



NORTH MARIN WATER DISTRICT
AGENDA - REGULAR MEETING
 May 17, 2016 – 7:00 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
7:00 p.m.	CALL TO ORDER	
	1. APPROVE MINUTES FROM REGULAR MEETING , May 3, 2016	
	2. PUBLIC HEARING	
	<i>Consider Proposed Increase in Water Rates for Novato Service Area and Resulting Revisions to District Regulation 54, Water Rates</i>	
		Resolution
	3. PUBLIC HEARING PUBLIC HEARING/ADOPT	
	<i>Public Hearing for Revisions to Drought Emergency Water Conservation Regulations</i>	
		Ordinance
	4. GENERAL MANAGER'S REPORT	
	5. 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.	
	6. STAFF/DIRECTORS REPORTS	
	7. MONTHLY PROGRESS REPORT	
	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.	
	8. Consent – Approve: Novato Spring <i>WaterLine</i> , Volume 17, Issue 36	
	9. Consent – Approve: West Marin Spring <i>WaterLine</i> , Volume 13	
	ACTION CALENDAR	
	10. Approve: General Services Agreement – Genterra Consultants, Inc.	
	11. Approve: Bid Advertisement – Recycled Water Expansion Central Service Area – West Project	

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
		INFORMATION ITEMS
	12.	Quarterly Progress Report – Water Quality Report
	13.	Second Review – Proposed FY 2016/17 Novato Water Equipment Budget
	14.	Second Review – Proposed FY 17 & FY 18 Novato Capital Improvement Projects Budget
	15.	Second Review – FY 2016/17 Proposed Novato Operations Budget
	16.	Second Review – FY 2016/17 Proposed Novato Recycled Water Operations Budget
	17.	MISCELLANEOUS Disbursements Tour of Novato Sponsor May 14th <u>News Articles:</u> Marin IJ Editorial: Keep desalination in MMWD plan as insurance Marin’s flush water districts seek easing of state conservation mandate Marin fluoride ballot measure falls short of signatures Gov. Brown seeks permanent water saving measures amid pushback on state mandate Marin IJ Editorial: Water ruling should be based on reality MALT nabs Gallagher land Survey Shows Californians’ Support for Recycled Water
9:00 p.m.	18.	ADJOURNMENT

1

DRAFT
NORTH MARIN WATER DISTRICT
MINUTES OF REGULAR MEETING
OF THE BOARD OF DIRECTORS
May 3, 2016

CALL TO ORDER

President Schoonover called the regular meeting of the Board of Directors of North Marin Water District to order at 7:00 p.m. at the District headquarters and the agenda was accepted as presented. Present were Directors Jack Baker, Rick Fraites, Stephen Petterle, Dennis Rodoni and John Schoonover. Also present were General Manager Chris DeGabriele, District Secretary Katie Young, Auditor-Controller David Bentley and Chief Engineer Drew McIntyre.

Novato Resident, Mike Jolly and District employee Tony Arendell (Construction/Maintenance Superintendent) were in the audience.

MINUTES

On motion of Director Baker, seconded by Director Fraites, the Board approved the minutes from the previous meeting as presented by the following vote:

AYES: Director Baker, Fraites, Petterle, Rodoni and Schoonover

NOES: None

GENERAL MANAGER'S REPORT

State Water Resources Control Board (SWRCB) Workshop

Mr. DeGabriele advised the Board that he attended the SWRCB workshop in Sacramento on April 20th with City of Petaluma council member Mike Healy, the Water Advisory Committee Chair. He stated that Mr. Healy was the only elected official who spoke at the workshop and that the local agencies were well represented. He informed the Board that the District is expected to receive draft revisions to the regulation this week. He noted that he also has meetings set up this week with Steven Moore by phone and Tam Doduc next Monday in Sacramento to advocate again for the District request to rescind the Emergency Urban Water Conservation Regulation.

National Marine Fishery Service (NMFS)

Mr. DeGabriele informed the Board that he and Mr. McIntyre met with NMFS last Monday about the Steelhead Recovery Plan. He stated that NMFS plans to have the final document completed in October and that it's not likely any additional information the District can provide in the interim would change the plan. He advised the Board that the District's desire to remove the stream reach above Stafford Dam as potential steelhead habitat would be addressed when a new base

1 model is prepared by NMFS science center because NMFS recognizes that these SF Bay Coastal
2 streams have a high number of fish per kilometer of stream. Mr. DeGabriele stated that NMFS
3 encouraged the District to get the other agencies with SF Bay Coastal streams together to advocate
4 for funding and elevate the priority of the NMFS science center work. He noted that NMFS also
5 suggested the District work with their staff on any habitat evaluation in Novato Creek.

6 ACWA President

7 Mr. DeGabriele advised the Board that the District will host the ACWA President on June 2nd,
8 other agencies in the Marin/Sonoma areas will also be invited and the District intends to host at the
9 Novato City Hall.

10 State Water Resources Control Board Division of Drinking Water

11 Mr. DeGabriele informed the Board that the District is also hosting a SWRCB Division of
12 Drinking Water meeting at the District next Wednesday for water quality staff in Marin/Sonoma
13 areas related to the Total Coliform Rule compliance.

14 ACWA Conference

15 Mr. DeGabriele advised the Board that David Bentley is attending the ACWA Conference in
16 Monterey this week and is not attending tonight's meeting.

17 **OPEN TIME**

18 President Schoonover asked if anyone in the audience wished to bring up an item not on the
19 agenda and there was no response.

20 **STAFF / DIRECTORS' REPORTS**

21 President Schoonover asked if staff or Directors wished to bring up an item not on the
22 agenda and the following items were discussed:

23 Director Baker advised that he and Director Fraites attended the North Bay Watershed
24 Association conference on April 22nd, indicating that it was well attended and very informative.

25 **CONSENT CALENDAR**

26 Director Petterle requested the Addendum to the Stafford Lake Park Irrigation System Lake
27 Intake Upgrade MOU be removed from the consent calendar and recused himself since he is a
28 Marin County Parks employee and is precluded from discussing or voting on the item due to a
29 conflict of interest.

30 On the motion of Director Petterle, seconded by Director Baker the Board approved the
31 following items on the consent calendar by the following vote:

AYES: Director Baker, Fraites, Petterle, Rodoni and Schoonover

NOES: None

SET PUBLIC HEARING FOR REVISIONS TO DROUGHT EMERGENCY WATER CONSERVATION REGULATIONS

The Board approved setting a Public Hearing for revisions to the Drought Emergency Water Conservation Regulations at a hearing on May 17th. It was noted that the State Board will not make their determination final until May 18th but we should have a draft of the recommended regulations by the May 17th meeting.

VILLA ENTRADA HOA EASEMENT AND COMPENSATION

The Board authorized payment to Villa Entrada HOA for a new easement across their property to install a 220ft long pipeline to Norman Tank for recycled water. The new pipeline will be installed using trenchless methods and will supplement an existing pipeline further up the hill to be used for the recycled water installation.

ADOPT STATE FINANCIAL ASSISTANCE REVISED PLEDGED REVENUES AND FUNDS RESOLUTION FOR RECYCLED WATER CENTRAL SERVICE AREA PROJECT

The Board adopted a revised Resolution 15-07 entitled: "Pledged Revenues and Fund(s) Resolution" for the State Board as part of the District's Application for State Revolving Funds on Recycled Water Loan Financing.

SELECTION OF CPA FIRM TO PERFORM ANNUAL FINANCIAL AUDIT

The Board selected Fedak and Brown as the auditing firm to perform the District's audit over the next four year period.

ACTION CALENDER

ADDENDUM TO STAFFORD LAKE PARK IRRIGATION SYSTEM LAKE INTAKE UPGRADE MOU

Director Petterle recused himself and left from the Board meeting since he is a Marin County Parks employee and is precluded from discussing or voting on the item due to a conflict of interest.

The Board considered an Addendum to the Stafford Lake Park Irrigation System Lake Intake Upgrade Memorandum of Understanding that will enable Marin County Parks to install their new submersible pump station earlier in the summer to give them more time before the construction cutoff date of October 15th.

On motion of Director Fraites, seconded by Director Baker, the Board approved the Addendum to the 2011 MOU agreement between Marin County Parks and North Marin Water District for installation of a new lake intake and pump station by the following vote:

AYES: Directors Baker, Fraites, Rodoni and Schoonover

NOES: None

ABSTAIN: None

ABSENT: Director Petterle

Director Petterle returned to the Board Meeting.

WATER SHORTAGE CONTINGENCY PLAN FOR WEST MARIN SERVICE AREA

Mr. DeGabriele advised the Board that staff is requesting the Board approve an updated Draft Water Shortage Contingency Plan for the West Marin Service Area. He stated that the updated draft follows the format approved for the Novato Water Shortage Contingency Plan at the previous meeting and includes stages of voluntary measures, mandatory restrictions on water use and finally mandatory reductions in water use. He noted that the triggers in the plan are similar to that in Novato, broadening the ability of the North Marin Board to declare water shortage emergencies.

On motion of Director Petterle, seconded by Director Fraites, the Board approved Resolution 16-09 entitled: "Resolution of the Board of Directors of North Marin Water District Approving the Water Shortage Contingency Plan for West Marin Service Area" and updated the Draft Water Shortage Contingency Plan for West Marin Service Area by the following vote:

AYES: Director Baker, Fraites, Petterle, Rodoni and Schoonover

NOES: None

RATE INCREASE LETTER TO WEST MARIN WATER AND OCEANA MARIN SERVICE AREA

Mr. DeGabriele advised the Board that staff prepared rate increase letters to West Marin water customers and Oceana Marin Sewer customers for mailing. He reminded the Board that customers must be notified of water or sewer rate increases at least 45 days before a public hearing where the Board considers adoption. Mr. DeGabriele informed the Board that in West Marin, the public hearing is scheduled for Tuesday, June 28th, so the letters need to be postmarked no later than May 14th. He stated that for West Marin water a 5% overall rate increase is proposed, solely on the commodity rate which is proposed to increase 7% effective July 1st and at Oceana Marin a 10% rate increase is proposed effective July 1st.

On motion of Director Fraites, seconded by Director Rodoni, the Board approved mailing the rate increase letters to West Marin Service Area customers by the following vote:

AYES: Director Baker, Fraites, Petterle, Rodoni and Schoonover

1 NOES: None

2 **INFORMATION ITEMS**

3 **INITIAL REVIEW – FY 2016/17 PROPOSED NOVATO OPERATIONS BUDGET**

4 Mr. DeGabriele provided the Board with the initial review for the proposed FY16/17 Novato
5 Operations Budget. He advised the Board that the proposed budget is based on 2.2BG of water to
6 be sold, which is the lowest consumption level since 1979. He stated that on the operating side, the
7 budget is projecting a net income of \$1.1M and that operating expenditures are decreasing by 3%
8 due to purchasing less water from Sonoma County Water Agency. Mr. DeGabriele informed the
9 Board that staff is proposing the current staffing levels continue with the two added Treatment Plant
10 Operators, maintaining 53.7 full time equivalent staff. He noted that there is a recommended spot
11 adjustment for the Auditor Controller and that there may be another spot adjustment in the next
12 version of the budget for the Board to consider. Mr. DeGabriele stated that there is an anticipated
13 2.7% cost of living and the PERS retirement contribution is expected to decrease.

14 Mr. DeGabriele advised the Board that there will be an additional review at the May 17th
15 meeting and then will be considered at the June 21st public hearing meeting.

16 **INITIAL REVIEW - FY 2016/17 NOVATO RECYCLED WATER SYSTEM BUDGET**

17 Mr. DeGabriele provided the Board with the initial review of the FY2016/17 Novato Recycled
18 Water System Budget. He stated that the water demand for next year is projected at 104MG and the
19 operating expenses projected to decrease by 2%. He reminded the Board of the recycled water
20 expansion project in the Central Novato Service area with \$7.5M to be expended next fiscal year
21 and noted that the total cost of the project would be \$11M. He stated that grant funding along with
22 state revolving fund loans will be used to pay for the project and that there is an expected \$815K
23 transfer of connection fee revenue to in the recycled water system budget.

24 Director Fraites inquired about the Hamilton Sports Complex and asked if recycled water
25 would be available for the turf. Mr. DeGabriele replied that the District would be able to supply
26 recycled water especially in the Hamilton area and the developers would have to pay connection
27 fees and to extend the necessary pipeline.

28 Mr. DeGabriele advised the Board that there will be an additional review at the May 17th
29 meeting and then will be considered at the June 21st public hearing meeting.

30 **QUARTERLY PROGRESS REPORT - ENGINEERING**

31 Mr. McIntyre provided the Board with the Quarterly Progress Report for Engineering. He
32 stated that the budgeted expenditures for Novato Water are just short of \$5M vs the approved
33 budget of \$9M. He noted that the \$4M difference is due to the projected savings on the AEEP

1 project and the deferral. Mr. McIntyre informed the Board that only two projects went over the
2 approved budget, tank access hatch project and level alarms was over approximately \$10K and the
3 West Marin upsized pipeline at Bear Valley went over \$110K. Mr. McIntyre advised the Board that
4 staff continues to work on the Recycled Water Central Service Area project and that the application
5 for SRF loan should get approved within the next six weeks. He reminded the Board that staff
6 received approval to go out for bid for the East side of the project and will come back to the Board at
7 a future date to get the approval to go out for bid for the West side projects.

8 **QUARTERLY PROGRESS REPORT – WATER CONSERVATION**

9 Mr. McIntyre provided the Quarterly Progress Report for Water Conservation. He stated that
10 the Cash for Grass program continues to grow with record participation levels and it is expected that
11 the end result will exceed any other year on record. He stated that the other water conservation
12 programs remain fairly consistent, except for a decline in washer rebates.

13 Mr. McIntyre advised the Board that Ryan Grisso is working on the spring “*Waterline*”
14 newsletter for both Novato and West Marin areas and that budgeted expenditures are higher than
15 the previous two years.

16 **NBWRA MEETING UPDATE – APRIL 25, 2016**

17 Mr. McIntyre provided the Board with the North Bay Water Reuse Authority Meeting update
18 from April 25th. He stated that there were no changes in the budget and the NBWRA Board
19 approved the next fiscal year budget. He informed the Board that there is continued discussion
20 about the Hertzberg bill to reduce ocean outfall wastewater discharge by 2026. Mr. McIntyre advised
21 the Board that Chair Rabbit discussed the long term viability and the best way of trying to determine
22 NBWRA’s future.

23 **WAC/TAC MEETING – MAY 2, 2016**

24 Mr. DeGabriele provided the Board with a summary of the WAC/TAC meeting held on May
25 2nd. He informed the Board that Lauren Casey from the Regional Climate Protection Authority, made
26 a presentation on Climate Action 2020 and Beyond (CAP), a regional program for Sonoma County
27 Communities. He stated that The CAP builds on previous commitments to reduce Green House Gas
28 (GHG) Emissions for all Sonoma County Communities. He stated that 3% of the CAP GHG
29 reduction goal is in the Water Conveyance and Wastewater Treatment Sector. Mr. DeGabriele
30 stated that the goals include increasing participation in existing efforts (SBX7-7, Water Conservation
31 for existing buildings, greywater use and green energy) plus new water conservation in new
32 construction.

33 Mike Thompson, Assistant General Manager made an oral presentation on the new Power

1 and Water Resource Pooling Authority (PWRPA) contract. He stated that PWRPA is a joint powers
2 authority of small irrigation districts in the Central Valley along with Santa Clara Valley Water District
3 and Sonoma County Water Agency. Mike advised that significant reduction in electrical cost have
4 occurred in the last 3 years due to: 1) lower cost natural gas prices; 2) widespread use of renewable
5 energy sources and 3) portfolio management, (a shift to cheaper, larger hydro-electric power). The
6 new PWRPA contract results in an energy savings to the Water Transmission System of
7 approximately \$700k.

8 **NBWA MEETING – MAY 6, 2016**

9 Director Baker will be attending the North Bay Watershed Association meeting on Friday,
10 May 6, 2016.

11 **MISCELLANEOUS**

12 The Board received the following miscellaneous information: Disbursements, FY16 – 3rd
13 Quarter Labor Cost Report, ACWA Clair Hill Water Agency Award for Excellence, Residential
14 Recycled Water Plan for 2016, and County Appoints Acting Parks Director.

15 The Board received the following news articles: Novato Woman Gives Back Through 'A
16 Taste of Sri Lanka' Fundraiser, East Bay water district will stop fining water guzzlers, Schools buying
17 water filters even though fountains are fine, Marin Oks coastal program amid disagreement with
18 state staff, West Marin community celebrates new wastewater system in Marshall, Marshall
19 celebrates community septic system, Mosquito agreement coming soon, and Klamath Basin
20 Agreement Opens Way to Restore River.

21 The Board received the following miscellaneous item at the meeting: WAC Meeting Update
22 – May 2, 2016 and the following news article at the meeting: Marin water supply report sees no
23 urgent need for desalination plant.

24 **ADJOURNMENT**


25 President Schoonover adjourned the meeting at 8:01 p.m.

26 Submitted by
27
28

29
30 Katie Young
31 District Secretary

2

MEMORANDUM

To: Board of Directors
 From: David L. Bentley, Auditor-Controller 
 Subj: Public Hearing – Proposed Novato Water Rate Increase
t:\ac\word\budget\17\public hearing - rate increase fy17.docx

May 13, 2016

RECOMMENDED ACTION: 1) Approve Rate Increase
 2) Consider Drought Revenue Recovery Surcharge

FINANCIAL IMPACT: 1) Additional \$770,000 in FY17 Revenue from Rate Increase
 2) Additional \$725,000 in FY17 Revenue from Surcharge

In a letter dated April 1, 2016, Novato customers were invited to a public hearing scheduled for May 17 at 7:00 PM to consider:

- 1) Adoption of a proposed increase in the cost of water which averages 5% for the typical residential and non-residential customer; and,
- 2) Adoption of a Drought Revenue Recovery Surcharge, effective June 1, 2016.

Customers were noticed individually of the proposed water rate increase and Surcharge by letter (Attachment A) and a notice of the Public Hearing was published in the May 12 edition of the Marin Independent Journal (Attachment B).

Under law, a customer protest of 50% plus one would invalidate the proposed increase. Through May 13, the District received letters from thirty-seven customers pertaining to the proposed increase, thirty-five opposing and two in support. The customer letters are included as Attachment C.

Staff also received about 14 calls concerning the increase. Customers who called noted that "we are not in a drought", and "if the drought regulation is lifted, will we be able to eliminate the increase?" and "I reduced irrigation and lost some plants." By and large the customers were cordial but frustrated with a rate increase in response to reduced consumption.

On May 9, 2016, the Governor issued a new Executive Order entitled "Making Water Conservation a California Way of Life" which, among other things, ordered the State Water Resource Control Board (SWRCB) to adjust the Emergency Water Conservation Regulations (Regulations) through the end of January 2017 in recognition of the differences in water supply conditions across the state. The draft Regulations allow each agency to "self-certify" water supply reliability for three additional years of drought using the average water demand projections from calendar years 2013 and 2014 as compared to supply using hydrology experienced in water years 2013, 2014 and 2015. Preliminary calculations on a regional basis

show that NMWD, and other water contractors which receive wholesale water supply from the Sonoma County Water Agency, would have sufficient water supply to meet projected water demand during the next three years pursuant to the self-certification criteria in the draft Regulations (see chart in Attachment D). The SWRCB is scheduled to act upon the revised Regulation at its May 18 meeting. District Staff is confident that the “self-certification” provision will remain in the Regulations adopted by the SWRCB and has calculated that should the District certify that an adequate water supply exists, and FY17 budgeted water sales volume increase to 2.5 BG, a 300 MG increase and equivalent to the FY15 sales volume (see chart in Attachment E), the increased water sales would generate the same amount of revenue as the proposed surcharge. Thus the Board has an opportunity to consider the Drought Revenue Recovery Surcharge independently from the proposed rate increase for FY17 and direct staff to make an adjustment in the proposed Novato operations budget water sales volume resulting in the same budgeted revenue.

The General Manager will make a short presentation on the need for the proposed water cost increase at the meeting, after which the Board can accept public comment. A draft of the proposed Regulation 54 rate changes in strike-out mode is included as Attachment F.

Staff Recommendation

After closing the public hearing

- 1) Approve Resolution 16-XX (Attachment G) amending Regulation 54 pertaining to Water Rates and Charges to reflect an increase averaging 5% for the typical residential customer in the Novato Service Area effective June 1 of 2016;
- 2) Approve Resolution 16-XX (Attachment H) enacting the Regulation 54a.(3) Surcharge effective June 1, 2016;
- 3) Instruct staff that if the SWRCB adopts the revised Regulation allowing for self-certification, and that the District certifies that an adequate water supply exists, to not impose the Surcharge and instead adjust the proposed FY17 Novato Water Operations budget to reflect 2.5BG in water sales.



999 Rush Creek Place
P.O. Box 146
Novato, CA 94948

PHONE

415.897.4133

FAX

415.892.8043

EMAIL

info@nmwd.com

WEB

www.nmwd.com

April 1, 2016

Re: Notice of Proposed Water Rate Increase

Dear Customer:

The North Marin Water District's mission is to provide an adequate supply of safe, reliable and high-quality water to our customers at reasonable cost consistent with good conservation practices and minimum environmental impact. To fulfill this mission, NMWD must generate revenue sufficient to cover its cost of operations.

Accordingly, the North Marin Water District is proposing an increase in the cost of water which averages \$2.85 per month (5%) for the typical Novato customer, effective June 1 of 2016. In addition, should the state mandated drought regulations remain in effect, implementation of a Temporary Drought Revenue Recovery Surcharge (Drought Surcharge) is proposed, adding \$1.00 per 1,000 gallons for all residential water use exceeding 300 gallons per day, and \$1.00 per 1,000 gallons for all non-residential water use. The State will consider rescission or adjustment of the mandatory drought regulations in May 2016.

This letter provides details on the need for the increase and information about the public hearing where public comment will be taken prior to a vote by the District Board of Directors on the proposed water rate increase and Drought Surcharge.

You can determine the increase in your annual water cost based on your personal water use over the past year from our website. Insert your NMWD account number and the name on your account into the Rate-Increase Model on NMWD's website at https://www.nmwd.com/account_balance.php

REASON FOR THE PROPOSED INCREASE

Higher Water Cost: The Sonoma County Water Agency (SCWA), which provides 80% of Novato's water supply, is increasing the rate it charges NMWD for Russian River water by 6.6% effective July 1, 2016. In addition, the State mandated Emergency Water Conservation Regulation has reduced Novato water consumption by over 30%, compared to the 2013 base year, significantly reducing the water sales revenue used to operate and maintain the Novato water system.

Water System Infrastructure Maintenance: The Novato water system includes 326 miles of pipeline, 38 million gallons of finished water storage distributed across 33 tanks, 26 pump stations, 13 pressure regulating stations, over 2,600 fire hydrants and a multitude of valves, all of which require ongoing maintenance. The District is now 68 years old, and much of the pipeline installed in the early years is nearing the end of its useful life requiring future replacement.

RATE COMPARISON

NMWD's rates remain reasonable. You can assess this for yourself by comparing NMWD's cost of water service to 16 counterpart Bay Area water agencies (see Urban Area Water Cost Comparison on page 5 of this letter). The comparison shows that the typical cost of service for a Novato single-family residence is just below the median of our counterpart agencies.

PROPOSED RATE INCREASE

A table showing the existing rates and charges, and the amounts proposed, is included on page 4 of this letter.

