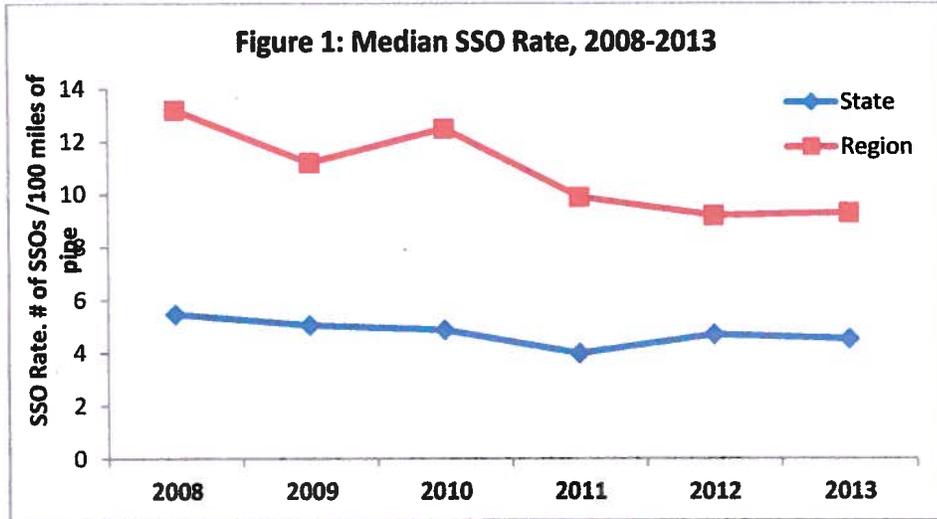


Figure 4: SSOs by Cause, 2008-2013
 (Total # SSOs: 10,302)

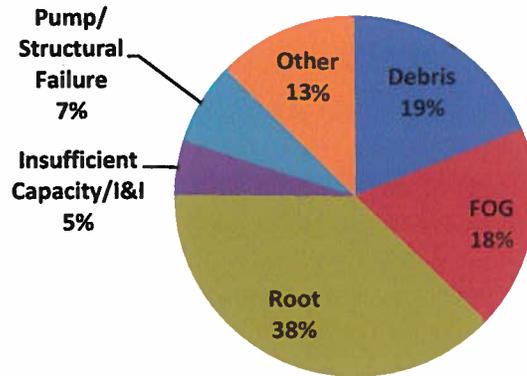
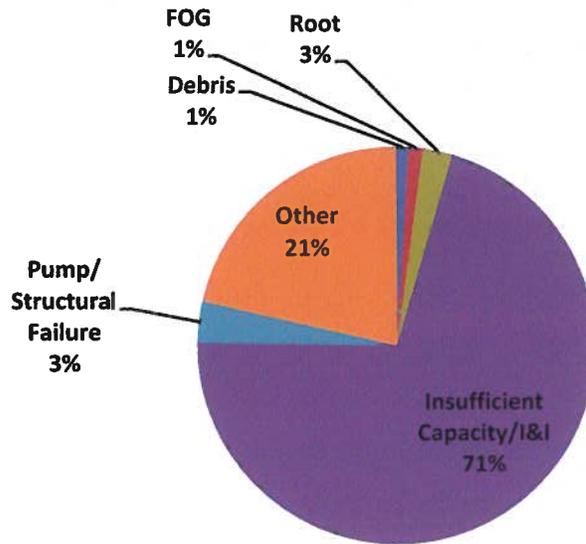


Figure 5: Wet Weather SSO Volume, 2008-2013
 (Total Spill Volume: 70.7 million gallons)



Strategy to Improve Sanitary Sewer Systems

Our strategy to reduce SSOs and improve sewer systems in the Region will continue to span from outreach to formal Board enforcement. Additional staff resources have been carved out from other oversight efforts and directed to the program this fiscal year. This will allow for an increase in formal enforcement actions than in recent years when resources were reduced. We will also continue to audit sewer system agencies to

assess the adequacy of responses to SSOs and the completeness of sanitary sewer management plans. We plan to expand our audits to assess the adequacy of capital improvement and rehabilitation programs considering the age and condition of the agencies' systems.

The following provides a summary of our efforts thus far:

- Since 1987, the Board has issued cease and desist orders against seven sewer system agencies and assessed over \$11.5 million against those and 19 other agencies (see Table 1). Many of these actions were targeted against agencies with high SSO volumes and rates. Additionally, the Board has entered into court-sanctioned stipulated orders with U.S. EPA against seven other sewer system agencies. In total, these systems encompass about 30 percent of the sewer system miles in the Region.
- The Board has approved 25 supplemental environmental projects (SEPs) totaling \$6 million from its enforcement actions. Seven of these SEPs, totaling \$3.6 million, are targeted at incentivizing the replacement of defective private sewer laterals.
- For collection systems with high I&I, the Board has also included requirements in agency permits to evaluate I&I reduction including adoption of private sewer lateral rehabilitation ordinances. Together with cease and desist order requirements and agencies acting under their own initiative, at least 39 sewer system agencies now have such ordinances in place.
- In the past two years, staff has audited 22 sewer system agencies and has issued 11 notices of violation calling for corrective actions to reduce SSOs and to improve response actions, reporting, and sanitary sewer management plans.

