



NORTH MARIN WATER DISTRICT AGENDA - REGULAR MEETING

April 3, 2018 – 6:00 p.m.
District Headquarters
999 Rush Creek Place
Novato, California

Information about and copies of supporting materials on agenda items are available for public review at 999 Rush Creek Place, Novato, at the Reception Desk, or by calling the District Secretary at (415) 897-4133. A fee may be charged for copies. District facilities and meetings comply with the Americans with Disabilities Act. If special accommodations are needed, please contact the District Secretary as soon as possible, but at least two days prior to the meeting.

Est. Time	Item	Subject
6:00 p.m.	CALL TO ORDER	
	1. APPROVE MINUTES FROM REGULAR MEETING , March 20, 2018	
	2. GENERAL MANAGER'S REPORT	
	3. OPEN TIME: (Please observe a three-minute time limit)	
	This section of the agenda is provided so that the public may express comments on any issues not listed on the agenda that are of interest to the public and within the jurisdiction of the North Marin Water District. When comments are made about matters not on the agenda, Board members can ask questions for clarification, respond to statements or questions from members of the public, refer a matter to staff, or direct staff to place a matter of business on a future agenda. The public may also express comments on agenda items at the time of Board consideration.	
	4. STAFF/DIRECTORS REPORTS	
	CONSENT CALENDAR The General Manager has reviewed the following items. To his knowledge, there is no opposition to the action. The items can be acted on in one consolidated motion as recommended or may be removed from the Consent Calendar and separately considered at the request of any person.	
	5. Consent - Approve: Furnishing and Delivery of Steel Pipe for Ridge Road Pipeline Replacement	
	6. Consent - Approve: Multi Agency Letter Supporting Changes to the Marin Local Coastal Program Amendment	
	ACTION CALENDAR 7. Approve: Ridge Road Pipeline Replacement Project – Award Construction Contract to W.R. Forde Associates, Inc. 8. Accept: Retiree Medical Liability Updated Actuarial Valuation	
	INFORMATION ITEMS	
	9. Technical Advisory Committee Meeting – March 5, 2018	
	10. Hydrant Damage History	
	11. North Bay Water Workshop #3 – March 26, 2018	
	12. MISCELLANEOUS	

All times are approximate and for reference only.

The Board of Directors may consider an item at a different time than set forth herein.

(Continued)

Est. Time	Item	Subject
		Disbursements – March 22, 2018
		Disbursements – March 29, 2018
		Final copy of WaterSense support letter
		Salinity Notice, Point Reyes Light- March 22, 2018
		2018 Strategic (Long-Range) Plan Development –Status Update
		Disposal of Surplus Equipment
		<u>News Articles:</u>
		ASCE 2017 Drinking Water Infrastructure Report Card
		ACWA News-New Polling Shows 73% of Californians Oppose a Drinking Water Tax
		City: Fountaingrove water system needs \$43 million replacement due to contamination after Sonoma County fires
		Glen Ghilotti Obituary
		City finances ‘pretty solid’
	13.	Closed Session: Conference with Real Property Negotiator (Drew McIntyre) regarding <i>price and terms of potential sale of Surplus Water from Lagunitas Creek</i> by Marin Municipal Water District (Government Code Section 54956.8)
7:15 p.m.	14.	ADJOURNMENT

1

DRAFT
NORTH MARIN WATER DISTRICT
MINUTES OF REGULAR MEETING
OF THE BOARD OF DIRECTORS
March 20, 2018

CALL TO ORDER

President Fraites called the regular meeting of the Board of Directors of North Marin Water District to order at 6:02 p.m. at the District Headquarters and the agenda was accepted as presented. Present were Directors Jack Baker, Rick Fraites, Michael Joly and James Grossi. Director Stephen Petterle was absent. Also present were General Manager Drew McIntyre, District Secretary Terrie Kehoe, Auditor-Controller David Bentley and Chief Engineer Rocky Vogler.

District employees, Robert Clark (Maintenance/Operations Superintendent), Tony Arendell (Construction/Maintenance Superintendent), Pablo Ramudo (Water Quality Supervisor), and Julie Blue were also in attendance. Lynne Rosselli from the Sonoma County Water Agency was also in the audience.

MINUTES

On motion of Director Baker, seconded by Director Joly the Board approved the minutes from the March 6, 2018 meeting as presented by the following vote:

AYES: Director Baker, Fraites, Grossi and Joly

NOES: None

ABSENT: Director Petterle

ABSTAIN: None

GENERAL MANAGER'S REPORT

During the General Manager's report, Mr. McIntyre discussed current rainfall activity and the possibility of mandatory water conservation in West Marin if MMWD's Kent Lake gauge doesn't receive the minimum rainfall threshold of 28-inches before April 1 for normal year conditions. Mr. McIntyre also talked about the upcoming North Bay Water Workshop No. 3 on March 26th and the Upper Russian River Managers meeting on March 28th.

PRESENTATION ON DRAFT FY 19 SCWA WATER TRANSMISSION SYSTEM BUDGET

Lynne Rosselli from Sonoma County Water Agency gave a presentation on the FY18-19 Proposed Budget and Rates Water Transmission System. During the presentation, Ms. Rosselli answered questions from various Board members.

OPEN TIME

1 President Fraites asked if anyone in the audience wished to bring up an item not on the
2 agenda and there was no response.

3 **STAFF/DIRECTORS REPORTS**

4 President Fraites asked if staff or Directors wished to bring up an item not on the agenda
5 and the following items were discussed:

6 Director Baker summarized the meeting with Supervisor Rodoni in reference to potential
7 formation of the North Bay Water organization

8 **MONTHLY PROGRSS REPORT**

9 Mr. McIntyre discussed current water production in both the Novato and West Marin service
10 areas and how it compared to previous years. Novato water production is up 13% in February vs.
11 last year and down 10% from 2013. West Marin water production is up 31% compared to last year
12 at this time. Consumption is not up as high and staff is continuing to investigate possible meter
13 inaccuracies as well as investigate the distribution system for potential water leaks. Mr. McIntyre
14 informed the Board that Stafford Lake is at 48% capacity, Lake Sonoma is at 85% capacity and
15 Lake Mendocino is at 88% capacity. He stated that safety and liability trends remain normal, the
16 current rate of days without a lost time accident continues to grow at 124 days and there was a
17 decrease in high bill complaints.

18 Mr. Bentley provided the Monthly Investment Report and discussed the Districts current
19 Investment Portfolio which has a cash value of \$14,877,300 and a market value of \$14,834,006.
20 The weighted average Portfolio rate was 1.29% compared to 1.24% the previous month.

21 **CONSENT CALENDAR**

22 On the motion of Director Baker, and seconded by Director Joly the Board approved the
23 following items on the consent calendar by the following vote:

24 AYES: Director Baker, Fraites, Grossi, and Joly

25 NOES: None

26 ABSENT: Director Petterle

27 ABSTAIN: None

28 **GHD INC. GENERAL SERVICES AGREEMENT**

29 The Board approved the GHD Inc. General Consulting Services Agreement.

1 **ACTION CALENDAR**

2 **AUTHORIZE AFFIRMATIVE VOTE FOR SCWA FY 19 WATER TRANSMISSION BUDGET**

3 Mr. McIntyre reported that the proposed Sonoma County Water Agency budget results in an
4 effective North Marin Water District rate increase of 4% with future annual purchase water rate
5 increases of up to 6%. The Board previously approved payment of \$1.28M to opt out of the
6 Agency's bond issuance which adjusts the commodity rate increase to 0.9%. Mr. McIntyre reminded
7 the Board that a TAC Ad Hoc subcommittee, which included David Bentley, was formed in
8 December and met twice in January to negotiate with the Agency. The Technical Advisory
9 Committee unanimously approved the FY19 SCWA budget on March 5, 2018. Mr. McIntyre stated
10 that staff's recommendation is to approve the budget as presented.

11 On the motion of Director Joly, and seconded by Director Baker, the Board approved the
12 SCWA FY 19 Water Transmission System Budget by the following vote:

13 AYES: Director Baker, Fraites, Grossi and Joly

14 NOES: None

15 ABSENT: Director Petterle

16 ABSTAIN: None

17 **AMI OPT-OUT POLICY**

18 Mr. Bentley presented a proposal for an AMI Opt-Out Policy. Currently nine customers have
19 requested not to have the AMI meters installed. The reasons varied from privacy to health
20 concerns. Staff recommended to go forward with the program and allow those that "opt-out" to read
21 their own meters which would be audited by staff annually, creating an adjustment billing if the
22 reported information was incorrect. A \$5 per bill surcharge was recommended to offset staff time
23 and postage. After much discussion from the Board it was decided to table the AMI Opt-Out Policy
24 allowing time for a legal review and further analysis.

25 **RATE INCREASE LETTER TO NOVATO CUSTOMERS**

26 Mr. Bentley advised the Board that California law requires that customers be notified of a
27 water rate increase at least 45 days prior to the public hearing. A revised draft which included minor
28 changes was given to the Board at the meeting. He stated that a public hearing is scheduled for
29 Tuesday, May 15th; therefore the letters must be mailed by March 31, 2018. Mr. Bentley advised the
30 Board that postage, stationary and copying cost to distribute the letters is estimated at \$10,500.

1 He informed the Board that the proposed commodity and bimonthly service charge rate increase for
2 Novato customers is 4.5%. He also stated that the median single-family residential customer will
3 see a \$2.50 per month increase or \$5 bimonthly on their typical bill.

4 On the motion of Director Baker, and seconded by Director Joly, the Board approved mailing
5 the rate increase letter to customers by the following vote:

6 AYES: Director Baker, Fraites, Grossi and Joly

7 NOES: None

8 ABSENT: Director Petterle

9 ABSTAIN: None

10 **CLAIM FOR DAMAGES - TROIA**

11 Mr. Bentley discussed the claim against the District. The Troias had a leak in their basement
12 caused by puncturing a waterline running behind the sheetrock apparently while hanging a picture,
13 and were unable to determine its source for months. During this time there was a service line leak
14 up the street from their house that resulted in water running onto their property. The District hired an
15 outside water restoration company to dry out the basement, and it was then discovered that the
16 claimants had a leak behind their wall which was causing the water damage to their basement. The
17 claimants however still believe that an oak tree in their backyard may have been damaged or killed
18 by the service line leak. Staff recommends the Board deny the claim, which will start the clock
19 allowing the Troias six months to settle and sign a release or file in civil court, should they pursue
20 this claim.

21 On the motion of Director Baker, and seconded by Director Joly, the Board approved denying
22 Troias claim for damages by the following vote:

23 AYES: Director Baker, Fraites, Grossi and Joly

24 NOES: None

25 ABSENT: Director Petterle

26 ABSTAIN: None

27 **INFORMATION ITEMS**

28 **2018 URBAN AREA WATER COST COMPARISON**

29 Mr. Bentley summarized the 2018 survey showing that even when including North Marin's
30 proposed 4.5% rate increase, the total annual water cost for a NMWD single-family home will rank

8th from the top of the 16 agencies we compare to. The median Novato single-family household's consumption is at 86, 600 gallons, which is down 4,300 from the prior year. Of interest, fourteen of the sixteen comparison agencies increased their water rates over the past year.

2ND QUARTER FY 17/18 – WATER QUALITY REPORT

Mr. Ramudo presented the 2nd Quarter FY 17/18-Water Quality Report. It was reported that Novato and Point Reyes met the federal and state primary and secondary water quality standards during the second quarter of the fiscal year 2017-2018.

STAFFORD LAKE SPILL/RAINFALL HISTORY

Mr. Clark discussed the Stafford Lake Spill and Rainfall History. Over the past 20 years Stafford Lake has reached full capacity and spilled over 16 of the 20 years. Staff does not expect the lake to fill this year.

MISCELLANEOUS

The Board received the following miscellaneous items: Disbursements-Dated March 8 and March 15th, 2018, Rate Increase Notice on Water Bill and Why your water provider is fighting California's ban on watering sidewalks.

The Board also received the following news articles: House, DA, assessor candidates file, and Marin's rare fish have off season as rain fluctuates.

ADJOURNMENT

President Fraites adjourned the meeting at 7:59 p.m.

Submitted by

Theresa Kehoe
District Secretary

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MEMORANDUM

To: Board of Directors

March 30, 2018

From: Rocky Vogler, Chief Engineer 
Carmela Chandrasekera, Associate Engineer 

Subject: Furnishing and Delivery of Steel Pipe for Ridge Road Pipeline Replacement

R:\Folders by Job No\7000 jobs\7161 Ridge Rd\BOD Memos\1 7161.01Steel Pipe Contract Award to Ferguson.doc

RECOMMENDED ACTION: Approve award of the contract to Ferguson Waterworks (Ferguson) and authorize the General Manager to execute an agreement with Ferguson.

FINANCIAL IMPACT: \$67,320 – Included in the FY18 CIP budget.

In an effort to expedite manufacturing and delivery of the steel pipeline required for the Ridge Road Pipeline Replacement project, as well as avoiding contractor markup, the District decided to purchase the pipe in advance of hiring a contractor to perform the work during spring 2018. The Furnishing and Delivery of Steel Pipeline was advertised in the Marin IJ on March 8, 2018. Bid packets were requested and e-mailed to five pipe suppliers, but the District received only one bid at the March 22, 2018 bid opening. The sole bidder was Ferguson with a bid price of \$67,320. Feedback from suppliers who did not submit a bid indicated that the recent uncertainty in steel pipe pricing due to potential tariffs has created volatility in material costs, generating a reluctance to bid.

Bid Items				Engineer's Estimate		Ferguson Waterworks	
Item No.	Qty.	Unit	Description of Items	Unit Price	Total Amount	Unit Price	Total Amount
1	1,440	lf	8-inch cement lined coal tar wrapped steel pipe	\$42.00	\$60,480	\$45.00	\$64,800
2	60	lf	6-inch cement lined coal tar wrapped steel pipe	\$38.00	\$2,280	\$42.00	\$2,520
Total Base Bid :					\$62,760		\$67,320

In February 2018, staff requested bids from its two on-call contractors (Team Ghilotti and Ghilotti Construction) to assess potential cost savings related to dealing directly with these contractors. Team Ghilotti indicated their price to provide the pipeline (excluding installation) was \$83,500. Ghilotti Construction did not segregate the pricing for supplying the pipeline. The Engineer's Estimate was \$62,760, approximately 7% lower than the Ferguson bid.

Bid Evaluation

The bidder has provided all information requested and the bid is complete.

RECOMMENDATION

That the Board approve award of the contract to Ferguson and authorize the General Manager to execute an agreement with Ferguson.

Approved by GM 


Date 3.30.18

6

MEMORANDUM

To: Board of Directors

March 30, 2018

From: Drew McIntyre, General Manager Subj: Multi Agency Letter Supporting Changes to the Marin Local Coastal Program
Amendment

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RECOMMENDED ACTION: Board authorize the General Manager to sign on to a letter supporting changes to the County of Marin Local Coastal Program Amendment.

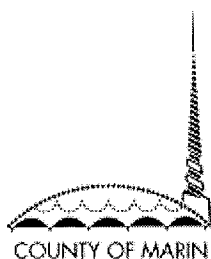
FINANCIAL IMPACT: None

NMWD staff has been providing information to the County of Marin since 2003 regarding revisions to the Marin County Local Coastal Program (LCP). On April 24 the Marin County Board of Supervisors will hold a public hearing to consider voting on modifications to the LCP (see Attachment 1). Inverness Public Utilities District (IPUD) has recently made outreach to other West Marin water agencies to sign on to the attached letter requesting a streamlined permitting process to help facilitate critical infrastructure replacement projects that ensure safe drinking water and adequate fire protection. NMWD staff supports efforts by IPUD to provide additional flexibility in the LCP process. Comment letters are due no later than April 13 and a draft version of the comment letter is provided in Attachment 2. Staff is requesting Board approval for NMWD to be a signatory to this letter.

RECOMMENDATION:

That the Board authorize the General Manager to sign on the multi-agency Marin County Local Coastal Program comment letter in a form similar to the draft provided herein.

Approved by GM Date 3.30.18



NEWS RELEASE

www.marincounty.org/news

For Immediate Release
March 22, 2018

Contact:

Jack Liebster
Planning Manager
Community Development
Agency

3501 Civic Center Drive
Suite 308
San Rafael, CA 94903
(415) 473-6278
Email: Jack.Liebster@marincounty.org
Community Development
website

County Fine-Tuning its Local Coastal Plan ***Supervisors discuss Coastal Commission modifications, provide direction to staff***

San Rafael, CA – To gain greater insight into the handful of remaining issues, the Marin County Board of Supervisors conducted a public workshop March 20 to discuss modifications to the Marin County Local Coastal Program (LCP) that were conditionally approved by the California Coastal Commission in November 2016.

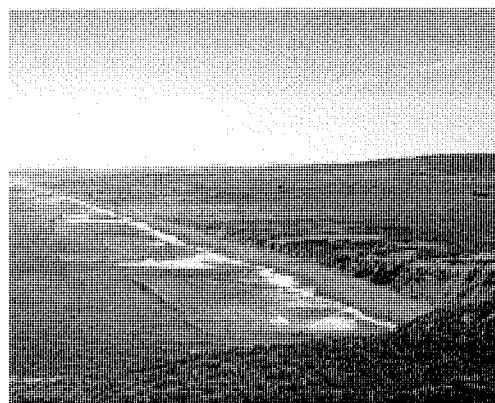
The LCP is the key document used by the County of Marin to manage conservation and development in rural West Marin.