Residential Accounts: It is proposed that a commodity rate increase of 7% for all water used be implemented effective June 1, 2016. No increase in the bimonthly service charge is proposed. For the typical Novato single-family residence, the proposed increase in the total cost of water (commodity charge plus bimonthly service charge) is 5%. The proposed increase would add \$2.85 per month (\$5.70 per bimonthly bill) to the cost of water for a typical single-family residence beginning June 2016.

Non-Residential Accounts (Commercial, Institutional & Irrigation): It is proposed that an increase in the commodity rate of 7% for all water used be implemented effective June 1, 2016. No increase in the bimonthly service charge is proposed. The increase for non-residential customers will vary based upon water use. In Novato the median non-residential account uses more water than the median residential account, but would still see an increase in the total cost of water (commodity charge plus bimonthly service charge) of 5%. You can determine the increase in your annual water cost based on your consumption over the past year from our website. See the boxed area above for instructions.

PROPOSED TEMPORARY DROUGHT REVENUE RECOVERY SURCHARGE

On June 1, 2015, California enacted an Emergency Water Conservation Regulation mandating reduced water use statewide. Novato was ordered to reduce consumption by 24%. Since June 1 Novato water use has fallen over 30%. The reduction in water consumption has significantly reduced the revenue required to operate and maintain the water system. In response, effective June 1, 2016, a temporary Drought Surcharge for each 1,000 gallons of potable water use is proposed as follows:

Residential Accounts: Use exceeding 300 gallons per day per dwelling unit.....\$1.00

Commercial, Institutional & Irrigation Accounts: All Use.....\$1.00

The Drought Surcharge would add \$0.90 per month (1.6%) on average to the typical residential water bill and \$9.00 per month (12%) on average to the typical non-residential water bill.

The State mandated Emergency Water Conservation Regulation is currently scheduled to remain in effect through October 31, 2016, but will be reviewed by the State in May. Collection of the proposed temporary Drought Surcharge will be

suspended at the time the State Regulation is rescinded.

You can determine the impact of the proposed Drought Surcharge on your annual water cost based on your consumption over the past year from our website. See the boxed area above for instructions.

WATER RATE PUBLIC HEARING

A public hearing will be held at the NMWD office (999 Rush Creek Place, Novato) at 7:00 p.m. on Tuesday, May 17, 2016, to consider enactment of an increase averaging 5%, and enactment of a temporary Drought Surcharge, both effective June 1, 2016.

HOW TO PARTICIPATE

You are invited to present oral or written testimony on these proposals at the public hearing. You have the right to protest these proposed rate increases. If you do, you must submit your protest in writing, even if you plan to attend the public hearing. If written protests are submitted by a majority of the affected property owners or customers, the proposed increases will not be imposed.

Your written protest must be received prior to the close of the May 17, 2016 public hearing. Written protests must be signed by the property owner or customer of record and must include a description of the parcel (parcel number) or NMWD account number. Send or deliver written protests to:

District Secretary
North Marin Water District
PO Box 146
Novato, CA 94948

For more information visit NMWD's website at www.nmwd.com or call the District Secretary at (415) 897-4133.

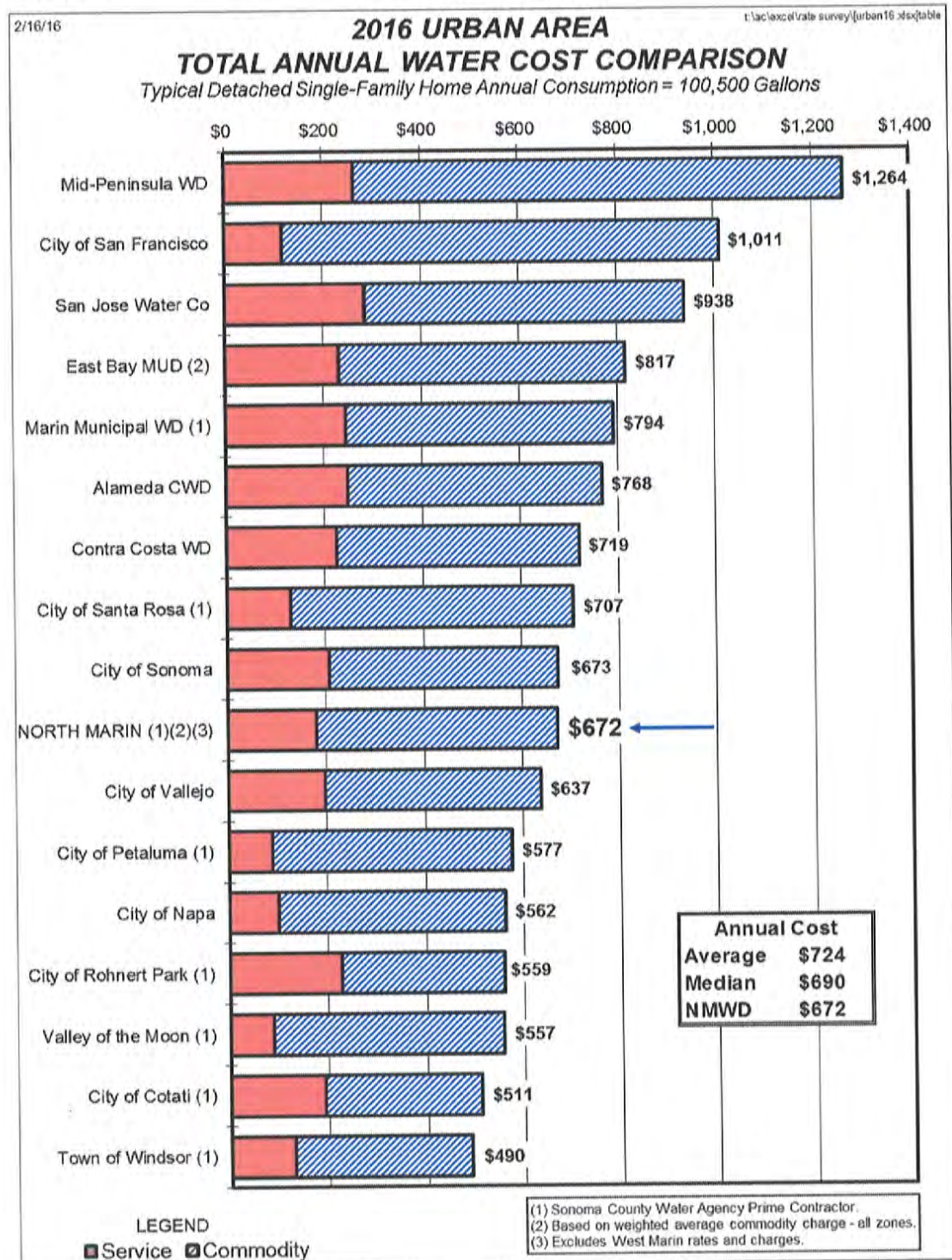
Sincerely,



Chris DeGabriele
General Manager

NOVATO WATER CHARGES

	Existing 6/1/15	Proposed 6/1/16	% Increase
A BI-MONTHLY SERVICE CHARGE OF:			
STANDARD 5/8-INCH METER	\$30.00	\$30.00	0%
1 -inch residential meter for fire sprinklers	\$34.00	\$34.00	0%
1 -inch meter	\$60.00	\$60.00	0%
1.5 -inch meter	\$73.00	\$73.00	0%
2 -inch meter	\$114.00	\$114.00	0%
3 -inch meter	\$227.00	\$227.00	0%
4 -inch meter	\$364.00	\$364.00	0%
6 -inch meter	\$761.00	\$761.00	0%
8 -inch meter	\$1,134.00	\$1,134.00	0%
PLUS A QUANTITY RATE OF:			
<u>Residential rate for each 1,000 gallons</u>	<u>Rate</u>	<u>Rate</u>	
First 615 gallons per day	\$4.46	\$4.77	7%
616 - 1,845 gallons per day	\$7.11	\$7.61	7%
Use in excess of 1,845 gallons per day.....	\$12.38	\$13.25	7%
<u>Rate for each 1,000 gallons for all other potable water accounts</u>			
Commercial, institutional & irrigation accounts - 11/1-5/31.....	\$4.92	\$5.26	7%
Commercial, institutional & irrigation accounts - 6/1-10/31.....	\$5.28	\$5.65	7%
<u>Rate for each 1,000 gallons for non-potable water</u>			
Recycled Water	\$4.92	\$5.26	7%
Raw (Untreated) Water	\$2.03	\$2.17	7%
PLUS AN ELEVATION ZONE RATE FOR EACH 1,000 GALLONS OF:			
<u>Zone</u> <u>Elevation</u>	<u>Rate</u>	<u>Rate</u>	
A 0 through 60 feet.....	\$0.00	\$0.00	-
B 60 feet - 200 feet.....	\$0.53	\$0.57	7%
C 200 feet +.....	\$1.71	\$1.83	7%
Hydrants or Temporary Service.....	\$6.99	\$7.48	7%



ordinance shall be and is hereby declared in full force and effect as of thirty (30) from and after the date of its passage shall be published once before the expiration (15) days after its passage, with copies of the supervisors voting for and against the same in the Marin Independent Star, a newspaper of general circulation published in the County of Marin.

D. AND ADOPTED at the regular meeting of the Board of Supervisors of the County of State of California, held on the 3rd day of 2016, by the following vote:

SUPERVISORS: Judy Arnold, Katie Rice, in Connolly, Kathryn Sellers, Steve Kinsey

JOHN

FINANCE

Steve Kinsey

ENT. BOARD OF SUPERVISORS

MEL

MAY 12, 2016

**San Rafael
Unclaimed Money**

hereby given that the City of San Rafael is holding funds for the following for three years or more. If said funds claimed by Jun 15, 2016, these funds are the property of the City of San Rafael. Funds may be released to the claimant, their heir, beneficiary, or duly appointed representative provided a claim form has been filed with the necessary information for releasing entitlement to the funds.

Unclaimed Money Claim form is available from the City of San Rafael Finance Department, 1000 Avenue, San Rafael, CA 94901 or by email: finance@cityofsanrafael.org. The claim form includes name, address, phone number, tax identification number, and grounds on which founded. Once a claim is submitted, the Finance Director will determine what, if any, additional information is necessary.

with funds on deposit with the City of San Rafael for 3 years or more in the General Finance Department Center \$142.00; Aetna Health Inc \$35.00; Nicholas Lindquist Caria & Clark \$40; Shaofu Li \$60; Rice Source \$129.12; Glacier Water \$44.42; Green Planet Solar \$28.12; Dr. Golden Orie \$125.67; Bloom, Torben \$27.67; Roger C. Himes \$25.00; Susan \$32.00; Ariel Allen \$28.38; Marin Recovery \$36.00; Glacier Water Service Inc. Dermatology Associates \$62.50; Land Co \$211.14; Trugreen Landcare Co. Arthur Moore \$18.99; Call Society \$352.50; Emil Valikov \$388.00; Field Network \$183.00; Gina Roth

Legal Notice	Legal Notice	Legal Notice	Legal Notice
--------------	--------------	--------------	--------------

North Marin Water District
WATER RATE HEARING
Purpose: Consider Proposed Rate Increase
Impact Area: Greater Novato Area
Date and Time: Tuesday, May 17, 2016 at 7:00 p.m.
Place: 999 Rush Creek Place, Novato

PROPOSAL

NMWD is proposing an increase in water rates and charges averaging 5% for the typical Novato single-family residence. The increase is proposed to be effective June 1 of 2016. In addition, should the state mandated drought regulations remain in effect, implementation of a Temporary Drought Revenue Recovery Surcharge (Drought Surcharge) is proposed, adding \$1.00 per 1,000 gallons for all residential water use exceeding 300 gallons per day, and \$1.00 per 1,000 gallons for all non-residential water use.

REASON FOR THE PROPOSED INCREASE

Higher Water Costs: The Sonoma County Water Agency (SCWA), which provides 80% of Novato's water supply, is increasing the rate it charges NMWD for Russian River water by 6.6% effective July 1, 2016. In addition, the state mandated Emergency Water Conservation Regulation has reduced Novato water consumption by over 30% compared to the 2013 base year, significantly reducing the water sales revenue used to operate and maintain the Novato water system. **Water System Infrastructure Maintenance:** The Novato water system includes 336 miles of pipeline, 38 million gallons of finished water storage distributed across 33 tanks, 28 pump stations, 13 pressure regulating stations, over 2,600 fire hydrants and a multitude of valves, all of which require ongoing maintenance. The District is now 60 years old, and much of the pipeline installed in the early years is nearing the end of its useful life requiring future replacement.

NMWD's rates remain reasonable. You can assess this for yourself by comparing NMWD's cost of water service to 16 counterpart Bay Area water agencies (see Urban Area Water Cost Comparison at <http://www.nmwd.com>). The comparison shows that the typical cost of service for a Novato single-family residence is just below the median of our counterpart agencies.

IMPACT

Residential Accounts: For the typical Novato single-family residence, the proposed increase in the total cost of water (commodity charge plus bi-monthly service charge) is 5%. The proposed increase would add \$2.85 per month (\$5.70 per bi-monthly bill) to the cost of water for a typical single-family residence beginning June 2016.

Non-Residential Accounts (Commercial, Institutional & Irrigation): The increases for non-residential customers will vary based upon water use. The median non-residential account would add a 4% increase commencing June 1, 2016.

Temporary Drought Revenue Recovery Surcharge: On June 1, 2016, California enacted an Emergency Water Conservation Regulation mandating reduced water use statewide. Novato was ordered to reduce consumption by 34%. Since June 1, Novato water use has fallen over 30%. The reduction in water consumption has significantly reduced the revenue required to operate and maintain the water system. In response, effective June 1, 2016, a temporary Drought Surcharge for each 1,000 gallons of potable water use is proposed as follows:

Residential Accounts: Use exceeding 300 gallons per day per dwelling unit.....\$1.00
Commercial, Institutional & Irrigation Accounts: All Use.....\$1.00
The Drought Surcharge would add \$0.90 per month (1.6%) on average to the typical residential water bill and \$9.00 per month (12%) on average to the typical non-residential water bill.

Customers can determine the increase in their annual water cost based on their water use over the past year from NMWD's website. Insert your NMWD account number and the name on your account into the Rate-Increase Model on NMWD's website at <http://www.nmwd.com/accountbalance.php>.

PUBLIC HEARING

A public hearing will be held at the NMWD office (999 Rush Creek Place, Novato) at 7:00 p.m. on Tuesday, May 17, 2016, to consider enactment of the proposed increases. You are cordially invited to attend the hearing, or mail or email your comments (info@nmwd.com). For more information visit NMWD's website or call the District Secretary at (415) 897-4133.

no.562 May 12, 2016



Katie Young

From: Craig N Jansen <JansenCraig@msn.com>
Sent: Wednesday, April 06, 2016 4:21 PM
To: Info NMWD
Subject: New Water Rates

RECEIVED
APR 07 2016
North Marin Water District

Hello NMWD,

I just received your notice of a proposed rate increase.

You will get no complaints from me!

I think that our water district has been doing a wonderful job in providing top-quality water. A new water treatment plant, and infrastructure repairs don't come free of charge.

Old service lines from the street mains installed in the mid 1950s occasionally start leaking. I believe there have been about five repairs to Crescent Lane service lines. The repairs are done in almost no time at all, with very short interruption in water service.

It is very possible that those towns and cities with lower rates than North Marin may not have had major infrastructure improvements made yet. They are also much closer to the Russian River sources than Novato, and this may also account for lower rates.

Keep up the good work NMWD!

Craig Jansen
40 Crescent Lane
Novato, CA 94947
(415) 892-3807

ATTACHMENT C

J. DIETRICH STROEH
2590 Vineyard Road
Novato, CA 94947
(415) 892-8135

RECEIVED
APR 07 2016
North Marin Water District

April 6, 2016

Board of Directors
North Marin Water District
P. O. Box 146
Novato, CA 94948

RE: NOTICE OF PROPOSED WATER RATE INCREASE

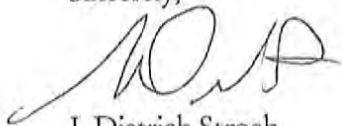
Dear Board of Directors:

I live at 2590 Vineyard Road and received your letter covering the rate increase.

You have no choice but to raise the rates. I support the increase.

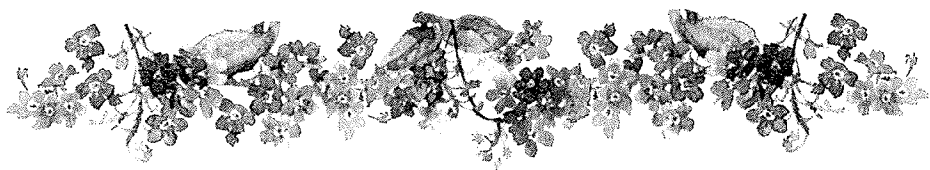
Keep up the good work!

Sincerely,



J. Dietrich Stroeh

cc: Chris DeGabriele



RECEIVED
APR 25 2016
North Main Water District
Tana Foster
18111a Maria Ct.
Novato, Ca. 94947

Dear NMWD,
I am protesting your
proposed rate increase. We
were asked to use less water,
and we did. What thanks do
we get? You propose
raising our rates. Many of
us live on a fixed income.
Please don't raise
our rates



Apr. 21, 2016

April 8, 2016

North Marin Water District
District Secretary NAWD account
975608

Re. Notice of proposed water rate
increase June 1, 2016.

I protest the rate increase. We
have used less water to conserve,
however, will have to pay more
for future water. To reduce costs
the water districts pensions and
benefits should be reduced for employees.

Sincerely
Todd Smith
2052 Felig Road
Novato, Ca 94945

RECEIVED
APR 08 2016
North Marin Water District

RECEIVED
MAY 06 2016
North Marin Water District

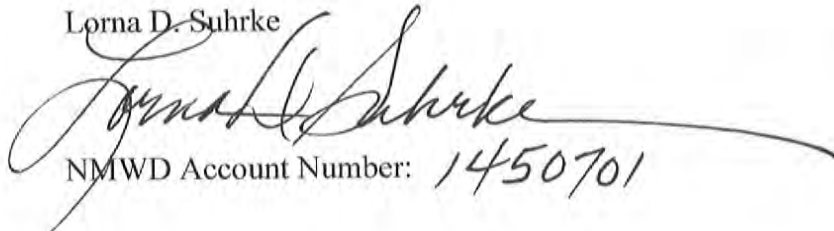
May 3, 2016

To whom it may concern:

This is to register my opposition to both the rate increase and the temporary drought surcharge proposed to take effect on June 1, 2016.

Sincerely,

Lorna D. Suhrke

A handwritten signature in black ink, appearing to read 'Lorna D. Suhrke', with a long horizontal flourish extending to the right.

NMWD Account Number: 1450701

RECEIVED
MAY 05 2016
North Marin Water District

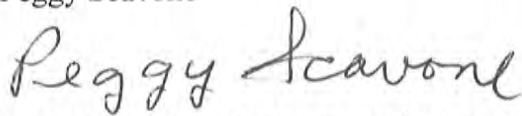
May 3, 2016

To whom it may concern:

This is to register my opposition to both the rate increase and the temporary drought surcharge proposed to take effect on June 1, 2016.

Sincerely,

Peggy Scavone



NMWD Account Number: 1450601

May 3, 2016

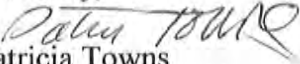
North Marin Water District
P.O. Box 146
Novato, CA 94948
Attn: District Secretary

RECEIVED
MAY 05 2016
North Marin Water District

To whom it may concern:

This is to register my opposition to both the rate increase and the temporary drought surcharge proposed to take effect on June 1, 2016.

Sincerely,


Patricia Towns
163 San Andreas Dr
Novato, CA 94945

NMWD account number:
739803

5/2/16

RECEIVED

MAY 04 2016

North Marin Water District

To whom it may concern

This is to register my opposition
to both the rate increase and
the temporary drought surcharge
proposed to take effect on June 1,
2016

Sincerely

William & Dale Faust

APN # 124-261-82

5/1/16

NMCWD,

I object to the proposed rate increases.
Especially for all of us who try to conserve.

Helen M. Seuridia
114 E Oliva Ct
Novato

parcel no. 132-361-05

RECEIVED
MAY 04 2016
North Marin Water District

Katie Young

From: Dave Planka <dplanka@comcast.net>
Sent: Tuesday, May 03, 2016 9:42 AM
To: Info NMWD
Subject: Proposed rate increase

I entirely disagree with any proposed rate increase in my water rates. I have been saving water and you raise my rates? I pulled out my lawn and you raise my rates? What recourse do I have? This is one more example of the government squeezing more money out of consumers. We have more water than in years past and you raise our rates? This pisses me off like you cannot believe.

David Planka
91 San Carlos wAy
Novato

RECEIVED

MAY 03 2016

North Marin Water District

James M. Phelps
5 Douglas Court
Novato, California 94947

RECEIVED

MAY 02 2016

April 28, 2016

Board of Directors
North Marin Water District
P. O. Box 146
Novato, CA 94948-0146

Subject: Opposition to Proposed Rate Increase

Gentlemen:

I oppose the new rate increase. I oppose enactment of a temporary Drought Surcharge.

Citizens for Sustainable Pension Plans (CSPP) in their report Pension Roulette, state that NMWD is a Special District whose "pension plans and retiree benefits are exorbitant and dangerously underfunded."

I request your total transparency -- please tell the truth -- aren't pension plans and retiree benefits what the rate increase is really about?

Novato residents will take action to vote out of office Board members who enact the rate increase.

Sincerely,



James M. Phelps

Account # 1838401

April 24, 2016

NMWD Acct. No.: 1240807

447 San Marin Drive

Novato CA 94945

RECEIVED

APR 27 2016

North Marin Water District

ATTN: District Secretary

As per your request of written testimony, this is to confirm my protest of the enactment of the proposed rate increase and enactment of a temporary Drought Surcharge. I have done my part in saving water, perhaps you could just increase rates of those who do not comply.

Sincerely,

A handwritten signature in cursive script that reads "Maryann Manning".

Maryann Manning

Property Owner: 447 San Marin Drive, Novato CA 94945

4-25-16

RECEIVED

APR 27 2016

North Marin Water District

To Whom it may concern,

I AM opposed to the proposed rate increases. This is not fair to people who conserved and water rationed through out the year. Also, I AM A senior on A fixed income, we cannot afford this rate hike. Please consider all the seniors that live in North Marin.

Sincerely
Carolyn Flaherty

Carolyn Flaherty

PARCEL 132-191-02

P.S. My husband passed away last month, A difficult time for me.

RECEIVED
APR 27 2016
Parcel # 15... North Marin Water District
408 Calle de La Mesa
Novato CA 94949

To whom it may concern,

The proposed water increases are outrageous and saying that the increase average is 5% is very very misleading. Looking forward to hearing about our woes and issues with Russian River water cost w/o increasing our own capacity. So far you have no plan on better serving your customers, how to decrease your costs and nothing has been done to apparently proactively save for an ever aging delivery system. Your last letter on the break down of costs was kind enough to say what you subsidize on our dollar yet do not note to what income level nor up to how many gallons they get. As a home owner I believe our needs are higher than that of an apartment center and all the while you even break down additional costs by the size of pipe some one has - we should charge you for how ugly each tank is on the bill side. You need to run this as if you care for what you are serving please
Pete Duhay

April 26, 2016

RECEIVED

APR 28 2016

North Marin Water District
P.O. Box 146
Novato, CA 94948

North Marin Water District

I protest the proposed water rate
increases.