**RECOM-
MENDATION:** This item is a status report; no action is necessary.

Table 1. SF Bay Regional Water Board's Past Enforcement Actions and Supplemental Environmental Projects (SEPs)

Year	Discharger	Violation Description	Penalty	SEP Dollar Amount	Completion Date	SEP Description
1987	East Bay Municipal Utilities District	SSO(s) totaling 8M gallons discharged into waters of the State.	\$100,000	\$0	n/a	n/a
1987	San Francisco Public Utilities Commission	SSO(s) totaling 6M gallons discharged into waters of the State.	\$100,000	\$0	n/a	n/a
1989	Central Marin Sanitation Agency	SSO(s) totaling 2.4M gallons discharged into waters of the State.	\$60,000	\$0	n/a	n/a
1990	City of Oakland	SSO(s) totaling 400,000 gallons discharged into waters of the State.	\$25,000	\$0	n/a	n/a
1991	City of Mill Valley	SSO(s) totaling 280,000 gallons discharged into waters of the State.	\$26,700	\$0	n/a	n/a
1992	City of Mill Valley	SSO(s) totaling 17,500 gallons discharged into waters of the State.	\$12,274	\$0	n/a	n/a
1993	City of Pittsburg	SSO(s) totaling 29,300 gallons discharged into waters of the State.	\$23,000	\$0	n/a	n/a
1995	Sausalito-Marín City Sanitary District	SSO(s) totaling 3.7M gallons discharged into waters of the State.	\$55,900	\$0	n/a	n/a
1995	City of Hayward	SSO(s) totaling 6M gallons discharged into waters of the State.	\$10,000	\$0	n/a	n/a
1997	San Francisco Public Utilities Commission	SSOs totaling 95.3M gallons combined with stormwater discharged into waters of the State.	\$300,000	\$264,000	n/a	Crissy Field Dune Restoration Project and Development of NPDES Electronic Reporting System

Year	Discharger	Violation Description	Penalty Amount	SEP Dollar Amount	Completion Date	SEP Description
1998	Central Contra Costa Sanitary District	SSO discharged 1M gallons to San Pablo Creek.	\$55,700	\$45,900	4/2/2001	San Ramon Creek Restoration Project
2003	Sonoma County Water Agency (Sonoma County Water - Penngrove Collection System)	SSO totaling 400,000 gallons to tributary of the Petaluma River.	\$38,000	\$34,000	1/30/2004	Nathanson Creek Restoration Project
2003	City of Pacifica	SSO totaling 1.8M gallons discharged into waters of the State.	\$125,033	\$0	n/a	n/a
2004	Central Contra Costa Sanitary District	28 SSOs totaling 271,000 gallons discharged to waters of the State.	\$165,000	\$155,000	10/6/2009	Environmental Education Programs and Alhambra Creek study
2004	San Francisco City & Co. Sheriff's Dept.	SSO totaling 99,000 gallons from a private sewer lateral serving the San Bruno Jail.	\$118,000	\$110,000	2/1/2007	Property acquisition and San Bruno Jail garden project
2006	City of South San Francisco	SSOs from May 1, 2003, through March 1, 2006 including 1.8 MG SSO on December 27, 2004	\$516,000	\$484,000	12/23/2008	Private Sewer Lateral Replacement Program
2006	Ross Valley Sanitary District	SSO totaling 472,600 gallons on December 31, 2005	\$78,000	\$62,000	2/1/2008	Creek restoration projects in Corte Madera Creek watershed.
2006	East Bay Municipal Utility District	10,600,000 gallon SSO on December 18, 2005	\$314,000	\$0	n/a	n/a

Year	Discharger	Violation Description	Penalty Amount	SEP Dollar Amount	Completion Date	SEP Description
2007	San Francisco Public Utilities Commission	Unauthorized discharge and poor cleanup of 475,000 gallons of raw sewage onto the Great Highway and Ocean Beach on November 13, 2006	\$626,000	\$582,000	8/31/2010	San Francisco Unified School District Schoolyard Greening Projects
2007	City of Pacifica	SSO totaling 253,000 gallons on December 3, 2005	\$190,000	\$0	n/a	n/a
2008	City of San Mateo	87 SSOs totaling 3.5 million gallons between 2004-2008	\$950,000 with CDO	\$760,000	7/1/2014	Private Sewer Lateral Replacement Project
2008	Town of Hillsborough	89 SSOs between 2004-2008	\$405,000 with CDO	\$225,000	7/1/2014	Private Sewer Lateral Inspection and Replacement Project
2008	Crystal Springs County Sanitation District	22 SSOs between 2004-2008	\$23,375 with CDO	\$0	n/a	n/a
2008	CalTrans	Dry weather SSO to Guadalupe River during emergency repair to Interstate 880 and off ramp Route 82	\$150,000	Memorandum of Understanding (MOU)	n/a	The MOU is to improve existing project planning procedures, spill identification, and response procedures.
2009	Sewerage Agency of Southern Marin	Bypass of 3.4 MG of partially treated sewage from the wastewater treatment plant to surface waters and other sewage discharges from January 1, 2001 to September 30, 2008.	\$1,600,000	\$800,000	7/1/2014	Richardson Bay Audubon Sanctuary's Aramburu Island Clean Up, Restoration, and Enhancement Project (\$200,000) and Private Sewer Lateral Replacement Program (\$600,000)

Year	Discharger	Violation Description	Penalty Amount	SEP Dollar Amount	Completion Date	SEP Description
2009	Mount View Sanitary District	586,000-gallon SSO from the District's Pump Station No. 4.	\$270,000	\$125,000	5/1/2015	Peyton Slough Hydraulic Relief Project
2009	Sausalito-Marin City Sanitary District	Wastewater treatment plant spills totaling 632,700 gallons and a 9,000-gallon SSO.	\$258,000	\$119,000	11/2010	Marine Mammal Center Rehabilitation Project
2009	East Bay Regional Park District	22,260-gallon SSO to Arroyo Del Valle Creek.	\$3,900	\$0	n/a	n/a
2009	City of Pacifica	Numerous sanitary sewer overflows (412,951 gallons) and a bypass of (6.9 million gallons) partially treated wastewater in January 2008 to Calera Creek and the Pacific Ocean.	\$1,700,000 with CDO	\$820,000	1/1/2016	Private Sewer Lateral Replacement Project
2010	City of Oakland	15 SSOs discharged to waters of the State and related reporting and notification violations.	\$155,000 with CDO	\$0	n/a	n/a
2010	City of Sausalito	SSOs that occurred in July 2008 at Woodward Avenue in Sausalito.	\$75,342	\$0	n/a	n/a