The Board meeting was a listening session with no vote taken. The Supervisors provided input to staff as it prepares for a public hearing at 1:30 p.m. April 24 in the Marin County Civic Center's Board chamber in San Rafael. At that time, the Board could vote on the modifications to the LCP.

The Board heard Community Development Agency staff's

analysis and from the public on the proposed zoning regulations, including the new Coastal Commission-proposed permit requirements for agriculture and modified LCP definitions that County staff views as unclear and difficult to implement. Those modifications also impose new development requirements and restrictions that may exceed the requirements of the Coastal Act.

The Coastal Commission's action left the County the options of accepting the modifications "as is," accepting them with the express intent to submit amendments, or rejecting them and resubmitting the LCP. A resubmittal could be done with the Natural Hazards section, which the commission delayed taking action on at its November 2016 hearing.



The Local Coastal Program is the key document used by the County of Marin to manage conservation and development of rural West Marin. Shown is Point Reyes Beach, just north of the Point Reyes Lighthouse.

ATTACHMENT 1

The LCP has two parts – the Land Use Plan and the more technical Implementation Program. Designed to lay out the programs' objectives, the Land Use Plan sets out specific policies to protect environmental resources and scenic landscapes, provide for public access and recreation, and maintain vibrant and productive coastal agricultural communities. The Implementation Program contains the rules, regulations, zoning classification and performance standards that make it possible to carry out the policies of the Land Use Plan.

Working together, the two components of the LCP ensure that the County government is meeting the requirements of the California Coastal Act.

Comments are welcomed at MarinLCP@marincounty.org. Read submitted comments and other documents on www.MarinLCP.org.

[addressee]

Page 1

[letter date]

April XX, 2018

DRAFT

Marin County Board of Supervisors
3501 Civic Center Drive, Suite 329
San Rafael, CA 94903

Via Electronic Mail: BOS@marincounty.org / marinLCP@marincounty.org

RE: Marin County Local Coastal Program Amendment

Dear Supervisors:

The Marin County coastal municipal water systems have unique challenges before them to ensure our communities have safe drinking water and adequate fire protection. The Coastal Permit process needs to recognize this and provide consideration to streamline the permitting process. Our water systems have aged infrastructure needing replacement, may have limited fire water storage that needs to be upgraded, and aged redwood tanks that are fire and earthquake damage prone needing replacement.

These critical lifeline infrastructure projects (and others) should have a streamlined permitting process that spends public monies effectively. Per the California Code Title 22, Division 4, under the California Environmental Quality Act, many water system projects are Categorically Exempt Class 2 or 3. It would be helpful if the Coastal Permit process mirrored the Exemptions allowed for in the CEQA process.

One particular area of concern is the replacement of redwood tanks. The 1995 Mt. Vision fire caused the redwood potable water tank (North Marin Water District service area) at the top of Drakes View Drive to be destroyed by fire. The Inverness Public Utility District has a Capital Improvement Program (CIP) to replace all six of the remaining redwood tanks with steel tanks. Similarly, the North Marin Water District has an ongoing CIP program to replace all remaining redwood tanks. There are limited tax payer monies available to provide for replacement of key infrastructure crucial to our coastal water systems. The LCP permitting process should be amended to reflect the replacement of this important infrastructure in the coastal permitting process to reduce overall project cost and schedule.

The undersigned water districts respectfully request that the Local Coastal Program amendment provide the County planners with a means to streamline the Coastal Permit process, particularly for critical lifeline infrastructure such as water systems. This would include the ability to grant a de minimis waiver if there are no adverse impacts. An exemption should allow for an increase in storage of up to 10% or that required for Marin County fire protection goals. In a high fire area, this storage is important. Fees for this permit application (if the de minimis waiver is granted) would be waived.

Thank you for your consideration.

Signed:

ATTACHMENT 2

[addressee]

Page 2

[letter date]

North Marin Water District
Muir Beach Community Services District
Bolinas Community Public Utility District
Stinson Beach County Water District
Inverness Public Utility District

7

MEMORANDUM

To: Board of Directors March 30, 2018

From: Rocky Vogler, Chief Engineer *RV*
Carmela Chandrasekera, Associate Engineer *MC*

Subject: Ridge Road Pipeline Replacement Project – Award Construction Contract to W.R. Forde Associates, Inc.

R:\Folders by Job No\7000 jobs\7161 Ridge Rd\BOD Memos\1.7161.00 Contract Award BOD Memo April 3-2018.doc

RECOMMENDED ACTION: Approve award of the contract to W.R. Forde Associates, Inc. and authorize the General Manager to execute an agreement with W.R. Forde Associates, Inc.

FINANCIAL IMPACT: \$464,500 plus \$46,500 contingency (10%)

Background

On Sunday August 31, 2014, the 6-inch asbestos cement (AC) pipeline located in Ridge Road (just downstream of the Ridge pump station) ruptured. Crews worked over the Memorial Day holiday weekend to effect repairs. The total cost to replace the failed section of pipeline was approximately \$28,000, which included geotechnical evaluation for compaction, pipeline analysis and testing, as well as paving. The failed pipeline was examined and it was determined that in conjunction with the higher pressures associated with proximity to the pump station, the pipeline had reached the end of its useful life. A capital improvement project was subsequently incorporated into the CIP to replace the Ridge Road pipeline from the pump station to the intersection at Half Moon Road, a narrow and windy road with limited access and room for construction.

In an effort to manage escalating project costs and minimize impacts to residents given the project constraints, staff evaluated alternative methodologies to replacing the pipe, including installation of an epoxy liner in the existing AC pipeline. However, spatial constraints limited the ability to incorporate this technology. In addition, staff worked with its two on-call contractors (Ghilotti Construction and Team Ghilotti) to solicit bids in February 2018 for project construction. Since the pricing provided by the on-call contractors was sufficiently higher than the engineer's estimate, the decision was made to publicly bid the project to secure more competitive pricing. However, the low bid received by W.R. Forde Associates was comparable to the non-competitive bid received by Ghilotti Construction in February 2018 (\$543,000 which included supplying the pipe and fittings).

The project consists of replacing 1,400 lineal feet of 6-inch AC water main with 8-inch welded steel pipe to improve hydraulic performance as well as enhance structural characteristics. Steel pipe and elbows will be District furnished. The Board authorized advertisement for bids for the Ridge Road Pipeline Replacement project on February 20, 2018. The advertisement date for this project was March 2, 2018 with a bid opening on March 27, 2018. The District advertised the project in the Marin IJ and posted the project on

www.ebidboard.com. Six (6) contractors attended the mandatory pre-bid meeting and site visit on March 13, 2018. The bid period was approximately three and a half (3.5) weeks and included one addendum. Two bids were received, as listed below.

	CONTRACTOR	BID
1.	W.R. Forde Associates, Inc., Richmond, CA	\$464,500.00
2.	Ghilotti Construction Co., Santa Rosa	\$530,400.00

The Engineer's Estimate was \$380,000. The bid variance between the Number 1 and Number 2 low bidders (W.R. Forde Associates, Inc. and Ghilotti Construction Co.) was \$65,900 (for a variance of 14%).

Bid Evaluation

W.R. Forde Associates, Inc. of Richmond, California, submitted the lowest responsive bid of \$464,500 which is \$84,500 (22%) higher than the Engineer's construction cost estimate of \$380,000. The current bidding climate continues to exhibit a trend of decreasing contractor availability, increasing material costs, and increasing bid prices. A bid evaluation (Attachment 1) is attached. The attached analysis shows that both bidders complied with the bidding requirements.

The approved FY18 budget for this project is \$400,000, and for FY19 the budget is \$140,000, for a total combined budget of \$540,000. Increasing the FY19 budget by \$230,000 (for a total of \$370,000) will be accommodated by deferring Rush Creek Pipe Protection (\$190,000) and reducing the budget for DCA Repair/Replace from \$100,000 to \$60,000. Substantial construction by District staff was necessary to ready the project for the contractor. This work included constructing bypass connections to keep the Half Moon Tank supplied with water, high lining which involves erection of temporary piping to supply water to residents during the construction period, and replacement of the piping manifold at the Ridge pump station which was not originally included as part of the pipe replacement project. The following table provides costs for the Ridge Road project for current FY18 to date, as well as projected costs:

Contract Award	\$464,500
Contract Contingency (10%)	\$46,500
Current FY18 costs (design, materials, NMWD labor)	\$111,300
Pipe/Fittings Procurement (includes Ferguson bid)	\$72,000
Projected District costs (labor, inspection)	\$75,000
Total FY18 and FY19 project budget	\$769,300

RECOMMENDATION

That the Board approve award of the contract to W.R. Forde Associates Inc. and authorize the General Manager to execute an agreement with W.R. Forde Associates Inc.

Ridge Rd Water Line Replacement Project

Bid Items From Bid Schedule (00310)				Engineer's Estimate		W.R. Forde Assoc		Ghilotti Const	
Item No.	Qty.	Unit	Description of Items	Unit Price	Total Amount	Unit Price	Total Amount	Unit Price	Total Amount
1	LS		Mobilization/demobilization allowance (not to exceed 5% of total bid amount)			NA	\$20,000	NA	\$25,500
2	LS		Trenching, sheeting, shoring, and bracing or equivalent method of protection of works in accordance with Section 6700-6708 of the California Labor Code			NA	\$8,000	NA	\$5,000
3	LS		All work to construct the 6-inch welded steel pipeline from approximately STA 10+00 to STA 10+23 as shown on drawings 005 and 008 and all appurtenances thereto except Bid item 6			NA	\$10,000	NA	\$20,000
4	LS		All work to construct 8-inch welded steel pipeline from approximately STA 10+26 to STA 24+28 as shown on drawings 005 to 007 and all appurtenances thereto except Bid items 5, 6, 7, 8, 9, and 10			NA	\$288,000	NA	\$417,000
5	LS		All costs related to remove and dispose existing 6-inch ACP per applicable Federal and State requirements			NA	\$20,000	NA	\$8,000
6	2 each		Tie-in at pump station (STA 10+00) and end of project on Ridge Rd. (STA 24+28) after satisfactory hydrostatic testing and bacteriological testing			\$8,500	\$17,000	\$1,500	\$3,000
7	3 each		Tie-in to existing 6-inch ACP main on Farvue Rd., tie-in to 8-inch existing PVC main on Forrest Rd at turnout no. 1, and tie-in to 6-inch ACP main on Forrest Rd turnout No. 2			\$8,500	\$25,500	\$2,500	\$7,500
8	LS		Provide and install two fire hydrants as shown on plans			NA	\$20,000	NA	\$16,000
9	9 each		Reconnect existing eight (8) service laterals to the new 8-inch WSP and reconnect one (1) sample station lateral			NA	\$10,800	\$500	\$4,500
10	24,000 sf		Prepare and micro seal the total width of the paved area within construction limits			\$0.55	\$13,200	0.60	\$14,400
11	LS		Provide shuttle service for residents			NA	\$30,000	NA	\$7,500
12	LS		As-Built Drawings			NA	\$2,000	NA	\$2,000
Total Base Bid :					\$380,000		\$464,500		\$530,400

Bid Forms:			
"IN" Stamped before bid closing (00010)		Yes	Yes
Bid multiplies out and sums correctly		Yes	Yes
Bid value in word agrees with numerals		Yes	Yes
License Checks Out (00300) Possesses Class A License		Yes	Yes
Bid Form (00300-1) Addenda 1 acknowledged		Yes	Yes
Bid Form - Contractor's Licensing Statement (00300-2)		Yes	Yes
Bid Form - Signed by Authorized Individual (00300-5)		Yes	Yes
Bid Form - Bid Guaranty Bond (00410)		Yes	Yes
Bid Form - Cert. of Bidders Experience and Qualifications (00420)		Yes	Yes
Bid Form - List of Subcontractors (00430)		Yes	Yes
Bid Form - Site Visit Affidavit (00440)		Yes	Yes
Bid Form - Sched of Major Equipment & Material Supplier, Projects Identified (00450)		Yes	Yes
Bidders Affidavit of Non-Collusion (00480)		Yes	Yes
Escrow Agreement (00490)		NA	NA
Subcontractors:		Listed	Listed
Welding		Charles Custom	Larsson Welding
Microsurfacing		Bond Blacktop	Graham Contractors

Material & Equipment Manufacturers:	Specified	Bid	Comply	Bid	Comply
		NA		NA	

8

MEMORANDUM

To: Board of Directors
 From: David L. Bentley, Auditor-Controller
 Subj: Retiree Medical Liability Updated Actuarial Valuation
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March 30, 2018

RECOMMENDED ACTION: 1) Accept Actuarial Report
 2) Direct Staff to Investigate Establishing an OPEB Trust

FINANCIAL IMPACT: None

The District purchases its employee health insurance coverage through CalPERS, which offers a variety of plans (Kaiser, Blue Shield, etc.) for employees to choose from. CalPERS negotiates annually with major health plan providers using its size to mitigate premium increases. Agencies that purchase health insurance through CalPERS are required to offer health insurance to their retirees and to subsidize the retiree cost. Accordingly, the District pays up to \$319 per month¹ for each of its 35 participating retirees.

Retiree medical cost is commonly referred to as Other Post-Employment Benefits, or OPEB, and the Governmental Accounting Standards Board (GASB) requires that each government agency periodically undertake an actuarial analysis to calculate the liability it has assumed in providing this benefit.

The District requested and received an updated actuarial valuation of its retiree health care liability prepared by certified actuary Brian Demsey² in accordance with GASB Standard 75. GASB 75 requires each government agency to value and disclose its retiree health care liability in its financial statement, and to update the calculation every two years (the previous GASB 45 standard required an update every three years).

The following table above shows that over the past two years the District's Actuarial Liability³ decreased \$481,028 to \$5.1 million. The Accrued Liability⁴ remained virtually unchanged (a \$9,679 decrease) at \$4.1 million, while the District's Retiree Medical Reserve Fund grew by \$488,114, to \$3.9 million. The decrease is primarily attributable to health insurance premiums increasing less than the 8% previously projected.⁵

¹ Several employees retired under prior retiree health benefit agreements and the District continues to honor the agreement in effect upon their retirement date.

² Brian Demsey of Demsey, Filliger and Associates of Laguna Niguel, CA updated the valuation for a fee of \$4,000.

³ Present value of health insurance benefits to be paid to current and future retirees. If this amount were placed in a fund earning 4% interest, the fund would have exactly enough to pay all expected benefits.

⁴ The present value of health insurance benefits earned to date.

⁵ The average annual rate of growth over the past two years was 2.2%.

Retiree Medical Liability Actuarial Analysis					2017 v 2015
<u>Present Value of Future Benefits</u>	7/1/09	7/1/12	7/1/15	7/1/17	Increase
Active Employees	\$1,889,127	\$2,482,927	\$3,622,361	\$3,424,674	
Retirees	\$1,581,707	\$1,699,509	\$1,961,866	\$1,678,525	
Total Actuarial Liability	\$3,470,834	\$4,182,436	\$5,584,227	\$5,103,199	(\$481,028)
<u>Accrued Liability</u>					
Active Employees	\$1,019,849	\$1,431,119	\$2,123,509	\$2,397,171	
Retirees	\$1,581,707	\$1,699,509	\$1,961,866	\$1,678,525	
Total Accrued Liability	\$2,601,556	\$3,130,628	\$4,085,375	\$4,075,696	(\$9,679)
Retiree Medical Reserve Fund Balance	\$2,614,991	\$3,065,753	\$3,436,173	\$3,924,287	\$488,114
Cash Reserve as a % of Actuarial Liability	75%	73%	62%	77%	
Cash Reserve as a % of Accrued Liability	101%	98%	84%	96%	

This latest (7/1/17) valuation is great news for the District. The prior valuation, as of 7/1/15, was disheartening as it showed the District's accrued liability growing by nearly \$1 million over the 7/1/12 valuation due to a new Actuarial Standard requiring recognition of an "implicit subsidy" factored into the actuarial equation for agencies that purchase their health insurance through CalPERS.

The Actuarial Standards Board ruled that actuaries should not use unadjusted CalPERS premiums for valuation purposes. The Standards Board finds fault with CalPERS practice of blending the cost of the health premium of active employees with early retirees (those retiring before age 65) which results in a premium that is the same for both groups. The Actuarial Standards Board posits that, on average, the medical claim costs of an early retiree, with an average age of 60, is greater than the utilization of the typical 40-year-old active employee. Therefore, given that the premiums are uniform, early retirees are being subsidized by active employees. Since CalPERS blends the utilization of the two groups, the Actuarial Standards Board directs actuaries to impute the "implicit subsidy" early retirees receive and add that subsidy amount to the OPEB liability, which for North Marin's Actuarial Liability is calculated at \$1,100,000, and for its Accrued Liability at \$775,000. The addition of the implicit subsidy to the liability explained over 80% of the \$1 million liability increase seen in the 7/1/15 valuation.

Actuary Brian Demsey believes that while the measurement of the implicit subsidy may be appropriate for GASB 75 (expensing) purposes, it is not necessary to pre-fund for the implicit subsidy. Your Auditor-Controller concurs. In his report, Mr. Demsey points out that if CalPERS

were to increase the premium for early retirees to the full actuarial cost of their benefits, the premium for active employees could be reduced, thereby offsetting the implicit subsidy amount. For this reason, Mr. Demsey does not recommend that the District fund the implicit subsidy. He states: "We believe that pre-funding of the full GASB liability would be redundant."