Sincerely,

Christel Marton
(Mrs. L. Marton)
144 San Felipe Way
Novato, CA 94945
NMWD Account # 720401

April 12, 2016

From: NMWD Account #1874304

RECEIVED

APR 26 2016

North Marin Water District

Dear District Secretary,

Here we go again.

The same time last year I wrote on April 15, 2015 to oppose that rate increase. Now, I am writing again to **oppose this new rate increase and to oppose the enactment of a temporary Drought Surcharge.**

Is this about the cost of supplying water or is this about NMWD pensions? What is the real need for the rate increase? Are you truly being transparent? Citizens for Sustainable Pension Plans (CSPP) in their report called, Pension Roulette, concludes that NMWD is a Special District whose "pension plans and retiree benefits are exorbitant and dangerously underfunded."

It's just never enough money for NMWD.

We are told to reduce our water consumption, so we do, and as a result we are hit with increases in our water bill. It is completely unfair that ratepayers do not have an option to go to another water company. You are the only one we can use, so we are stuck with these constant water increases and money grabs imposed by you.

If your constant rate increases and surcharges weren't bad enough, your money grabs for second units is obscene. NMWD wants their pound of flesh too from the little guy. If you are transparent, play by the rules, obtain the appropriate permits, the county will financially flog you and NMWD will slaughter you too with a \$14,000 water fee. NMWD and the county go after the easy money. Never mind that you are providing affordable housing for an eighty year old widow. As one NMWD Board member said when defending the preposterous fee, "We need to get the money from somewhere." The FRF (Facilities Reserves Fund) allows water use for more high density housing. So the Mom and Pop homeowner is paying for the corporate giant. How inequitable.

NMWD plays "Big Brother" and monitors our water use, how we can wash our car and clothes, what toilet we should use and what kind of bush we need to plant (See NMWD Regulation 15) but NMWD puts their head in the sand when a homeowner installs above ground water pipes from their illegal second unit to their main house, even when NMWD is aware of it (I won't even bring up the human waste issue, which of course is a county issue). A homeowner with

an illegal unit is not obtaining or paying the appropriate permits, fees, taxes or contributing into the infrastructure of the county/city or to the water company (nothing to the FRF), nor complying with health and safety codes, yet NMWD wants the county to deal with it.

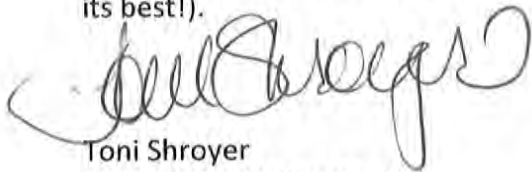
The message is crystal clear from NMWD. Save water, NMWD is going to increase your rates. Provide affordable housing, obtain the appropriate permits for your second unit, pay \$50,000 in soft costs to the county and NMWD is going to financially nail you too. Don't get permits, do your own jerry-rigging of your water hookups and NMWD will look the other way, unless you "confidentially" rat out someone to the county, then NMWD might do something.

No wonder there are so many illegal units in Novato potentially threatening the health and safety of our neighborhoods. People simply cannot afford or chose not to pay these preposterous charges.

NMWD should be ashamed. The poor, the middle-class and honest homeowners are getting financially hit at every turn. This latest rate increase is yet another example of that. Why not be more fiscally responsible?

It just doesn't have to be this way.

I reiterate that I oppose this latest increase of the average of 5% (reality is 7%) and a temporary Drought Surcharge (even with all the rain we have been having—our government at its best!).



Toni Shroyer
1955 Indian Valley Road
Novato Ca 94947

NMWD Account #1874304

RECEIVED

APRIL 22, 216

APR 26 2016

TO WHOM IT MAY CONCERN,

North Marin Water District

THIS LETTER IS ISSUED TO PROTEST THE PROPOSED PLANS FOR INCREASED FEES FOR THE NORTH MARIN WATER DISTRICT.

THERE ARE SEVERAL DISCLOSURES THAT SHOULD BE AVAILABLE TO THE PUBLIC AS WELL AS A REVIEW OF THE FEES PAID TO SUPPORT THE "SERVICE" AND THE CONTRACTS HELD FOR THE "COMMODITY".

WE SHOULD BE DOING EVERYTHING POSSIBLE NOT TO FALL INTO THE ISSUES THAT ARE CURRENTLY IMPACTING, IN VERY NEGATIVE WAYS, OTHER WATER AGENCIES IN THE BAY AREA.

I HAVE ALWAYS BEEN PLEASED WITH THE MANAGEMENT OF NMWD AND WOULD LIKE TO HAVE IT BE CONTINUED.

VERY TRULY YOURS,



D. L. SWATTA

21 FONTANA COUR, NOVATO/#1556702

17 WEST BROOKE DRIVE, NOVATO/#1639401

RECEIVED

APR 22 2016

North Marin Water District

April 11, 2016

999 Rush Creek Place
P.O. Box 146
Novato, CA 94948

Dear Mr. DeGabriele,

California is doomed by regulations and a lack of vision. We have always had years of rain fall from which water could be stored; we live on a coast where desalinization can take place. Making California look like Arizona is the goal of Jerry Brown and Diane Feinstein. The phrase "The new brown is green" can tell you how dumb everybody is. Stop the Commissioner's letters to us with "People who have the same house use less water." Maybe those people do not take a shower or perhaps they do not have relatives. These letters cost the taxpayer so much money. If you cut down on the absurd letters sent out monthly, the savings will be all for the water.

Sincerely,



Giti Underhill

Pugliese
10 Turner Drive
Novato, CA 94949

NMWD Account #: 4215701

RECEIVED

APR 21 2016

North Marin Water District

North Marin Water District
999 Rush Creek Place
PO Box 146
Novato, CA 94948

RE: Proposed Water Rate Increase

To Whom It May Concern:

I am writing in response to the "notice of Proposed Water Increase" letter received on April 1, 2016. We strongly PROTEST to this proposed rate increase.

Sincerely,



Kari Pugliese
Joe Pugliese

NMWD Account Number: 4215701

To Whom It May Concern,

I am writing to express my reservations about and opposition to the proposed rate increase for water in Novato beginning June 2016.

Part of the rationale for increasing rates assumes that the state mandated Emergency Water Conservation Regulation will remain in effect moving forward. This is not a sure thing given this year's rainfall and snow pack, and it is doubtful that the rate increases will be reversed when the regulation is lifted.

This winter has gone a long way toward alleviating the drought, it seems strange to enact a Drought Surcharge at this point. Furthermore, temporary surcharges should come with defined end dates, which this one does not have.

The information in the letter sent out does not give dollar figures outlining how much revenue the water district generates or what its operation costs are or what the proposed timeline and cost of infrastructure maintenance would be. Without this information, it isn't possible to evaluate the necessity of the proposed increases. Consequently I am opposed to the increases.

Lastly, I am a father struggling to pay my bills and taxes. Please don't ask me to pay even more.

Thank you

Ian Doleman

4 Maria Ct

Novato, CA 94945

NMWD account 833505

A handwritten signature in black ink, appearing to read 'Ian Doleman', with a stylized flourish at the end.

RECEIVED
4/13/16
APR 18 2016
North Marin Water District

April 11, 2016

District Secretary
North Marin Water District
P.O. Box 146
Novato, Ca 94948

RECEIVED
APR 18 2016
North Marin Water District

Dear District Secretary,

I just received your letter dated April 1, 2016 regarding a proposed water rate increase. I am against any rate increase. It is amazing to me whenever a public service has been managed poorly that the answer is to raise the rates for consumers. P. G. & E., property taxes, food, etc, all have risen in cost, yet for senior citizens who did not receive a Social Security cost-of-living increase, we are stuck paying increased costs with no additional income. I have done everything that I can to cut my water usage due to the California drought, and a rate increase appears to be a punishment for my efforts.

Again, I am against a rate increase, but if one is instituted, I would hope that seniors who are on a fixed income could receive some consideration for a discount or allowance on these increased rates.

Sincerely,



David M. Cassetta
San Marin/Novato resident

APRIL 14, 2016

RECEIVED

APR 18 2016

North Marin Water District: North Marin Water District

Re: Protest of Proposed Rate Increase.

From: Tim Kenney
160 Laurelwood DRIVE
NOVATO, CA 94949
NMWD Acct. #: 4212703.

I protest the rate increase of 5% on Volumetric usage. The rate increase is too much, especially given the several previous increases in recent years. Together, the rate increases far exceed inflation and thereby deprive ratepayers of their dwindling "real" income. You're a public agency -- protect the public.

Thank you
Tim Kenney

April 12, 2016

RECEIVED

APR 15 2016

North Marin Water District

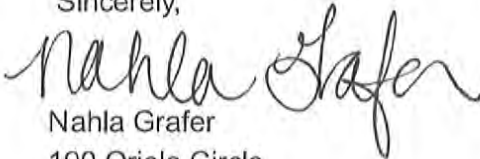
To whom it may concern:

I write to you today to **protest** against the proposed water rate increase that I was informed of through a letter of "Notice of Public Hearing Regarding Proposed Water Rate Increase." I understand that there will be a Public Hearing on May 17, 2016 at 7:00 p.m. at the NMWD office. I also understand that if written protests against the proposed water rate Increase are presented by a majority of owners or ratepayers subject to the increase, the District shall not impose the increase.

Consider this letter my formal written protest against the proposed water rate increase.

I am a single mom, raising two children on my own. We rent a single family condo. My water bill in the last two months went from \$42 to \$130. I haven't done anything different than our normal usage. I don't use the dishwasher, laundry is done once a week, plants watered by hand every other week and showers are kept to a minimum. I have been a good citizen conserving as much as possible and completely protest any rate increase.

Sincerely,



Nahla Grafer
190 Oriole Circle
Novato, CA 94949

Katie Young

From: Rick Voorhees <rick.voorhees@solanova.com>
Sent: Thursday, April 07, 2016 9:42 AM
To: Info NMWD
Subject: Water Rate Increase to 5%

FYI, People have been conserving water left and right for the last 3-4 years. This is how you reward them with a price increase..Why should people conserve when they know it doesn't do them any good..There should be no increases in water cost when you dump or spilled hundreds of thousands of gallons of water over the spillway to accommodate more rain and water from the Russian river..This is just bad water mgmt, period....

Thanks Rick.

Solanova, LLC.

"Discover A Healthier You"

7110 Redwood Blvd., Suite A

Novato, CA 94945

Phone 415-892-3880 Ext 113

Toll Free: 1-800-200-0456

Fax: 415-898-1666

Email: Rick.Voorhees@solanova.com

www.Solanova.com

RECEIVED
APR 07 2016
North Marin Water District

Katie Young

From: cfearnot@yahoo.com
Sent: Tuesday, April 05, 2016 7:49 AM
To: Info NMWD
Subject: Fw: rate increases

this is an email that I sent to Sacramento regarding the water levels, proposed price increases

Sent from Windows Mail

From: cfearnot@yahoo.com
Sent: Monday, March 28, 2016 3:03 PM
To: askgovops@govops.ca.gov

I live in Novato California. Our water levels were at 87% last year. We get our water from the lake in Novato and the Russian Rive, Sonoma lake. Southern Marin county was at 95%. We were subjected to the state price increases last year, despite our high water level. Because of a STATEWIDE draught mandate.

This year we got so much rain that they had to RELEASE water from the Sonoma lake, so that the Russian river wouldn't flood. That's right, SO MUCH RAIN THEY HAD TO RELEASE WATER FROM THE LAKE. And yet the North Marin water district is planning ANOTHER price increase! Why? Our lakes are full!

Stop over charging us! It is not like you can send the water from here to central California. Take a day and sort out water levels by region. Put more focus on capture and transport methods. You are punishing the residents of our communities, by not analyzing by region. It is ridiculous to force another price increase for water in this area.

Carol Fearnot

Sent from Windows Mail

RECEIVED
APR 07 2016
North Marin Water District

Katie Young

From: cfearnot@yahoo.com
Sent: Wednesday, April 06, 2016 9:36 PM
To: Info NMWD
Subject: letter

RECEIVED
APR 07 2016
North Marin Water District

Hi,

I got your letter this past week about the water pricing rate proposal. I am thinking that someone at Ca.gov should be sued for BOGUS rate increases for 2016, and subsequently miss-management of funds.

Did anyone catch the KQED radio broadcast, on Sunday April 3rd, at about 5pm, regarding the "drought" in CA? The person being interviewed was SO well informed. He understood the total picture in Marin, about the five lakes being over-full, and the water district having to release the water into the ocean. Not to mention the same for Sonoma Lake, and our water district, having to release the water into the bay/ocean so the Russian River doesn't flood. He was well informed about our state.

It is hard for some of us, who are aware that we and our neighboring counties have been over-charged for lack of water and put under restrictions this past year. To accept that another rate increase is proposed for 2016? So many of us are enjoying the beautiful green grass around our neighborhoods, along the highway, and on the fields that travel out to Point Reyes. And we are aware of the excess water supply that the rain has provided in our city and Marin county.

I think there are still a lot of people in our area/state, who don't understand that we/CA still don't have a CAPTURE AND TRANSPORT system. That we can't even send our excess of water to Mountain View, CA, let alone transport it to Central or Southern California.

So, explain to me why you are planning a rate increase for Novato residents? Is it just because the State wants their cut of the increase? I don't trust them to spend it correctly. I want proof, that if they get the money from our rate increases, that they will spend it on the drought starved agricultural fields in central and southern CA. I want proof of appropriate allocation of funds.

Carol Fearnot

Sent from Windows Mail

Date: April 11, 2016

To: District Secretary, North Marin Water District

Re: Proposed 7% Commodity Water Rate Increase

From: Kevin Jenkins - NMWD Acct #1660905

RECEIVED

APR 14 2016

North Marin Water District

I am writing to protest the proposed 7% commodity water rate increase effective June 1, 2016. For residential customers who have made the effort to reduce water consumption over the last year, increasing the rates due to the lower mandated usage is another example of "no good turn should go unpunished".

Regards,

Kevin Jenkins

A handwritten signature in black ink, appearing to read "Kevin Jenkins", with a stylized flourish extending from the end.

Gregory Machkovsky
1287 Simmons Lane
Novato, CA 94945

I Gregory Machkovsky oppose and protest the proposed water rate increase.

RECEIVED
APR 12 2016
North Marin Water District

Gregory Machkovsky NMWD ACC# 1443402



4/10/16

District Secretary
North Marin Water District
P.O. Box 146
Novato, CA 94948

RECEIVED

APR 13 2016

North Marin Water District

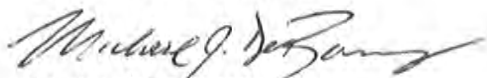
Dear Secretary:

I am writing to formally protest the proposed water rate increase and drought surcharge effective June 1, 2016. I believe that your District can continue to find ways to be more efficient with their spending and improve on their service processes to save time and money.

In addition, the model for District revenue based on water sales is archaic and outdated, given that it directly counters the state mandate for customers to conserve water. Customers should NOT be penalized with a rate surcharge for following conservation regulations.

Please be mindful of your customers who have made many sacrifices to survive this historic drought. Having to pay more for our water because we are consciously using less just doesn't make sense!

Thank You and Regards,



Michael DeBarros

Account # 496402

FROM THE DESK OF
MARY SHERMAN

RECEIVED

APR 13 2016

North Marin Water District

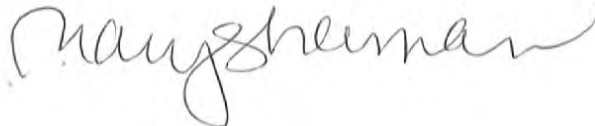
April 10, 2016
District Secretary North Marin Water District

PO Box 146, Novato, CA 94948

Dear Secretary,

I am writing to protest the increase in rates and the drought surcharge that you are intending to implement. I am a senior with a dwindling income. Despite the fact that I am having my third joint replacement in one week, I have been carrying my shower and kitchen water outside in buckets to water my plants, have worked very hard to cut the use of water and more than exceeded your recommendations. I find it intolerable that you are now wanting to charge me more AND put a drought surcharge on top of this. Why would any of us continue to listen to your recommendations when you do this? Can I see posted the incomes are of the employees of the water board, what cost of living increase you have received etc. please? And why have you not planned more wisely for this kind of event so that we can weather the droughts as well as the increase rains? We've had a good year of rain, we have done what we were asked. We do NOT need to increase our rates. If you want people to listen to you, do not levy fines on them for doing so!

Mary Sherman



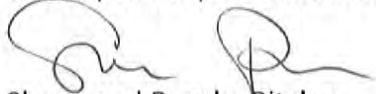
Parcel 157-291-16

April 6, 2016

Dear North Marin Water District,

We request that you do not raise the water rates. We feel our monthly rates are high even though we are careful with our consumption. Our account number is 4117405.

Thank you for your consideration,



Shana and Brooke Pitcher
104 Windwalker Way
Novato, CA 94945

RECEIVED
APR 11 2016
North Marin Water District

March 7, 2016

District Secretary
North Marin Water District
P.O. Box 146
Novato, CA 94948

RECEIVED
APR 11 2016
North Marin Water District

RE: Proposed Water Rate Increase
Account NO. 4178201
PARCEL # 155-530-56

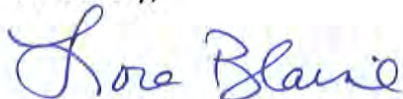
Dear District Secretary

I am writing to protest the proposed water rate increase. I am living in a low-income housing development in Hamilton and live on a very low income budget.

Any increase will be taking food from my budget.

Please do not increase these water rates!

Sincerely,



Lora Blaine
382 Captain Nurse Circle
Novato, CA 94949

April 6, 2016

District Secretary

North Marin Water District

P. O. Box 146

Novato, Ca 94848

RECEIVED

APR 11 2016

North Marin Water District

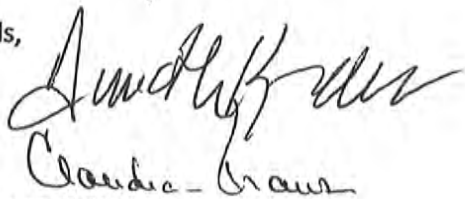
Re: Water Rate Protest.

Please put on the record that we protest the proposed rate increase. We've been diligent in cutting back on water use.

We don't feel we should be further penalized and feel the rate increase is unwarranted.

Our NMWD account number is #1003105. It is a single dwelling with two occupants.

Regards,

Handwritten signatures of Timothy and Claudia Kraus. The signature for Timothy is written above the signature for Claudia.

Timothy and Claudia Kraus

619 Andale Avenue

Novato, CA 94945

April 7, 2016

Protest

RECEIVED

APR 11 2016

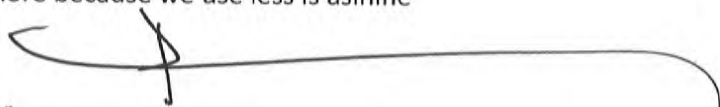
North Marin Water District

I am against to the rate increase.

The water distric has not provided a budget for the infrastructure costs.

The rates are higher than other similar cities

Charging more because we use less is asinine

A handwritten signature in black ink, consisting of a long horizontal stroke with a loop at the end and a vertical stroke crossing it near the beginning.

Paul Walker

750 Diablo

Novato, CA 94947

District Secretary
North Marin Water District
PO Box 146
Novato , CA 94948

RECEIVED

APR 11 2016

North Marin Water District

April 9, 2016

I strongly oppose the water increase based on the lack of transparency and sketchy management of the North Marin Water District . Please see the letter below that expresses the reasoning behind my position.

**An opinion that many in the town of Novato share.
Novato Voices**

NMWD is hitting us with another rate increase. AGAIN! If we conserve water they raise the rates, if it rains a lot they raise the rates. If you are being transparent and build a cottage for your elderly mother to provide her affordable housing, they will attack you with a \$14,000 mandatory water hook up fee. (This money is used for recycled water for golf courses and irrigation for high density housing). If you have an illegal unit and NMWD knows about it, they will do nothing UNLESS a complaint is filed by the neighbor "confidentially" with the county.

If you play by the rules, NMWD will financially plummet you because honest people are easy to get money from--- because they play by the rules.

Michelle Dervise
1408 Park Ave
Novato, CA 94945
AP# 141-272-05

RECEIVED

APR 15 2016

April 8, 2016

North Marin Water District

District Secretary
North Marin Water District
P.O. Box 146
Novato, CA 94948

Subject: Notice of Proposed Water Rate Increase

Dear Sir:

I received your correspondence regarding a proposed rate increase for water, dated April 1st, 2016, a date that is associated with stories that stretch the bounds of reality. Perhaps I have fallen for the April Fool's joke and offer the following comment in protest.

Thanks to bountiful rains this winter, local and northern California reservoirs, including Stafford Lake, are at their historical average non-drought levels or are, in fact, at capacity. Further, the snow pack in the northern Sierra is good. Never the less, the water district wants to impose a drought revenue recovery surcharge. It argues that since it sold less water, revenue is down. One could use the same argument to say that revenue will increase without a rate increase, simply because water sales will increase with the easing of the drought.

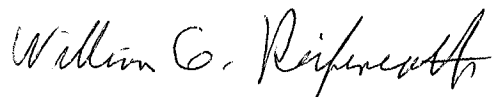
The most troubling aspect of your correspondence is the statement that "If written protests are submitted by a majority of the affected property owners or customers, the proposed increases will not be imposed". After NMWD painted a dire picture and recited a litany of reasons for a rate increase, no explanation was given as to how the district plans to survive without the rate increase. It's obvious that voter apathy will virtually guarantee that this level of protest will never be achieved. If every public agency operated this way, no rate increase would ever be denied for anything. .

The key to operating a successful public agency is communication with the people it serves – if the need is genuine, it can be recognized by the public. The Marin-Sonoma Mosquito Abatement District recently learned this lesson the hard way, after resorting to gimmicks in its unsuccessful bid for more money.

Many of us in the district take water conservation seriously, installing drip lines, low-flow toilets, water restrictors etc. Unlike City Hall, whose lawn surrounding the new civic center remained a lush green this past summer, we took the past drought seriously and let our lawns die out. Some of us also hauled recycled water this past summer to

avoid the complete death of the landscape. Our reward is an opportunistic ploy for more money.

Sincerely,

A handwritten signature in cursive script, reading "William G. Reifenrath". The signature is fluid and somewhat stylized, with the first and last names being more prominent than the middle initial.