Year	Discharger	Violation Description	Penalty Amount	SEP Dollar Amount	Completion Date	SEP Description
2010	City of San Bruno	148 sanitary sewer overflows between December 1, 2004, and December 31, 2009. Total volume discharged and not recovered was 1,953,225 gallons. Discharges ultimately reached ground or surface waters.	\$621,100 with CDO	\$295,550	6/1/2016	Private Sewer Lateral Grant Program (\$199,622) and Marine Mammal Center Rehabilitation Project (\$95,928)
2010	Sonoma Valley County Sanitation District	37 sanitary sewer overflows for the period of January 31, 2007, through January 31, 2010	\$383,000	\$183,250	1/31/2014	The Fryer Creek Habitat Enhancement Project
2010	Novato Sanitary District	Sanitary sewer overflows, unauthorized discharges of sludge and chlorinated effluent, and discharge above effluent limits for total suspended solids.	\$354,240.72	\$140,138	8/31/2016	Bahia Tidal Pond Enhancement and Marsh Monitoring Project and Simmons Slough Wetland Enhancement Project
2011	City of Redwood City	A 94,900 gal SSO of which 57,107 gal discharged to surface water.	\$95,600	\$0	n/a	n/a
2012 and 2013	Ross Valley Sanitary District	36 SSOs and failure to meet notification and reporting requirements.	\$1,539,100 with CDO	\$721,750	11/1/2016	Southeastern Creekside Marsh Habitat Enhancement Project (\$249,370) and Private Sewer Lateral Replacement Grant Program (\$482,380)



Directors
 Manny Fernandez
 Tom Handley
 Pat Kite
 Anjali Lathi
 Jennifer Toy

Officers
 Richard B. Currie
General Manager/
 District Engineer

David M. O'Hara
Attorney

DATE: August 5, 2014

MEMO TO: Board of Directors - Union Sanitary District

FROM: Richard B. Currie, General Manager/District Engineer

SUBJECT: Agenda Item No. 9e – Meeting of August 11, 2014
 Information Item: **Schedule of Board Workshops/Special Meetings through October 2014**

The following is a list of workshops/special meetings that have been scheduled through October 2014.

Workshop Topic	Date	Time
USD Forcemain Alignment	Monday, August 18, 2014	TBD
Board Planning Meeting	Monday, September 15, 2014	6:30 p.m.
ACWD/USD Joint Meeting	Thursday, September 25, 2014	6:30 p.m.
Board Retreat	Monday, September 29, (5 – 8 p.m.)	5:00 p.m.
Private Lateral Study	Monday, October 6, 2014	6:30 p.m.
Unclassified Staff Benefits Workshop	Monday, October 20, 2014	6:30 p.m.

Oakland, EBMUD, other East Bay agencies reach clean water pact

By Bay City News

The city of Oakland, the East Bay Municipal Utility District and six other East Bay cities have reached an agreement with federal environmental regulators to prevent sewage overflows and spills into the San Francisco Bay, officials said today.

The clean water agreement, which calls for updating aging sewer infrastructure, is in the form of a 22-year-long federal consent decree with the U.S. Environmental Protection Agency lodged today in U.S. District Court.

It resolves a lawsuit the EPA and the California State Water Resources Control Board filed against eight East Bay agencies in 2009 to prevent spills into the Bay and local overflows throughout the East Bay.

Oakland officials said they and the other parties involved in the matter worked cooperatively to reach an agreement that will protect creeks, parks, shorelines and public health in the East Bay.

In addition to Oakland and EBMUD, the parties involved in the agreement are the cities of Albany, Alameda, Berkeley, Emeryville and Piedmont, as well as the Stege Sanitary District, which covers Kensington and parts of El Cerrito.

The parties involved in the suit said that during periods of heavy rainfall, flows have often exceeded the capacity of EBMUD's sewage treatment plant, discharging partially treated sewage into the Bay.

They said that even during normal operations, thousands of miles of aging sewage pipes in Oakland and other cities clog due to grease, roots, and other obstructions, resulting in local overflows of raw sewage. Some of these pipes are more than a century old.

Oakland City Attorney Barbara Parker said in a statement, "Although the vehicle for these negotiations was a lawsuit, all parties worked cooperatively to reach our common goal of providing greater protections of the health and welfare of our environment and the citizens of the East Bay."

Parker said, "This agreement does not simply increase repairs to our sewer infrastructure. It also creates jobs, makes Oakland a greener community and helps to secure environmental justice for East Bay residents."

Oakland officials said that before the suit was filed in 2009, they had complied with all EPA regulatory enforcement actions and had begun the work to complete hundreds of millions of dollars in improvements the EPA and state water board ordered in the 1980s.

Since the suit was filed, Oakland officials said they, EBMUD, and the neighboring cities have worked together to fix leaky sewer pipes and build wet weather facilities to prevent heavy storms from causing raw sewage overflows into the Bay.

Oakland alone has spent about \$300 million to improve its collections system and reduce flows, city officials said.

They said the joint efforts were successful in reducing discharges of sewage to the Bay, but EBMUD's three wet weather facilities were unable to meet current tougher standards for wastewater secondary treatment.

Under terms of the agreement, Oakland is expected to spend up to an additional \$13 million each year on sewer infrastructure above the \$52 million it is currently spending annually to repair and upgrade the city's sewer system.