That said, the good news is that, absent application of the implicit subsidy, the District's cash reserve designated to fund this obligation now stands at 119% of the Accrued Liability (i.e., it is fully funded), and further, given the District's current funding course, the Actuarial Liability will be fully funded by the end of 2018.

The District merits credit when the Board designated funds in 2003 to be set-aside for this liability, and again in 2007 when the Board authorized setting aside an additional \$1,500 per employee (approximately \$75,000 annually) to accelerate amortization of the unfunded liability. The attached chart graphically displays the liability and reserve over time.

The policy question that arises every time the District reviews this liability is whether or not to deposit the designated cash reserve, now \$4 million, into an irrevocable trust, outside of the District's control. Depositing the funds into an irrevocable trust is a GASB 75 prerequisite to showing the \$4 million as an offset to the retiree medical liability in the District's audited financial statement. Failure to deposit the money into an irrevocable trust increases the District's required annual expense calculated under GASB 75 as if there were no money set-aside to pay the liability, and similarly the liability shown in the financial statement notes is not reduced by the amount in the designated reserve. GASB's concern is that the District could elect to use the designated \$4 million for another purpose, then enter bankruptcy and thereby potentially defraud retirees. In addition, those who make a cursory review of the District's financial statement can come away with the mistaken impression that the District has done nothing to address its OPEB liability.

In 2007 CalPERS established a subsidiary to accept OPEB monies (through which the funds can be invested in equities) and many investment houses have sprung up that covet these OPEB assets. Recall that public agencies that moved their money into an irrevocable trust in 2007 immediately lost 30% in the market downturn that occurred shortly thereafter.

In prior OPEB reports staff has argued that placing the money in an irrevocable trust is not in the best interest of the District's customers as the District has historically met its obligations to its retirees, and the loss of control of \$4 million in reserve funds could hamper the

District's flexibility in dealing with future financial events that may arise.

Now, however, staff recommends that the District consider moving a portion of the \$4 million reserve into an irrevocable trust. The recycled water expansion project, which made a significant demand upon the District's cash resources, is wrapping up. If the District were to establish a trust, money should be moved into the trust in small increments over time, in a dollar-cost averaging manner, as the equity market is presently at a high level and experiencing significant volatility. The additional investment latitude of a trust offers a higher rate of return over time, allowing for use of a discount rate below 4% in the actuarial calculation, thereby reducing the District's OPEB liability.

Actuary Brian Demsey recommends that no more than 60% of the District's OPEB liability be moved into a trust, as once the money is deposited, it cannot be withdrawn except to pay for retiree health benefits. Demsey estimates that about 15% of schools have established an OPEB trust; about 35-40% of water agencies; and no more than 25% of other public agencies (cities, counties, other special districts) have established an irrevocable OPEB trust.

Placing some money into a dedicated irrevocable trust will mean that the District's audited financial statement will show that the District's post-employment health care benefit is at least partially funded.

Recommendation:

- 1) Accept the Updated Retiree Medical Liability GASB 75 Actuarial Report;
- 2) Direct staff to investigate establishing an irrevocable trust for its OPEB liability.

3/28/18

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Retiree Health Insurance Actuarial Liability Funding Progress

Millions

\$7

\$6

\$5

\$4

\$3

\$2

\$1

\$0

**Absent
Implicit
Subsidy**

**Total
Liability
\$3.3**

Future
Liability
\$0.7

Current
Liability
\$2.6

Unfunded
Liability
\$0.9

Funded
Reserve
\$2.4

Liability Reserve
July 1, 2006

**Total
Liability
\$3.5**

Future
Liability
\$0.9

Current
Liability
\$2.6

Unfunded
Liability
\$0.9

Funded
Reserve
\$2.6

Liability Reserve
July 1, 2009

**Total
Liability
\$4.2**

Future
Liability
\$1.1

Current
Liability
\$3.1

Unfunded
Liability
\$1.1

Funded
Reserve
\$3.1

Liability Reserve
July 1, 2012

**Total
Liability
\$5.6**

Future
Liability
\$1.5

Current
Liability
\$4.1

Unfunded
Liability
\$2.1

Funded
Reserve
\$3.4

Liability Reserve
July 1, 2015

**Total
Liability
\$5.1**

Future
Liability
\$1.0

Current
Liability
\$4.1

Unfunded
Liability
\$1.0

Funded
Reserve
\$3.9

Liability Reserve
July 1, 2017

**Total
Liability
\$4.0**

Future
Liability
\$0.7

Current
Liability
\$3.3

Unfunded
Liability
\$0.1

Funded
Reserve
\$3.9

Liability Reserve
July 1, 2017



*Rec'd via Email
3/13/18*

March 12, 2018

Mr. David L. Bentley
Director of Fiscal Services
North Marin Water District
P.O. Box 146
Novato, CA 94945

Re: North Marin Water District ("District") GASB 75 Valuation

Dear Mr. Bentley:

This report sets forth the results of our GASB 75 actuarial valuation of the District's retiree health insurance program as of July 1, 2017.

In June 2004, the Governmental Accounting Standards Board (GASB) issued its accrual accounting standards for retiree healthcare benefits, GASB 43 and GASB 45. GASB 43/45 require public employers such as the District to perform periodic actuarial valuations to measure and disclose their retiree healthcare liabilities for the financial statements of both the employer and the trust, if any, set aside to pre-fund these liabilities. In June 2015, GASB released new accounting standards for postretirement benefit programs, GASB 74 and GASB 75, which replace GASB 43 and GASB 45, respectively.

The District selected Demsey, Filliger and Associates (DF&A) to perform an actuarial valuation of the retiree health insurance program as of July 1, 2017. This report may be compared with the valuation performed by DF&A as of July 1, 2015, to see how the liabilities have changed since the last valuation.

Financial Results

We have determined that the amount of actuarial liability for District-paid retiree benefits is \$5,103,199 as of July 1, 2017. This represents the present value of all benefits expected to be paid by the District for its current and future retirees. If the District were to place this amount in a fund earning interest at the rate of 4.00% per year, and all other actuarial assumptions were exactly met, the fund would have exactly enough to pay all expected benefits.

This valuation includes benefits for 38 retirees as well as 53 active employees who may become eligible to retire and receive benefits in the future. It excludes employees hired after the valuation date.

When we apportion the \$5,103,199 into past service and future service components under the Entry Age, Level Percent of Pay Cost Method, the Total OPEB Liability is \$4,075,696 as of July 1, 2017. This represents the present value of all benefits accrued through the valuation date if each employee's liability is expensed from hire date until retirement date as a level percentage of pay. The \$4,075,696 is comprised of liabilities of \$2,397,171 for active employees and \$1,678,525 for retirees.

The District has not adopted an irrevocable trust for the pre-funding of retiree healthcare benefits. As of June 30, 2017, the trust balance or Plan Fiduciary's Net Position (GASB 75) is \$0.

The Net OPEB Liability, Total OPEB Liability over the Plan Fiduciary's Net Position, is \$4,075,696.

Discount Rate under GASB 75

For financial reporting purposes, GASB 75 requires a discount rate that reflects the following:

- a. The long-term expected rate of return on OPEB plan investments – to the extent that the OPEB plan's fiduciary net position is projected to be sufficient to make projected benefit payments and assets are expected to be invested using a strategy to achieve that return)
- b. A yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher – to the extent that the conditions in (a) are not met.

The amount of the plan's projected fiduciary net position and the amount of projected benefit payments should be compared in each period of projected benefit payments.

Based on these requirements and the following information, we have determined a discount rate of 3.13% for GASB 75 reporting purposes:

Expected Return on Assets	4.00%
S&P Municipal Bond 20-Year High Grade Rate Index at June 30, 2017	3.13%
GASB 75 Discount Rate	3.13%

Net OPEB Expense

We have determined the following components of the District's Net OPEB Expense for fiscal year 2017-18: Service Cost, Interest Cost, and Expected Return on Assets. The Service Cost represents the present value of benefits accruing in the current year. Interest Cost represents the interest on the Total OPEB Obligation. **Expected Return on Assets is the expected return based on a 4.00% investment rate of return.** Other components (Deferred Outflows and Inflows) will be determined based on the Net OPEB Obligation as of June 30, 2018.

We summarize the valuation results in the table on the next page. We provide results at three discount rates (the expected return on assets, the S&P Municipal Bond rate index, and the blended GASB 75 rate, discussed above). All amounts are net of expected future retiree contributions, if any.

When the District begins preparation of the June 30, 2018 government-wide financial statements, DF&A will be available to assist the District and its auditors in preparing the footnotes and required supplemental information for compliance with GASB 75 (and GASB 74, if applicable).

In the meantime, we are available to answer any questions the District may have concerning the report.

North Marin Water District

**Net OPEB Liabilities and Expense Under
GASB 75 Accrual Accounting Standard**

	✓ July 1, 2017		
	Actuarial Liability	S&P Municipal Bond Rate Index	GASB 75 Blended Rate
Discount Rate	4.00%	3.13%	3.13%
Present Value of Future Benefits			
Active	\$3,424,674	\$3,930,535	\$3,930,535
Retired	1,678,525	1,784,845	1,784,845
Total	\$5,103,199	\$5,715,380	\$5,715,380
Total OPEB Liability (Actuarial Liability)			
Active	\$2,397,171	\$2,633,360	\$2,633,360
Retired	1,678,525	1,784,845	1,784,845
Total	\$4,075,696	\$4,418,205	\$4,418,205
Plan Fiduciary Net Position (Plan Assets)	\$0	\$0	\$0
Net OPEB Liability (Unfunded Actuarial Liability)	\$4,075,696	\$4,418,205	\$4,418,205
Components of Net OPEB Expense for fiscal year 2018			
Service Cost at Year-End	\$124,600	\$145,989	\$145,989
Interest Cost	157,475	133,936	133,936
Expected Return on Assets	0	0	0
Subtotal	\$282,075	\$279,925	\$279,925
Change in Deferred Outflows ¹			
Change in Deferred Inflows ²			

1. To be determined based on the Total OPEB Obligation and Plan Fiduciary Net Position as of June 30, 2018.

2. To be determined based on the Total OPEB Obligation and Plan Fiduciary Net Position as of June 30, 2018.

Differences from Prior Valuation

The most recent prior valuation was completed as of July 1, 2015 by DF&A. The AL (Accrued Liability) as of that date was \$4,085,375, compared to \$4,075,696 as of July 1, 2017. In this section, we provide a reconciliation between the two numbers so that it is possible to trace the AL from one actuarial report to the next.

Several factors have caused the AL to change since 2015. The AL increases as employees accrue more service and get closer to receiving benefits. There are actuarial gains/losses from one valuation to the next, and changes in actuarial assumptions and methodology for the current valuation. To summarize, the most important changes were as follows:

1. We changed our valuation software to be able to track experience more precisely over time. This change decreased the AL by \$120,051.
2. There was a net census loss (an increase in the AL) of \$121,707.
3. There was a gain (a decrease in the AL) of \$420,172 due to **increases in healthcare premiums and statutory minimum contributions less than expected.**
4. There was a gain (a decrease in the AL) of \$517 due to a decrease in the PERS Health administrative fee from 0.34% of premium to 0.33% of premium.
5. We changed the actuarial cost method from Projected Unit Credit to Entry Age, Level Percent of Pay, as required by GASB 75. This change increased the AL by \$206,694.

The estimated changes to the AL from July 1, 2015 to July 1, 2017 are as follows:

Changes to AL	AL
AL as of July 1, 2015	\$4,085,375
Passage of time	202,660
Change in system	(120,051)
Change in census	121,707
Change in premium rates	(420,172)
Change in administration fees	(517)
Change in cost method	<u>206,694</u>
AL as of July 1, 2017 ¹	\$4,075,696

1. Based on a discount rate of 4.00%.

Funding Schedules

There are many ways to approach the pre-funding of retiree healthcare benefits. In the *Financial Results* section, we determined the annual expense for all District-paid benefits. The expense is an orderly methodology, developed by the GASB, to account for retiree healthcare benefits. However, the GASB 75 expense has no direct relation to amounts the District may set aside to pre-fund healthcare benefits.

The table on the next page provides the District with three alternative schedules for funding (as contrasted with expensing) retiree healthcare benefits. The schedules all assume that the retiree fund earns, or is otherwise credited with, 4.00% per annum on its investments, a starting reserve fund value of \$3,924,287 as of July 1, 2017, and that contributions and benefits are paid mid-year.

The schedules are:

1. A level contribution amount for the next 20 years.
2. A level percent of the Unfunded Accrued Liability.
3. Because the reserve fund is sufficient to cover the Total OPEB Liability calculate (1) using a 4.00% discount rate and (2) considering no implicit subsidy, a depletion of funds until additional funds are needed to cover future pay-as-you-go payments.

We provide these funding schedules to give the District a sense of the various alternatives available to it to pre-fund its retiree healthcare obligation. The three funding schedules are simply three different examples of how the District may choose to spread its costs.

By comparing the schedules, you can see the effect that early pre-funding has on the total amount the District will eventually have to pay. Because of investment earnings on fund assets, the earlier contributions are made, the less the District will have to pay in the long run. Of course, the advantages of pre-funding will have to be weighed against other uses of the money.

The table on the following page shows the required annual outlay under the pay-as-you-go method and each of the above schedules. **The three funding schedules include the "pay-as-you-go" costs; therefore, the amount of pre-funding is the excess over the "pay-as-you-go" amount.**

Treatment of Implicit Subsidy

We exclude the implicit subsidy from these funding schedules because we do not recommend that the District pre-fund for the full age-adjusted costs reflected in the liabilities shown in the first section of this report. If the District's premium structure changes in the future to explicitly charge under-age 65 retirees for the full actuarial cost of their benefits, this change will be offset by a lowering of the active employee rates (all else remaining equal), resulting in a direct reduction in District operating expenses on behalf of active employees from that point forward. For this reason, among others, we believe that pre-funding of the full GASB liability would be redundant.

North Marin Water District

Sample Funding Schedules (Closed Group)

Starting Reserve of \$3,924,287 as of July 1, 2017

Fiscal Year	Pay-as-you-go	Level Contribution for 20 years	Level % of Unfunded Liability	Constant Percentage Increase
Beginning				
2017	\$225,160	\$5,489	\$0	\$0
2018	214,132	5,489	0	0
2019	212,613	5,489	0	0
2020	228,330	5,489	0	0
2021	253,253	5,489	0	0
2022	266,666	5,489	0	0
2023	278,467	5,489	0	0
2024	276,439	5,489	0	0
2025	249,517	5,489	0	0
2026	230,500	5,489	0	0
2027	189,464	5,489	0	0
2028	183,360	5,489	0	0
2029	180,420	5,489	0	0
2030	173,555	5,489	0	0
2031	179,382	5,489	0	0
2032	175,550	5,489	0	0
2033	180,484	5,489	3,456	0
2034	178,062	5,489	28,508	0
2035	173,193	5,489	26,882	0
2036	184,519	5,489	24,668	0
2037	169,308	0	22,948	0
2038	184,645	0	20,469	0
2039	201,616	0	18,615	0
2040	206,991	0	16,394	0
2041	193,188	0	5,111	0
2042	197,340	0	139	0
2043	201,406	0	43	0
2044	182,275	0	40	0
2045	166,797	0	36	0
2046	151,409	0	34	0
2047	133,351	0	30	0
2048	113,970	0	27	0
2049	105,874	0	23	0
2050	96,478	0	21	0
2055	55,830	0	12	0
2060	34,876	0	7	34,876
2065	19,146	0	5	19,146
2070	11,411	0	3	11,411

Note to auditor: when calculating the employer OPEB contribution for the year ending on the statement date, we recommend multiplying the actual District-paid premiums on behalf of retirees by a factor of 1.2351 to adjust for the implicit subsidy.

Actuarial Assumptions

To perform the valuation, the actuary must make certain assumptions regarding such items as rates of employee turnover, retirement, and mortality, as well as economic assumptions regarding healthcare inflation and interest rates. Our assumptions are based on a standard set of assumptions we have used for similar valuations, modified as appropriate for the District. Retirement rates are based on recent District retirement patterns.

The discount rate of 4.00% is based on our best estimate of expected long-term plan experience for unfunded plans such as the District's. As discussed above, for financial reporting purposes under GASB 75, a discount rate of 3.13% reflects the required blend between discount and municipal bond rates. The healthcare trend rates are based on our analysis of recent District experience and our knowledge of the healthcare environment.

A complete description of the actuarial assumptions used in the valuation is set forth in the "Actuarial Assumptions" section.

Projected Annual Pay-as-you go Costs

As part of the valuation, we prepared a projection of the expected annual cost to the District to pay benefits on behalf of its retirees on a pay-as-you-go basis. These numbers are computed on a closed group basis, assuming no new entrants, and are net of retiree contributions. Projected pay-as-you-go costs for selected years are as follows:

FYB	Pay-as-you-go
2017	\$225,160
2018	214,132
2019	212,613
2020	228,330
2021	253,253
2022	266,666
2023	278,467
2024	276,439
2025	249,517
2026	230,500
2030	173,555
2035	173,193
2040	206,991
2045	166,797
2050	96,478
2055	55,830
2060	34,876
2065	19,146
2070	11,411

Implicit Subsidy and ASOP 6

When premiums charged for retiree healthcare are lower than expected claims, an implicit subsidy is realized. This occurs, for example, when pre-Medicare retirees are afforded medical coverage at the same rates as active employees.

Actuarial Standard of Practice No. 6 (ASOP 6), revised in May 2014, provides guidance in measuring OPEB obligations and determining periodic costs or actuarially determined contributions. The standard specifies that in (almost all instances), the actuary must include the value of this implicit subsidy in the GASB 45/75 liabilities.