William G. Reifenrath
6 Christopher Court
Novato, CA 94947

Acct. No 747401

I oppose the NMWD June 1, 2016 proposed rate increase

Fill this form out, print it, mail it into the address below to stop the proposed NMWD rate increase:

District Secretary
North Marin Water District
PO Box 146
Novato, CA 94948

YOU MUST MAIL THIS INTO THE ADDRESS ABOVE OR IT WILL NOT COUNT

* Required

A printable version of this form is here

https://dl.dropboxusercontent.com/u/2228938/_OPPOSE_NMWD_RATE_INCREASE.pdf

A copy of the mailed proposal is available here

https://dl.dropboxusercontent.com/u/2228938/NMWD_JUNE2016_RATE_INCREASE.pdf

1. Property Owner Name *

MARK SCHOENBAUM

2. Property Parcel Number *

3. NMWD Customer Number *

1729004

Signature



I oppose the NMWD June 1, 2016 proposed rate increase

Fill this form out, print it, mail it into the address below to stop the proposed NMWD rate increase:

District Secretary
North Marin Water District
PO Box 146
Novato, CA 94948

RECEIVED
MAY 11 2016
North Marin Water District

YOU MUST MAIL THIS INTO THE ADDRESS ABOVE OR IT WILL NOT COUNT

* Required

A printable version of this form is here

https://dl.dropboxusercontent.com/u/2228938/I_OPPOSE_NMWD_RATE_INCREASE.pdf

A copy of the mailed proposal is available here

https://dl.dropboxusercontent.com/u/2228938/NMWD_JUNE2016_RATE_INCREASE.pdf

1. Property Owner Name *

Trevor Pressman

2. Property Parcel Number *

160-171-11

3. NMWD Customer Number *

505603

Signature

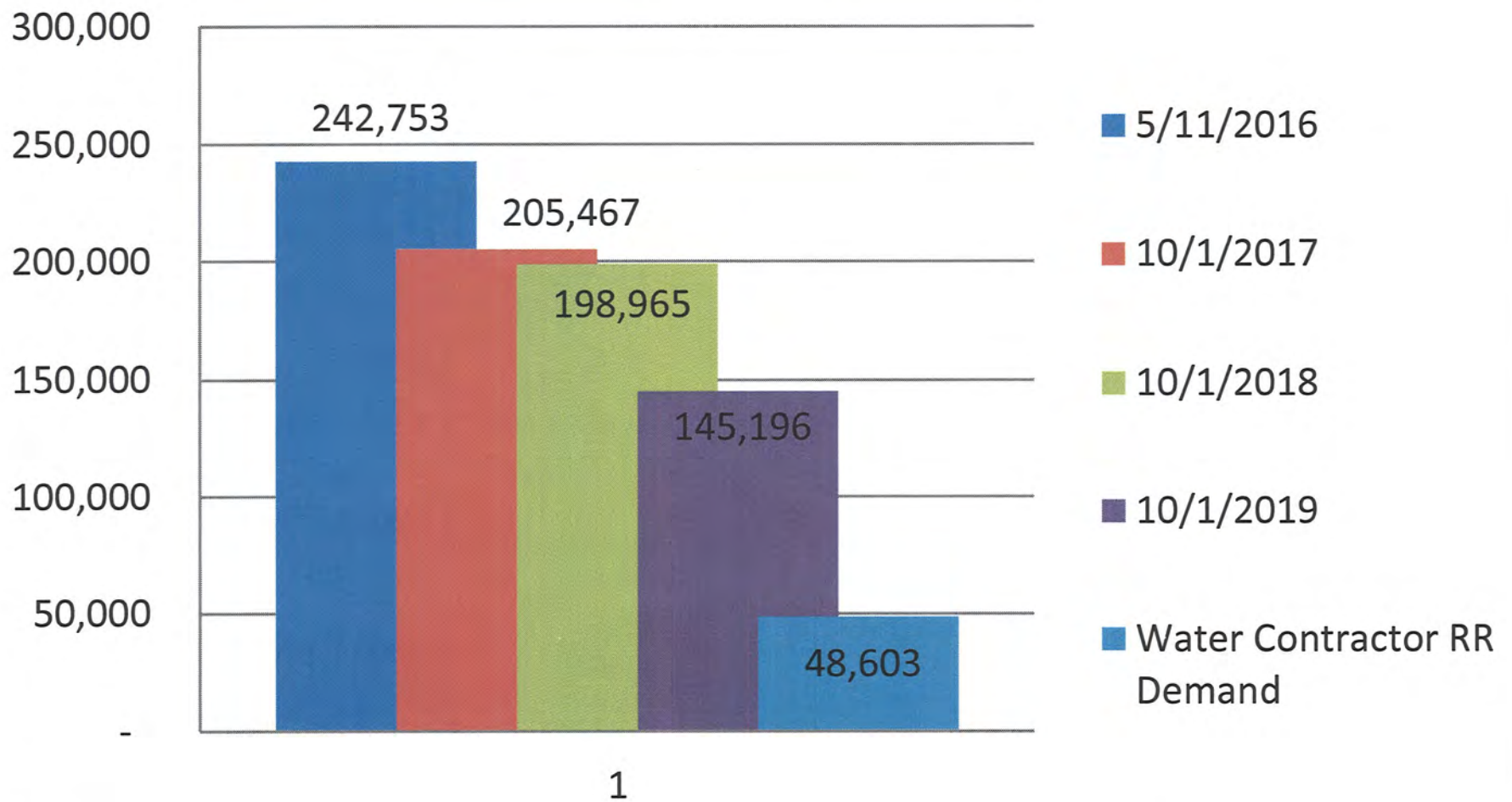


Powered by

 Google Forms

Lake Sonoma Storage

(Acre Feet)

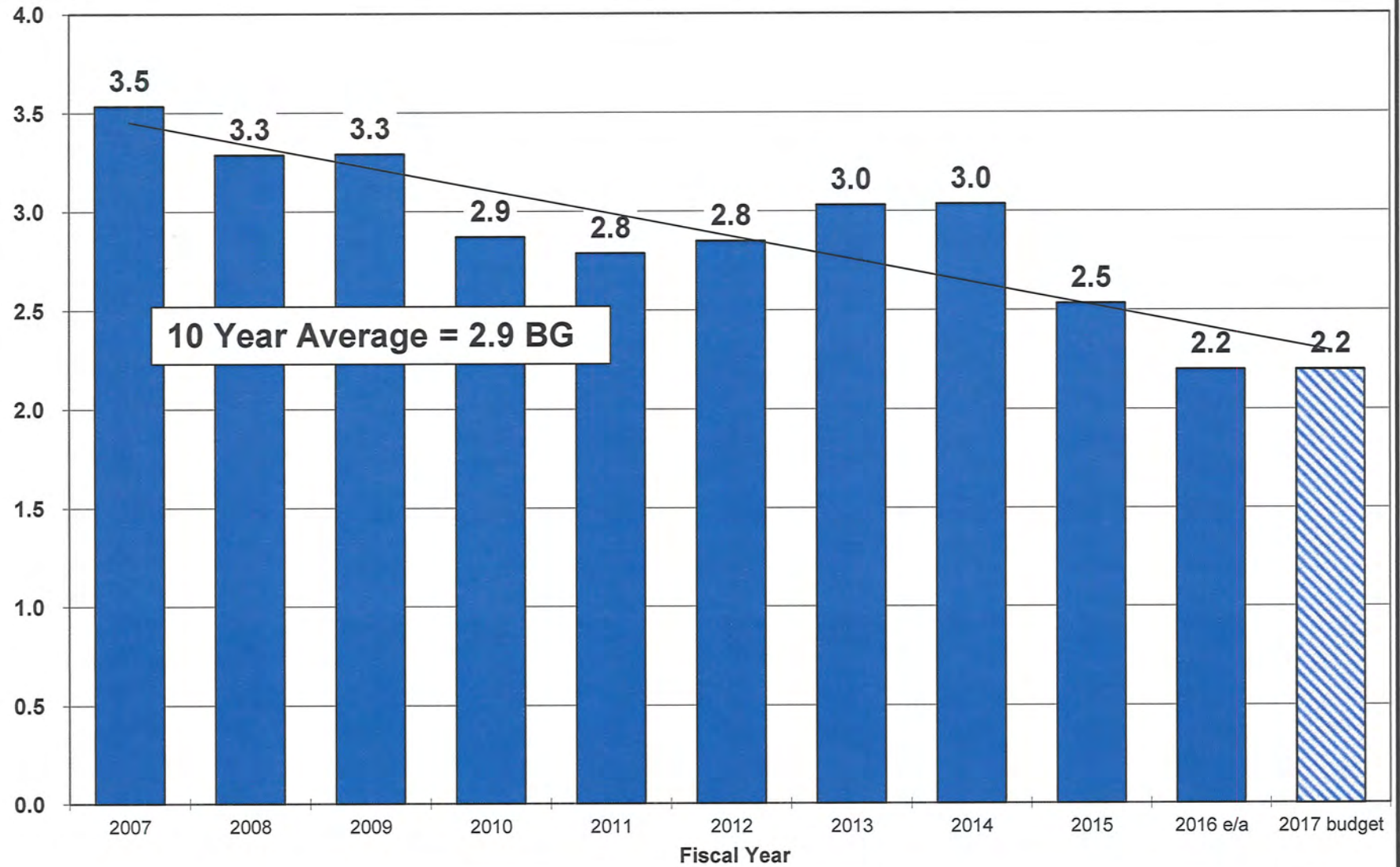


4/27/16

t:\acexcel\budget\17[sales17.xlsx]stat rpt data

Novato Water Billed Consumption 10 Year History

Billion
Gallons



**DRAFT
NORTH MARIN WATER DISTRICT
REGULATION 54
WATER RATES**

a Rates for Domestic, Commercial and Industrial Users, Novato Service Area

- (1) The following minimum service charge and water quantity rates shall be paid for domestic, commercial and industrial water service for each meter once every two months:

A BI-MONTHLY SERVICE CHARGE OF:

	Rate Effective 6/1/13
Standard 5/8 inch meter	\$30.00
For 1-inch meter*	\$60.00
1.5-inch meter*	\$73.00
2-inch meter	\$114.00
3-inch meter	\$227.00
4-inch meter	\$364.00
6-inch meter	\$761.00
8-inch meter	\$1,134.00

*(see paragraph f)

PLUS A QUANTITY CHARGE OF:

	Rate Effective 6/1/1516
<u>Residential Rate for Each 1,000 Gallons Per Dwelling Unit</u>	
First 615 gallons per day (gpd)	\$4.4677
616 up to 1,845 gpd	\$7.1461
Use in excess of 1,845 gpd	\$12.3813.25
<u>Rate for 1,000 Gal for All Other Potable Water Accounts</u>	
Commercial, Institutional & Irrigation Accounts - 11/1 – 5/31	\$4.925.26
Commercial, Institutional & Irrigation Accounts - 6/1 – 10/31	\$5.285.65
<u>Rate For 1,000 Gallons For Non-Potable Water</u>	
Recycled Water	\$4.925.26
Raw (Untreated) Water from Stafford Lake	\$2.032.17

PLUS AN ELEVATION ZONE CHARGE FOR EACH 1,000 GALLONS

<u>Zone</u>	<u>Elevation</u>	Rate Effective 6/1/1516
A	0 through 60 feet	\$0.00
B	60 feet – 200 feet	\$0.5357
C*	200 feet +	\$1.7183

*Any consumer receiving water through a District owned and maintained hydro-pneumatic system shall be assigned to Zone C irrespective of said consumer's actual elevation.

NMWD Regulation 54, adopted 1/65

Revised: 1/67, 6/67, 1/71, 3/72, 2/74, 5/74, 6/74, 8/75, 3/75, 4/76, 5/77, 7/77, 6/78, 7/78, 7/78, 7/79, 3/80, 7/7/81, 7/21/81, 11/81, 12/82, 4/84, 2/87, 5/88, 7/89, 9/89, 7/90, 8/90, 3/91, 4/92, 6/92, 7/92, 9/92, 10/92, 3/93, 7/93, 7/94, 8/94, 11/94, 3/95, 4/95, 7/95, 2/96, 5/96, 6/96, 2/97, 6/97, 2/98, 6/98, 7/99, 6/00, 7/00, 12/00, 06/01, 07/01, 1/02, 06/02, 7/02, 06/03, 01/04, 06/04, 07/04, 6/05, 7/05, 06/06, 07/06 12/06, 07/07, 6/08, 7/08, 7/09, 6/10, 7/10, 6/11, 7/11, 9/11, 7/12, 6/13, 7/14, 5/15, 6/15, 6/16

ATTACHMENT F

(2) Consumers outside the Improvement District boundary shall pay the Elevation Zone C Rate.

(3) In the event a mandatory reduction in water use is triggered under the District's Water Shortage Contingency Plan for the Greater Novato Area, a Drought Surcharge will be implemented simultaneous with enactment of the mandatory stage. The Drought Surcharge will serve to mitigate the revenue loss resulting from a reduction in water use, as well as the liquidated damages assessed by the Sonoma County Water Agency pursuant to the water shortage and apportionment provisions of the Restructured Agreement for Water Supply. The Drought Surcharge shall be a quantity charge for each 1,000 gallons of potable water use as follows:

Residential Accounts: Use in excess of 300 gallons per day \$1.00

Commercial, Institutional and Irrigation Accounts: All Use \$1.00

b Rates for Service to Privately Owned Fire Protection Systems, All Service Areas

The rates for service through detector check assemblies owned by the District to privately owned and maintained systems supplying sprinklers, hydrants or other facilities exclusively for fire fighting shall be paid once every two months as follows:

Size of Detector Assembly

	Rate Effective 6/1/13
2 inches or less	\$15.00
4 inches	\$28.00
6 inches	\$54.00
8 inches	\$83.00
10 inches	\$109.00

c. Rates for Domestic, Commercial and Industrial Users, West Marin Service Area:

(1) The following minimum service charge and water quantity rates shall be paid for domestic, commercial and industrial water service for each meter once every two months:

<u>BI-MONTHLY SERVICE CHARGE</u>	<u>Effective 7/1/13</u>
For 5/8 x 3/4-inch meter	\$30.00
For 1-inch meter*	\$60.00
For 1 1/2-inch meter*	\$73.00
For 2-inch meter	\$114.00
For 3-inch meter	\$227.00
For 4-inch meter	\$364.00
For all meters in Paradise Ranch Estates	\$46.00
*(see paragraph f)	

PLUS A QUANTITY CHARGE

<u>Residential Rate for Each 1,000 Gallons Per Dwelling Unit</u>	<u>Effective 7/1/15</u>
First 400 gallons per day (gpd)	\$7.61
401 up to 900 gpd	\$10.54
Use in excess of 900 gpd	\$16.91

Rate Per 1,000 Gallons for All Other Accounts

Commercial, Industrial and Irrigation Accounts Nov 1 – May 31 \$7.69

Commercial, Industrial and Irrigation Accounts June 1 – Oct 31 \$10.64

PLUS A HYDRAULIC ZONE CHARGE FOR EACH 1,000 GALLONS

<u>Zone</u>	<u>Hydraulic Zone</u>	<u>Effective 7/1/15</u>
1	Point Reyes Station	\$0.00
2	Bear Valley, Silver Hills, Inverness Park & Lower Paradise Ranch Estates (Elevation 0' – 365')	\$0.20
3	Olema	\$0.75
4	Upper Paradise Ranch Estates (Elevation 365' +)	\$5.08

- (2) Effective July 1, 2015, charge for raw water delivered from Lagunitas Creek shall be paid once every two months at the rate of \$0.43 per 1,000 gallons.
- (3) Effective July 1, 2015 consumers outside the Improvement District boundary shall pay an additional \$3.05 per 1,000 gallons.
- (4) In the event a mandatory reduction in water use is triggered under the District's Water Shortage Contingency Plan for the West Marin Service Area, a Drought Surcharge will be implemented simultaneous with enactment of the mandatory stage. The Drought Surcharge will serve to mitigate the revenue loss resulting from a reduction in water use, as well as the cost of water purchased from Marin Municipal Water District for release into Lagunitas Creek, pursuant to the Interconnection Agreement between Marin Municipal and NMWD.. The Drought Surcharge shall be a quantity charge for each 1,000 gallons as follows:

Residential Accounts: Use in excess of 200 gallons per day \$2.50

Commercial, Institutional and Irrigation Accounts: All Use \$2.50

d. Rates for Water Service from Hydrants or Other Temporary Service

The following rates shall be paid for water delivered via hydrant meter or pursuant to permit issued by the District from hydrants or for any temporary service as authorized in Regulation 5 or for use through a fire service meter.

<u>Novato Service Area</u>	<u>Rate</u> <u>Effective</u> <u>6/1/15</u>
For each 1,000 gallons	\$6.99 <u>7.48</u>

<u>West Marin Service Area</u>	<u>Effective 7/1/15</u>
For each 1,000 gallons	\$15.72

The quantity of water delivered as aforesaid shall be determined by the District.

e. Service Arrangements Requiring Assessment of Additional Minimum Service Charges, All Service Areas

A minimum service charge established by this regulation, equal to \$15.00 bi-monthly shall be paid for each dwelling unit which includes a kitchen and which is metered pursuant to Regulation 4.b.(5).

f. Minimum Service Charge for Residential Connections with Fire Fighting Equipment

Where a meter larger than is otherwise required is installed solely to provide capacity for private fire sprinklers or other fire-fighting equipment in single-family residential connections, the minimum bi-monthly service charge shall be:

Rate
Effective
6/1/13
\$34.00

g. Charges for Testing & Maintenance of Backflow Preventers Performed by District

- (1) Each consumer having a backflow prevention device serviced by the District shall pay a bimonthly fee for servicing the device as shown below.

District Owned DCV Devices:

Services Performed by District	Size	Rate Effective 6/1/13
Testing, Repair, Replacement	3/4" + 1"	\$12.00
Testing, Repair, Replacement	1 1/2"	\$16.00

Privately Owned DCV Devices:

Services Performed by District	Size	Rate Effective 6/1/13
Testing	3/4" + 1"	\$7.00
Testing	1 1/2"	\$12.00
Testing	2"	\$19.00
Testing	3" + 4"	\$28.00

District Owned RPP Devices:

Services Performed by District	Size	Rate Effective 6/1/13
Testing, Repair, Replacement	3/4" + 1"	\$34.00
Testing, Repair, Replacement	1 1/2" + 2"	\$48.00
Testing, Repair, Replacement	3" + 4"	\$114.00
Testing, Repair, Replacement	6" + 8"	\$247.00

Privately Owned RPP Devices:

Services Performed by District	Size	Rate Effective 6/1/13
Testing	3/4" + 1"	13.00
Testing	1 1/2" + 2"	\$25.00
Testing	3" + 4"	\$52.00

Testing 6" + 8" \$101.00

If any customer requires that testing or maintenance be performed outside of normal work hours of the District an additional charge equivalent to the overtime charges incurred by the District will be assessed.

(2) Exemptions

Exemptions from the testing program are permitted on a case-by-case basis as may be approved by the District and the California Department of Public Health, Office of Drinking Water, District Sanitary Engineer. All such exemptions are conditioned on periodic inspection to ensure that exemption criteria are still being met. Each consumer that applies for and receives such an exemption shall pay a bimonthly fee of:

Rate
Effective
6/1/13
\$2.80

RESOLUTION 16-XX

RESOLUTION OF THE BOARD OF DIRECTORS OF NORTH MARIN WATER DISTRICT AMENDING REGULATION 54 – WATER RATES

WHEREAS, the Board of Directors hereby finds and determines that certain of the water rates and charges adjusted herein or previously adopted by the Board are imposed based on the supply of water to be used or consumed by the customer. The Board of Directors also finds and determines that these rates and charges are not imposed upon real property or upon a person as an incident of property ownership, and such rates or charges may be reduced or avoided by a customer by reducing or discontinuing water use; and

BE IT RESOLVED by the Board of Directors of North Marin Water District that Regulation 54 of the North Marin Water District is adopted as follows, effective June 1, 2016:

a Rates for Domestic, Commercial and Industrial Users, Novato Service Area

- (1) The following minimum service charge and water quantity rates shall be paid for domestic, commercial and industrial water service for each meter once every two months:

PLUS A QUANTITY CHARGE OF:

	Rate Effective 6/1/16
<u>Residential Rate for Each 1,000 Gallons Per Dwelling Unit</u>	
First 615 gallons per day (gpd)	\$4.77
616 up to 1,845 gpd	\$7.61
Use in excess of 1,845 gpd.....	\$13.25
<u>Rate for 1,000 Gal for All Other Potable Water Accounts</u>	
Commercial, Institutional & Irrigation Accounts - 11/1 – 5/31	\$5.26
Commercial, Institutional & Irrigation Accounts - 6/1 – 10/31	\$5.65
<u>Rate For 1,000 Gallons For Non-Potable Water</u>	
Recycled Water.....	\$5.26
Raw (Untreated) Water from Stafford Lake	\$2.17

PLUS AN ELEVATION ZONE CHARGE FOR EACH 1,000 GALLONS

<u>Zone</u>	<u>Elevation</u>	Rate Effective 6/1/16
A	0 through 60 feet.....	\$0.00
B	60 feet – 200 feet.....	\$0.57
C*	200 feet +	\$1.83

NMWD Regulation 54, adopted 1/65

Revised: 1/67, 6/67, 1/71, 3/72, 2/74, 5/74, 6/74, 8/75, 3/75, 4/76, 5/77, 7/77, 6/78, 7/78, 7/78, 7/79, 3/80, 7/781, 7/21/81, 11/81, 12/82, 4/84, 2/87, 5/88, 7/89, 9/89, 7/90, 8/90, 3/91, 4/92, 6/92, 7/92, 9/92, 10/92, 3/93, 7/93, 7/94, 8/94, 11/94, 3/95, 4/95, 7/95, 2/96, 5/96, 6/96, 2/97, 6/97, 2/98, 6/98, 7/99, 6/00, 7/00, 12/00, 06/01, 07/01, 1/02, 06/02, 7/02, 06/03, 01/04, 06/04, 07/04, 6/05, 7/05, 06/06, 07/06 12/06, 07/07, 6/08, 7/08, 7/09, 6/10, 7/10, 6/11, 7/11, 9/11, 7/12, 5/14, 5/15, 5/16

*Any consumer receiving water through a District owned and maintained hydro-pneumatic system shall be assigned to Zone C irrespective of said consumer's actual elevation.

d. Rates for Water Service from Hydrants or Other Temporary Service

The following rates shall be paid for water delivered via hydrant meter or pursuant to permit issued by the District from hydrants or for any temporary service as authorized in Regulation 5 or for use through a fire service meter.

<u>Novato Service Area</u>	Rate Effective <u>6/1/16</u>
For each 1,000 gallons	\$7.48

* * * * *

I hereby certify that the foregoing is a true and complete copy of a resolution duly and regularly adopted by the Board of Directors of NORTH MARIN WATER DISTRICT at a regular meeting of said Board held on the seventeenth of May 2016, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

Katie Young, District Secretary
North Marin Water District

(SEAL)

RESOLUTION 16-XX

**RESOLUTION OF THE BOARD OF DIRECTORS OF
NORTH MARIN WATER DISTRICT
ENACTING REGULATION 54 a(3) – WATER DROUGHT SURCHARGE**

WHEREAS, the Board of Directors hereby finds and determines that certain of the water rates and charges previously adopted by the Board are imposed based on the supply of water to be used or consumed by the customer. The Board of Directors also finds and determines that these rates and charges are not imposed upon real property or upon a person as an incident of property ownership, and such rates or charges may be reduced or avoided by a customer by reducing or discontinuing water use; and

BE IT RESOLVED by the Board of Directors of North Marin Water District that Regulation 54 a(3) of the North Marin Water District is enacted as follows, effective June 1, 2016:

(3) In the event a mandatory reduction in water use is triggered under the District's Water Shortage Contingency Plan for the Greater Novato Area, a Drought Surcharge will be implemented simultaneous with enactment of the mandatory stage. The Drought Surcharge will serve to mitigate the revenue loss resulting from a reduction in water use, as well as the liquidated damages assessed by the Sonoma County Water Agency pursuant to the water shortage and apportionment provisions of the Restructured Agreement for Water Supply. The Drought Surcharge shall be a quantity charge for each 1,000 gallons of potable water use as follows:

Residential Accounts: Use in excess of 300 gallons per day	\$1.00
Commercial, Institutional and Irrigation Accounts: All Use	\$1.00

* * * * *

I hereby certify that the foregoing is a true and complete copy of a resolution duly and regularly adopted by the Board of Directors of NORTH MARIN WATER DISTRICT at a regular meeting of said Board held on the seventeenth of May 2016, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAINED:

Katie Young, District Secretary
North Marin Water District

(SEAL


3

MEMORANDUM

ITEM #3

To: Board of Directors

May 13, 2016

From: Chris DeGabriele, General Manager 

Subject: Drought Emergency Water Conservation Regulations – Public Hearing
v:\memos to board\public hearing drought emergency water conservation requirements may 2016.doc

RECOMMENDED ACTION: Hold public hearing to rescind Ordinance No. 28 and adopt resolutions with amended emergency water conservation requirements for Novato and West Marin Service Areas.