Oakland officials said the agreement also includes payment of a one-time civil penalty of \$850,000 to the EPA. All of the other defendants also are paying civil penalties, according to Oakland officials.

The work in Oakland will be funded by sewer service fee increases the City Council adopted in 2010, so the agreement's additional spending requirements will not cause budget deficits or service cuts in other areas, city officials said.

Under the terms of the consent decree, Oakland will be responsible for upgrading 13 miles of sewers per year and substantially increasing regular sewer inspection and maintenance.

The agreement also includes an investigation program to identify and disconnect potential direct storm water connections or other sources of major inflow during storms.

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BAY AREA & CALIFORNIA

EAST BAY

Deal reached to keep raw sewage out of bay

By John Coté

In the next two decades or so, the millions of gallons of sewage that flow each year to the San Francisco Bay from antiquated East Bay sewer systems will drop to zero.

At least, that's the goal of a sweeping agreement announced Monday requiring the East Bay Municipal Utility District and seven communities it serves, including Oakland and Berkeley, to repair 1,500 miles of pipes over a 21-year period.

The deal settles a federal lawsuit brought in 2009 by the U.S. Environmental Protection Agency.

"It's really a big deal, because it's a federally enforceable agreement," said Jared Blumenfeld, regional administrator for the EPA, which sued

the utility district and its cities for allegedly violating the federal Clean Water Act.

Blumenfeld described the sewer system as being in a "really bad state of disrepair." During rainstorms it is inundated with water, forcing raw sewage leaks from manholes as well as massive discharges from three wastewater treatment plants along the bay — two in Oakland and one in Richmond, according to court documents.

"Nationally, this is one of the last large systems to be dealt with," Blumenfeld said.

EPA officials estimate the upgrades will cost about \$1.5 billion. The utility district and local governments named in the lawsuit will be responsible for about \$900 million in sewer work, including repairing

cracked pipes, regularly cleaning them to prevent overflows of raw sewage, and eliminating illegal sewer connections.

An estimated \$600 million in upgrades is expected to be borne by property owners fixing private sewer lines that feed into the publicly maintained system, which usually runs down the middle of the street.

When a property is sold or \$100,000 in renovation work is done, the owner will be required to demonstrate that the lateral sewer line is in good shape or fix it, which will cost an estimated \$3,000 to \$7,000, officials said.

"That's one reason for the length of the settlement to be 21 years; the majority of houses will either be renovated or sold during that 21-year period," Blumenfeld said.

The other reason is the costly work that must be undertaken by the East Bay Municipal Utility District, which operates the wastewater treatment system, and the seven

communities that feed into it: Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont and the Stege Sanitary District, which serves El Cerrito, Kensington and part of Richmond.

For the East Bay Municipal Utility District alone, the cost is expected to be about \$5 million a year. That translates into a one-time increase of about 1 percent on wastewater rates, which currently average \$19.25 a month per household, said Abby Figueroa, a spokeswoman for the utility district.

That doesn't include the costs for individual cities to implement the repairs required under the settlement.

"It's a big investment for the East Bay," Figueroa said. "But everyone around the table agrees it's worth it because we all benefit from a clean bay."

John Coté is a San Francisco Chronicle staff writer. E-mail: jcote@sfgate.com Twitter: [@johnwcote](https://twitter.com/johnwcote)

OAKLAND

7/31/14

Man arrested after jumping on dais

Police officers will be stationed at all future City Council meetings after a 20-year-old man was arrested Tuesday night for reportedly jumping on top of the dais during a public hearing, officials said Wednesday.

Dante Cano was arrested on suspicion of disturbing a public meeting and trespassing. Because he apparently has outstanding warrants, he was being held in lieu of \$70,000 bail at Santa Rita Jail and is due in court Thursday.

The incident happened before 7 p.m. Tuesday inside the chambers at City Hall while council members were discussing a West Oakland development project. No police were in the chambers at the time.

Cano, who was wearing a backpack and baseball cap, jumped a table and then went toward the dais screaming unintelligibly, officials said. He then jumped on top of the dais before being detained by a city staffer and some community members.

Assistant Chief of Police Paul Figueroa was in the city administrator's office at another meeting but saw the television feed and rushed to the chambers. By the time he arrived, Cano was almost outside the chambers and Figueroa radioed for officers to respond and detain the man.

Two officers were outside in Frank H. Ogawa Plaza and saw Cano run from the building.

They began chasing him and he was arrested without incident at 15th Street and Broadway.

Figueroa said that in the future, officers will be present at all full City Council meetings in the chambers and police will review security procedures for City Hall. Before Tuesday, officers were assigned to council chambers on a case-by-case basis, depending on subject matter and projected number of attendees. It has not been determined whether officers will be present at council committee hearings.

— Harry Harris, Staff

Big step for downtown

Fremont plans \$250M civic center complex as centerpiece for project

By Chris De Benedetti

cdebenedetti@bayareanewsgroup.com

FREMONT — The city's plan to create a traditional downtown, where people walk among condos, shops and restaurants, has added

vision

a crucial but costly element: A \$250 million civic center complex.

The sweeping project would include a new City Hall, which Fremont envisions as downtown's centerpiece. "Downtown is something everyone in Fremont has dreamed of for a long time," said deputy city manager Jessica von Borck. "We see the civic center as providing another venue for

the community to gather and celebrate."

The civic center would fill a 6-acre parcel on Capitol Avenue, between Liberty and State streets, and would create an identity for the area. Construction of the publicly funded project could be as high as a quarter-billion dollars.

City leaders say it will be worth the price as it could boost retail

sales and allow administrators to serve the public more efficiently.

"It won't only serve as a civic center," von Borck said. "We intend for it to bring visitors and community members to activate its retail space throughout the day."

When the civic center draws people downtown, foot traffic would be funneled to 10,000

square feet of stores and dining spots along Capitol Avenue, said.