This valuation reflects the value of the implicit subsidy equal to \$775,833.

Certification

The actuarial certification, including a caveat regarding limitations of scope, if any, is contained in the "Actuarial Certification" section.

We have enjoyed working with the District on this project and are available to answer any questions you may have concerning any information contained herein.

Sincerely,
DEMSEY, FILLIGER AND ASSOCIATES

DRAFT

Carlos Diaz, ASA, EA, MAAA
Actuary

Benefit Plan Provisions

This report analyzes the actuarially projected costs of the District's retiree health insurance program. Our findings and assumptions are based on census data as of July 2015 and PERS Health premiums for 2015, projected to the valuation year at the assumed healthcare trend rate. The postretirement medical plans are basically continuations of the plans for active employees, so that the active employee plans will be described first.

Active Employee Coverage

The District sponsors the California PERS Health Plan, referred to here as "PEMHCA". The program provides comprehensive health insurance through a variety of Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) options. The above plans are provided by the District through a Section 125 Plan, with contributions made to PEMHCA at the employee's option, in addition to the flat \$319.22/month that the District has contributed directly to PEMHCA pursuant to a contractual agreement between the District and PEMHCA effective June 1, 2005. The \$319.22/month will not increase unless the agreement is explicitly amended at the District's request.

Post-retirement Coverage

The District also offers PEMHCA to its retirees. The District contributes up to \$319.22 to PEMHCA on behalf of each retiree eligible for PEMHCA, pursuant to the unequal contribution method (which has evolved to the point where the same amount is now contributed on behalf of retirees and active employees). Furthermore, the District will make supplemental contributions towards certain retirees' PEMHCA premiums according to provisions of the District MOUs with its various represented and unrepresented employee and retiree groups, as described below.

A retiree is eligible for supplemental District contributions towards retiree health benefits if the retiree has attained age 55 and has completed at least 12 years of service with the District at the time of retirement. The District's contribution varies by group and retirement date, as follows:

(1) Retiring on or after January 1, 2013, all groups: Up to 85% of the Kaiser 2-party rate each year, offset by the District's basic contribution of \$319.22/month to PEMHCA. If there is no covered spouse, or once the spouse has attained age 65, this changes to 85% of the Kaiser 1-party rate. The supplement ends upon the retiree's attainment of age 65.¹

(1) Note that the District policy reads: Coverage terminates for the spouse when the spouse becomes eligible for Medicare, or for both the retiree and spouse when the retiree becomes eligible for Medicare.

<p align="center">Benefit Plan Provisions (Continued)</p>
--

Supplemental District contributions, continued:

(2) Retiring on or after June 1, 2005, but before January 1, 2013, all groups: Up to 90% of the Kaiser 2-party rate each year, offset by the District's basic contribution of \$319.22/month to PEMHCA. If there is no covered spouse, or once the spouse has attained age 65, this changes to 90% of the Kaiser 1-party rate. The supplement ends upon the retiree's attainment of age 65.¹

(3) Retiring before June 1, 2005:

Represented: Up to 100% of the Kaiser 2-party rate (or 1-party rate if single or if spouse has attained age 65) until retiree's age 65; after age 65, the dollar amount is capped at a flat \$409.91/month. All amounts are offset by the District's basic \$319.22/month to PEMHCA.

Unrepresented: Up to 90% of the Kaiser 2-party rate (or 1-party rate if single or if spouse has attained age 65) until retiree's age 65; after age 65, the dollar amount is capped at a flat \$364.87/month. All amounts are offset by the District's basic \$319.22/month to PEMHCA.

The following table shows January 1, 2017 monthly PERS Health (PEMHCA) premiums for retirees within the Bay Area:

	Kaiser HMO	PERS Choice PPO	PERS Care PPO	United HealthCare HMO
<u>Basic Plan</u>				
Retiree	\$733.39	\$830.30	\$932.39	\$1,062.26
Retiree + 1	1,466.78	1,660.60	1,864.78	2,124.52
Family	1,906.81	2,158.78	2,424.21	2,761.88
<u>Medicare Supplement</u>				
Retiree	\$300.48	\$353.63	\$389.76	\$324.21
Retiree + 1	600.96	707.26	779.52	648.42
Family	901.44	1,060.89	1,169.28	972.63

Dental Benefits

The District also offers a self-insured dental plan to its employees and retirees. We reviewed these premiums in 2006 and found that the premiums appear to be approximately sufficient to pay expected benefits under the Plan's benefit schedule, and in our opinion do not constitute an implicit subsidy as discussed in GASB 45; therefore, retiree dental benefits have been excluded from the scope of this report.

(1) Note that the District policy reads: Coverage terminates for the spouse when the spouse becomes eligible for Medicare, or for both the retiree and spouse when the retiree becomes eligible for Medicare.

Valuation Data

Active and Retiree Census

Age distribution of retirees included in the valuation

Age	Represented	Unrepresented	Total
Under 50	0	0	0
50-54	0	0	0
55-59	0	0	0
60-64	5	2	7
65-69	4	2	6
70-74	5	5	10
75-79	3	1	4
80-84	4	0	4
85-89	4	0	4
90+	<u>3</u>	<u>0</u>	<u>3</u>
All Ages	28	10	38
Average Age	75.4	69.8	73.9

Age/Years of service distribution of active employees included in the valuation

Years→	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
<u>Age</u>									
<25	3	0	0	0	0	0	0	0	3
25-29	2	0	0	0	0	0	0	0	2
30-34	2	3	1	0	0	0	0	0	6
35-39	1	1	8	1	0	0	0	0	11
40-44	1	0	2	1	0	0	0	0	4
45-49	1	1	0	1	0	0	0	0	3
50-54	1	0	1	1	0	0	1	0	4
55-59	0	0	6	4	1	5	1	0	17
60-64	0	0	0	0	0	0	0	0	0
65+	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>3</u>
All Ages	11	5	18	8	2	5	3	1	53

Average Age: 45.5
Average Service: 14.1

Actuarial Assumptions

The liabilities set forth in this report are based on the actuarial assumptions described in this section.

Valuation Date:	July 1, 2017
Actuarial Cost Method:	Entry Age, Level Percent of Pay
Discount Rate:	
Accrued Liability	4.00% per annum
GASB 75	3.13% per annum
Return on Assets:	4.00% per annum
Salary Increases:	3.00% per annum
Pre-retirement Turnover:	According to Crocker-Sarason Table T-5 less mortality, increased by 25% at all ages. Sample rates are as follows:

Age	Turnover (%)
25	9.7%
35	7.8
45	5.0
55	1.1

Pre-retirement Mortality: RP-2014 Employee Mortality, without projection. Sample deaths per 1,000 employees are as follows:

Age	Males	Females
25	0.48	0.17
35	0.52	0.29
45	0.97	0.66
55	2.79	1.67

Post-retirement Mortality: RP-2014 Healthy Annuitant Mortality, without projection. Sample deaths per 1,000 retirees are as follows:

Age	Males	Females
55	5.74	3.62
60	7.78	5.19
65	11.01	8.05
70	16.77	12.87
75	26.83	20.94
80	44.72	34.84
85	77.50	60.50
90	135.91	107.13

<p align="center">Actuarial Assumptions (Continued)</p>
--

Claim Cost per Retiree or Spouse:

Age	Medical/Rx
50	\$9,696
55	11,241
60	13,031
64	14,666
65+	3,901

Retirement Rates:

Age	Percent Retiring
50	3.0%
51	3.0
52	3.0
53	3.0
54	3.0
55	7.0
56	7.0
57	7.0
58	7.0
59	15.0
60	18.0
61	20.0
62	22.0
63	25.0
64	30.0
65	100.0

* The percentage refers to the probability that an active employee who has reached the stated age will retire within the following year.

Trend Rate:

Healthcare costs were assumed to increase according to the following schedule:

FYB	Medical/Rx	Dental/Vision	Medical CPI
2017	6.0%	4.0%	3.5%
2018+	5.0	4.0	3.5

Percent Waiving Coverage:

9% (applies to future retirees only)

Percent of Retirees with Spouses:

Future Retirees: 60% of future retirees were assumed to have spouses. Female spouses assumed three years younger than male spouses. Current Retirees: Based on actual spousal data.

Change in Dollar Cap:

Grandfathered caps assumed frozen for all future years.

Administrative Fees:

0.33% of total premium to PEMCHA for all future years.

Actuarial Certification

The results set forth in this report are based on our actuarial valuation of the health and welfare benefit plans of the North Marin Water District ("District") as of July 1, 2017.

The valuation was performed in accordance with generally accepted actuarial principles and practices. We relied on census data for active employees and retirees provided to us by the District. We also made use of claims, premium, expense, and enrollment data, and copies of relevant sections of healthcare documents provided to us by the District, and (when applicable) trust statements prepared by the trustee and provided to us by the District.

The assumptions used in performing the valuation, as summarized in this report, and the results based thereupon, represent our best estimate of the actuarial costs of the program under GASB 74 and GASB 75, and the existing and proposed Actuarial Standards of Practice for measuring post-retirement healthcare benefits.

Throughout the report, we have used unrounded numbers, because rounding and the reconciliation of the rounded results would add an additional, and in our opinion unnecessary, layer of complexity to the valuation process. By our publishing of unrounded results, no implication is made as to the degree of precision inherent in those results. Clients and their auditors should use their own judgment as to the desirability of rounding when transferring the results of this valuation report to the clients' financial statements.

The undersigned actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Certified by:

DRAFT

Carlos Diaz, ASA, EA, MAAA
Actuary

Exhibit I

**North Marin Water District
GASB 75 Valuation Results By Employee Group**


	<u>7/1/2017 Represented</u>	<u>7/1/2017 Unrepresented</u>	<u>7/1/2017 Total All Groups</u>
District-paid Present Value of Benefits			
Actives	\$ 3,670,814	\$ 259,721	\$ 3,930,535
Retirees	<u>1,266,887</u>	<u>517,958</u>	<u>1,784,845</u>
Total District-Paid PVFB:	\$ 4,937,701	\$ 777,679	\$ 5,715,380
District-paid Total OPEB Liability:			
Actives	\$ 2,447,006	\$ 186,354	\$ 2,633,360
Retirees	<u>1,266,887</u>	<u>517,958</u>	<u>1,784,845</u>
Total District-Paid AL:	\$ 3,713,893	\$ 704,312	\$ 4,418,205
Assets*	<u>-</u>	<u>-</u>	<u>-</u>
District-paid Unfunded Accrued Liability ("UAL")	\$ 3,713,893	\$ 704,312	\$ 4,418,205
Components of Net OPEB Expense			
Service Cost at Year-end	\$ 136,289	\$ 9,700	\$ 145,989
Interest Cost	113,173	20,763	133,936
Expected Return on Assets	<u>-</u>	<u>-</u>	<u>-</u>
Total**	\$ 249,462	\$ 30,463	\$ 279,925

*Assets, if any, allocated in proportion to AL for illustration purposes only; GASB 75 does not provide authority for this calculation.

**Does not include Deferred Inflows/Outflows components that may apply at fiscal year-end.

9

MEMORANDUM

To: Board of Directors
From: Drew McIntyre, General Manager 
Subject: Technical Advisory Committee Meeting – March 5, 2018
t:\gm\scwa\tac minutes and agenda\2018\tac meeting bod update memo 03_05_18.doc

March 30, 2018

RECOMMENDED ACTION: Information Only

FINANCIAL IMPACT: None

Supplemental information is provided as follows using item numbers referenced in the attached meeting agenda and draft minutes.

1. Check-In

NMWD was represented by me and Rocky Vogler

3. Government Affairs Update - \$8.9 Billion November Water Bond Initiative

Jerry Meral from the Natural Heritage Institute gave a similar presentation to that given at the March 2 North Bay Watershed Association attended by Directors Fraites and Baker. The TAC presentation was tailored to highlight potential funding benefits for the Russian River watershed. Mr. Meral noted that only one of the last 14 Water Bonds since 1960 has failed to be approved by the voters.

4. Approve – FY19 SCWA Water Transmission System Budget

The TAC members unanimously approved the budget. It will now move on for approval at the April 2 WAC meeting. The SCWA Board of Supervisors will consider the budget at their April 17, 2018 meeting.

5. Sonoma-Marin Saving Water Partnership – Item C

The original MOU approved by our Board at the March 14, 2008 meeting will terminate in June of this year. Ryan Grisso has been working on the First Amended MOU as part of a TAC Ad Hoc subcommittee. The updated draft MOU was unanimously approved. Other non-substantive revisions have been made so the TAC will review again as part of the April 2 WAC/TAC meeting. Staff will bring the draft First Amendment MOU to the Board at the April 17, 2018 meeting. WAC approval is scheduled for the May 7th meeting.

FOR ACCESSIBLE
MEETING INFORMATION
CALL: (707) 543-3350
ADD: (707) 543-3031



**TECHNICAL ADVISORY COMMITTEE
MONDAY: MARCH 5, 2018**

Utilities Field Operations Training Center
35 Stony Point Road, Santa Rosa, CA

9:00 a.m. (Note Location)

1. Check In
2. Public Comment
3. Gov't Affairs Update - \$8.9 Billion November Water Bond Initiative
4. Approve - FY19 Draft SCWA Budget
5. Sonoma Marin Saving Water Partnership
 - a. FY17 Annual Report
 - b. Water Production Relative to 2013 Benchmark
 - c. Approve - Sonoma-Marín Saving Water Partnership First Amended MOU
6. Water Supply Conditions
7. Biological Opinion Status Update
8. Items for next agenda (WAC/TAC Meeting on April 2, 2018)
9. Check Out

*DRAFT Minutes of Technical Advisory Committee
35 Stony Point Road, Santa Rosa, California
March 5, 2018

Attendees: Craig Scott, City of Cotati
Kent Carothers, City of Petaluma
Mary Grace Pawson, City of Rohnert Park
Kimberly Zunino, City of Santa Rosa
Colin Close, City of Santa Rosa
Carlene Okiyama, City of Santa Rosa
Colleen Ferguson, City of Sonoma
Mike Ban, Marin Municipal Water District
Drew McIntyre, North Marin Water District
Rocky Vogler, North Marin Water District
Paul Piazza, Town of Windsor
Toni Bertolero, Town of Windsor
Dan Muelrath, Valley of the Moon Water District
Pam Jeane, SCWA
Ann DuBay, SCWA
Brad Sherwood, SCWA
Carrie Pollard, SCWA
Michael Thompson, SCWA
Lynne Rosselli, SCWA
Justin Adolio, SCWA

Public Attendees: David Keller, Friends of the Eel River (FOER)
Brenda Adelman, RRWPC
Bob Anderson, United Wine Growers
Margaret Di Genova, California American Water
Jerry Meral, Natural Heritage Institute

1. Check-in

Chair Drew McIntyre called the meeting to order at 9:10 a.m.

2. Public Comment

None.

3. Gov't Affairs Update - \$8.9 Billion November Water Bond Initiative

Brad Sherwood introduced guest speaker Jerry Meral who presented on the November Water Bond initiative, Water Supply and Water Quality Act of 2018. He initially provided a recap on the status of Prop. 1 funds and Proposition 68 which is on the June ballot. Regarding the November Bond initiative, he summarized how the proposed Water Bond allocates funds within key funding categories and highlighted Russian River benefits. Questions and comments followed.

4. Approve – FY19 Draft SCWA Budget

Lynne Rosselli gave a presentation. Her presentation included proposed rates for FY 18-19, rate setting calculation, FY 18-19 budgeted expenditures, expenditures compared to FY 17-18, historical water transmission deliveries, capital projects, 2018 wholesale water rates per acre-foot, and next steps. Questions and comments followed.

Motion to approve by Craig Scott, City of Cotati, Second by Toni Bertolero, Town of Windsor. Unanimously approved.

5. Sonoma Marin Saving Water Partnership

a. FY17 Annual Report

Carrie Pollard gave an update. Update included commercial programs, youth education programs, landscape program, eco-friendly tours, turf removal and fire response. Questions and comments followed.

b. Water Production Relative to 2013 Benchmark

Drew McIntyre referred to the handout and reported that the January 2018 Partnership water usage was 8% below the 2013 benchmark and also mentioned that this is the first month of reporting for the 2018 calendar year.

c. Approve - Sonoma-Marin Saving Water Partnership First Amended MOU

Presented by Colin Close, chair of the Ad Hoc subcommittee. The 10-year agreement is set to expire in June 2018. He presented a memo to the TAC regarding revisions. Questions and comments followed. The next step is to bring the First Amended MOU to the WAC for approval. It was agreed to schedule WAC approval for the May 7, 2018 meeting. Motion to approve the First Amended MOU by Toni Bertolero, Town of Windsor and second by Kent Carothers, City of Petaluma. Unanimously approved.

6. Water Supply Conditions

Pam Jeanne reported. Normal water supply year as of February. At Lake Mendocino, 63,000-acre feet of storage, outflow is 35 cubic feet per second, at about 90% at our target storage for the lake. At Lake Sonoma, 205,000-acre feet in storage, about 84% of the water supply pool, outflow 75 cubic feet per second. Hacienda flowing at about 1400 cubic feet per second. Comments followed.

7. Biological Opinion Status Update

Pam Jeanne reported. Her update included the Fish Flow Project, the Dry Creek Habitat Enhancement Project, Fish Monitoring, Russian River Estuary Management Project, Interim Flow Changes, and Public Outreach efforts.