FINANCIAL IMPACT: None at this time

The Governor proclaimed a state of emergency on January 17, 2014, and declared drought conditions under the California Emergency Services Act (Act) and on April 25, 2014, the Governor issued a proclamation of continued state of emergency under the Act based on continued drought conditions existing statewide. On April 1, 2014, the NMWD Board declared a water shortage emergency, enacted the Water Shortage Contingency Plan and adopted Emergency Water Conservation Ordinances No. 28 and No. 29, prohibiting waste of water and non-essential uses of water. (The West Marin Ordinance No. 29 was subsequently lifted at the Board of Directors meeting on February 3, 2015).

On July 15, 2014, the State Water Resources Control Board (State Board) adopted Article 22.5 entitled "Drought Emergency Water Conservation Regulations" (California Code of Regulations Title 23, Sections 863, 864, and 865) which makes drought related findings and imposed state-wide mandatory requirements on urban water suppliers. On August 5, 2014 the NMWD Board adopted a resolution to comply with the State Board requirements augmenting the adopted Novato water use restrictions in Ordinance No. 28, with mandatory urban outdoor water use restrictions and water usage reporting procedures in compliance with the State Board's requirements.

On Wednesday, April 1, 2015, Governor Brown issued Executive Order (EO) B-29-15 which directed the State Board to add further restrictions to save water. State Board then re-adopted the previously mentioned Emergency Water Conservation Regulations with amendments on May 5, 2015. In response, on May 17, 2015, the NMWD Board approved two resolutions containing water use prohibitions compliant with the State Board Order for Novato (Resolution# 14-18) and West Marin (Resolution# 15-04) Service Areas.

This year, in response to potentially adequate water supply in portions of the State, the Governor issued Executive Order B-37-16 (Attachment 1) on May 9, 2016, acknowledging the past response to the drought, declaring that the drought continues in portions of the State, and mandating more long term water conservation goals. In this Order, the Governor directed the State Board to adjust the emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions across the State. The Order maintained mandates on elimination of water waste.

That same day, on May 9, 2016, the State Board released their proposed text for the emergency regulations (Attachment 2). The revisions include some minor changes to the end user water waste and non-essential use prohibitions; however, they remain fairly intact. The major change is the addition of a self-certification of supply reliability option that allows each urban water supplier to calculate a local percentage reduction mandate for 2016 based on listed assumptions of water supply and demand specific to the urban water supplier. Preliminary calculations using the parameters and assumptions noted in the proposed text for emergency regulations, and in consultation with Sonoma County Water Agency, staff has determined that no reduction mandate is required for 2016 (through January 2017). However, most water waste and non-essential use prohibitions included in Resolution# 14-18 shall remain in effect and staff will be required continue reporting water production each month to the State Board.

Staff recommends that NMWD comply with the pending State Board Order by holding a public hearing to consider revising Resolution 14-18 (Attachment 3) for the Novato Service Area and Resolution 15-04 (Attachment 4) for the West Marin Service Area, and rescinding Ordinance No. 28 with enactment of Ordinance No. 33 (Attachment 5). This recommended series of actions will keep in place the water waste and non-essential use prohibitions previously enforced through Ordinance No. 28, Resolution 14-18 and Resolution 15-04, but will eliminate the percentage reduction mandate, the enactment of the Water Shortage Contingency Plan and subsequent stages of reduction mandates, and the potential triggering of the Drought Revenue Recovery Surcharge. Since the State Board will not be issuing their Order until after the NMWD public hearing on May 18, 2016, staff is requesting the Board authorize minor revisions to the attached draft Resolutions to comply with any unforeseen changes to the proposed text of emergency regulations once the State Board Order is released on May 18th.

The public hearing was noticed in the Marin Independent Journal on May 11, 2016 (Attachment 6).

RECOMMENDATION

Board hold public hearing to consider adoption of the attached revised resolutions and rescind Ordinance No. 28, to comply with the proposed State Board Emergency Water Conservation Regulations and Governor's EO. Board authorize staff to make minor changes to the draft Resolutions in response to any unforeseen changes in the final State Board Order.

Executive Department

State of California

EXECUTIVE ORDER B-37-16 MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

WHEREAS California has suffered through a severe multi-year drought that has threatened the water supplies of communities and residents, devastated agricultural production in many areas, and harmed fish, animals and their environmental habitats; and

WHEREAS Californians responded to the drought by conserving water at unprecedented levels, reducing water use in communities by 23.9% between June 2015 and March 2016 and saving enough water during this period to provide 6.5 million Californians with water for one year; and

WHEREAS severe drought conditions persist in many areas of the state despite recent winter precipitation, with limited drinking water supplies in some communities, diminished water for agricultural production and environmental habitat, and severely-depleted groundwater basins; and

WHEREAS drought conditions may persist in some parts of the state into 2017 and beyond, as warmer winter temperatures driven by climate change reduce water supply held in mountain snowpack and result in drier soil conditions; and

WHEREAS these ongoing drought conditions and our changing climate require California to move beyond temporary emergency drought measures and adopt permanent changes to use water more wisely and to prepare for more frequent and persistent periods of limited water supply; and

WHEREAS increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change; and

WHEREAS these activities are prioritized in the California Water Action Plan, which calls for concrete, measurable actions that "Make Conservation a California Way of Life" and "Manage and Prepare for Dry Periods" in order to improve use of water in our state.

NOW, THEREFORE, I, EDMUND G. BROWN JR., Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular California Government Code sections 8567 and 8571, do hereby issue this Executive Order, effective immediately.

IT IS HEREBY ORDERED THAT:

The orders and provisions contained in my January 17, 2014 Emergency Proclamation, my April 25, 2014 Emergency Proclamation, Executive Orders B-26-14, B-28-14, B-29-15, and B-36-15 remain in full force and in effect except as modified herein.

State agencies shall update temporary emergency water restrictions and transition to permanent, long-term improvements in water use by taking the following actions.

USE WATER MORE WISELY

1. The State Water Resources Control Board (Water Board) shall, as soon as practicable, adjust emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions across the state. To prepare for the possibility of another dry winter, the Water Board shall also develop, by January 2017, a proposal to achieve a mandatory reduction in potable urban water usage that builds off of the mandatory 25% reduction called for in Executive Order B-29-15 and lessons learned through 2016.
2. The Department of Water Resources (Department) shall work with the Water Board to develop new water use targets as part of a permanent framework for urban water agencies. These new water use targets shall build upon the existing state law requirements that the state achieve a 20% reduction in urban water usage by 2020. (Senate Bill No. 7 (7th Extraordinary Session, 2009-2010).) These water use targets shall be customized to the unique conditions of each water agency, shall generate more statewide water conservation than existing requirements, and shall be based on strengthened standards for:
 - a. Indoor residential per capita water use;
 - b. Outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data;
 - c. Commercial, industrial, and institutional water use; and
 - d. Water lost through leaks.

The Department and Water Board shall consult with urban water suppliers, local governments, environmental groups, and other partners to develop these water use targets and shall publicly issue a proposed draft framework by January 10, 2017.

3. The Department and the Water Board shall permanently require urban water suppliers to issue a monthly report on their water usage, amount of conservation achieved, and any enforcement efforts.

ELIMINATE WATER WASTE

4. The Water Board shall permanently prohibit practices that waste potable water, such as:
 - Hosing off sidewalks, driveways and other hardscapes;
 - Washing automobiles with hoses not equipped with a shut-off nozzle;
 - Using non-recirculated water in a fountain or other decorative water feature;
 - Watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and
 - Irrigating ornamental turf on public street medians.
5. The Water Board and the Department shall direct actions to minimize water system leaks that waste large amounts of water. The Water Board, after funding projects to address health and safety, shall use loans from the Drinking Water State Revolving Fund to prioritize local projects that reduce leaks and other water system losses.
6. The Water Board and the Department shall direct urban and agricultural water suppliers to accelerate their data collection, improve water system management, and prioritize capital projects to reduce water waste. The California Public Utilities Commission shall order investor-owned water utilities to accelerate work to minimize leaks.
7. The California Energy Commission shall certify innovative water conservation and water loss detection and control technologies that also increase energy efficiency.

STRENGTHEN LOCAL DROUGHT RESILIENCE

8. The Department shall strengthen requirements for urban Water Shortage Contingency Plans, which urban water agencies are required to maintain. These updated requirements shall include adequate actions to respond to droughts lasting at least five years, as well as more frequent and severe periods of drought. While remaining customized according to local conditions, the updated requirements shall also create common statewide standards so that these plans can be quickly utilized during this and any future droughts.
9. The Department shall consult with urban water suppliers, local governments, environmental groups, and other partners to update requirements for Water Shortage Contingency Plans. The updated draft requirements shall be publicly released by January 10, 2017.

10. For areas not covered by a Water Shortage Contingency Plan, the Department shall work with counties to facilitate improved drought planning for small water suppliers and rural communities.

IMPROVE AGRICULTURAL WATER USE EFFICIENCY AND DROUGHT PLANNING

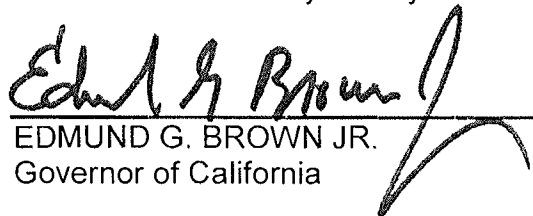
11. The Department shall work with the California Department of Food and Agriculture to update existing requirements for Agricultural Water Management Plans to ensure that these plans identify and quantify measures to increase water efficiency in their service area and to adequately plan for periods of limited water supply.
12. The Department shall permanently require the completion of Agricultural Water Management Plans by water suppliers with over 10,000 irrigated acres of land.
13. The Department, together with the California Department of Food and Agriculture, shall consult with agricultural water suppliers, local governments, agricultural producers, environmental groups, and other partners to update requirements for Agricultural Water Management Plans. The updated draft requirements shall be publicly released by January 10, 2017.

The Department, Water Board and California Public Utilities Commission shall develop methods to ensure compliance with the provisions of this Executive Order, including technical and financial assistance, agency oversight, and, if necessary, enforcement action by the Water Board to address non-compliant water suppliers.

This Executive Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

I FURTHER DIRECT that as soon as hereafter possible, this order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this order.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 9th day of May 2016.


EDMUND G. BROWN JR.
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

PROPOSED TEXT OF EMERGENCY REGULATION

Article 22.5. Drought Emergency Water Conservation.

Sec. 863. Findings of Drought Emergency.

(a) The State Water Resources Control Board finds as follows:

(1) On January 17, 2014, the Governor issued a proclamation of a state of emergency under the California Emergency Services Act based on drought conditions;

(2) On April 25, 2014, the Governor issued a proclamation of a continued state of emergency under the California Emergency Services Act based on continued drought conditions;

(3) On April 1, 2015, the Governor issued an Executive Order that, in part, directs the State Board to impose restrictions on water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February, 2016; require commercial, industrial, and institutional users to implement water efficiency measures; prohibit irrigation with potable water of ornamental turf in public street medians; and prohibit irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems;

(4) On November 13, 2015, the Governor issued an Executive Order that directs the State Board to, if drought conditions persist through January 2016, extend until October 31, 2016 restrictions to achieve a statewide reduction in potable usage;

(5) On May 9, 2016, the Governor issued an Executive Order that directs the State Board to adjust and extend its emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions for many communities;

(56) The drought conditions that formed the basis of the Governor's emergency proclamations continue to exist; and

(67) The drought conditions will likely continue for the foreseeable future and additional action by both the State Water Resources Control Board and local water suppliers will likely be necessary to prevent waste and unreasonable use of water and to further promote conservation.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 102, 104, 105, and 275, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 864. End-User Requirements in Promotion of Water Conservation.

(a) To prevent the waste and unreasonable use of water and to promote water conservation, each of the following actions is prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:

(1) The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;

(2) The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;

(3) The application of potable water to driveways and sidewalks;

(4) The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system;

(5) The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall;

~~(6) The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased;~~

(76) The irrigation with potable water of ornamental turf on public street medians; and

(87) The irrigation with potable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

~~(b) To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.~~

(eb) Immediately upon this subdivision taking effect, all commercial, industrial and institutional properties that use a water supply, any portion of which is from a source other than a water supplier subject to section 864.5 or 865 of this article, shall target water use reductions commensurate with those required of the nearest urban water supplier under section 864.5 or, if applicable, section 865. ~~shall either:~~

~~—— (1) Limit outdoor irrigation of ornamental landscapes or turf with potable water to no more than two days per week; or~~

~~—— (2) Reduce potable water usage supplied by sources other than a water supplier by 25 percent for the months of June 2015 through October 2016 as compared to the amount used from those sources for the same months in 2013.~~

(dc) The taking of any action prohibited in subdivision (a) or (ed), or the failure to take any action required in subdivision (b) or (c), is an infraction punishable by a fine of up to five hundred dollars (\$500) for each day in which the violation occurs. The fine for the infraction is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(ed)(1) To prevent the waste and unreasonable use of water and to promote water conservation, any homeowners' association or community service organization or similar entity is prohibited from:

(A) Taking or threatening to take any action to enforce any provision of the governing documents or architectural or landscaping guidelines or policies of a common interest development where that provision is void or unenforceable under section 4735, subdivision (a) of the Civil Code; or

(B) Imposing or threatening to impose a fine, assessment, or other monetary penalty against any owner of a separate interest for reducing or eliminating the watering of vegetation or lawns during a declared drought emergency, as described in section 4735, subdivision (c) of the Civil Code.

(2) As used in this subdivision:

(A) "Architectural or landscaping guidelines or policies" includes any formal or informal rules other than the governing documents of a common interest development.

(B) "Homeowners' association" means an "association" as defined in section 4080 of the Civil Code.

(C) "Common interest development" has the same meaning as in section 4100 of the Civil Code.

(D) "Community service organization or similar entity" has the same meaning as in section 4110 of the Civil Code.

(E) "Governing documents" has the same meaning as in section 4150 of the Civil Code.

(F) "Separate interest" has the same meaning as in section 4185 of the Civil Code.

(3) If a disciplinary proceeding or other proceeding to enforce a rule in violation of subdivision (e)(1) is initiated, each day the proceeding remains pending shall constitute a separate violation of this regulation.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 4080, 4100, 4110, 4150, 4185, and 4735, Civil Code; Sections 102, 104, 105, 275, 350, and 10617, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 864.5. Self-Certification of Supply Reliability for Three Additional Years of Drought.

(a) To prevent the waste and unreasonable use of water and to meet the requirements of the Governor's May 9, 2016 Executive Order, each urban water supplier shall:

(1) Identify and report on a form provided by the Board, no later than June 15, 2016, the conservation standard that the supplier will be required to meet under this section;

(2) Identify and report on a form provided by the Board, no later than June 15, 2016, the data relied upon by the supplier to determine the conservation standard reported pursuant to this subdivision including, but not limited to identification of each source of supply the supplier intends to rely on and the quantity of water available under that source of supply given the assumptions of this section;

(3) Certify, no later than June 15, 2016, that the conservation standard reported pursuant to this subdivision is based on the information and assumptions identified in this section; and

(4) Beginning June 1, 2016, reduce its total potable water production by the percentage identified as its conservation standard in this section each month, compared to the amount used in the same month in 2013.

(b) Each urban water supplier's conservation standard pursuant to this section shall be the percentage by which the supplier's total potable water supply is insufficient to meet the total potable water demand in the third year after this section takes effect under the following assumptions:

(1) The next three years' precipitation is the same as it was in water years 2013-2015;

(2) The supplier's total potable water demand for each of the next three years will be the supplier's average annual total potable water production for the years 2013 and 2014;

(3) The supplier's total potable water supply shall include only water sources of supply available to the supplier that could be used for potable drinking water purposes;

(4) Each urban water supplier's conservation standard shall be calculated as a percentage and rounded to the nearest whole percentage point.

(c) Beginning June 1, 2016, each urban water supplier shall comply with the conservation standard it identifies and reports pursuant to subdivision (a).

(d) Compliance with the conservation standard reported pursuant to subdivision (a) shall be measured monthly and assessed on a cumulative basis through January 2017.

(e) Each urban water wholesaler shall calculate, to the best of its ability, and no later than June 8, 2016, the volume of water that it expects it would deliver to each urban water supplier in each of the next three years under the assumptions identified in subdivision (b), and post that calculation, and the underlying analysis, to a publicly-accessible webpage.

(f) Submitting any information pursuant to this subdivision that the person who submits the information knows or should have known is materially false is a violation of this regulation, punishable by civil liability of up to five hundred dollars (\$500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(g) Any urban water supplier that does not comply with this section shall comply with the applicable conservation standard identified in section 865.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 102, 104, 105, 275, 350, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 865. Mandatory Actions by Water Suppliers.

(a) As used in this ~~section~~ article:

(1) "Distributor of a public water supply" has the same meaning as under section 350 of the Water Code, except it does not refer to such distributors when they are functioning solely in a wholesale capacity, but does apply to distributors when they are functioning in a retail capacity.

(2) "R-GPCD" means residential gallons per capita per day.

(3) "Total potable water production" means all potable water that enters into a water supplier's distribution system, excluding water placed into storage and not withdrawn for use during the reporting period, or water exported outside the supplier's service area.

(4) "Urban water supplier" means a supplier that meets the definition set forth in Water Code section 10617, except it does not refer to suppliers when they are functioning solely in a wholesale capacity, but does apply to suppliers when they are functioning in a retail capacity.

(5) "Urban water wholesaler" means a wholesaler of water to more than one urban water supplier.

(6) "Water year" means the period from October 1 through the following September 30. Where a water year is designated by year number, the designation is by the calendar year number in which the water year ends.

(b) In furtherance of the promotion of water conservation each urban water supplier shall:

(1) Provide prompt notice to a customer whenever the supplier obtains information that indicates that a leak may exist within the end-user's exclusive control.

(2) Prepare and submit to the State Water Resources Control Board by the 15th of each month a monitoring report on forms provided by the Board. The monitoring report shall include the amount of potable water the urban water supplier produced, including water provided by a wholesaler, in the preceding calendar month and shall compare that amount to the amount produced in the same calendar month in 2013. The monitoring report shall specify the population served by the urban water supplier, the percentage of water produced that is used for the residential sector, descriptive statistics on water conservation compliance and enforcement efforts, the number of days that outdoor irrigation is allowed, and monthly commercial, industrial and institutional sector use. The monitoring report shall also estimate the gallons of water per person per day used by the residential customers it serves.

(c)(1) To prevent the waste and unreasonable use of water and to meet the requirements of the Governor's ~~November 13, 2015~~ May 9, 2016 Executive Order, each urban water supplier that does not submit a self-certification in compliance with section 864.5 shall reduce its total potable water production by the percentage identified as its conservation standard in this ~~subdivision~~ section. Each urban water supplier's conservation standard considers its service area's relative per capita water usage.

~~(2) Each urban water supplier whose source of supply does not include groundwater or water imported from outside the hydrologic region in which the water supplier is located, and that has a minimum of four years' reserved supply available, may submit to the Executive Director for approval a request that, in lieu of the reduction that would otherwise be required under paragraphs (3) through (10), the urban water supplier shall reduce its total potable water production by 4 percent for each month as compared to the amount used in the same month in 2013. Any such request shall be accompanied by information showing that the supplier's sources of supply do not include groundwater or water imported from outside the hydrologic region and that the supplier has a minimum of four years' reserved supply available.~~

(32) Each urban water supplier whose average July-September 2014 R-GPCD was less than 65 shall reduce its total potable water production by 8 percent for each month as compared to the amount used in the same month in 2013.

(43) Each urban water supplier whose average July-September 2014 R-GPCD was 65 or more but less than 80 shall reduce its total potable water production by 12 percent for each month as compared to the amount used in the same month in 2013.

(54) Each urban water supplier whose average July-September 2014 R-GPCD was 80 or more but less than 95 shall reduce its total potable water production by 16 percent for each month as compared to the amount used in the same month in 2013.

(65) Each urban water supplier whose average July-September 2014 R-GPCD was 95 or more but less than 110 shall reduce its total potable water production by 20 percent for each month as compared to the amount used in the same month in 2013.

(76) Each urban water supplier whose average July-September 2014 R-GPCD was 110 or more but less than 130 shall reduce its total potable water production by 24 percent for each month as compared to the amount used in the same month in 2013.

(87) Each urban water supplier whose average July-September 2014 R-GPCD was 130 or more but less than 170 shall reduce its total potable water production by 28 percent for each month as compared to the amount used in the same month in 2013.

(98) Each urban water supplier whose average July-September 2014 R-GPCD was 170 or more but less than 215 shall reduce its total potable water production by 32 percent for each month as compared to the amount used in the same month in 2013.

(109) Each urban water supplier whose average July-September 2014 R-GPCD was 215 or more shall reduce its total potable water production by 36 percent for each month as compared to the amount used in the same month in 2013.

(d)(1) Beginning June 1, 2015, each urban water supplier that does not submit a self-certification in compliance with section 864.5 shall comply with the conservation standard specified in subdivision (c), with any modifications to the conservation standard pursuant to subdivision (f) applying beginning March 1, 2016.

(2) Compliance with the requirements of this subdivision shall be measured monthly and assessed on a cumulative basis through ~~October 2016~~ January 2017.

(e)(1) Each urban water supplier that provides potable water for commercial agricultural use meeting the definition of Government Code section 51201, subdivision (b), may subtract the amount of water provided for commercial agricultural use from its potable water production total, provided that any urban water supplier that subtracts any water provided for commercial agricultural use from its total potable water production shall:

(A) Impose reductions determined locally appropriate by the urban water supplier, after considering the applicable urban water supplier conservation standard specified in subdivision (c), for commercial agricultural users meeting the definition of Government Code section 51201, subdivision (b) served by the supplier;

(B) Report its total potable water production pursuant to subdivision (b)(2) of this section, the total amount of water supplied for commercial agricultural use, and shall identify the reduction imposed on its commercial agricultural users and each recipient of potable water for commercial agricultural use;

(C) Certify that the agricultural uses it serves meet the definition of Government Code section 51201, subdivision (b); and

(D) Comply with the Agricultural Water Management Plan requirement of paragraph 12 of the April 1, 2015 Executive Order for all commercial agricultural water served by the supplier that is subtracted from its total potable water production.