"It will be a key component that we intend as a stimulus to downtown, to bring economic benefits overall to the city," she said.

When Fremont condenses its city offices — now dispersed in several locations — it could sell

those sites and other surplus parcels to boost the city's revenue, Mayor Bill Harrison said.

"We'll sell about 10 properties to help pay for the downtown and Warm Springs projects," he said.

The surplus property sales would cover 25 to 30 percent of the entire civic center's construction costs, von Borck said.

"We're also seeking grants and other creative ways to fund things," she said.

The city approved the civic center plan last week and hopes to start the first of four phases in 2016.

First, Fremont would build a community center that would host public events and serve as an interim City Council chamber.

Next, a housing complex with up to 60 units and a seven-level parking garage would start construction in 2019, according to city reports. A nine-story City Hall and adjacent public park, estimated at \$183 million, would break ground in 2024.

A fourth phase would add a small annex building to the complex, but the city could nix that part of the plan, a city report states.

At a meeting earlier this year, Fremont council members said they want the civic center to become a "distinctive central public gathering place" that also "demonstrates an inviting civic identity that is whimsical yet timeless."

For years, there was little identity in a sluggish down-



town that was more dream than reality. But the 110-acre area has seen steady progress, including the opening last year of a Whole Foods store and a 300-unit apartment complex.

Last month, Fremont approved 140 townhomes and condos and 21,000 square feet retail on a 4-acre property across the street from the civic center site.

And city leaders will hold a groundbreaking ceremony scheduled for 4:30 p.m. Friday celebrating the extension of Capitol Avenue, downtown's unofficial Main Street.

Harrison said he hopes the civic center becomes an iconic gathering spot the whole community can use.

"The plan for this basically draws from everything in a city — residential, commercial, entertainment, civic and cultural," Harrison said. "I'd like to see a City Hall that represents the entire city."

Contact Chris De Benedetti at 510-353-7011

7/23/14

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Property taxes may rise — sans vote from public

By Paul Rogers

progers@mercurynews.com

Major water districts in California are quietly considering using property taxes — and possibly raising them without a vote of the public — to help fund Gov. Jerry Brown's \$25 billion plan to build two massive tunnels through the Sacramento-San Joaquin River Delta.

Most property tax hikes require a two-thirds vote, as required under California's landmark Proposition 13, which voters passed in 1978. But the water agencies contend they are not bound by that requirement.

They say they were given the authority to raise property taxes to pay for the State Water Project, a vast system of dams and canals, in both a 1959 law and a year later in a statewide ballot measure. And those predate Proposition 13.

The Santa Clara Valley Water District, which serves 1.8 million customers in Silicon Valley, this month discussed raising property taxes from \$36 a year to \$60 a year on the average assessed residential property over the next decade to help pay some of the \$228 million it expects to contribute to the Delta tunnels project between now and 2024.

"Because this is a tax that was already voted on, it was a pre-Prop. 13 measure," said Jim Fiedler, the district's chief operating officer. "Because it was

adopted by voters prior to that date, it doesn't qualify for the two-thirds requirement."

Asked if there was any limit to how much higher property taxes could be raised if the Delta tunnels project has cost overruns, similar to the Bay Bridge or high-speed rail projects, Fiedler said he didn't know. "That's a good question. That's a decision our board would make," he said. "But it would be in public hearings, not behind closed doors."

Until now, it had been assumed that water agencies supporting the tunnels project would be raising water rates to pay for the tunnels.

As word has trickled out about the property tax strategy, anti-tax activists, environmental groups and even other water agencies are raising concerns.

The Metropolitan Water District of Southern California, which provides water to 19 million people in and around Los Angeles, is also discussing using that agency's property tax authority to help pay its share of the cost.

But its property tax rate, now about \$10 a year on the average home in Southern California, wouldn't be increased, said general manager Jeff Kightlinger.

"If there are cost overruns, water rates would go up," he said. "It has been a policy of our board to not raise property taxes."

OAKLAND

7/24/14

EBMUD to ban water waste but no fines

The East Bay Municipal Utility District is moving to declare several water wasting practices illegal in the drought, but without imposing fines to enforce the rules.

The district board agreed Tuesday to hold a public hearing at its 1:15 p.m. meeting Aug. 12 on a proposed emergency drought regulation.

The rules would make it mandatory not to flood pavement with runoff and not to water lawns more than twice a week. Water customers also would be required to have a shut-off nozzle on their hose when they wash cars.

The district already asks its customers to take these measures voluntarily, but state water officials are urging suppliers throughout California to enact mandatory bans against water wasting practices.

LOS ANGELES 7/24/14

Ex-Bell councilman is sentenced in scandal

Another former Bell City Council member has been sentenced in the corruption scandal that engulfed the Los Angeles County community.

Prosecutors say 64-year-old George Cole was sentenced Wednesday to 180 days of home confinement, ordered to pay more than \$77,000 in restitution and perform 1,000 hours of community service.

Prosecutors wanted a four-year prison sentence for Cole, who was convicted of two counts of misappropriation of public funds and pleaded no contest to one additional count.

He's the second of five former council members to be sentenced in the illegal pay scheme. Previously, George Mirabal was sentenced to a year in jail and \$242,000 in restitution.

The scheme's mastermind, former City Manager Robert Rizzo, and his assistant have been sentenced to years in prison and repayment of millions of dollars.

A year in jail for Bell ex-mayor

Hernandez was 'asleep at the switch,' judge says

By Linda Deutsch
Associated Press

LOS ANGELES — A former mayor of the scandal-ridden city of Bell who could not read or write English was sentenced to serve a year in Los Angeles County jail and five years of probation.

Oscar Hernandez was ordered Thursday to pay \$241,000 in restitution to the city that was driven close to bankruptcy by a scheme to vastly inflate official salaries.