8. Items for Next WAC/TAC Agenda

SCWA FY19 Budget Approval

Presentation – Pilot Study of Contaminants of Emerging Concerns in the RR Watershed, State Water Resources Control Board

9. Check Out

Meeting was adjourned at 10:30 a.m.

10

MEMORANDUM

To: Board of Directors

March 30, 2018

From: Nancy Holton, Senior Accountant *NH*

Subject: Hydrant Damage History

t:\finance\memos\hydrant damage history 2018.doc.docx

RECOMMENDED ACTION: None – Information Only

FINANCIAL IMPACT: Average Annual Unreimbursed Expense of \$1,756

At a previous meeting Director Baker inquired as to the District's experience in obtaining reimbursement for hydrants damaged by motorists. We compiled a history of the past five years and found that, on average, six hydrants are damaged annually - with an average cost to repair of \$3,174 each. We recover 91% of the repair cost, primarily through claims against the driver's auto insurance. The uncollected costs arise due either to hit and run accidents or uninsured drivers.

Hydrant Damage - 5 Year History

3/23/2018

t:\finance\hydrant damage history.xls\032318

Date	Hydrant Location	Repair Cost	Reimbursed	Reason not Reimbursed	Qty per FY
7/22/2013	1000 Cambridge	1,359.31	Yes		
8/20/2013	842 Reichert Ave	628.39	Yes		
9/6/2013	San Marin High School	1,167.94	Yes		
1/14/2014	5720 Nave Dr.	790.88	Yes		
3/26/2014	Indian Valley & Indian Springs	3,711.65	No	Hit and Run	
4/4/2014	Cambridge & Buchanan	5,335.68	Yes		
4/10/2014	San Antonio Rd	4,421.10	Yes		
6/9/2014	Ignacio Blvd	2,023.18	Yes		
6/25/2014	Clay Ct	697.37	Yes		9
12/13/2014	20 Woodfern Ct	727.43	Yes		
1/8/2015	396 Bel Marin Keys Blvd	1,427.37	Yes		
1/16/2015	20 Woodfern Ct	3,197.62	Yes		
4/9/2015	12073 Shoreline Hwy	5,065.91	No	Hit and Run	
4/22/2015	2045 Novato Blvd	944.06	Yes		
5/17/2015	School Rd	4,681.09	Yes		6
10/29/2015	1730 Novato Blvd	1,150.68	Yes		
12/10/2015	Ignacio Blvd	2,222.29	Yes		
12/21/2015	1725 Novato Blvd	2,759.91	Yes		
12/31/2015	H Lane & Bugeia	12,032.43	Yes		
2/23/2016	55 Frosty Lane	6,160.70	Yes		5
11/18/2016	Grant Ave-Lucky Store	4,057.87	Yes		
12/9/2016	15 Thorsson Ct	1,207.58	Yes		
3/23/2017	481 Indian Springs	6,147.47	Yes	Making Monthly Payments	3
8/14/2017	120 Landing Ct	3,108.73	Yes		
8/24/2017	35 Rowland	1,192.31	Yes		
11/24/2017	1400 Donna St	5,919.80	Yes		
12/28/2017	449 Grandview Ave	3,526.51	Yes		
1/22/2018	2045 Novato Blvd	1,691.96	Yes		
2/16/2018	1761 Grant Ave	3,809.98	Yes		
3/6/2018	Ignacio Blvd	4,050.94	Yes		7
Total Cost:		<u>\$95,218.14</u>			

Amount Not Collected:

\$8,777.56

Percent Collected:

91%

Avg Cost per Hydrant

\$3,173.94

Avg # per Year


6

Avg Annual Unreimb Cost

\$1,755.51

11

MEMORANDUM

To: Board of Directors
From: Drew McIntyre, General Manager 
Subject: NorthBay Water Workshop No. 3 – March 26, 2018
t:\gm\northbay water\northbay water update 03_30_18.doc

March 30, 2018

RECOMMENDED ACTION: Information Only**FINANCIAL IMPACT:** None

Workshop No. 3 was attended by Director Baker, me and Rocky Vogler. As reported earlier, each workshop features a discussion on the following topics: (1) Building the organization, (2) Regional initiatives, State and Federal Policy and (3) Preliminary tasks for the North Bay Drought Contingency Plan. At the completion of the five workshops, a decision will be made whether there is enough interest to move forward with NorthBay WATER.

Key information for Workshop No. 3 is provided as follows using item numbers referenced in the attached meeting agenda. A copy of the presentation and more background information is available at www.northbaywater.org.

1. Building NorthBay WATER

The stated goal of NorthBay WATER is to create a regional organization that supports the policy and funding needed to implement storm water, groundwater and surface water projects in the North Bay. The first two workshops focused on opportunities and proposed organizational structure. Workshop No. 3 focused on federal advocacy (note- the next workshop will focus on financing options). Informational work sessions are being planned within the next 2-4 weeks to discuss priority projects, the proposed two-year work plan and budget. Membership cost is currently estimated at \$15,000 to \$20,000 per year assuming ten member agencies.

2. Special Guest Speaker

Guest speakers were Roger Gwinn, CEO and Mark Limbaugh, President of The Ferguson Group (TFG) located in Washington D.C. TFG is the federal advocacy group supporting North Bay Water Reuse Authority (NBWRA) and played a key role in NBWRA's success in obtaining \$25M in federal Title XVI grants for NBWRA Phase 1 projects.

3. North Bay Drought Contingency Plan

Initial efforts to prepare the DCP are being funded by SCWA however more money is needed to complete the Plan. Current estimates are ~\$12,000 per year for two years for each member (assuming ~ 10 members). These costs would increase if the decision was made to not proceed with creating the regional North Bay WATER organization.

Drew McIntyre

From: Mark Millan <millan@datainstincts.com>
Sent: Friday, March 23, 2018 10:04 AM
To: Undisclosed Recipients
Subject: Reminder: North Bay WATER Workshop #3 in Novato - Mar 26 9:30 - 11am



Hello perspective members and interested parties,

We look forward to seeing you at our Workshop #3 for the new NorthBay WATER program.

Monday, March 26, 2018 – 9:30 am to 11:00

Novato City Hall Council Chambers, 901 Sherman Avenue, Novato, CA 94945

Agenda Highlights:

- 1) **Building NorthBay WATER:** We will be discussing Board formation and leadership, initial Goals and Objectives of the new organization, and how an MOU could be structured between participating members.
- 2) **Special Guest Speaker:** Learn how legislative advocacy work in Washington can translate into dollars for your water related projects from Roger Gwinn and Mark Limbaugh of The Ferguson Group.
- 3) **North Bay Drought Contingency Plan (DCP):** Discuss the DCP workplan, schedule over the next two years, and upcoming regional meetings to hear from the agencies. The DCP planning process works closely with agencies to identify and integrate water project priorities into regional planning for future implementation.

Questions? Please contact: Mark Millan, Information Coordinator at 707.235.8965, or Ginger Bryant, Program Manager at 916.442.5877

Workshop Process and Schedule

	January 22, 2018	February 26, 2018	March 26, 2018	April 23, 2018	May 21, 2018
Part 1: Building NorthBay WATER	Workshop process and content, consulting team	Goals and objectives, interim MOU and Board	2-year workplan, schedule and budget	MOU, 2-year workplan, budget and member costs	Approve: MOU, workplan and budget
Part 2: Regional Initiatives, State and Federal Policy	Regional Initiatives: John Woodling, Ex. Dir. Regional Water Authority	State Advocacy: Pilar Oñate-Quintana, Principal The Oñate Group, Sacramento	Federal Advocacy: Roger Gwinn, CEO & Mark Limbaugh, Pres. The Ferguson Group, Washington DC	Organizations and Project Financing: Dave Stoldt, GM Monterey Peninsula Water Management District	Report out on Regional Informal Worksessions
Part 3: Preliminary Tasks for North Bay Drought Contingency Plan	Intro to DCP, overview of workshops, initiate discussions regarding participation	DCP workplan, budget, schedule and cost to participate in study	Continue: DCP workplan, budget, schedule and cost to participate in study	Agency commitment: point of contact, data contributions/needs, stakeholder and communications plan	USBR review and approval before July start of DCP





NorthBayWATER

Regional Water Supply Reliability

Next Workshop:

1. Monday January 22 NorthBay WATER 9:30-11:00
2. Monday February 26 NorthBay WATER 10:45-12:00
(after the NBWRA meeting)
3. Monday March 26 NorthBay WATER 9:30-11:00
4. **Monday April 23 NorthBay WATER 9:30-11:00**
5. Monday May 21 NorthBay WATER 10:45-12:00
(after the NBWRA meeting)



12

DISBURSEMENTS - DATED MARCH 22, 2018

Date Prepared 3/20/18

The following demands made against the District are listed for approval and authorization for payment in accordance with Section 31302 of the California Water Code, being a part of the California Water District Law:

Seq	Payable To	For	Amount
EFT*	US Bank	February Bank Analysis Charge (Lockbox \$912 & Other \$330, Less Interest of \$124)	\$1,117.87
1	Abell, Michelle	Refund Overpayment on Open Account	\$525.58
2	Allied Electronics	PLC Fuses (48)	33.39
3	Alpha Analytical Labs	Lab Testing	180.00
4	Asbury Environmental Services	Used Oil Recycling	120.00
5	AT&T	Leased Lines (2)	66.24
6	Automation Direct	PLC Parts to Allow NSD to Monitor Norman Tank Status	396.25
7	AWWA CA-NV SEC	Backflow Tester Exam & Certification Renewal (Kurfist & J. Lemos)	360.00
8	Bank of Marin	Bank of Marin Loan Principal & Interest (Pymt 77 of 240)	46,066.67
9	Barrilleaux, Nick	Exp Reimb: DMV Testing Fee for Class A Driver's License	76.00
10	Beingessner, Brent	Novato "Washer Rebate" Program	50.00
11	Building Supply Center	Pipe Saw & Hacksaw for Pt. Reyes T.P.	49.77
12	Caldwell Sutter Capital	JPMorgan/Chase AMI Loan Origination Fee (Procurement)	35,000.00
13	California Pipe Fabricators	12" & 3" Wall Steel Pipe (21')	4,010.16
14	California Water Service	Water Service (0 ccf) (OM 12/31/17-3/1/18)	50.23
15	Clipper Direct	Commuter Benefit Program (4)	402.00
16	Durkin Signs & Graphics	13" X 16" NMWD Magnetic Signs (20) for AMI Contractor Vehicles	
			620.19



Seq	Payable To	For	Amount
17	Ferguson Waterworks	Bushings (17) (\$10), Brass Ells (14), Nipples (51) (\$268), Couplings (62) (\$775), Brass Tees (4), Flanges (4) 1" Brass Caps (3), Gaskets (6) & Meter Register (\$228) & Direct Read Register	1,947.65
18	Fisher Scientific	Alcohol Wipes (200)	5.22
19	G3 Engineering	Replacement Mechanical Pump Seal for Pump @ Lynwood	2,555.49
20	Golden Gate Petroleum	Gasoline (\$2.77/gal) & Diesel (\$3.00/gal)	2,586.20
21		Cafeteria Plan: Uninsured Medical Reimbursement	41.59
22	Grainger	Flange Gaskets (3) (\$85), PLC Relays (8) (\$148), PVC Quick Couplings (24) (\$146), Spray Bottles (3-32 oz), Wire Ties (200) & Lock Box for Front Main Gate	459.36
23	Hardy Diagnostics	Media for Micro (Lab)	116.05
24	Idexx Laboratories	Coli Comparator & Reference Cultures (\$241) (Lab)	259.03
25	InfoSend	Programming Fee - Revise Water Bill to Display 3rd Meter Reading for Compound Meters.	300.00
26	Intellaprint Systems	Quarterly Maintenance on Wide Carriage Engineering Scanner/Copier	447.00
27	Jamieson, Linda	Novato "Smart Irrigation Controller" Program	237.99
28	Jeung, Alice	Novato "Toilet Rebate" Program	200.00
29	Jones Hall	JPMorgan/Chase AMI Loan Origination Fee (Legal)	41,530.00
30	Keller Heartt	Gear Oil (15 gal) (STP)	429.00
31	Lincoln Life	Deferred Compensation PPE 3/15/18	12,331.22
32	Madruga Iron Works	Vault Lid for STP (\$2,174) & DCA Repair (\$3,196)	5,370.30
33		Cafeteria Plan Uninsured Medical Reimbursement	499.45

Seq	Payable To	For	Amount
34	Marin County Recorder	Replenish Draw Down Acct for Official Record Copies	100.00
35	Marin County Treasurer	Semi-Annual Bond Service PRE-1 Revenue Bond	12,950.00
36	Marin County Ford	Transmission, Transfer Case Fluid, Rotor Assembly (\$284) Oil, Air Filters, Motor Oil (8 qts), Diagnose "Check Engine Light" & Replaced Valve Assembly ('10 F150) (\$354), New Key Fob & Programming ('17 Ford Escape) (\$310)	801.58
37	McLellan, WK	Misc Paving	2,346.66
38	Medora	Solar Bee Motor Control Cord	451.14
39	Mettler-Toledo Rainin	Annual Pipette Calibration (Lab)	182.00
40	Micro Motion	Replacement Magnetic Flow Meter for Diablo Hills Pump Station	3,877.18
41	Mitch's Certified Classes	Backflow Tester Workshop & Test Prep for Recertification & Cross Connection Control (Kurfist & J. Lemos)	1,200.00
42	National Association of Corrosion Engineers	Membership Dues (4/18-4/19) (Budget \$220) (Jackson)	140.00
43	Nationwide Retirement Solution	Deferred Comp 3/15/18 PPE	2,150.00
44	North Marin Auto Parts	Rear Brake Rotors & Pad Set ('08 F250) (\$237), Brake Caliper Bolts (2), Brake Hardware Kit, Gear Oil (16 qts) (\$224), Gasket Sealer, Wheel Lug Nuts (20), Front Brake Pad Kits, Rotors & Spark Plugs (\$289) ('10 F150), Gasket Maker, Batteries (2) (\$235) ('02 Chevy K1500 & Hose Reel Trailer, Oil Filters (2), Motor Oil (4 qts), Fuse, Battery Trickle Charger, Shop Rags (40 lbs) & Hose Clamps (10)	1,241.24
45	North Bay Gas	Gas for Graphite Furnace for Lead Analysis (\$363) & Argon (Lab)	408.48
46	Novato Builders Supply	Concrete (2 yds)	388.44
47	Novato Sanitary District	Semi-Annual Billing for Yard/Office Sewer Service Charges (2017-2018)	2,447.28

Seq	Payable To	For	Amount
48	O'Reilly Auto Parts	Washer Fluid (24 gal) (\$60), Anti-Freeze (12 gal) (\$195), Rust Preventer (44 oz) & WD-40 (48 oz)	327.63
49	Pace Supply	Couplings (19) (\$599), Flange, Galv Nipple & Elbow (\$149)	809.67
50	Pape Machinery	Windshield Washer Pump ('04 Backhoe)	33.67
51	Pini Hardware	Masking Tape, Spray Paint (4-11oz cans), Tape Measure, Plumbing Supplies (\$99), Dust Bags, Chlorine Test Strips (50), Hammer, Rope, Socket Adaptor, Grind Wheel, Wire Cup Brush, Key Fob Batteries, Concrete Hole Saw for AMI Meter Lids, Locker Room Faucet (\$56), Outlet Box, Cabinet Door Hinges (6), Pruner Shears, Saw Blade, Painting Supplies, Cabinet Door Hinge Edge Band, Glue, Hole Saw, Drill Bits & Bolts/Nuts	536.53
52	Rauch Communication	Consulting Services - Preparation for NMWD's 2018 Strategic (Long-Range) Plan Workshop	3,499.46
53	Schoepp Construction	Reimbursement Program: - Oak Park Estates	738.98
54	Sebastopol Bearing & Hydraulic	4" Vacuum Hose Quick Couplings (4)	194.71
55	Sequoia Safety Supply	Brief Relief Urine Bags (100) (\$259), Coveralls (2) (\$316), Poison Oak Cleanser, Rain Gear (\$102) (STP), Leather Gloves (48) (\$150) & Safety Vests (2)	888.78
56	Sonomarin Landscape Materials	Cement (5 sacks)	165.44
57	Squire Patton Boggs	JPMorgan/Chase AMI Loan Origination Fees (Lender's Legal Review)	8,500.00
58	SWRCB Accounting Office	FY18 Large Water System Fee (\$47,222) & FY18 Small Water System Fee (Pt. Reyes) (\$4,578)	52,000.30
59	Thatcher of California	Adjustment to Invoice Previously Paid (\$3,744) & Debt Memo for Misbillings of Ferric Chloride (2) (STP)	7,488.56
60	The Transmitter Shop	Reconditioning on Tank Level Transmitters (3)	1,012.00

Seq	Payable To	For	Amount
61	U.S. Bank Card	Strategic Planning Workshop Lunches (\$239) (2 Mtgs), Wastewater Treatment Exam Review Regist (Garrett) (\$150), Craigslist Ads for Temp Meter Reader & Cashier/Receptionist Position (\$150), W2 Correction Form (\$15), Sympathy Flowers for Employee (\$63), Notice to Bidders & Legal Notice for Ridge Road Project (\$534) & North Bay Watershed Association Conf Registration (Vogler) (\$120)	1,271.25
62	Veolia Water Technologies	Sand Pump Replacement Parts @ STP	8,698.65
63	Victory Auto Plaza	Keys (2) ('08 Chevy Colorado)	13.56
64	VWR International	Titrant (1 gal) (Lab)	33.14
65	Wine Country Water Works Association	Registration for "Clearlake Water Operator Training" on 3/28/18 (Reischmann, C. Kehoe & Bergstrom)	135.00
66	WQI	Reg Fee: Grade 2 Water Distribution Seminar (Sjoblom) & Grade 1 (Pearce)	1,000.00
TOTAL DISBURSEMENTS			<u>\$274,471.23</u>

The foregoing payroll and accounts payable vouchers totaling \$274,471.23 are hereby approved and authorized for payment.