(2) Submitting any information pursuant to subdivision (e)(1)(B) or (C) of this section that is found to be materially false by the Board is a violation of this regulation, punishable by civil liability of up to five hundred dollars (\$500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(f) In consideration of the differences in climate affecting different parts of the state, growth experienced by urban areas and significant investments that have been made by some suppliers towards creating new, local, drought-resilient sources of potable water supply, an urban water supplier's conservation standard identified in subdivision (c) shall be reduced by an amount, not to exceed eight (8) percentage points total, as follows:

(1) For an urban water supplier whose service area evapotranspiration (ET_o) for the months of July through September exceeds the statewide average evapotranspiration, as determined by the Board, for the same months by five (5) percent or more, the supplier's conservation standard identified in subdivision (c) shall be reduced:

(A) By two (2) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by five (5) percent or more but less than ten (10) percent;

(B) By three (3) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by ten (10) percent or more but less than twenty (20) percent;

(C) By four (4) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by twenty (20) percent or more.

(D) Statewide average evapotranspiration is calculated as the arithmetic mean of all urban water suppliers' service area default evapotranspiration values for the months of July through September. Default service area evapotranspiration will be based on the California Irrigation Management System (CIMIS) ET_o Zones Map zone for which the supplier's service area has the greatest area of overlap. In lieu of applying its default service area evapotranspiration, a supplier may use specific data from CIMIS stations within its service area that have at least a five-year period of record, or a three year continuous period of record, to identify a more specifically-applicable evapotranspiration for its service area. If no CIMIS station exists within the supplier's service area, a weather station of comparable accuracy, meeting the preceding period of record requirements, may be used. To qualify for the in-lieu climate adjustment, the supplier shall submit the following data to the Board by March 15, 2016 for each station: station ID; station location; and monthly average evapotranspiration, in inches per month, for July, August, and September for either the five-year period of record or the three-year continuous period of record.

(2) To account for water efficient growth experienced in the state since 2013, urban water suppliers' conservation standards shall be reduced by the product of the percentage change in potable water production since 2013 and the percentage reduction in potable water use required pursuant to subdivision (c), rounded to the nearest whole percentage point. Change in potable water production since 2013 shall be calculated as the sum of the following:

(A) The number of additional permanent residents served since January 1, 2013, multiplied by the average residential water use per person for that supplier's service area during the months of February through October, 2015, in gallons; and

(B) The number of new commercial, industrial and institutional connections since January 1, 2013, multiplied by the average commercial, industrial and institutional water use per connection for that supplier's service area during the months of February through October, 2015, in gallons.

(C) To qualify for the growth credit the supplier shall submit to the Board the following data by March 15, 2016: the number of additional permanent residents served since January 1, 2013 and the number of new commercial, industrial and institutional connections since January 1, 2013.

(3) For an urban water supplier that supplies, contracts for, or otherwise financially invests in, water from a new local, drought-resilient source of supply, the use of which does not reduce the water available to another legal user of water or the environment, the conservation standard identified in subdivision (c) shall be reduced:

(A) By one (1) percentage point if the supplier's qualifying source of supply is one (1) percent or more but less than two (2) percent of the supplier's total potable water production;

(B) By two (2) percentage points if the supplier's qualifying source of supply is two (2) percent or more but less than three (3) percent of the supplier's total potable water production;

(C) By three (3) percentage points if the supplier's qualifying source of supply is three (3) percent or more but less than four (4) percent of the supplier's total potable water production;

(D) By four (4) percentage points if the supplier's qualifying source of supply is four (4) percent or more but less than five (5) percent of the supplier's total potable water production;

(E) By five (5) percentage points if the supplier's qualifying source of supply is five (5) percent or more but less than six (6) percent of the supplier's total potable water production;

(F) By six (6) percentage points if the supplier's qualifying source of supply is six (6) percent or more but less than seven (7) percent of the supplier's total potable water production;

(G) By seven (7) percentage points if the supplier's qualifying source of supply is seven (7) percent or more but less than eight (8) percent of the supplier's total potable water production;

(H) By eight (8) percentage points if the supplier's qualifying source of supply is eight (8) percent or more of the supplier's total potable water production.

(I) To qualify for this reduction the supplier must certify, and provide documentation to the Board upon request demonstrating, the percent of its total potable water production that comes from a local, drought-resilient source of supply developed after 2013, the supplier's investment in that local, drought-resilient source of supply, and that the use of that supply does not reduce the water available to another legal user of water or the environment. To qualify for this reduction an urban water supplier shall submit the required certification to the Board by March 15, 2016.

(J) Certifications that do not meet the requirements of subdivision (f)(3)(I), including certifications for which documentation does not support that the source of supply is a local, drought-resilient source of supply, the use of which does not reduce the water available to another legal user of water or the environment, will be rejected. Submitting a certification or supporting documentation pursuant to subdivision (f)(3)(I) that is found to be materially false by the Board is a violation of this regulation, punishable by civil liability of up to five hundred dollars (\$500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(4) No urban water supplier's conservation standard pursuant to this section shall drop below eight (8) percent as a consequence of the reductions identified in this subdivision. ~~No reduction pursuant to this subdivision shall be applied to any urban water supplier whose conservation standard is four (4) percent based on subdivision (e)(2).~~

(g)(1) To prevent waste and unreasonable use of water and to promote water conservation, each distributor of a public water supply that is not an urban water supplier shall ~~take one or more of the following actions:~~

(1) Provide prompt notice to a customer whenever the supplier obtains information that indicates that a leak may exist within the end-user's exclusive control; and

~~—— (A) Limit outdoor irrigation of ornamental landscapes or turf with potable water by the persons it serves to no more than two days per week; or~~

~~—— (B) Reduce by 25 percent its total potable water production relative to the amount produced in 2013.~~

~~(2) Each distributor of a public water supply that is not an urban water supplier shall submit~~ Submit a report by ~~September~~ December 15, 2016, on a form provided by the Board, that ~~either confirms compliance with subdivision (g)(1)(A) or identifies total~~ potable water production, by month, from December, 2015 through ~~August~~ November, 2016, ~~and total potable water production, by month, for the same months in 2013, and~~ any actions taken by the supplier to encourage or require its customers to conserve water.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 102, 104, 105, 275, 350, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 866. Additional Conservation Tools.

(a)(1) To prevent the waste and unreasonable use of water and to promote conservation, when a water supplier does not meet its conservation standard required by section 864.5 or section 865 the Executive Director, or the Executive Director's designee, may issue conservation orders requiring additional actions by the supplier to come into compliance with its conservation standard.

(2) A decision or order issued under this article by the Board or an officer or employee of the Board is subject to reconsideration under article 2 (commencing with section 1122) of chapter 4 of part 1 of division 2 of the Water Code.

(b) The Executive Director, or his designee, may issue an informational order requiring water suppliers, or commercial, industrial or institutional properties that receive any portion of their supply from a source other than a water supplier subject to section 864.5 or 865, to submit additional information relating to water production, water use or water conservation. The failure to provide the information requested within 30 days or any additional time extension granted is a violation subject to civil liability of up to \$500 per day for each day the violation continues pursuant to Water Code section 1846.

(c) Orders issued under previous versions of this ~~subdivision~~section shall remain in effect and shall be enforceable as if adopted under this version. Changes in the requirements of this article do not operate to void or excuse compliance with orders issued before those requirements were changed.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 100, 102, 104, 105, 174, 186, 187, 275, 350, 1051, 1122, 1123, 1825, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

DRAFT RESOLUTION 14-18 REVISED

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE NORTH MARIN WATER DISTRICT
IMPLEMENTING THE STATE WATER RESOURCES CONTROL BOARD'S MANDATE ON
URBAN WATER SUPPLIERS TO ACTIVATE MANDATORY RESTRICTIONS ON WATER
USE.**

WHEREAS, pursuant to California Water Code Section 102, all water in the state is the property of the people of the state; and

WHEREAS, the State Resources Control Board (State Board) is the agency tasked with issuing and monitoring permits to urban water suppliers and others to appropriate water statewide and determining the amount, purpose, place and beneficial use of that water. The North Marin Water District (District) is the beneficiary of multiple State Board permits which authorize the appropriation of waters of the state; and

WHEREAS, Water Code Section 10617 defines "urban water supplier" as a supplier for municipal purposes that serves 3,000 customers or more than 3,000 acre feet annually. Pursuant to Section 10617, the District is an urban water supplier; and

WHEREAS, on July 15, 2014, the State Board adopted Article 22.5 entitled "Drought Emergency Water Conservation Regulations" (California Code of Regulations, Title 23, sections 863, 864, and 865) which makes drought related findings and imposes mandatory requirements on urban water suppliers state-wide; and

WHEREAS, on March 17, 2015 -and May 5, 2015 the State Board amended and re-adopted the Drought Emergency Water Conservation Regulations, and-

WHEREAS, on May 9, 2016 the State Board proposed revisions to the Drought Emergency Water Conservation Regulations.

WHEREAS, Section 863 of Article 22.5 made the following factual findings related to the current state of drought in California and the Governor's proclamations of emergency related thereto:

1. On January 17, 2014, the Governor proclaimed a state of emergency under the California Emergency Services Act (Act) based on drought conditions;
2. On April 25, 2014, the Governor issued a proclamation of continued state of emergency under the Act based on continued drought conditions existing statewide;
3. On April 1, 2015, the Governor issued an Executive Order directing the State Board to impose restrictions to achieve a statewide 25% reduction in potable urban water use through February 2016;
4. On May 9, 2016, the Governor issued an Executive Order that directs the State Board to adjust and extend its emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions for many communities.
5. The drought conditions forming the base of the Governor's proclamations still exist in portions of the State;

~~4.6.~~ The present year rainfall in Novato to date is 80% of average and normal conditions prevail on Lagunitas Creek and the Russian River.

~~5.~~ The present year is critically dry and has been immediately preceded by two or more consecutive below normal, dry, or critically dry years; and

~~6.7.~~ The drought conditions ~~will likely~~ may continue ~~in~~ for the foreseeable future and additional action by both the State Water Resources Control Board and local water suppliers ~~will likely~~ may be necessary to further promote conservation.

WHEREAS, Section 864 of Article 22.5 promotes conservation by prohibiting the following outdoor activities, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency;

1. The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;
2. The use of a hose that dispensed potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;
3. The application of potable water to driveways and sidewalks;
4. The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculation system;
5. The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall; and
- ~~6.~~ The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased;
- ~~7.6.~~ The irrigation with potable water of ornamental turf on public street medians.
- ~~8.7.~~ The irrigation with potable water of any landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.
- ~~9.8.~~ To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.

WHEREAS, Section 865 of Article 22.5 requires urban water suppliers state-wide to:

- ~~1. Implement all requirements and actions of the stage of its water shortage contingency plan that imposes mandatory restrictions on outdoor irrigation of ornamental landscapes or turf with potable water;~~
- ~~2.1. Provide prompt notice to a customer whenever the supplier obtains information that indicates that a leak may exist within the end-users exclusive control;~~
- ~~3.2. Prepare and submit to the State Board by the 15th of each month a monitoring report that includes the amount of potable water produced, including potable water provided by a wholesaler, in the preceding calendar month compared to the amount produced in the same calendar month in 2013 and estimate the gallons of water per person per day used by the residential customers it serves. The monitoring report shall specify the population served by the urban water supplier, the percentage of water produced that is used for the residential sector, descriptive statistics on water conservation compliance and enforcement efforts, and the number of days that outdoor irrigation is allowed and monthly commercial, industrial and institutional sector use.~~

NOW, THEREFORE, THE BOARD OF DIRECTORS RESOLVES AS FOLLOWS:

1. The District's existing Regulation 15, section b. (Water Conservation - Novato Service Area), and Emergency Water Conservation Ordinance No. 28, enacted on April 1, 2014, contains prohibitions on a portion of those uses contained in Section 864 of Article 22.5, and remains in effect.
2. ~~The following use (s) is declared to be non-essential and is prohibited:~~
 - ~~a. Watering of any lawn, garden landscaped area, tree, shrub or other plant except from a handheld hose equipped with an automatic shut-off nozzle, container or drip irrigation system. Overhead sprinkler irrigation can be used no more than three (3) days per week (Odd numbered street addresses are authorized to irrigate on Monday, Wednesday and Friday and even numbered street addresses are authorized to irrigate on Tuesday, Thursday and Saturday) provided the customer maintains an overall 24% reduction in water use compared to the corresponding billing period in 2013 (Customers using less than 300 gallons per day are permitted to water their landscapes without the required 24% reduction), and properly operates the irrigation system in a non-wasteful manner between the hours of 7:00 p.m. and 9:00 a.m. the next day. If overhead sprinkler water is used in a wasteful manner, the General Manager may prohibit sprinkling by that customer. Exemptions may be granted for irrigation of commercial or government owned recreational landscape areas provided a 24% reduction in water use compared to the corresponding billing period in 2013 is maintained.~~

3.2. In response to the ~~mandate prohibitions~~ in Section 865 in Article 22.5, the Board directs staff to implement those water conservation measures governing ~~restrictions prohibiting waste and non-essential uses of water as noted in Section 864 and listed above~~ on outdoor water use described above. In addition, the Board leaves in full force and effect Regulation 15, Section b., and ~~Emergency Water Conservation Ordinance No. 28.~~ These will ensure continued water conservation ~~and~~ compliance with the mandate contained in Article 22.5. Enforcement will be in accordance with existing provisions of Regulation 15, Section b., and ~~Emergency Water Conservation Ordinance No. 28.~~

4.3. The Board directs staff to comply with the reporting requirements noted in Section 865 or Article 22.5.

5.4. The provisions of this Resolution shall remain in effect as long as Article 22.5 remains in effect or until this Resolution is rescinded or modified by the Board.

* * * * *

I hereby certify that the foregoing is a true and complete copy of a resolution duly and regularly adopted by the Board of Directors of NORTH MARIN WATER DISTRICT at a regular meeting of said Board held on the ~~nineteenth~~ seventeenth of May 2016~~5~~, by the following vote:

AYES:	Directors Baker, Fraites, Petterle, Rodoni, Schoonover
NOES:	None
ABSENT:	None
ABSTAINED:	None



Katie Young, District Secretary
North Marin Water District

(SEAL)

DRAFT RESOLUTION 15-04 REVISED

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE NORTH MARIN WATER DISTRICT
IMPLEMENTING THE STATE WATER RESOURCES CONTROL BOARD'S MANDATE ON
URBAN WATER SUPPLIERS TO ACTIVATE MANDATORY RESTRICTIONS ON WATER
USE.**

WHEREAS, pursuant to California Water Code Section 102, all water in the state is the property of the people of the state; and

WHEREAS, the State Resources Control Board (State Board) is the agency tasked with issuing and monitoring permits to urban water suppliers and others to appropriate water statewide and determining the amount, purpose, place and beneficial use of that water. The North Marin Water District (District) is the beneficiary of multiple State Board permits which authorize the appropriation of waters of the state; and

WHEREAS, Water Code Section 10617 defines "urban water supplier" as a supplier for municipal purposes that serves 3,000 customers or more than 3,000 acre feet annually. Pursuant to Section 10617, the District's West Marin Service area is not considered an urban water supplier; and

WHEREAS, on July 15, 2014, the State Board adopted Article 22.5 entitled "Drought Emergency Water Conservation Regulations" (California Code of Regulations, Title 23, sections 863, 864, and 865) which makes drought related findings and imposes mandatory requirements on urban water suppliers state-wide; and

WHEREAS, on March 17, 2015- and May 5, 2015 the State Board amended and re-adopted the Drought Emergency Water Conservation Regulations, and-

WHEREAS, on May 9, 2016, the State Board proposed revisions to the Drought Emergency Water Conservation Regulations.

WHEREAS, Section 863 of Article 22.5 made the following factual findings related to the current state of drought in California and the Governor's proclamations of emergency related thereto:

1. On January 17, 2014, the Governor proclaimed a state of emergency under the California Emergency Services Act (Act) based on drought conditions;
2. On April 25, 2014, the Governor issued a proclamation of continued state of emergency under the Act based on continued drought conditions existing statewide;
3. On April 1, 2015, the Governor issued an Executive Order directing the State Board to impose restrictions to achieve a statewide 25% reduction in potable urban water use through February 2016;
- ~~3.4.~~ On May 9, 2016, the Governor issued an Executive Order that directs the State Board to adjust and extend its emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions for many communities.

5. The drought conditions forming the base of the Governor's proclamations still exist in portions of the State;

4.6. The present year rainfall in West Marin is above average and normal year conditions prevail on Lagunitas Creek.

5. ~~The present year is critically dry and has been immediately preceded by two or more consecutive below normal, dry, or critically dry years; and~~

6.7. ~~The drought conditions will likely~~may ~~continue for in the foreseeable future and additional action by both the State Water Resources Control Board and local water suppliers will likely~~may be necessary to further promote conservation.

WHEREAS, Section 864 of Article 22.5 promotes conservation by prohibiting the following outdoor activities, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency;

1. The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;
2. The use of a hose that dispensed potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;
3. The application of potable water to driveways and sidewalks;
4. The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculation system;
5. The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall; and
6. ~~The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased;~~
- 7.6. The irrigation with potable water of ornamental turf on public street medians.
- 8.7. The irrigation with potable water of any landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.
9. ~~To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel~~

or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.

WHEREAS, Section 865 of Article 22.5 requires water suppliers not considered to be urban water suppliers state-wide to:

1. Limit outdoor irrigation of ornamental landscapes or turf with potable water by the persons it serves to no more than two days per week; or reduce by 25 percent reduction its total potable water production relative to the amount produced in 2013. Provide prompt notice to a customer whenever the supplier obtains information that indicates that a leak may exist within the end-users exclusive control.
- 4.2. Submit a report by December 15, 2016, on a form provided by the State Water Resources Control Board, that identifies total potable water production, by month, from December, 2015 through November 2016, total water production, by month, for the same in 2013, and any actions taken by the supplier to encourage or require its customers to conserve water.

NOW, THEREFORE, THE BOARD OF DIRECTORS RESOLVES AS FOLLOWS:

1. The District's existing Regulation 17, section b. (Water Conservation - West Marin Service Area), contains prohibitions on a portion those uses contained in Section 864 of Article 22.5, and remains in effect.
2. ~~The following use (s) is declared to be non-essential and is prohibited:~~
 - a. ~~Watering of ornamental landscape or turf areas more than two days per week.~~
- 3.2. In response to the mandate prohibitions in Section 8645 in Article 22.5, the Board directs staff to implement those water conservation measures governing restrictions on outdoor water use descried aboveprohibiting waste and non-essential use of water as noted in Section 864 and listed above. In addition, the Board leaves in full force and effect Regulation 17, Section b. Enforcement will be in accordance with existing enforcement provisions of Regulation 17, Section b.
- 4.3. The Board directs staff to comply with the reporting requirements noted in Section 865, Section (gf)(2) of Article 22.5.
- 5.4. The provisions of this Resolution shall remain in effect as long as Article 22.5 remains in effect or until this Resolution is rescinded or modified by the Board.

* * * * *

I hereby certify that the foregoing is a true and complete copy of a resolution duly and regularly adopted by the Board of Directors of NORTH MARIN WATER DISTRICT at a regular meeting of said Board held on the nineteenth-seventeenth of May 20165, by the following vote:

AYES: ~~Directors Baker, Fraites, Petterle, Rodoni and Schoonover~~

NOES: None

ABSENT: None

ABSTAINED: None

A handwritten signature in black ink, appearing to read "Katie Young". The signature is fluid and cursive, with the first name "Katie" written in a smaller, more compact script than the last name "Young", which features a large, sweeping "Y" and "g".

Katie Young, District Secretary
North Marin Water District

(SEAL)

ORDINANCE NO. 33
AN ORDINANCE OF NORTH MARIN WATER DISTRICT
RESCINDING ORDINANCE NO. 28

BE IT ORDAINED by the Board of Directors of North Marin Water District as follows:

Effective forthwith, Ordinance No. 28 is rescinded.

* * * * *

I hereby certify that the foregoing is a true and complete copy of an ordinance duly and regularly adopted by the Board of Directors of North Marin Water District at a regular meeting thereof held on May 17, 2016 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Katie Young
District Secretary

(SEAL)

Marin Independent Journal

4000 Civic Center Drive, Suite 301
San Rafael, CA 94903
415-382-7335
legals@marinij.com
2074361

NORTH MARIN WATER DISTRICT
PO BOX 146
NOVATO, CA 94948

PROOF OF PUBLICATION (2015.5 C.C.P.)

STATE OF CALIFORNIA County of Marin

I am a citizen of the United States and a resident of the County aforesaid: I am over the age of eighteen years, and not a party to or interested in the above matter. I am the principal clerk of the printer of the MARIN INDEPENDENT JOURNAL, a newspaper of general circulation, printed and published daily in the County of Marin, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Marin, State of California, under date of FEBRUARY 7, 1955, CASE NUMBER 25566; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

05/11/2016

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated this 11th day of May, 2016.

Donna Lajarus

Signature

PROOF OF PUBLICATION

Legal No. 0005727968

NOTICE OF A PUBLIC HEARING NORTH MARIN WATER DISTRICT Declaration of a Water Shortage Emergency Novato Service Area

Tuesday, May 17th - 7:00 p.m.
District Offices
999 Rush Creek Place
Novato, California
(415) 897-4133

The North Marin Water District Board of Directors will accept public comments and consider rescinding Ordinance No. 28 and adopting a new emergency conservation ordinance in response to revisions to the State Water Resources Control Board Emergency Water Conservation Regulations for the Novato Service Area, in accordance with the recently approved Water Shortage Contingency Plan for Greater Novato Area.

Copies of the Draft Ordinances are available for public inspection at the offices of North Marin Water District (address noted above) and on the NMWD website at www.nmwd.com.

NO. 547 MAY 11, 2016

ATTACHMENT 6

4

5

6

7

NORTH MARIN WATER DISTRICT
MONTHLY PROGRESS REPORT FOR April 2016
May 17, 2016

1.

Novato Potable Water Prod - RR & STP Combined - in Million Gallons - FYTD

Month	FY15/16	FY14/15	FY13/14	FY12/13	FY11/12	16 vs 15 %
July	252	319	385	389	371	-21%
August	274	301	360	396	373	-9%
September	213	276	332	346	347	-23%
October	243	221	313	283	249	10%
November	167	173	229	166	183	-3%
December	130	129	182	146	156	1%
January	55	137	168	151	178	-60%
February	72	121	119	148	147	-40%
March	159	195	154	211	156	-19%
April	192	217	177	240	171	-12%
FYTD Total	1,758	2,089	2,419	2,476	2,331	-16%

West Marin Potable Water Production - in Million Gallons - FY to Date

Month	FY15/16	FY14/15	FY13/14	FY12/13	FY11/12	16 vs 15 %
July	6.6	8.6	9.3	9.8	9.2	-23%
August	7.0	8.5	9.3	9.7	9.4	-18%
September	6.4	7.8	8.5	8.3	8.7	-18%
October	6.5	5.4	8.0	7.4	6.5	21%
November	4.7	4.6	6.8	5.2	5.1	4%
December	3.9	4.7	6.4	4.5	4.9	-16%
January	3.7	4.4	5.9	5.0	4.8	-16%
February	3.8	3.9	4.4	4.4	4.5	-4%
March	4.2	5.2	5.0	5.4	4.4	-19%
April	4.9	4.7	5.0	6.0	5.4	3%
FYTD Total	51.7	57.8	68.5	65.7	63.0	-11%

Stafford Treatment Plant Production - in Million Gallons - FY to Date

Month	FY15/16	FY14/15	FY13/14	FY12/13	FY11/12	16 vs 15 %
July	108	83	98	49	115	30%
August	79	61	83	83	126	29%
September	38	26	56	72	77	46%
October	50	0	82	88	113	-
November	58	8	5	64	106	672%
December	0	0	2	0	49	-
January	0	0	0	21	0	-
February	0	24	0	57	0	-
March	0	95	0	61	0	-
April	49	104	0	67	0	-53%
FYTD Total	382	401	326	560	586	-5%

Recycled Water Production - in Million Gallons - FY to Date

Month	FY15/16	FY14/15	FY13/14	FY12/13	FY11/12	16 vs 15 %
July	21.3	21.8	27.6	11.2	11.0	-2%
August	26.2	26.0	26.2	10.5	12.2	1%
September	15.7	19.2	18.6	8.5	9.6	-18%
October	15.8	9.4	15.8	0.0	0.0	69%
November	3.2	3.7	6.4	0.0	0.0	-14%
December	0.8	1.6	1.6	0.0	0.0	-51%
January	0.2	0.8	1.2	0.0	0.0	-76%
February	0.3	0.8	1.8	0.0	0.0	-61%
March	0.3	9.5	1.2	1.4	0.0	-97%
April	11.0	14.1	8.3	8.8	2.5	-22%
FYTD Total*	94.8	106.8	108.6	40.3	35.3	-11%

*Excludes potable water input into the RW system: FYTD16 = 8.0MG; FYTD15 = 6.9MG; FYTD14 = 10.6MG.