Superior Court Judge Kathleen Kennedy also ordered Hernandez to perform 1,000 hours of community service, but she suspended a four-year prison term.

Kennedy said the former official should not have run for office because he couldn't read English and wound up rubber-stamping documents for corrupt city manager Robert Rizzo. Hernandez came to the U.S. from Mexico as a teenager.

Hernandez expressed remorse, saying, "The problem was my English." He said he should have asked more questions of Rizzo, who was collecting \$800,000 a year for running the tiny blue-collar town of 35,000 people.

"Mr. Hernandez is an example of someone who came from another country, made something of himself and ran for public office and was elected," Kennedy said. "It takes a lot to run a city. One would think that being able to read and write English would be a prerequisite to running a city. I don't think Mr. Hernandez obtained those skills. Mr. Rizzo took advantage of that, having him sign documents he didn't read."

Hernandez is the latest in a series of former officials of the city to be sentenced for corruption-related offenses involving misappropriation of funds.

"There's a lot of blame to go around, and Mr. Hernandez, there's blame for you," said the judge who presided over trials of the former officials. "If you didn't have the skills to do the job, you shouldn't have run and taken the position."

"The people of Bell will have to pay very high taxes because you were asleep at the switch."

His lawyer, Stanley Friedman, told the judge:

"There is a stain that will remain on Mr. Hernandez's life forever."

Deputy District Attorney Sean Hassett acknowledged that Hernandez helped prosecutors make their case with a lengthy statement when he was arrested in which he said he and others did a "lousy" job. "He did make what I consider a truthful statement and laid out the case," Hassett said.

But Hassett faulted Hernandez for covering up Rizzo's misdeeds.

When the scandal broke in 2010, Hassett said Hernandez was "the face of Bell, and he came out in support of Rizzo," saying he deserved his huge salary.

"He covered up for Robert Rizzo," Hassett said. "It was a close thing. He almost saved the day for himself, Robert Rizzo and his co-defendants."

Hernandez, the fourth of five former council members sentenced in the public corruption case, went from earning \$673 a month on the council to collecting \$100,000 a year by inflating his salary and serving on sham commis-

The judge told Hernandez that he could have fired Rizzo, but "you were complacent. You had no reason to upset the apple cart because you were getting a very good salary."

"Do I think you are the worst of the worst?" the judge said. "No. I think you did wrong."

Kennedy said Hernandez had been alternately portrayed as "a bumbling bumpkin" or "sophisticated and pulling strings," but the truth was somewhere in between.

Hernandez's lawyer said he now lives in a small trailer and suggested he doesn't have the money to make restitution. Hassett said he owns several buildings in Bell and his assets can be seized to pay restitution.

In the end, the judge said partial blame rests with the citizens of Bell, few of whom voted on city issues or attended council meetings. Although a few residents had expressed concerns about rumors of large salaries, the scandal didn't come to light until the Los Angeles Times obtained city officials' true salaries under threat of legal action and published them in 2010. The resulting outrage led to Bell residents recalling the entire city council.

"This wouldn't have happened if people were as interested then as they are now," Kennedy said.

7-26-14

Newark vice mayor won't seek re-election

Apodaca says loss of family members had major role in decision

By Chris De Benedetti
cdebenedetti@
bayareanewsgroup.com

NEWARK — Vice Mayor Ana Apodaca, a City Council member since 2005, has announced she will not seek re-election.

The two-term Newark coun-

cilwoman revealed her decision at a city meeting Thursday night, saying that recent "life-changing moments" have led her to reassess her priorities.

"It has been my complete honor to be a part of Newark's City Council and my privilege to be entrusted by our citizens to represent them," she said, reading from a written statement. "This has not been an easy decision."



A. Apodaca her family members played a major role in her decision, Apodaca said.

"Over the past two years ...

The councilwoman's sister, Deborah Apodaca, died a year ago, and her father, Daniel Apodaca, died in May.

The loss of her family members played a major role in her decision, Apodaca said.

these moments have caused me to reassess my life," she said. "I have given serious thought to how I prioritize my time with family, my civic responsibilities, my career and other commitments."

Voters elected Apodaca, now 41, to the City Council nearly nine years ago. She ran for mayor in 2011, capturing 33 per-

See **NEWARK**, Page 3

Newark

Continued from Page 1

cent of the vote and finishing second to Al Nagy. Her four council colleagues have voted her vice mayor each year since.

Apodaca's announcement will leave two of Newark's three November council races without an incumbent. Councilman Bob Marshall, who was appointed in 2012, also is not seeking re-election.

Nagy, who serves on the

five-member council, said Friday he will run for a second term, but it will be different not having Apodaca there.

"It leaves a big void on the council because of her knowledge, experience and the enthusiasm she has for the job," Nagy said. "She has put her heart and soul into this community for years."

Apodaca, a Kaiser Permanente employee, said she is most proud of helping pass Measure U, a utility users tax that filled Newark's budget gaps after the 2008

economic downturn.

She said she will remain active in the community through volunteer work after her term expires in December and would not rule out a return to public office.

"I'll have plenty of time to think about returning to politics," Apodaca said. "But at this time, I just can't make a four-year commitment."

Contact Chris De Benedetti at 510-353-7011. Follow him at [Twitter.com/cdebenedetti](https://twitter.com/cdebenedetti).

"It leaves a big void on the council because of her knowledge, experience and the enthusiasm she has for the job. She has put her heart and soul into this community for years."

— Newark Mayor Al Nagy

STATE POLL

Forced water cuts favored

Survey shows 75% of residents support mandated reductions, but agencies yet to get on board

By Jessica Calefati

jcalefati@bayareanewsgroup.com

SACRAMENTO — Few local water agencies have forced customers to cut their water use amid the ongoing drought, but a new poll shows a large majority of Californians support mandates to turn off the tap.