	<u>3/20/18</u>
Auditor-Controller	Date
	<u>3.20.18</u>
General Manager	Date

DISBURSEMENTS - DATED MARCH 29, 2018

Date Prepared 3/27/18

The following demands made against the District are listed for approval and authorization for payment in accordance with Section 31302 of the California Water Code, being a part of the California Water District Law:

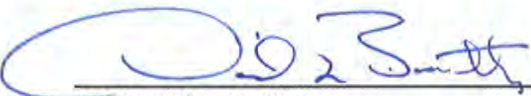

<u>Seq</u>	<u>Payable To</u>	<u>For</u>	<u>Amount</u>
P/R*	Employees	Net Payroll PPE 3/15/18	\$137,753.84
EFT*	US Bank	Federal & FICA Taxes PPE 3/15/18	56,465.85
EFT*	State of California	State Taxes & SDI PPE 3/15/18	11,430.89
EFT*	CalPERS	Pension Contribution PPE 3/15/18	34,605.11
1	American Family Life Ins	March Employee Accident, Disability, & Cancer Insurance	2,883.19
2	Badger Meter	Cellular Meters (18)	15.84
3	Bay Area Barricade Service	"Maximum Load Limit" Sign for Amaroli Tank	75.96
4	Bearings & Hydraulics	Flash Mixer Bearing (STP)	287.34
5		Cafeteria Plan: Uninsured Medical Reimbursement	338.00
6	Bold & Polisner	Connection Fee (\$357), Gallagher Well #2 (\$42), Misc (\$105), NMWD Interconnection Agreement (\$189), Personnel Issue (\$42) & Water Conservation (\$21) (Less Credit of \$74)	682.49
7	Borges & Mahoney	Repair Chlorinator @ STP	711.98
8	Caltest Analytical Laboratory	Lab Testing	35.00
9	Core Utilities	Consulting Services: February IT Support (\$5,000), SCADA Programming (\$1,900), Cell Modem Installation @ Diablo Hills (\$525), SCADA Maintenance of Controls (\$75), Water Quality Report (\$100), Website Maintenance (\$200) & AMI Project (\$100)	7,900.00
10	Covello Group	Prog Pymt#18: February RW Expansion Project Central Service Area (Balance Remaining on Contract \$13,175)	14,732.12

Seq	Payable To	For	Amount
11	Davenport, Colin	Exp Reimb: Lodging (\$589), Fuel (\$52) & Meals (\$87) for Backflow Certification Class on 3/12-3/16	728.15
12	E & M	Service Contract for Distribution & STP SCADA Software (Wonderware) (Budget \$6,350)	5,919.00
13	Evoqua Water Technologies	January Service on Deionization System	229.77
14	Farr Construction	Prog Pymt#5: San Mateo Recoat Project (Balance Remaining on Contract \$26,335)	352,049.10
15	Fisher Scientific	Standard & Silver Nitrate (Lab)	82.34
16	Frontier Communications	Leased Lines	1,444.25
17	Genterra Consultants	Prog Pymt#11: Stafford Dam Maintenance Plan (Balance Remaining on Contract \$4,319)	142.50
18	GHD	Prog Pymt#7: (\$18,551) & #8: Engineering Services PRE Water Tank 4A Replacement (\$5,267) (Balance Remaining on Contract \$37,569)	23,818.00
19	Golden Gate Petroleum	Gasoline (\$2.93/gal) & Diesel (\$3.12/gal)	2,458.88
20		Cafeteria Plan: Uninsured Medical Reimbursement	150.00
21	Grainger	Knee Boots (\$99), Wrenches (5), Bypass Lopper, Safety Goggles (2), PVC Pipe (3), Reducers (3), Elbows (8), Tee, PVC Unions (2), Check Valves (5) (\$228) & Mechanical Lock Set (\$161)	840.62
22	ICF International	Prog Pymt#6: Consulting Services for Stealhead Habitat Survey in Upper Novato Creek (Balance Remaining on Contract \$2,654)	2,264.69
23	LaborLaw Center	California & Federal Labor Law Posters (3)	96.81
24	Lemos, James	Exp Reimb: D1 Water Distribution Operator	120.00
25	MacArthurCo	Epoxy Paint (2 gals)	274.45
26	Maltby Electric	Conduit & Couplings	194.40
27	Marin Color Service	Paint (1 gal) & Caulk	42.25

Seq	Payable To	For	Amount
28	McPhail Fuel	Oceana Marin Generator Fuel Tank Repair	389.63
29	Miller Pacific Engineering	Prog Pymt#15: Geotechnical Services PRE-Tank 4A (Balance Remaining on Contract \$10,820)	515.00
30	Mutual of Omaha	April Group Life Ins Premium	856.73
31	National Meter	5/8" Meter (\$1,046) (15), 2" Meter & 1.5" Meter (\$409)	2,061.67
32	Pace Supply	Meter Gaskets (20), Hydrant, Nipples (2), Corp Stops (3), Tee & Valves (4) (\$1,206)	2,668.88
33	Pape Machinery	Remanufactured Starter (Compressor)	290.66
34	NMWD Petty Cash	Petty Cash Reimbursement: Safety Snacks (\$54), Lab Supplies (\$20), USB Cable, Safety Bucks & Mileage	80.55
35	PG&E	Power: Bldgs/Yard (\$3,007), Rectifier/Controls (\$693), Pumping (\$19,245), Treatment (\$77) & Other (\$128)	23,150.68
36	Ralph Andersen & Associates	Recruitment of Chief Financial Officer	27,500.00
37	Redwood Empire Disposal	Refund Overpayment on Closed Account	609.10
38	SoftResources	Prog Pymt#5: Project Billing for Enterprise Asset Management Software (Balance Remaining on Contract \$16,108)	1,925.02
39	Soiland	Asphalt Recycling (12 tons)	59.35
40	Sonoma County Water Agency	February Contract Water	344,388.90
41	SPG Solar	February Energy Delivered Under Solar Services Agreement	10,437.63
42	SWRCB Accounting Office	D2 Operator Certification Renewal (Lucchesi) (11/18-11/21) (Budget \$0)	60.00
43	Streakwave Wireless	Replacement SCADA Radios (4)	453.77
44	Syar Industries	Asphalt (6 tons)	981.14
45	Township Building Services	February Janitorial Services	1,877.53

Seq	Payable To	For	Amount
46	VWR International	Dispenser, Adapter & Color Meter Kit (\$463)	503.78
47	Waste Management	Misc Debris (7 yds)	309.03
		TOTAL DISBURSEMENTS	<u>\$1,077,891.87</u>

The foregoing payroll and accounts payable vouchers totaling \$1,077,891.87 are hereby approved and authorized for payment.

	<u>3/26/13</u>
Auditor-Controller	Date
	<u>3.26.18</u>
General Manager	Date

March 22, 2018

The Honorable Scott Pruitt
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator Pruitt:

The Alliance for Water Efficiency and the undersigned water utilities, manufacturers, distributors, consumer groups, and water efficiency advocates join in urging you to continue to fund EPA's highly successful WaterSense® program, a voluntary public-private partnership that has saved American consumers more than \$46 billion on their water and energy bills since 2006 through the end of 2016.

WaterSense is a voluntary program, not a regulatory one, and it costs less than \$2 million dollars per year to administer. It is universally supported by consumers, manufacturers and the public and private agencies charged with supplying water to American households and businesses. Since its inception in 2006, it has been immensely successful at achieving its goal of reducing water consumption. Through the end of 2016 an estimated 2.1 trillion gallons have been saved using WaterSense-labeled products. To underscore this, a report conducted by the U.S. EPA Office of Inspector General in 2017 found that the WaterSense program adhered to good practices in program management, achieved significant returns on investment, documented its controls on water savings and product performance, and obtained broad partner and consumer support.

WaterSense is Good for American Businesses and American Jobs

- WaterSense fuels innovation in American manufacturing and is strongly supported by the plumbing and irrigation industry. WaterSense performance standards and independent certifying process helps start-ups get to market more quickly and helps companies differentiate their products in the marketplace.
- More than 1,800 manufacturers, retailers and distributors, water and energy utilities, state and local government, non-profit and trade organizations, irrigation training organizations, and home-builders strengthen their businesses through partnerships with WaterSense.
- Businesses can reduce their operating costs and increase resiliency by updating their facilities with WaterSense-labeled fixtures and appliances.
- Homeowners and businesses can hire any of the 2,625 WaterSense-certified irrigation professionals to help design, install, and maintain an irrigation system that delivers a healthy landscape while minimizing waste.

WaterSense Helps Americans Save Money and Provides Choices

- WaterSense-labeled products have saved more than \$46 billion on American consumers' water, sewer, and energy bills.
- Water utilities, many of whom have been facing drought and other supply constraints in recent years, utilize WaterSense certified products as a vital tool that they can promote through conservation outreach and rebate programs, saving ratepayers the expense of each utility certifying water savings of products separately.

- Thanks to WaterSense and its partners, American families and businesses can buy WaterSense-labeled products that use at least 20 percent less water and work as well as or better than standard models.
- Americans can choose from more than 21,000 available models of WaterSense-labeled products for bathrooms, commercial kitchens and irrigation systems.

WaterSense Helps Create Thriving and Resilient Communities

- WaterSense has already saved more than 2.1 trillion gallons of water. That's more than the amount of water used by all of the households in California for one year!
- Saving water helps protect our water future. It means we can serve more people today and secure supplies for future generations. It saves water for emergencies. And, it leaves more water in lakes, rivers and underground aquifers to support water-based recreation and wildlife habitat.

WaterSense is a Cost-Effective Investment and Eliminating WaterSense Endangers Our Economy and Our Communities

- With an annual budget of \$2 million, WaterSense produces benefits that far outweigh its costs – strengthening our economy, protecting water for our communities, and helping families maximize their budgets.
- Without WaterSense, 284 billion kilowatt hours of electricity would not have been saved. That is one year's worth of power to more than 26.3 million American homes.

WaterSense Enjoys Broad, Bipartisan Support

- Support has been clearly demonstrated this past year by actions taken in the House and Senate. Both chambers included the language below categorically rejecting the elimination of this important program.
 - "The Committee rejects the proposed elimination of the WaterSense program, and provides not less than the fiscal year 2017 level." *Senate report, Dept. of the Interior, Environment, and Related Agencies Appropriations Bill, 2018*
 - "The Committee...rejects the proposed elimination of the WaterSense program." *H. Rep. 115-238 - Dept. of the Interior, Environment, and Related Agencies Appropriations Bill, 2018*

Since the WaterSense program has never been specifically authorized by Congress, its modest costs have been paid from discretionary funds available to previous EPA administrators of both parties. We urge you to continue this practice for FY 2019 and beyond, so that this valuable and highly productive partnership between government and the private sector can continue.

Sincerely,

The following 169 national, regional, and local organizations:

Alliance for Water Efficiency
Chicago, IL

AIQUEOUS
Austin, TX

American Council for an Energy-Efficient Economy
Washington, DC

American Rivers
Decatur, GA

**American Rainwater Catchment
Systems Assoc.**
Tempe, AZ

**American Society of Irrigation
Consultants**
Royal Oak, MI

American Supply Association
Itasca, IL

**American Water Works
Association**
Denver, CO

Amy Vickers & Associates
Amherst, MA

**Apache Junction Water Utilities
CFD**
Apache Junction, AZ

Aqua Water Supply Corporation
Bastrop, TX

**Arizona Municipal Water Users
Association**
Phoenix, AZ

Arizona Nursery Association
Tempe, AZ

Arizona Water Association
Queen Creek, AZ

**Association of Metropolitan
Water Agencies**
Washington, DC

Athens-Clarke County
Athens, GA

**Bay Area Water Supply &
Conservation Agency**
San Mateo, CA

Best Management Partners
Waterloo, IL

BLH Aqua Technology
San Jose, CA

Boulder Associates
Boulder, CO

Business for Water Stewardship
Portland, Oregon

C&C, Inc.
Seattle, WA

Cahaba River Society
Birmingham, AL

California Water Service
San Joes, CA

Carpinteria Valley Water District
Carpinteria, CA

**Center for Water-Energy
Efficiency, UC Davis**
Davis, CA

Chattahoochee Riverkeeper
Atlanta, GA

City of Avondale Public Works
Avondale, AZ

City of Bellingham
Bellingham, WA

City of Bend
Bend, OR

City of Big Bear Lake
Big Bear Lake, CA

City of Bozeman
Bozeman, MT

City of Buckeye
Buckeye, AZ

City of Durango
Durango, CO

City of Durham
Durham, NC

City of Flagstaff
Flagstaff, AZ

City of Fountain
Fountain, CO

City of Glendale
Glendale, AZ

City of Goodyear
Goodyear, AZ

City of Hays
Hays, KS

City of Mesa
Mesa, AZ

City of Napa
Napa, CA

City of Peoria
Peoria, AZ

City of Phoenix
Phoenix, AZ

City of Portsmouth
Portsmouth, NH

City of Round Rock
Round Rock, TX

City of Sacramento
Sacramento, CA

City of San Antonio
San Antonio, TX

City of Santa Barbara
Santa Barbara, CA

City of Santa Cruz, Water Dept.
Santa Cruz, CA

**City of Tucson, Water
Department**
Tucson, AZ

City of Tumwater
Tumwater, WA

Cobb County Water System
Marietta, GA

Codes & Standards International
Belen, NM

Colorado WaterWise
Denver, CO

Connecticut Water Company
Clinton, CT

Cool Choices
Madison, WI

Cushman & Wakefield
Tampa, FL

Dallas Water Utilities
Dallas, TX

Denver Botanic Gardens
Denver, CO

Dropcountr
San Francisco, CA

East Bay Municipal Utility District
Oakland, CA

Econics
Victoria, BC, Canada

Elevate Energy
Chicago, IL

Flo Technologies
Culver City, CA

FloLogic, Inc.
Morrisville, NC

Flow Dynamics, LLC
Encinitas, CA

Gary Klein and Associates
Rancho Cordova, CA

Gauley Associates, Ltd.
Acton, Ontario, Canada

Global Water Policy Project
Amherst, MA

Global Water Works
Libertyville, IL

Golden State Water Company
Anaheim, CA

Greater Edwards Aquifer Alliance
San Antonio, TX

Green Building Initiative
Portland, OR

Green Builder Coalition
Glen Carbon, IL

Green Business Certification Inc.
Washington, DC

Greywater Action
Berkley, CA

Halperin Creative, LLC
Denver, CO

Hawaii First Water, LLC
Kailua Kona, HI

Huron River Watershed Council
Ann Arbor, MI

HydroTech Solutions
Fort Worth, TX

IAPMO Group
Mokena, IL

Imagine H2O
San Francisco, CA

Irrigation Association
Fairfax, VA

Irrrometer Co., Inc.
Riverside, CA

Jordan Valley Water Conservancy District
West Jordan, UT

Kohler Co.
Kohler, WI

Las Vegas Valley Water District
Las Vegas, NV

LIXIL Water Technologies Americas
Piscataway, NJ

Lone Star Groundwater Conservation District
Conroe, TX

Maddaus Water Management, Inc.
Danville, CA

Madison Water Utility
Madison, WI

ManageWater, Inc.
Redwood City, CA

Marin Municipal Water District
Corte Madera, CA

Massachusetts Water Works Association
Acton, MA

Maximum Performance (MaP) Testing
Yorba Linda, CA

Medford Water Commission
Medford, OR

Metropolitan North GA Water Planning Dist.
Atlanta, GA

Metropolitan Water Dist. Of Southern CA
Los Angeles, CA

Middletown Sprinkler Company
Port Monmouth, NJ

Monterey Peninsula Water Management Dist.
Monterey, CA

Murray City Corporation
Murray City, UT

National Turfgrass Evaluation Program
Beltsville, MD

National Wildlife Federation
Reston, VA

Natural Resources Defense Council
New York, NY

Neponset River Watershed Association
Canton, MA

Niagara Conservation Corp.
Flower Mound, TX



North Marin Water District
Novato, CA

Northern Arizona Municipal Water Users Assoc.
Scottsdale, AZ

Olivenhain Municipal Water District
Encinitas, CA

PAC Properties
St. Paul, MN

Panhandle Groundwater Conservation District
White Deer, TX

PCR Resources
Santa Fe, NM

Plumbing-Heating-Cooling Contractors Association
Milwaukee, WI

Plumbing Manufacturers International
Rolling Meadows, IL

Pluvial Solutions
Atlanta, GA

Prescription Landscape, Inc.
St. Paul, MN

Purlin, LLC
Sarasota, FL

Ramona's Plumber/diyplumbingadvice.com
Ramona, CA

Rancho California Water District
Temecula, CA

Rain Bird Corp.
Azusa, CA

Recycled Hydro Solutions
Rogers, AR

Regional Water Authority
Citrus Heights, CA

Regional Water Providers Consortium
Portland, OR

River Network
Boulder, CO

Sacramento Suburban Water District
Sacramento, CA

Same Drop
San Francisco, CA

Sammamish Plateau Water
Sammamish, WA

San Francisco Public Utilities Commission
San Francisco, CA

Santa Clarita Valley Water Agency
Santa Clarita, CA

Santa Margarita Water District
Rancho Santa Margarita, CA

Scottsdale Water
Scottsdale, AZ

Seelig and Associates
Livermore, CA

Sierra Club
Oakland, CA

SLOAN
Franklin Park, IL

Sonoma County Water Agency
Santa Rosa, CA

Sonoma-Marin Saving Water Partnership
Santa Rosa, CA

South Central CT Regional Water Authority
New Haven, CT

South Tahoe Public Utility District
South Lake Tahoe, CA

Southern Environmental Law Center
Birmingham, AL

Southern Nevada Water Authority
Las Vegas, NV

Southern Oregon Landscape Association
Medford, OR

Spokane Aquifer Joint Board
Spokane, WA

Sustainable Waters
Crozet, VA

Sweetwater Authority
Chula Vista, CA

T&S Brass and Bronze Works
Travelers Rest, SC

Tampa Bay Water
Clearwater, FL

Terlyn Industries
Clearwater, FL

Texas Water Foundation
Austin, TX

Tohono O'odham Nation
Sells, AZ

TOTO USA, Inc.
Ontario, CA

Town of Queen Creek
Queen Creek, AZ

Tualatin Valley Water District
Beaverton, OR

U.S. Green Building Council
Washington, DC

U.S. Golf Association
Stillwater, OK

U.S. Water Alliance
Washington, DC

Upper San Gabriel Valley MWD
Monrovia, CA

Urban Fabrick Inc.
San Francisco, CA

Utah State University
Logan, UT

Verdani Partners
Carlsbad, CA

WasteWater Education, Inc.
Traverse City, MI

Water–Use It Wisely
Phoenix, AZ

Water Demand Management
Boulder, CO

Water Supply Citizens Advisory Board
Belchertown, MA

WaterNow Alliance
San Francisco, CA

Watershed, LLC
Vashon, WA

West Basin Municipal Water District
Carson, CA

Western Resource Advocates
Boulder, CO

Woodcock & Associates, Inc.
Northborough, MA

March 22, 2018 POINT REYES LIGHT

Legal Notices

Notice:

Salinity intrusion into the Point Reyes well supply serving the West Marin communities of Point Reyes, Olema, Inverness Park, and Paradise Ranch Estates has occurred and has caused sodium levels to increase from background levels of 15-30 milligrams per Liter (mg/L). The table below lists the most recent concentrations for sodium in the West Marin water supply:

Date	Chloride	Sodium	Units
3/13/18	100	50	mg/L

*milligrams per liter

Drew McIntyre, General Manager
North Marin Water District

MEMORANDUM

To: Board of Directors
From: Drew McIntyre, General Manager 
Subject: 2018 Strategic (Long-Range) Plan Development – Status Update
t:\gm\strategic plan\strategic plan update memo 3_30_2018.doc

March 30, 2018

Recommended Action: Information Only
Financial Impact: None

The purpose of this memo is to update the Board on the 2018 Strategic (Long-Range) Plan development status. A contract with Martin Rauch of Rauch Communications Consultants (Rauch) was approved by the Board at the November 21st meeting.


The work plan includes the following activities:

Item	Activity	Meeting Date	Status
1	Board Interviews	Tuesday, January 23	Complete
2	Strategic Planning Workshop #1	Tuesday, February 13, Special Meeting	Complete
3	Strategic Planning Workshop #2	Tuesday, February 27, Special Meeting	Complete
4	Final Draft Strategic Plan Development and Presentation	Tuesday, May 1, Regular Meeting ¹	In progress

The Strategic Planning Workshops were completed in February and staff is working with Mr. Rauch on preparation of the draft Strategic Plan based on input received from the two workshops. The draft Strategic Plan is now scheduled for presentation to the Board at the regular meeting on May 1.

¹ Revised from April 3, 2018

MEMORANDUM

To: Board of Directors
From: Luisa Fonseca, Acctg/HR Supervisor 
Subject: Disposal of Surplus Equipment
t:\accountants\financials\bod\bod memo vehicle auction 32718 - final.doc

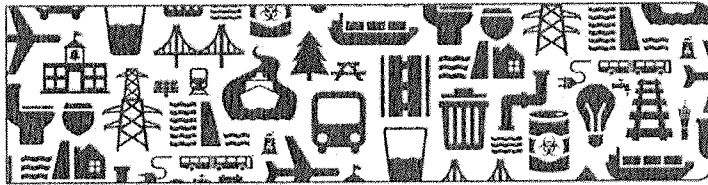
March 30, 2018

RECOMMENDED ACTION: None

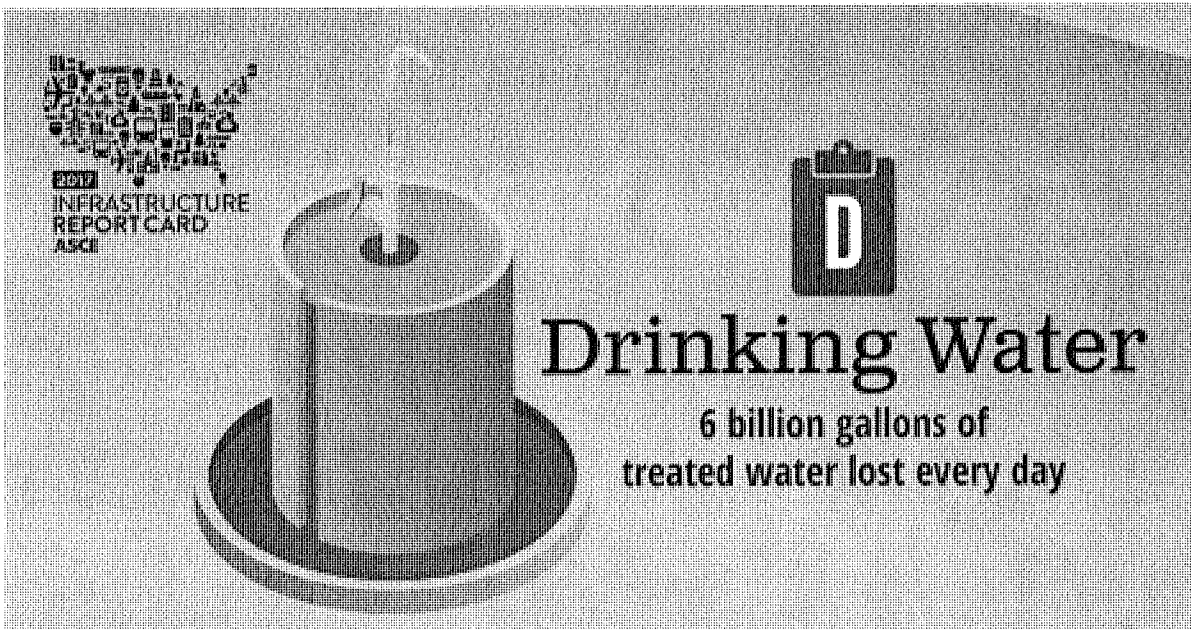
FINANCIAL IMPACT: \$7,536.00 income

Staff sold surplus equipment through First Capitol Auction, a bonded resale agent located in Vallejo on February 23, 2018 and the actual amount received (sale price less 4% commission) is shown below. This is the eighth year we have sold equipment through this vendor.

Equip. No.	Description	Mileage	Actual Amount Received
32	1999 Dodge Ram 1500 pickup truck	85,254	2,112.00
502	2007 Chevrolet 2500 HD Silverado pickup truck	100,562	4,560.00
	Pallet of metal folding stack chairs		336.00
	Quincy QGS 15 Shop Compressor		528.00
			-
	TOTAL		\$ 7,536.00

**2017**

INFRASTRUCTURE REPORT CARD



Drinking Water

6 billion gallons of
treated water lost every day

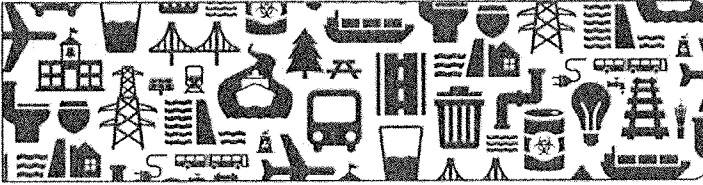
OVERVIEW

Drinking water is delivered via one million miles of pipes across the country. Many of those pipes were laid in the early to mid-20th century with a lifespan of 75 to 100 years. The quality of drinking water in the United States remains high, but legacy and emerging contaminants continue to require close attention. While water consumption is down, there are still an estimated 240,000 water main breaks per year in the United States, wasting over two trillion gallons of treated drinking water. According to the American Water Works Association, an estimated \$1 trillion is necessary to maintain and expand service to meet demands over the next 25 years.

CAPACITY AND CONDITION

The United States uses 42 billion gallons of water a day to support daily life from cooking and bathing in homes to use in factories and offices across the country. Around 80% of drinking water in the U.S. comes from surface waters such as rivers, lakes, reservoirs, and oceans, with the remaining 20% from groundwater aquifers. In total, there are approximately 155,000 active public drinking water systems across the country. Most Americans – just under 300 million people – receive their drinking water from one of the nation's 51,356 community water systems. Of these, just 8,674 systems, or approximately 17%, serve close to 92% of the total population, or approximately 272.6 million people. Small systems that serve the remaining 8% of the population frequently lack both economies of scale and financial, managerial, and technical capacity, which can lead to problems of meeting Safe Drinking Water Act standards.

Drinking water is delivered via one million miles of pipes across the country. Many of those pipes were laid in the early to mid- 20th century with a lifespan of 75-100 years. With utilities averaging a pipe



2017 INFRASTRUCTURE REPORT CARD

replacement rate of 0.5% per year, it will take an estimated 200 years to replace the system – nearly double the useful life of the pipes.

Because America's drinking water infrastructure provides a critical service, significant new investment and increased efficiencies are needed as filtration plants, pipes, and pumps age past their useful life. Every day, nearly six billion gallons of treated drinking water are lost due to leaking pipes, with an estimated 240,000 water main breaks occurring each year. It is estimated that leaky, aging pipes are wasting 14 to 18% of each day's treated water; the amount of clean drinking water lost every day could support 15 million households.

To address deteriorating water infrastructure, asset management provides utility managers and decision-makers with critical information on capital infrastructure assets and timing of investments. Some key steps for asset management include making an inventory of critical assets; evaluating their condition and performance; developing plans to maintain, repair, and replace assets; and funding these activities.

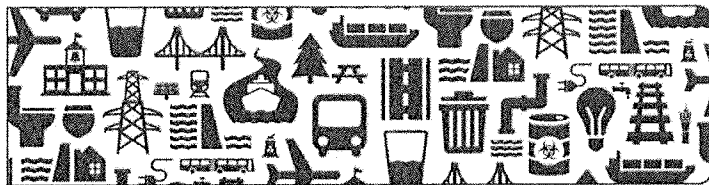
FUNDING

While drinking water infrastructure is funded primarily through a rate-based system, the investment has been inadequate for decades and will continue to be underfunded without significant changes as the revenue generated will fall short as needs grow. According to the American Water Works Association, upgrading existing water systems and to meeting the drinking water infrastructure needs of a growing population will require at least \$1 trillion.

The majority of funding for drinking water infrastructure comes from revenue generated by rate payers. In the nation's largest 50 cities, the rate users pay varies greatly; the lowest average monthly water bill is \$14.74 in Memphis, while Seattle residents pay the most at \$61.43. This large gap exemplifies the varied approaches to rate structure, as well as the contrast of need and investment across the country. While higher rates that reflect the true cost of service are important, public assistance programs should be considered for low income populations. Between 2009 and 2014, state and local governments decreased capital spending for both drinking water and wastewater by 22%; at the same time, federal capital spending did not change significantly.

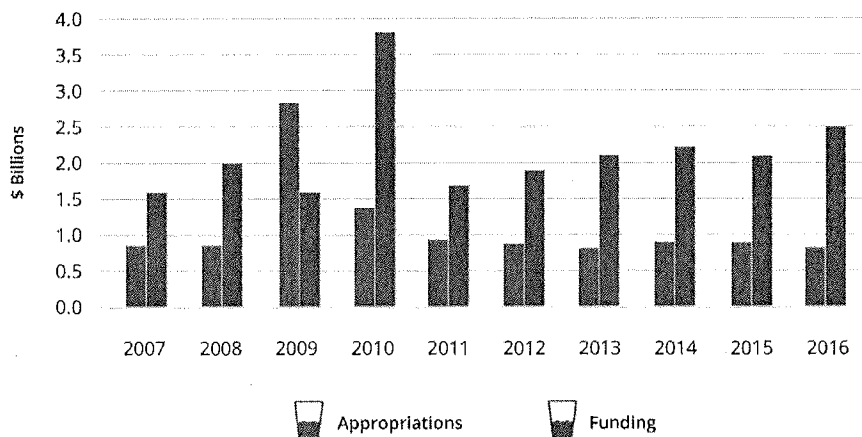
The federal government offers financial support to local governments and utilities in the form of loans through the Drinking Water State Revolving Fund, which provides low-interest loans to state and local water infrastructure projects. The Environmental Protection Agency (EPA) provides an allotment of funding for each state, and each state provides a 20% match. Since the program's inception, \$32.5 billion of low-interest loans have been allocated. However, with needs far surpassing the program's budget, it is unable to meet all investment needs or fund every deserving project.

In 2014, Congress authorized a new mechanism to fund primarily large water infrastructure projects over \$20 million through the Water Infrastructure Finance and Innovation Act (WIFIA). In 2016 Congress appropriated \$17 million in funds for the program. It is estimated that using WIFIA's full financial leveraging ability that a single dollar injected into the program can create \$50 dollars for project lending. Under current appropriations, EPA estimates that current budget authority may provide more than \$1 billion in credit assistance and may finance over \$2 billion in water infrastructure investment.



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Drinking Water State Revolving Fund Appropriations and Funding



FUTURE NEED

Municipal drinking water consumption in the United States has declined by 5% this decade, marking the first time in nearly 40 years that water use at home has decreased. Total freshwater withdrawals this decade continue to decline in almost every sector including agriculture, industrial, domestic, and thermoelectric. This is primarily due to increased efficiencies and the reduction in withdrawals for retired coal-fired power plants.

Drinking water needed for public supply in the United States has been relatively flat since 1985 even as the population has increased by approximately 70 million people over the same period. Water conservation efforts, including through water efficient fixtures, have had a significant impact in reducing per capita water usage. Importantly, while per capita demand has fallen, population trends have significantly challenged how cities manage water. For example, the Government Accountability Office estimates that 99 of 674 mid-sized cities in the U.S. are shrinking. This poses significant challenges to utility managers; fewer rate payers and a declining tax base make it difficult to raise funds for capital infrastructure plans. To respond, utilities must raise rates, often in cities where jobs and pay have not kept pace with the economy, putting a burden on those who can least afford rate increases. Conversely, in areas of the country that are growing, such as the West and Southwest, water managers must respond to increased overall demand.

PUBLIC SAFETY

Drinking water quality in the United States remains the safest in the world. The EPA sets legal limits for over 90 contaminants in drinking water. The Safe Drinking Water Act (SDWA) allows states to set and enforce their own drinking water standards as long as the standards meet or exceed EPA's minimum



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national standards. Smaller systems that serve under 10,000 people report that a lack of resources and personnel can limit the frequency of testing, monitoring, maintenance, and technical capability in their systems. With sufficient funding and proper oversight, these risks can be mitigated and water quality can remain safe.

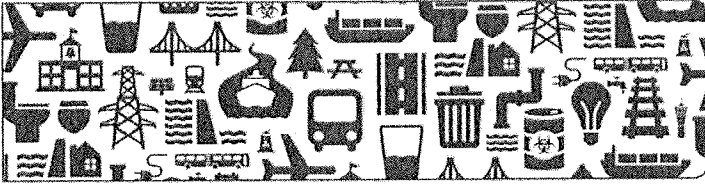
RESILIENCE AND INNOVATION

America's drinking water infrastructure doesn't stop at pipe, reservoir, pump station, and treatment plant upgrades; many threats to drinking water infrastructure can be attributed to the sources of drinking water, such as polluted water bodies, depleted aquifers, and inadequate storage. As watersheds continue to be impacted by shifting migration patterns, land use changes, consumption trends, and extreme weather, water infrastructure upgrades will be required to meet new demands. With proper planning, education, and conservation utilities are making strides to ensure demand is met for decades to come. Water conservation and improvements in water-use efficiency appear to have gained a general acceptance among water utilities as a sensible practice of water management.

According to the American Water Works Association, a majority of utilities—74%—have a formal conservation program, and 86% consider conserved water as one of their water supply alternatives. Additionally, many communities that have separate drinking water and wastewater departments are beginning to work together or even consolidate, creating "one water" utilities that manage water more holistically.

RECOMMENDATIONS TO RAISE THE GRADE

- Reinvigorate the State Revolving Loan Fund (SRF) program under the Safe Drinking Water Act through permanent reauthorization and tripling the amount of annual appropriations.
- Fully fund the Water Infrastructure Finance and Innovation Act (WIFIA) at its authorized level.
- Preserve tax exempt municipal bond financing. Low-cost access to capital helps keep lending for drinking water upgrades strong and accessible for communities large and small.
- Establish a federal Water Infrastructure Trust Fund to finance the national shortfall in funding of infrastructure systems under the Clean Water Act.
- Eliminate the state cap on private activity bonds for water infrastructure projects to bring an estimated \$6 to \$7 billion annually in new private financing.
- Encourage utilities to take regional approaches for water delivery to take advantage of economies of scale. *
- Increase federal support and funding for green infrastructure, watershed permitting, and other programs that promote the concept of "one water" to protect source watersheds.
- Encourage utilities to conduct revenue forecasting models to determine the necessary rate revenues over a period of time and then institute rates that reflect the true cost of supplying clean, reliable drinking water. *
- Encourage utilities to undertake asset management programs. *
- Increase federal and local support for vocational training in the drinking water sector as engineers, operators, and maintenance staff begin to retire in large numbers.