2. Stafford Lake Data

	April Average	April 2015	April 2016
Rainfall this month	1.72 Inches	1.40 Inches	1.04 Inches
Rainfall this FY to date	26.2 Inches	26.0 Inches	22.1 Inches
Lake elevation*	193.4 Feet	193.2 Feet	195.5 Feet
Lake storage**	1,205 MG	1,188 MG	1,416 MG

* Spillway elevation is 196.0 feet

** Lake storage less 390 MG = quantity available for delivery

Temperature (in degrees)

	Minimum	Maximum	Average
April 2015 (Novato)	41.8	93.4	59.4
April 2016 (Novato)	46.5	92.6	61.6

3. Number of Services

April 30	Novato Water			Recycled Water			West Marin Water			Oceana Marin Swr		
	FY16	FY15	Incr %	FY16	FY15	Incr %	FY16	FY15	Incr %	FY16	FY15	Incr %
Total meters	20,761	20,746	0.1%	48	48	0.0%	786	781	0.6%	-	-	-
Total meters active	20,522	20,497	0.1%	44	44	0.0%	779	777	0.3%	-	-	-
Active dwelling units	23,972	23,945	0.1%	0	0	-	824	824	0.0%	230	229	0.4%

4. Oceana Marin Monthly Status Report (April)

Description	April 2015	April 2016
Effluent Flow Volume (MG)	0.405	0.405
Irrigation Field Discharge (MG)	0.098	0.639
Treatment Pond Freeboard (ft)	3.2	3.4
Storage Pond Freeboard (ft)	7.2	5.7

5. Developer Projects Status Report (April)

Job No.	Project	% Complete	% This month
1.2768.00	OMA Village Water Facilities	100	2
1.2774.00	Mt. Burdell Place	80	5
1.2777.00	Walnut Meadows	99	2
1.2783.00	Olive Ave. Chevron Car Wash	85	5

District Projects Status Report - Const Dept (April)

Job No.	Project	% Complete	% This month
1.6112.24	Lynwood PS Motor Control	10	0
2.6602.23	PR Well No. 2 Replacement	100	8
1.7090.02	Anode Installations	95	35
1.6222.23	Sunset Tank Chlorine Mixing System	80	60
1.8677.20	Flushing Taps At Dead Ends	50	50
2.6257.20	Pt. Reyes Tanks 2 & 3 Seismic Piping Upgrade	85	60
1.7145.00	Zone A Pressure Improvements	20	20
1.7054.05	Inaccurate Meter Replacement	40	40

Employee Hours to Date, FY 15/16

As of Pay Period Ending April 30, 2016

Percent of Fiscal Year Passed = 83%

Developer Projects	Actual	Budget	% YTD Budget	District Projects	Actual	Budget	% YTD Budget
Construction	1,609	1,400	115	Construction	3,228	4,949	65
Engineering	775	1,480	52	Engineering	3,808	4,980	76

6. Safety/Liability

FY 16 through April
FY 15 through April

Industrial Injury with Lost Time				Liability Claims Paid	
Lost Days	OH Cost of Lost Days (\$)	No. of Emp. Involved	No. of Incidents	Incurred (FYTD)	Paid (FYTD) (\$)
10	4,080	2	2	5	57,635
165	83,160	1	0	5	3,599

Days without a lost time accident through April 30, 2016 = 9 days

7. Energy Cost

FYE	Kwh	April		Fiscal Year-to-Date thru April		
		¢/Kwh	Cost/Day	Kwh	¢/Kwh	Cost/Day
2016 Stafford TP	61,367	18.6¢	\$381	491,003	18.5¢	\$297
Pumping	79,014	20.2¢	\$499	903,704	18.1¢	\$537
Other*	40,029	20.2¢	\$245	387,121	22.3¢	\$283
	180,410	19.7¢	\$1,144	1,781,829	19.1¢	\$1,117
2015 Stafford TP	72,412	18.1¢	\$437	555,180	17.9¢	\$327
Pumping	97,017	15.9¢	\$483	1,063,382	16.4¢	\$569
Other*	40,150	17.7¢	\$223	395,241	20.5¢	\$265
	209,578	17.0¢	\$1,151	2,013,803	17.6¢	\$1,159
2014 Stafford TP	71,118	17.6¢	\$416	577,548	17.1¢	\$325
Pumping	86,171	15.0¢	\$432	1,357,109	15.3¢	\$685
Other*	36,850	17.3¢	\$212	425,838	19.4¢	\$271
	194,139	16.4¢	\$1,026	2,360,496	16.5¢	\$1,277

*Other includes West Marin Facilities

8. Water Conservation Update

	Month of April 2016	Fiscal Year to Date	Program Total to Date
High Efficiency Toilet (HET) Rebate (\$100 each)	18	229	3,500
Retrofit Certificates Filed	21	184	5,501
Cash for Grass Rebates Paid Out	5	121	815
Washing Machine Rebates	4	86	6,685
Water Smart Home Survey	9	196	2,316

9. Utility Performance Metric

SERVICE DISRUPTIONS (No. of Customers Impacted)	April 2016	April 2015	Fiscal Year to Date 2016	Fiscal Year to Date 2015
PLANNED				
Duration Between 0.5 and 4 hours	8	10	156	127
Duration Between 4 and 12 hours	67*		73*	12
Duration Greater than 12 hours			1	1
UNPLANNED				
Duration Between 0.5 and 4 hours	11	11	89	229
Duration Between 4 and 12 hours			32	69
Duration Greater than 12 hours		1	1	56
SERVICE LINES REPLACED				
Polybutylene	11	13	124	114
Copper (Replaced or Repaired)	0	0	14	34

*66 customers affected due to maintenance of valves

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders April 2016

5/10/2016

Type	Apr-16	Apr-15	Action Taken April 2016
<u>Consumers' System Problem</u>			
Service Line Leaks	19	16	Notified Consumer
Meter Leak Consumer's Side	0	0	~
House Plumbing	0	0	~
Noisy Plumbing	1	0	Notified Consumer
Seepage or Other	0	0	~
House Valve / Meter Off	5	4	Notified Consumer
Nothing Found	6	13	Notified Consumer
Low Pressure	1	1	Pressure low after PRV. Customer was notified.
High Pressure	1	1	Pressure @ 50 PSI. Customer was notified.
Water Waster Complaints	0	0	~
Total	33	35	
<u>Service Repair Reports</u>			
Register Replacements	0	0	~
Meter Replacement	1	3	Notified Consumer
Meter Box Alignment	0	0	~
Meter Noise	0	0	~
Dual Service Noise	0	0	~
Box and Lids	2	0	Replaced
Water Off/On Due To Repairs	1	8	Notified Consumer
Misc. Field Investigation	4	1	Notified Consumer
Total	8	12	
<u>Leak NMWD Facilities</u>			
Main-Leak	0	1	~
Mains-Nothing Found	0	0	~
Mains-Damage	0	0	~
Service- Leak	11	17	Repaired
Services-Nothing Found	6	5	Notified Consumer
Service-Damaged	1	0	Notified Consumer
Fire Hydrant-Leak	1	3	Repaired
Fire Hydrants-Nothing Found	1	0	Notified Consumer
Fire Hydrants-Damaged	0	1	~
Meter Replacement	2	1	Replaced
Meters-Leak	0	0	~
Meters-Nothing Found	0	0	~
Meters Damaged	0	0	~
Washer Leaks	7	2	Replaced
Total	29	30	
<u>High Bill Complaints</u>			
Consumer Leaks	5	6	Notified Consumer
Meter Testing	0	0	~
Meter Misread	3	6	Notified Consumer
Nothing Found	5	8	Notified Consumer
Projected Consumption	0	0	~
Excessive Irrigation	0	0	~
Total	13	20	

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders April 2016

5/10/2016

Type	Apr-16	Apr-15	Action Taken April 2016
<u>Low Bill Reports</u>			
Meter Misread	0	0	~
Stuck Meter	0	1	~
Nothing Found	0	1	~
Projected Consumption	0	0	~
Minimum Charge Only	0	0	~
Total	0	2	

Water Quality Complaints

Taste and Odor	0	0	~
Color	0	2	~
Turbidity	0	0	~
Suspended Solids	0	0	~
Other	5	2	<i>Customer made pipe repairs. Requested water test. (Laurelwood Dr)</i> All samples were clean. Customer was notified. <i>Customer requested lead & copper testing. (Eames Ct)</i> Neither were detected. Customer was notified. <i>Customer requested lead testing. (Plum St)</i> Lead was not detected. Customer was notified. <i>Customer requested water tested for coliforms. (Commercial Blvd)</i> Coliform was not detected. Customer was notified. <i>Customer requested lead & copper testing. (HWY 1)</i> Neither were detected. Customer was notified.

Total	5	4	
<u>TOTAL FOR MONTH:</u>	<u>88</u>	<u>103</u>	<u>-15%</u>

Fiscal YTD Summary

Consumer's System Problems	335	286
Service Repair Report	94	103
Leak NMWD Facilities	225	304
High Bill Complaints	254	272
Low Bills	1	9
Water Quality Complaints	37	30
Total	<u>946</u>	<u>1,004</u>

Change Primarily Due To

17%	Increase In Consumer Service Leaks
-9%	Decrease In Water On/Off For Repairs
-26%	Decrease In Service Line Leaks
-7%	Decrease In Nothing Found
-89%	Decrease In Stuck Meter
23%	Increase In Discolored Water
-6%	

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders April 2016

5/10/2016

Type	Apr-16	Apr-15	Action Taken April 2016
<u>"In House" Generated and Completed Work Orders</u>			
<u>Check Meter:</u> possible consumer/District leak, high bill, flooded, need read, etc.	230	170	
<u>Change Meter:</u> leaks, hard to read	5	4	
<u>Possible Stuck Meter</u>	0	0	
<u>Repair Meter:</u> registers, shut offs	0	0	
<u>Replace Boxes/Lids</u>	2	1	
<u>Hydrant Leaks</u>	0	0	
<u>Trims</u>	36	9	
<u>Dig Outs</u>	46	73	
<u>Letters to Consumer:</u> meter obstruction, trims, bees, gate access, etc. get meter number, kill service, etc.	0	0	
	319	257	

Bill Adjustments Under Board Policy:

April 16 vs. April 15

Apr-16	15	\$6,408
Apr-15	22	\$5,168

Fiscal Year to Date vs. Prior FYTD

15/16 FYTD	200	\$63,958
14/15 FYTD	220	\$88,578

c:\users\kyounglappdata\local\microsoft\windows\temporary inter

MEMORANDUM

To: Board of Directors

May 13, 2016

From: David L. Bentley, Auditor-Controller



Subj: Auditor-Controller's Monthly Report of Investments for April 2016

t:\acl\word\invest\16\investment report 0416.doc

RECOMMENDED ACTION: Information

FINANCIAL IMPACT: None

At month end the District's Investment Portfolio had an amortized cost value (i.e., cash balance) of \$13,263,736 and a market value of \$13,267,018. During April the cash balance increased by \$253,339. The market value of securities held increased \$3,281 during the month. The ratio of total cash to budgeted annual operating expense stood at 90%, up 2% from the prior month.

At April 30, 2016, 29% of the District's Portfolio was invested in California's Local Agency Investment Fund (LAIF), 30% in Time Certificate of Deposit, 15% in US Treasury Notes, 15% in Federal Agency Securities, and 5% in Corporate Medium Term Notes. The weighted average maturity of the portfolio was 200 days, compared to 165 days at the end of March. The LAIF interest rate for the month was 0.53%, compared to 0.51% the previous month. The weighted average Portfolio rate was 0.68%, compared to 0.65% the previous month. Including interest paid by The Bay Club on the StoneTree Golf Recycled Water Facilities Loan, the District earned \$11,117 in interest revenue during April, with 51% earned by Novato Water, 37% earned by Recycled Water (by virtue of the StoneTree Golf Loan) and the balance distributed to the two West Marin districts.

NORTH MARIN WATER DISTRICT
AUDITOR-CONTROLLER'S MONTHLY REPORT OF INVESTMENTS
April 30, 2016

Type	Description	S&P Rating	Purchase Date	Maturity Date	Cost Basis ¹	4/30/2016 Market Value	Yield ²	% of Portfolio
LAIF	State of CA Treasury	AA-	Various	Open	\$3,838,214	\$3,839,063	0.53% ³	29%
Time Certificate of Deposit								
TCD	Americanwest Bank	n/a	5/30/14	5/31/16	249,000	249,000	0.50%	2%
TCD	Enerbank	n/a	6/30/14	6/30/16	249,000	249,000	0.65%	2%
TCD	Investors Bank	n/a	7/21/14	7/21/16	249,000	249,000	0.70%	2%
TCD	Comenity Capital Bank	n/a	8/18/14	8/18/16	249,000	249,000	0.80%	2%
TCD	Ally Bank	n/a	10/2/14	10/3/16	248,000	248,000	0.95%	2%
TCD	Cardinal Bank	n/a	11/12/14	11/14/16	249,000	249,000	0.80%	2%
TCD	Goldman Sachs	n/a	12/10/14	12/12/16	248,000	248,000	1.00%	2%
TCD	First Niagara Bank	n/a	4/30/15	5/1/17	249,000	249,000	0.75%	2%
TCD	Discover Bank	n/a	5/6/15	5/8/17	248,000	248,000	0.85%	2%
TCD	Capital One Bank	n/a	6/10/15	6/12/17	248,000	248,000	0.90%	2%
TCD	Flagship Cmnty Bank	n/a	6/24/15	6/24/17	249,000	249,000	0.75%	2%
TCD	American Express Bank	n/a	7/8/15	7/10/17	248,000	248,000	1.15%	2%
TCD	Capital One National Assoc	n/a	8/5/15	8/7/17	248,000	248,000	1.20%	2%
TCD	American Express Centurion	n/a	10/7/15	10/10/17	248,000	248,000	1.20%	2%
TCD	BMW Bank	n/a	12/14/15	12/11/17	248,000	248,000	1.20%	2%
TCD	Wells Fargo Bank	n/a	3/23/16	3/23/18	248,000	248,000	1.10%	2%
					\$3,975,000	\$3,975,000	0.89%	30%
US Treasury Notes								
Treas	1,000 - 0.50%	n/a	3/26/14	6/15/16	\$999,936	\$1,000,344	0.55%	8%
Treas	1,000 - 1.00%	n/a	8/4/14	9/30/16	1,001,493	1,002,511	0.65%	8%
					\$2,001,429	\$2,002,855	0.60%	15%
Federal Agency Securities								
FFCB	1.70% MTN	n/a	9/15/14	10/28/16	\$502,542	\$502,956	0.69%	4%
FHLB	0.58% MTN	n/a	11/7/14	11/14/16	499,824	500,179	0.64%	4%
FICO	0.86% MTN	n/a	4/22/16	5/11/18	999,241	997,956	0.86%	8%
					\$2,001,607	\$2,001,090	0.76%	15%
Corporate Medium Term Notes								
MTN	General Electric Capital	AA+	3/18/16	5/15/17	\$641,644	\$643,167	0.75%	5%
					\$641,644	\$643,167	0.75%	5%
Other								
Agency	Marin Co Treasury	AA+	Various	Open	\$683,065	\$683,065	0.32%	5%
Other	Various	n/a	Various	Open	122,777	122,777	0.50%	1%
TOTAL IN PORTFOLIO					\$13,263,736	\$13,267,018	0.68%	100%

Weighted Average Maturity = **200 Days**

LAIF: State of California Local Agency Investment Fund.

TCD: Time Certificate of Deposit, Treas: US Treasury Notes with maturity of 5 years or less.

FFCB: Federal Farm Credit Bank, FHLB: Federal Home Loan Bank, FICO: Financing Corporation

Agency: STP State Revolving Fund Loan Reserve.

MTN: Medium Term Note - Maturity of 5 years or less.

Other: Comprised of 4 accounts used for operating purposes. US Bank Operating Account, US Bank STP SRF Loan Account, Bank of Marin AEEP Checking Account & NMWD Petty Cash Fund.

1 Original cost less repayment of principal and amortization of premium or discount.

2 Yield defined to be annualized interest earnings to maturity as a percentage of invested funds.

3 Earnings are calculated daily - this represents the average yield for the month ending April 30, 2016.

Interest Bearing Loans	Loan Date	Maturity Date	Original Loan Amount	Principal Outstanding	Interest Rate
StoneTree Golf Loan	6/30/06	2/28/24	\$3,612,640	\$1,764,744	2.40%
Employee Housing Loans (5)	Various	Various	934,200	934,200	Contingent
TOTAL INTEREST BEARING LOANS			\$4,546,840	\$2,698,944	

The District has the ability to meet the next six months of cash flow requirements.

8

MEMORANDUM

To: Board of Directors

May 13, 2016

From: Ryan Grisso, Water Conservation Coordinator *RG*Subject: Approve Text for Spring 2016 Novato "Water Line", Volume 17, Issue 36
V:\Memos to Board\Spring 2016 WaterLine Text 0516.doc**RECOMMENDED ACTION:** Approve Spring 2016 Novato "Water Line" Text**FINANCIAL IMPACT:** \$8,000 (Included in FY 2016/2017 Budget)

Draft text and design for the Spring 2016 Novato "Water Line", Volume 17, Issue 36 is attached for your review. Should any Board member have individual comments please provide them to the General Manager at the Board meeting on May 17, 2016. It is expected the "Water Line" will be mailed in late May or early June 2016.

RECOMMENDATION

Board authorize General Manager to approve final text and design of Spring 2016 Novato "Water Line", Volume 17, Issue 36.

Approved by GM *GD*
Date *5/13/2016*



NORTH MARIN
WATER DISTRICT

THE WATER LINE

NOVATO'S WATER CONSERVATION NEWSLETTER • VOLUME 17 ISSUE 36 SPRING 2016

California Drought Continues

Regional Water Supply Adequate Revised State Water Conservation Regulations for 2016

To date, Novato water customers have done a great job conserving during the State imposed mandatory water use restrictions. Water production to date since June 2015 is down 33% compared to the same period in 2013, while the State target for Novato is 24%. Thanks for doing your part. NMWD asks that you remain diligent in conserving water, as the State restrictions continue through January 2017.

This year, the State Water Resources Control Board (SWRCB) revised the Emergency Water Conservation Regulations to allow water utilities to self-certify the adequacy of their supply and determine the service area specific level of reduction needed. NMWD has determined that no reduction is needed for the remainder of 2016, through January 2017 and awaits confirmation from SWRCB. The revised state regulations still include water use restrictions. These restrictions are summarized below and the full range of 2016 restrictions can be found at www.nmwd.com.

Understanding your water use patterns is the first step in becoming more water-use efficient. You can see your water use history for your account at www.nmwd.com. Select the "Your Account" tab and click on "Account Balance & Consumption". We appreciate your help in preserving our water supply! Please pay attention to water use, especially outside. NMWD strongly encourages participation in the water conservation programs offered.

Important information regarding the water meter

The water meter, meter box and the shut-off valve and fittings within the meter box are the property and responsibility of NMWD to maintain. The meter shut-off valve can be damaged if improperly operated. We receive 2-3 calls per week from customers who inadvertently damage their water meter shut-off valve. If you need your water turned off, use the house valve, which is usually located near the hose-bib at the front of your home. If you need your water turned off at the meter, call 415.897.4133 at any time, day or night, and a service rep will be dispatched at no charge. If you or your agent damage the meter box components, it will be repaired at your expense. Save the grief – call NMWD.

NMWD is evaluating an Advanced Meter Information (AMI) system to improve meter reading accuracy, efficiency and customer service. A pilot program is anticipated for this summer to aid in the evaluation. With AMI, digital meter data is sent securely to NMWD headquarters by a radio or cellular signal. The AMI system will provide early leak identification and enable customers to view near real-time water use information.



Recycled Water is Expanding in the Central Area

NMWD is working on an expansion of the recycled water system into the Central Service Area of Novato. This expansion will extend from Novato Sanitary District's Davidson Plant to the Marin Country Club, serving approximately 40 large landscape customers along the way. Construction is expected to begin this summer and should be completed by the end of 2017.

For more information on the Recycled Water Expansion Project, please visit www.nmwd.com.

Summary of Water Use Prohibitions for 2016

Water Waste and Essential Prohibitions

- ◆ Gutter flooding (unreasonable irrigation overspray or irrigation run-off onto pavement, down a gutter, ditch or other drain).
- ◆ Failure to repair a controllable leak of water within a reasonable time.
- ◆ Using water for non-recycling decorative fountains or single-pass cooling systems.
- ◆ Washing down exterior paved areas.
- ◆ Washing privately-owned motor vehicles, trailers and boats except from a bucket and hose equipped with an automatic shut-off nozzle for a quick rinse.
- ◆ Overhead sprinkler irrigation cannot be used within 48 hours of measured rainfall.

For questions on the water use prohibitions call 415-761-8944 or email waterconserve@nmwd.com

Thank You For Using Water Efficiently During the Drought

Participate in NMWD's Water Conservation Programs

Cash for Grass

NMWD offers a cash incentive for removing regularly maintained and automatically irrigated lawn areas and replacing them with low water use plantings on drip irrigation. The incentive will pay you up to \$50 per 100 square feet of lawn area (maximum \$400 per single family dwelling). Pre-qualification site visit and re-landscaping plan approval is required for participation.



Lawn be Gone

This program is for "do-it-yourselfers" who want to replace lawn areas by covering and composting in place - a process known as "sheet-mulching". NMWD offers delivery of free compost, cardboard and mulch for eligible sheet-mulching projects. Pre-qualification site visit and landscape plan approval required prior to participation. Delivery will be performed by NMWD's designated contractor.



See www.nmwd.com for rules and application forms, and then call 415-761-8944 to schedule an appointment.

Water Smart Savings Program

Call (415) 761-8944 for program details or visit www.nmwd.com

North Marin Water District wants to help customers use water efficiently. That's why we've put all of our water saving promotions under one umbrella. The Water Smart Savings Program encompasses all you need to get started on saving water and saving money. Call (415) 761-8944 for program details or visit www.nmwd.com

Water Smart Home Survey:

This free service includes thorough indoor and outdoor water efficiency checks.

Water Conserving Fixtures:

Free showerheads, faucet aerators and self-closing hose nozzles are available upon request.