Three-quarters of people surveyed across the state want to see their local water providers require reductions, the Public Policy Institute of California found.

Support for restrictions stretches across the state and tops 80 percent in Los Angeles, where water use has barely budged since Gov. Jerry Brown declared a drought emergency earlier this year, according to a survey the group released Wednesday. With Brown also pushing for tougher curbs, it appears the agencies themselves, who stand to lose money if Californians use less water, are the holdouts.

Water is too important to leave to personal

See POLL, Page 8

Poll

Continued from Page 1

discretion, a Sunnyvale resident said Wednesday.

"You need to make the rules compulsory or a significant portion of people won't do what needs to be done," said Kevin Jackson, 61, a retired computer professional. "Water is right up there with air in terms of resources that have no substitutes, but some people just won't listen."

More than half of respondents said they believed water supply is a big problem in their part of the state, but Californians seem undecided about why that is. A majority of people polled said they believe global warming risks a drier California in the future, but most believe natural weather patterns have caused the now three-year drought.

The institute conducted

the survey between July 8 and July 15 among 1,705 adults. Its margin of error is plus or minus 3.7 percentage points.

Support for local, mandatory water-use restrictions has picked up in recent months because people are becoming more keenly aware of how serious the bone-dry weather is for the state's economy and ecosystems, said Felicia Marcus, chairwoman of the state Water Resources Control Board.

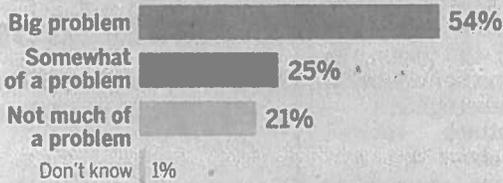
"No one inherently wants to waste a precious resource like potable drinking water, but people have busy lives," Marcus said. "They're not out there checking reservoir levels and thinking about how long this drought might last. It's our job to tell them."

The state recently kicked off a drought-busting "Brown is the New Green" advertising campaign, and last week, a state water

Californians' water concern

According to a new poll, a large majority believe the state's water supply is a problem and favor mandatory water-use reduction.

Would you say the supply of water is a big problem, somewhat of a problem or not much of a problem in your part of California?



Would you favor or oppose your local water district imposing mandatory water-use reduction?



Source: Public Policy Institute of California survey of 1,705 adult residents taken July 8-15. Margin of error: +/- 3.7 percentage points

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agency approved unprec- edented penalties for people who waste water by soaking the lawn or washing a car using a hose without a shut-

off nozzle.

Cindy Aisenbrey was a child when California suf- fered through its last severe drought, and the 47-year-

old said she wonders why the stiff water-use restric- tions the state adopted then aren't in place now. Limit- ing the number of days ho- meowners can water their lawns isn't enough, she said.

"Back then, no one served water at restaurants. Water was restricted everywhere," said Aisenbrey, a contract negotiator from Livermore. "It would behoove us to get back to that. Otherwise, we'll be in very dire straits."

The timing of a local wa- ter agency's decision to con- strain customer water use is crucial if the provider hopes to build public support for an imposed hardship, said Jay Lund, a resources ex- pert at UC Davis. Moving too quickly could cause an unwanted backlash.

"If you're a water utility, you don't want to be accused of crying wolf," Lund said. "If they impose restrictions this year, and next year we get wet weather, people will say, 'Why did you do it?'"

This is the dilemma urban utilities face."

Walnut Creek resident Jim Rogers said he favors water-use restrictions tai- lored to individual house- holds and hopes to see Cen- tral Valley farms — which use 80 percent of the state's water to grow a large por- tion of the country's fruits and vegetables — start planting fewer water-inten- sive crops.

No one in California is doing enough to plan ahead for a drought that could last years, said Rogers, a 57- year-old teacher.

"No one in California wants to accept that any- thing bad is happening until that thing has become a di- saster. Everyone I know is still hoping a good El Niño season will save us."

Contact Jessica Calefati at 916-441-2101. Follow her at [Twitter.com/calefati](https://twitter.com/calefati). Read the Political Blotter at IBAbuzz.com/politics.

CALIFORNIA DROUGHT

7/28/14

Water district surveys can help homeowners cut waste, bills

The way Chris Dundon, the Contra Costa Water District's conservation coordinator, tells the story, the customer who called for advice was a transplant from San Francisco with a yard so large it required 28 watering stations.

Most were drip irrigation, some were sprinklers, and nearly all were broken. That's what accounted for his enormous water bill.



TOM BARNIDGE
COLUMNIST

"He'd been using 3,000 to 5,000 gallons a day," said Dundon, who showed him the repairs that were needed. "After that, his water bill dropped from over \$300 to about \$60."

The story is an extreme one — a typical household consumes about 250 gallons a day — but it brings home a broader

See **BARNIDGE**, Page 8



SAVING WATER

■ **Outdoor** irrigation systems are often the source of water waste. Indoors, leaky toilets top the list.

■ **For a** water waste survey, call 925-688-8320.

Barnidge

Continued from Page 1

point: Inattention to water usage leads to water waste. As you may have heard, California is running a bit dry.

Dundon's department specializes in conservation surveys, at the request of the customer, during which a technician spends an hour or so with the homeowner, running down a checklist of ways water might escape.

"The program is designed to show customers how much water they're using," he said. "Then we show them where they're using it. We teach them how to read their meter."

A typical call begins with the irrigation system, a stopwatch and eyes on the meter. Then comes the math. If each of four stations runs 10 gallons

a minute for 12 minutes a day for five days a week ... wow, 2,400 gallons of water disappeared. Maybe that can be reduced.