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- Support and advance conservation ballot measures that protect source water through dedicated funding to land and water protection.
- Utility managers must remain diligent to ensure science-based decisions control operations and facility function. While lead and other contaminants post significant health concerns when ignored, with proper funding safe and clean drinking water can be ensured.

DEFINITIONS

Non-community Water System is a public water system that is not a community water system and that regularly serves at least 25 of the same people over six months/year. These may include systems that provide water to schools, day care centers, government/military installations, manufacturers, hospitals or nursing homes, office buildings, and other facilities.

SOURCES

American Water Works Association, Buried No Longer: Confronting Americas Water Infrastructure Challenge, February 2012

American Water Works Association, State of the Water Industry, March 2016

Black and Veatch, 50 Largest City Water/Wastewater Utility Rate Survey, April 2013

Congressional Budget Office, Public Spending on Transportation and Water Infrastructure, 1956 to 2014, March 2015

Environmental Protection Agency, Drinking Water Infrastructure Needs Assessment, Fifth Report to Congress (2011), April 2013

Environmental Protection Agency, Drinking Water Action Plan, US EPA, November 2016

Center for Neighborhood Technology, The Case for Fixing the Leaks: Protecting people and saving water while supporting economic growth in the Great Lakes region, November 2013

U.S. Geological Survey, Estimated Use of Water in the United States in 2010, November 2014
<http://water.usgs.gov/edu/wateruse-total.html>

Environmental Protection Agency, The Clean Water State Revolving Fund, 2015.
<https://www.epa.gov/sites/production/files/2016-03/documents/cwsrfinfographic-030116.pdf>

Environmental Protection Agency, Investing in America's Water Infrastructure – Answering the “How to Pay” Question, July 26, 2016. <https://blog.epa.gov/blog/2016/07/investing-in-americas-water-infrastructure-answering-the-how-to-pay-question/>

New Polling Shows 73% of Californians Oppose a Drinking Water Tax

On March 12, ACWA released key findings from a recent statewide poll showing that 73% of Californians oppose a tax on drinking water, such as the tax proposed in the Brown Administration's budget trailer bill and in SB 623 related to safe drinking water. ACWA staff presented these findings to legislators in a hand-delivered memo prior to their public release.

The poll was conducted by Tulchin Research, an independent research firm commissioned by ACWA to interview 1,000 likely voters between Jan. 25-28.

Among some of the top reasons cited for their opposition, Californians emphasized the already-too-high cost of living in the state and the belief that the state should not tax a life-sustaining resource such as drinking water.

Additionally, the poll shows that 74% of Californians believe the state should use existing resources to assist disadvantaged communities without safe drinking water, such the alternative funding sources being proposed by ACWA and its No Drinking Water Tax Oppose-Unless-Amended Coalition.

While ACWA agrees with the intent of the budget trailer bill, which is to fill gaps in funding for safe drinking water in some disadvantaged communities, it strongly opposes a tax on drinking water as a proposed solution. ACWA continues

to advocate for a more appropriate alternative package which includes funding from federal safe drinking water dollars, money from voter-approved general obligation bonds, the assessments related to nitrates proposed in the budget trailer bill and a limited amount of dollars from the general fund

"ACWA is advancing for a funding package comprised of a variety of sources, both existing and proposed, including a relatively small amount of general fund money to resolve this issue without a tax on drinking water," said ACWA Executive Director Timothy Quinn. "If state leaders are willing to make this societal problem a priority, general fund dollars can be part of the solution."

ACWA distributed a news release on March 13 highlighting the poll results.

Additionally, as *ACWA News* went to print March 14, ACWA and several member agency representatives were scheduled to testify against the proposed tax on drinking water included in the budget trailer bill during Budget Subcommittee hearings in the Assembly on Wednesday and the Senate on Thursday.

ACWA Director of State Relations Wendy Ridderbusch was slated to testify on behalf of ACWA. Due to the timing of the hearings, more detailed coverage is planned for ACWA's website.

On March 7, ACWA's No Drinking

Water Tax Oppose-Unless-Amended Coalition sent a letter opposing the budget trailer bill to the chairs of the Senate Budget Subcommittee No. 2 and the Assembly Budget Subcommittee No. 3. The letter listed 136 organizations that have an oppose-unless-amended position on the bill.

In addition to outlining ACWA's alternative funding proposal, the letter also details the coalition's key concerns with the proposal for a tax on drinking water. Those concerns include the fact that adding a tax on water works against the goal of keeping water affordable for all Californians and considerations such as the inefficiency of turning local water agencies and cities across the state into taxation agencies for the state of California.

Over the past few weeks, ACWA's No Drinking Water Tax Oppose-Unless-Amended Coalition has grown to 136 members and continues to add members on a daily basis. As members add on, ACWA will update its letter. A copy of the coalition's most recent letter and the list of coalition members can be found on ACWA's website at www.acwa.com/no-water-tax.

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City: Fountaingrove water system needs \$43 million replacement due to contamination after Sonoma County fires

KEVIN MCCALLUM

THE PRESS DEMOCRAT | March 22, 2018, 9:01 PM



The entire water-delivery system in a 184-acre section of the devastated Fountaingrove neighborhood will likely need replacement after becoming contaminated with benzene, and it appears the city will initially be on the hook for a project whose estimated costs have soared to \$43 million.

The intensive investigation into the exact cause of the contamination continues, but officials say they now understand how the cancer-causing hydrocarbon found in gasoline and plastics made it into the water mains in the area.

The city's team of water engineers, consultants and regulators is "converging on the recommended approach" that would require the "full replacement of the distribution system, from the water mains to the meters on the properties" and related equipment like fire hydrants within the advisory area, Ben Horenstein, director of Santa Rosa Water, said Thursday.

The cost of that solution, which Horenstein had previously estimated at up to \$20 million, has now more than doubled, and completion may take significantly longer than the year he initially hoped.

The development raises a host of questions about how quickly the devastated Fountaingrove neighborhood, which lost 1,420 homes in the Tubbs fire, may be able to recover, how the city can fund the needed repairs, and what it means for residents who still live there.

Before the fire, there were 350 homes in the advisory area, centered on the north and south sides of Fountaingrove Parkway near Fir Ridge Drive. Restrictions on water use for the 13 homes that remain standing have been in place since November. While lots are being cleared, few former residents of the advisory area have applied for city permits to rebuild.

Contamination of the water system has become one of the most pressing and confounding challenges facing the city as it seeks to recover from the October wildfires, the most destructive in U.S. history, with 5,100 homes lost in Sonoma County alone. Melted plastic storm drains that caused sinkholes and confusion over the acceptable level of arsenic in soil before cleared lots could be rebuilt have also been curveballs, but nothing like the contamination problem.

City officials say it has become increasingly clear over recent weeks that the benzene and other hydrocarbons detected in the water system in the advisory area originated when plastic components of the system melted during the fires and were somehow sucked into the water mains though a severe drop in water pressure.

Normally, positive water pressure pushes contaminants outward, acting as a protective barrier against broader contamination of the system, Horenstein said.

In this case, however, the sharp drop in water pressure that the Fountaingrove area suffered during the fires — something firefighters complained about as they battled the blaze — likely created a vacuum effect on the system.

Water pressure in the hillside neighborhood is provided by a combination of pumps that send the water uphill and pressure from the millions of gallons capable of being stored in seven holding tanks in the area.

But at the time of the fire, one of those tanks was empty because it was down for seismic retrofitting, said Jennifer Burke, the city's deputy director of water and engineering resources.

It's not clear how much having that tank offline contributed to the low water pressure, but it likely had some impact, Horenstein said. It also wasn't immediately clear how full the other tanks were at the time of the fire.

The combination of firefighters trying to save structures, residents turning on hoses in efforts to save their own homes, and water being released as homes were destroyed all created intense demands on the system, Burke said.

Complicating the issue is that the city lost the ability to monitor the pressure in the system. The equipment that monitors pressure and communicates data to decision makers went down in the fire, leaving water managers "blind" on the night of the fire, Horenstein said.

Officials believe the sharp drop in pressure created the conditions that allowed a combination of benzene, superheated air, ash and debris to enter the main water delivery pipes at some point during and after the fire. There, it sat for more than a month, adhering to and becoming absorbed by the plastic components in the system, and then leaching out over time, Horenstein said. Valves were closed to isolate the contamination to the advisory area.

"It's difficult, if not likely impossible, to get rid of it in any reasonable time frame other than by replacement," he said.

Water officials have been gradually coming to the conclusion that full replacement of the system in the advisory area might be necessary. Horenstein first raised that possibility with the City Council in December, when he first gave the \$20 million estimate.

Since then, however, the increasing number of test results showing benzene persisting in the mains in the advisory area have made the replacement need clearer. The complexity of the project has sent the projected costs skyward.

The latest \$43 million estimate is based on the deepening understanding of just how massive a project the replacement would be, especially if it were fast-tracked, Horenstein said.

The higher costs reflect the complexity of installing the new water lines in and around other utilities, and the need to phase the project to ensure no cross-contamination. The project would also need to take into account home rebuilding efforts while the line replacements are underway, and existing homeowners would need to have water service continued in some fashion, Horenstein said.

Doing all that in an expedited fashion — something the city would like to see given the time constraints on homeowners, whose insurance policies stop covering living expenses at two years — would likely require significant incentives for contractors, Horenstein said.

But the city's plan to pay for such a project took a hit recently when it learned the Federal Emergency Management Agency was unlikely to provide advance funding for it, Horenstein told the Board of Public Utilities last week.

Such advance payments are typically for emergency response measures, not long-term infrastructure repair. The city received some contradictory information on this point, initially believing it was entitled to 40 percent of the project's cost, or \$17.2 million. The surprise has caused the city to scramble to figure out how to pay for the project in the short term. It currently plans to draw down reserves and hope for reimbursement on the backside. Water officials referred to the surprise as a "glitch," something Board of Public Utilities Chairman Bill Arnone found an odd descriptor under the circumstances.

"Calling an unanticipated \$17.2 million loss of early funding a 'glitch' is a colossal understatement," Arnone said.

Veteran BPU member Dick Dowd said he felt city water staff were doing a "marvelous job" addressing the issue, and he noted that conservative fiscal policies of recent years have paid off.

"We have some reserves to absorb the shock of this fire disaster that our community experienced in October," Dowd said. "But if the FEMA money does not come forth to us, there probably will be the need for some significant rate increases."

To help the City Council and the public better understand the investigation status, repair plans and options, the city plans a rare joint meeting of the Board of Public Utilities and the City Council at 2 p.m. Tuesday.

You can reach Staff Writer Kevin McCallum at 707-521-5207 or kevin.mccallum@pressdemocrat.com. On Twitter @SRCityBeat.

Well, hello there...

... we're glad you stopped by to check out our award-winning coverage of the North Bay.

Glen Charles Ghilotti

Passed away unexpectedly on March 25, 2018 in Oklahoma at the age of 59 years. Devoted husband of Genevieve Ghilotti. Cherished father of Jennifer Ghilotti, Kevin Ghilotti, Tom McCoy, Jennilee Rodrigues, and Tina Studebaker. Beloved grandfather of Gwen and Lincoln McCoy and Archie Rodrigues. Loving brother of Gary Ghilotti, Patrick Ghilotti, Judy Ghilotti, and the late Jim, Greg, and Marcia. Survived by numerous nieces and nephews.

Born to Bonnie and Henry J. "Babe" Ghilotti on July 20, 1958, Glen was raised in San Rafael and attended Chico State. From a very young age, he was actively involved in his family's construction company. Striking out on his own, Glen created his own family business, Team Ghilotti, in Petaluma. Over the last eleven years, he has proudly owned and operated Team Ghilotti and considered himself very fortunate to work alongside his children, Jennifer and Kevin.

Glen's Petaluma farm, Glenhill Farm & Gardens, was an enormous sense of joy for him. His vision was to create a magical

place where families could visit and learn about farming, petting zoo animals, and trains. It was during his trip to pick up a special trolley for the farm that Glen sadly passed away.

In his spare time, Glen collected antique Caterpillar tractors, trucks and military tanks. He was in the process of building a museum for people to visit at the farm to house his collection of rare and unique equipment.

Having a heart of gold, Glen was also very committed to fundraising for Miracle League North Bay, a ballpark for special needs children. Above all, Glen loved his family; his grandchildren were the light of his life. He was a wonderful and special man; he will be greatly missed.

Friends and family are invited to attend the Funeral Mass, Friday, April 6, 2018 at 10:00 am at St. Raphael's Catholic Church, 1104 Fifth Ave., San Rafael, CA. A Visitation will be held on Thursday, April 5, 2018 from 11:00 am to 3:00 pm at the PARENT-SORENSEN MORTUARY & CREMATORY, 850 Keokuk St., Petaluma, CA, followed by the Vigil Service at 6:00 pm at St. Raphael's Church. Memorial contributions may be made to Miracle League North Bay, 40 Fourth St., Ste. 286, Petaluma, CA 94952. Private Interment: Mt. Olivet Catholic Cemetery, San Rafael.



Novato Advance

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THE WEEK OF MARCH 28, 2011

City Government / Budget

City finances 'pretty solid'

By **Corey Pride**
Novato Advance

City Manager Regan Candelario wants residents to know Novato is in a good place economically.

That was the theme last Thursday as he delivered his annual State of the City Address.

"I don't have all the answers. Like I told you last year, I don't know that anybody ever will," he said. "But I know where we're at now. We're sitting on pretty solid ground."

Candelario highlighted a general fund surplus the city achieved at the start of the current fiscal year and a balance of \$5.8 million in Novato's emergency reserve fund. He said he and his staff are working on ways to use the surplus dollars to provide services for the public.

Candelario said he is proud of what the city has been able to accomplish with a staff of about 218 employees serving

56,000 residents.

"That's not a lot of bodies," Candelario said. "That's not a lot of people to provide services to a city of our size."

Candelario emphasized interest the city is getting from developers wanting to bring in housing and commercial projects. Most notably, Candelario said he is pleased a developer has proposed a housing and retail mix for the 20,000 square-foot office building that formerly housed Pini Ace Hardware on Grant Avenue.

Partnerships with local nonprofits and other agencies were also discussed. Candelario referenced the Mobile Showers Program, which provides showers for the homeless, that Novato and San Rafael allowed the Downtown Streets Team to set up in their cities. He also mentioned Mayor Josh Fryday's scholarship program with Dominican University, which gives students from Novato the opportunity to intern for the city.

"I like to point to our partnerships and

our collaborative efforts," he said. "How we do as a city is dependent upon relationships. We help them, they help us, we work together on something and a project happens."

The city council recently approved creation of a trust to deal with an accrued \$46 million unfunded pension liability for future city retirees.

"This trust that we're going to be putting together is one vehicle. It's not going to solve that problem, but it's going to really help us address it and reduce that liability," Candelario said.

A question and answer period followed Candelario's speech. He and his staff answered questions about traffic, tourism, hotel construction and sales tax revenue.

The State of The City Address is scheduled to be rebroadcasted on Novato Community Television Channel 27 and is available on the internet at novato.org/watchmeetings.

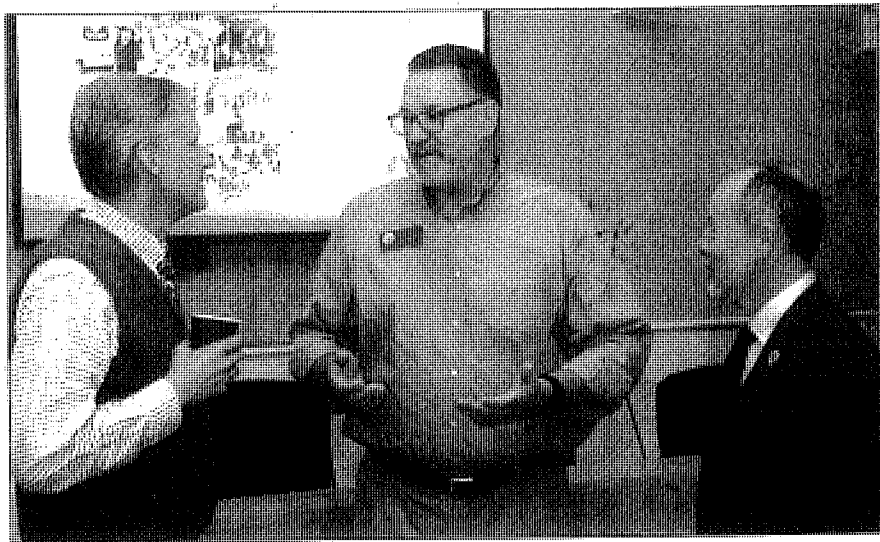


PHOTO BY ELLIOT KARLAN

Novato City Manager Regan Candelario, right, talked with North Marin Water District GM Drew McIntyre, (left,) and Novato Public Works Director Russ Thompson, (center) a few moments before he delivered his annual Novato State of the City address at Novato City Hall. He told the group that Novato is on firm financial footing.

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