"People like to tell me they're taking three-minute showers," Dundon said. "I tell them watering their front lawn is like a whole basketball team showering each day."

Dundon is careful to explain that conservation is not a quick fix to water woes. It's a process that yields cumulative benefits. His office typically audits 500 or more households a year — with heightened interest this year, the number may surpass 700 — but he's looking at the long-term picture.

"We're nibbling away at the apple," he said. "If over the next 40 years, we've saved 10,000 acre feet, that's a big chunk of water, and it doesn't negatively

affect consumers."

Bent, broken or blocked pop-up sprinkler heads are frequent offenders. So are torn diaphragms in sprinkler valves. If there's a green patch in a brown yard, it likely indicates a break in the line. The biggest indoor headache is old toilet flappers that still flap but don't seal.

At the end of a survey, consumers get a list of recommended actions, none of which is required. They also get cards to return with evaluations of the survey, which have been overwhelmingly positive. "The one negative we constantly get," Dundon said, "is, 'Why didn't I know about this before?'"

Contra Costa is not alone in conservation efforts. The East Bay Municipal Utility District provides do-it-yourself home survey kits and also does home

audits. Both districts give cash rebates for water-efficient toilets, clothes washers and lawn conversions.

Perhaps it's no surprise that water usage in their districts has declined. In the four months after EBMUD called for voluntary reductions this year, consumption dropped 10 percent compared with the same period last year. Contra Costa, which measures usage against numbers established before recent droughts (from 2005-2007), reports a 17 percent reduction in total consumption since then.

There's room for more conservation. The key is attentive consumers.

Next time you've got time on your hands, check out your sprinkler heads.

Contact Tom Barnidge at tbarnidge@bayareanewsgroup.com.

Surge in 'water cops' expected

Drought forces some districts to increase personnel

By Paul Rogers

progers@mercurynews.com

It's about to get more difficult to go unnoticed if your sprinklers are watering the street more than your lawn.

California's worsening drought and mandatory new state water rules are prompting Bay Area water agencies to beef up their conservation staffs — the employees sometimes called "water cops."

Only a few cities, including Santa Cruz and Sacramento, have resorted to writing tickets or issuing fines.

But most others are simply responding to complaints by sending employees to homes and businesses with a stern warning, and sometimes a door hanger.

"The bottom line is that we are just not getting the results we would like to see for water reduction," said Joan Maher, deputy operating officer for the Santa Clara Valley Water District.

On Tuesday, the district's board will vote on whether to spend \$500,000 to hire up to 10 new temporary employees to help enforce water use prohibitions across Silicon Valley.

If the proposal is approved, as expected, the workers would respond in person to complaints about property owners wasting water.

They also would send the information to whichever of the 12 cities or private companies sends the property owner their bill.

Few Bay Area cities have begun to impose fines yet for wasting water, but if they eventually do, they could use the information to write tickets.

In February the Santa Clara Valley Water District asked its 1.8 million customers in the county to cut water use by 20 percent compared with last year, but so far, none of its retailer providers has met that goal.

Palo Alto and Mountain View conserved the most, with a 17 percent reduction each, and the county-wide total is a 12 percent reduction.

Similarly, in the East Bay, the East Bay Municipal Utility District in Oakland hired a new outreach

person this week, and another starts next week, said district spokeswoman Abby Figueroa.

They will join nine other East Bay MUD staff members who help do free water audits at homes and businesses, looking for leaks and telling property owners when they are violating the district's and state's water wasting rules.

"We have a backlog with water wasting complaints," Figueroa said. "We're getting calls about runoff, broken sprinklers, people washing cars too much. Everyone is hear-

ing all the media reports and talking about drought a lot. The news definitely got people's attention."

In February, East Bay MUD asked its 1.3 million customers in Alameda and Contra Costa counties to voluntarily reduce water use by 10 percent.

Between Feb. 1 and May 31, they achieved that 10 percent savings. But it is still below the 20 percent savings that Gov. Jerry Brown requested statewide in January when he declared a drought emergency as the state moved into its third dry year.

Figueroa said the agency has no plans this year to issue fines to people violating its rules or new rules passed last week by the State Water Resources Control Board that ban washing cars without a nozzle on the hose, spraying down pavement, watering landscaping so much that it runs into streets and running ornamental fountains without recirculating systems.

"We've been conserving. Our total system storage is in good shape com-

pared to other districts," she said. "And we brought in additional supplies. That's getting us through the summer."

At an Aug. 12 board meeting, the district is expected to pass rules limiting lawn watering to two or three days a week.

Contra Costa Water District, which requested a 15 percent voluntary reduction, has no plans for fines.

It has eight outreach employees and enough budget to hire two more if needed, said district spokeswoman Jennifer Allen.

The Bay Area's largest water district, the San Francisco Public Utilities Commission, which provides water to 2.6 million people in San Francisco, San Mateo, and in north Santa Clara and southern Alameda counties through the Hetch Hetchy system, is planning to either hire or reassign six employees to respond to water wasting complaints, and look for violations.

The agency is considering in the next few weeks imposing fines on San Francisco residents who waste water, with a warning for first violations, said Steve Ritchie, its assistant general manager.

"Penalties are the last resort. But we are definitely keeping that option on the table," he said. "It's important that we have that as a tool."

Some Bay Area residents are surprised that there aren't more areas issuing fines, as city officials in Sacramento, Santa Cruz and other communities have done for flagrant water wasting.

"Nobody wants to be seen as fining people, but what we are doing isn't enough," said Peter Gleick, president of the Pacific Institute, an Oakland nonprofit group that studies water usage.

"Maybe we'll muddle through this year and we'll be lucky and next year will be wet," he said.

"But if not, we're in a deep, deep hole and voluntary will be off the table. We will be talking about things like mandatory removal of lawns and per-capita rationed amounts."

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