Rainwater Catchment Rebate:

Rebate for collection and storage of rainwater.

High Efficiency Clothes Washer Rebate:

NMWD offers a rebate to customers when they purchase a qualifying high efficiency clothes washer.

Cash for Grass Rebate:

Get Cash for removing irrigated and maintained lawn and replacing it with low water use plants. Pre-qualification required.

Water Smart Landscape Rebate:

Rebates available for water efficient landscape equipment, like a new drip irrigation system replacing a spray system or a rain shut off device.

Smart Controller Rebate:

A Smart Controller uses weather data and site specific information to automatically adjust run times.

High Efficiency Toilet Rebate:

Customers who replace an old water-guzzling toilet with a high efficiency toilet may be eligible for a rebate.

Greywater Rebate:

Rebate for the reuse of water from washing machine, shower or bathroom sink to water landscape plants.

Other Programs:

Other programs include pool cover rebate, hot water recirculation system rebate and "Lawn Be Gone" sheet mulching program.



**NORTH MARIN
WATER DISTRICT**

999 Rush Creek Place
PO Box 146
Novato, CA 94948

www.nmwd.com

PRESORTED
STANDARD
U.S. POSTAGE
PAID
STRAHCOM



Printed on Recycled Paper

Free Water Smart Home Survey Program

The Water Smart Home Survey Program offers customers a chance to have a NMWD representative complete a FREE water use efficiency survey. Our friendly and knowledgeable survey technicians can show you how to easily become more water use efficient and save money, and we can even help you understand how to program your irrigation controller. You'll also get free low-flow showerheads and sink aerators as needed to achieve maximum water use efficiency.

On the Survey we will inspect:

- Sprinklers & irrigation systems
- Flow and leaks
- Landscaping
- Water meter
- Faucets
- Showerheads
- Toilets
- Clothes washers
- Other water-using devices in the home



Call today to schedule your **Free Water Smart Home Survey**: 707-547-1909

9

MEMORANDUM

To: Board of Directors

May 13, 2016

From: Ryan Grisso, Water Conservation Coordinator *RG*Subject: Approve Text for West Marin's *Water Line*, Volume 13

V:\Memos to Board\Spring 2016 WM WaterLine Text 0516.doc

RECOMMENDED ACTION: Approve 2016 West Marin "*Water Line*"**FINANCIAL IMPACT:** \$2,000 (included in WM FY 2016/2017 Budget)

Text for West Marin's 2016 "*Water Line*", Volume 13 (Attached), is enclosed for your review and approval. Should any Board member have individual comments please provide them to the General Manager at the Board meeting on May 17, 2016. It is expected the West Marin 2016 "*Water Line*" will be mailed in late May or early June 2016.

RECOMMENDATION

Board authorize the General Manager to approve text and design of West Marin's 2016 "*Water Line*", Volume 13.

Approved by GM *CD*Date *5/13/2016*



NORTH MARIN
WATER DISTRICT

THE WATER LINE

WEST MARIN'S WATER CONSERVATION NEWSLETTER • VOLUME 13 • SPRING 2016

State Removes Two Days Per Week Irrigation Limit

NMWD water supply for West Marin customers is diverted from shallow wells adjacent to Lagunitas Creek near the U.S. Coast Guard Housing Facility in Point Reyes Station.



This year's rainfall levels again reached normal year status (a normal year is declared when total precipitation from October 1 to April 1 exceeds 28 inches measured at the Marin Municipal's Kent Lake). However, the statewide drought still continues and the State Water Resources Control Board (SWRCB) has continued Emergency Water Conservation Regulations for all California water suppliers through January 2017. The West Marin Service Area falls into the category of a "smaller water supplier", serving fewer than 3,000 connections. The SWRCB requires smaller water

suppliers to prohibit waste of water and to report water use monthly. Last year, the NMWD Board of Directors approved a resolution restricting outdoor irrigation in the West Marin service area to no more than two days per week. This restriction will no longer be in effect beginning June 1, 2016.

We appreciate your help conserving water and preserving West Marin water supply! Please identify and fix leaks immediately, pay attention to water use, especially outside, and limit outdoor irrigation.

Important information regarding the water meter

The water meter, meter box and the shut-off valve and fittings within the meter box are the property and responsibility of NMWD to maintain. The meter shut-off valve can be damaged if improperly operated. We receive 2-3 calls per week from customers who inadvertently damage their water meter shut-off valve. If you need your water turned off, use the house valve, which is usually located near the hose-bib at the front of your home. If you need your water turned off at

the meter, call 415.897.4133 at any time, day or night, and a service rep will be dispatched at no charge. If you or your agent damage the meter box components, it will be repaired at your expense. Save the grief – call NMWD.



**Thank You For Using Water
Efficiently During the Drought**

Water Smart Savings Program

Call (415) 761-8944 for program details or visit www.nmwd.com

North Marin Water District wants to help customers use water efficiently. That's why we've put all of our water saving promotions under one umbrella. The *Water Smart Savings Program* encompasses all you need to get started on saving water and saving money. Call (415) 761-8944 for program details or visit www.nmwd.com.



High-Efficiency Toilet Rebate

Don't flush money away. Now you can get a rebate when you replace your non-water-conserving toilets with a High-Efficiency Toilet (HET). HETs use 20% less water than standard ultra-low flush toilets, so not only will you save water, but you'll save money, too. HETs eligible for rebate must be EPA WaterSense models. Call for rebate values and participation details or visit www.nmwd.com.



High-Efficiency Clothes Washer Rebate Program

High Efficiency clothes washers can save up to 50% of the water used and 65% of the energy used compared to conventional top-loading clothes washers. NMWD currently offers a rebate to customers when they purchase a qualifying high-efficiency clothes washer. Call for rebate value and participation details, or visit www.nmwd.com.



999 Rush Creek Place
PO Box 146
Novato, CA 94948
(415) 897-4133

**NORTH MARIN
WATER DISTRICT**

www.nmwd.com

PRESORTED
STANDARD
U.S. POSTAGE
PAID
STRAHMCOM



Printed on Recycled Paper



Water Smart Landscape Efficiency Rebate

Water efficient landscapes can be achieved through a number of strategies including efficient irrigation devices and equipment, and soil maintenance.

You may be eligible for rebates (call for rebate amounts and participation details or visit www.nmwd.com) when you install District-qualified water-efficient landscape equipment including:

- Spray to drip irrigation conversions
- Weather Based Irrigation Controllers
- Multi-stream rotating sprinkler nozzles (for lawn areas only)
- Rain shut-off devices
- Mulch



Cash for Grass



As part of the Water Smart Savings Program, you can get cash back when you remove your regularly mowed and irrigated lawn and re-landscape with California native low-water use plants. Pre-inspection and re-landscaping plan approval required. Call for rebate values and complete program participation details or visit www.nmwd.com.

Rainwater Harvesting and Graywater Rebate



Install a rainwater harvesting system, and District rebates may be available. Rainwater harvesting is the collection and storage of rainwater for reuse in landscape irrigation. Systems can range from simple catchment devices, such as rain barrels, to more complex systems, such as cisterns or storage tanks. Rebates are also available for greywater system installations. Pre-inspection and plan approval required. Call for participation details and rebate values.

10

MEMORANDUM

To: Board of Directors
From: Drew McIntyre, Assist. General Manager/Chief Engineer
Re: Approve General Services Agreement – Genterra Consultants Inc.
R:\NON JOB No ISSUES\Consultants\Genterra\Genterra Genl Servs Agmt BOD memo 5_16.doc



May 13, 2016

RECOMMENDED ACTION: Authorize General Manager to execute a General Consulting Services Agreement with Genterra Consultants Inc.

FINANCIAL IMPACT: \$40,000

The purpose of this memo is to request a General Consulting Services (GCS) Agreement with Genterra Consultants Inc (Genterra). Genterra is a consulting firm with specialized expertise in civil and geotechnical engineering for dams. From time to time, the District is in need of these services for periodic support of Stafford Dam operational, maintenance and inspection issues. As recently as 2007, the District used Richard Harlan, one of the original designers of the Dam but, unfortunately, Mr. Harlan is now deceased. Inspection reports from the Dept. of Water Resources Division of Safety of Dams (DSOD) have generally been positive but the most recent inspection report dated April 13 2016 (Attachment 1) includes recommendations that require specialized expertise not readily available within the District's in-house engineering staff. They are:

1. Survey and develop a long term maintenance plan to preserve the concrete armoring of the upstream face of the dam, and
2. Provide a statement by NMWD's dam engineer concluding that overall dam performance is satisfactory based on review of instrumentation data (i.e., survey data of monument elevation/alignment every 5 years and monthly water elevation monitoring).

Regarding Item 1 above, the District has expended ~ \$130,000 to date on concrete patch repairs to the 2-inch thick concrete apron on the upstream face of the dam. This armoring is provided to protect the earthen dam from erosion due to wave action. The current patch repair work has addressed immediate needs but has a high unit cost of ~ \$60 per sq. ft. and is not cost effective when considering a long term repair solution for the entire 50,000 sq. ft. apron area that is nearing the end of its useful life. Accordingly, Genterra's scope of work (included in Attachment 2) includes the development of long return rehabilitation alternatives for the existing concrete apron. In addition, as part of Genterra's scope, they will also will review Stafford Dam's historical piezometric (water level) monitoring and monument survey data and provide a statement regarding the performance of the dam as requested by DSOD in Item 2 above.

Attached is an agreement for Genterra to provide outsourcing support for technical engineering services related to Stafford Dam with a not-to-exceed limit of \$40,000 (Attachment 2). Genterra is a California based engineering firm with a branch office in Sacramento and headquarters in Irvine California. Over the past 20 years, Genterra has worked on more than 150 dams. The proposed Genterra team for this project has direct and recent experience for two dams owned by PGE in Northern California, two dams owned by Paradise Irrigation District and two dams owned by Stanford University. Reference checks for all three owners were very positive.

To best meet project demands, a new GCS Agreement is desired and will be executed with individual task orders on a job-by-job basis. The first task order to be funded through this Agreement will be for assistance related to responding to the above mentioned DSOD recommendations in the 2015 Inspection Report. This first task order will be approximately \$20,000.

RECOMMENDATION

That the Board authorize the General Manager to execute a General Consulting Services Agreement between NMWD and RMC with a not-to-exceed limit of \$40,000.

STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF SAFETY OF DAMS

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

RECEIVED
APR 25 2016
North Marin Water District

Name of Dam Novato Creek Dam No. 88 County Marin
Type of Dam ERTH Type of Spillway Ogee weir and concrete lined chute
Water is 0.1 feet Above the spillway crest and 17.9 feet below the dam crest.
Weather Conditions Clear and mild
Contacts Made Robert Clark during the inspection
Reason for Inspection Periodic Evaluation

Important Observations, Recommendations or Actions Taken

As discussed in the September 12, 2013 inspection report, the better constructed repairs to the upstream face concrete armoring appear to be holding up well, while more superficial joint and crack repairs made a few years ago are again in need of attention. Much of the less severely deteriorated portions of the upstream face armoring show evidence of long-term wear and would benefit from maintenance or repairs designed to extend its useful working life. I strongly recommend the owner perform a thorough survey of the condition of the upstream face concrete liner, and devise and implement a long term maintenance plan designed to preserve the liner and reduce long-term maintenance costs.

Instrumentation data reporting and presentation is excellent, however, a statement by the owner's engineer summarizing the effectiveness of the data and the performance of the dam as reflected by the data is required.

Conclusions

From the known information and visual inspection, the dam, reservoir, and the appurtenances are judged safe for continued use.

Observations and Comments

<u>Dam</u>	<p>The visible portions of the concrete armored upstream face, the crest, downstream face, and the abutment contacts are in reasonably satisfactory condition with no indication of significant surficial distress or instability.</p> <p>Portions of the upstream face concrete armor are beginning to show signs of advanced deterioration and require repair. Most of the remaining less severely deteriorated portions of the upstream face armoring above the spillway elevation show evidence of long-term wear and would benefit from maintenance or repairs designed to extend its useful working life.</p> <p>Vegetation control within the embankment remains excellent. The embankment is covered with ankle to knee tall grass and other low ground cover that provide protection against erosion without hindering inspection and monitoring for seepage and other defects.</p> <p>Rodent activity remains satisfactory and few indications of active burrowing were observed.</p>
<u>Spillway</u>	<p>The spillway approach, control section, and exit channel were open and clear.</p> <p>The concrete ogee weir, chute, and cross beams were in satisfactory condition, and are free of large cracks, spalls or other defects indicative of excessive stress or deterioration. The concrete invert could not be inspected due to flow within the spillway.</p> <p>Total freeboard is 18 feet and residual freeboard is 4.8 feet; residual freeboard is satisfactory.</p>

Photos taken? Yes X No
cc for Owner/Book

Inspected by J. Lowe *13 Apr 2016*
Date of Inspection 12 April 2016
Date of Report 13 April 2016 *LSing 4/16/16*

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Novato Creek Dam No. 88

Date of Inspection 12 April 2016

Observations and Comments

<u>Outlet</u>	<p>Upstream control at the outlet tower is provided by hydraulically operated 18-inch slide gates at elevations 174.0 feet and 158.0 feet. Additional upstream control is provided by a hydraulically operated 30-inch slide gate at the outlet tunnel entrance at elevation 145.0 feet. Downstream control is provided by a 30-inch butterfly valve. The fully concrete encased outlet is normally pressurized.</p> <p>None of the outlet controls were cycled during this inspection. All upstream and downstream controls were fully cycled and were found to be in good operating condition by the owner on March 11, 2016. All upstream and downstream controls were fully cycled in my presence and were found to be in good operating condition during the November 25, 2014 inspection.</p>
<u>Seepage</u>	<p>The downstream face, groins, and abutments were dry and free of any indications ^{of} seepage.</p> <p>Flow from the right abutment (6" chimney) drain outfall was approximately 1 gpm. The toe drain outfall collection box was flowing approximately 2 gpm. Flow from both locations was clear and are within historic values.</p>
<u>Instr.</u>	<p>Instrumentation consists of the following:</p> <ul style="list-style-type: none"> One (1) accelerometer located in a vault near the center of the crest and designed to measure the ground motion response of the dam during seismic events. Sixteen (16) piezometers installed to confirm the continued satisfactory operation of the toe drain and right abutment blanket drain (under-drain system), and arranged in four lines originating at the crest and extending across the downstream face and toe berm. Piezometers are monitored monthly. Two (2) seepage monitoring locations within the Novato Creek just upstream of the outlet discharge. The seepage monitoring locations provide for the measurement of seepage collected from within the toe drain and right embankment blanket drain, and are monitored monthly. Seepage data is not presently submitted to the DSOD. Eight (8) survey monuments designed to measure embankment settlement following construction, and settlement and lateral displacement following seismic events. Survey monuments are located along the crest axis, with six distributed along the crest and the remaining two located one each on the right and left abutments. The survey monuments are measured roughly every five years. <p>The instrumentation data report, received on October 31, 2015, was reviewed before the inspection.</p> <p>Seepage data covers the reporting period between January 1989 and January 2015. To evaluate and better understand the implications of a high phreatic surface within the embankment, the owner hired Richard C. Harlan, Consulting Engineer, to evaluate the piezometer data and its effect on the stability of the dam. The June 2, 2010 inspection report examines these issues in greater detail, and I refer the reader to that report for further information. With the exception of several anomalous readings, and periodic high water elevations in Piezometer No. 11 believed to be caused by road surface drainage, all piezometer readings are below the maximum safe phreatic levels presented by Richard Harlan in his 2007 report to the owner.</p> <p>No seepage data was presented in the October 2015 instrumentation report. Reported seepage</p>

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Novato Creek Dam No. 88

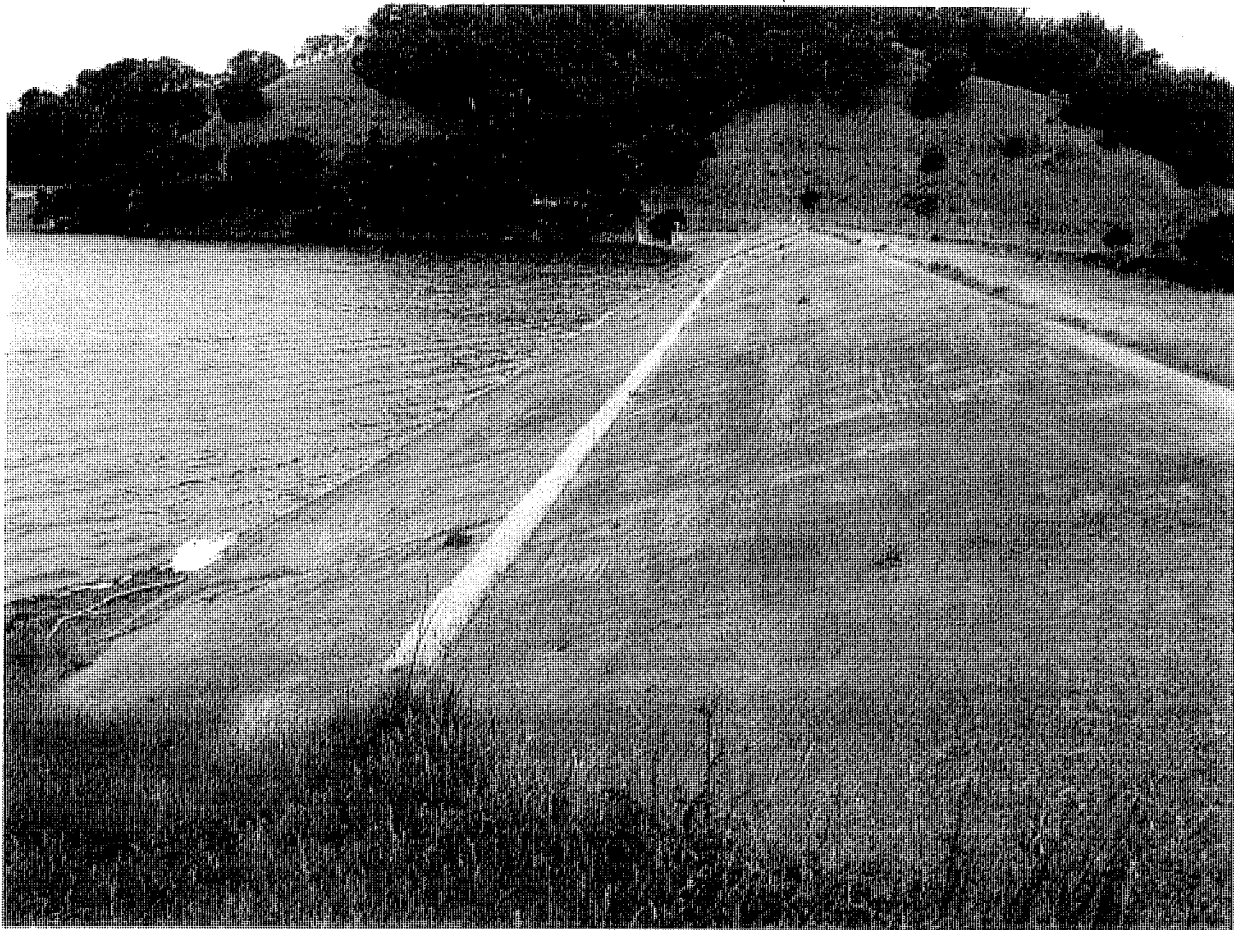
Date of Inspection 12 April 2016

Observations and Comments

data for 2013, presented in the October 2014 instrumentation report, indicates flow from the toe drain varies between zero and 2-gpm; there was no seepage data from the abutment drain. Seepage from the toe drain was low and within historic limits.

Survey data covers the reporting period between January 1986 and March 2015. As the owner reports, *"Monument alignment and elevation changes are of the same order of magnitude as observed in previous surveys. Monuments within the crest of the embankment (Monuments No's 2 through 7) follow the trend of downstream movement (~1.5" max) and settlement (~3" max) since measurements began in 1986. The next scheduled survey will be in 2020."*

Instrumentation data reporting and presentation is excellent, however, a statement by the owner's engineer summarizing the effectiveness of the data and the performance of the dam as reflected by the data is required. Based on the data submitted the dam appears to be performing satisfactorily, and no additional instrumentation is believed necessary at this time.



The upstream face as viewed from the right abutment. The spillway entrance through the left abutment is circled. I strongly recommend the owner perform a thorough survey of the condition of the upstream face concrete liner, and devise and implement a long term maintenance plan designed to preserve the liner and reduce long-term maintenance costs.

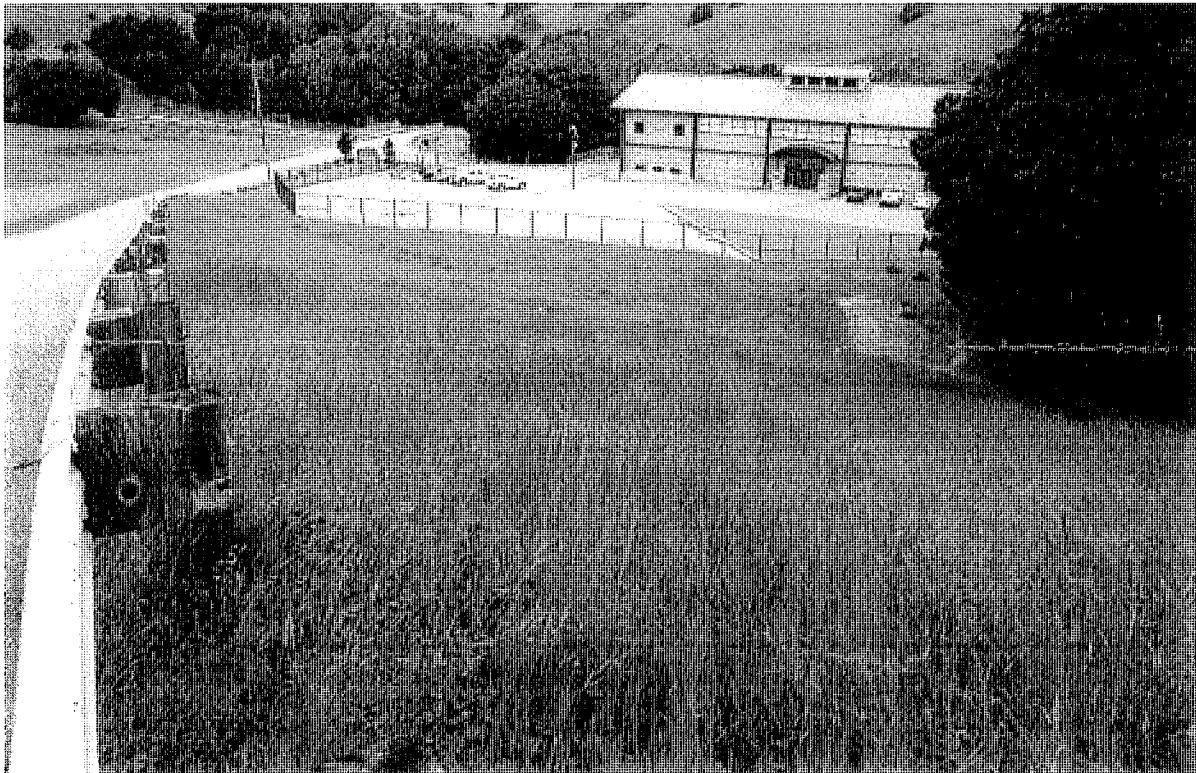
INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Novato Creek Dam No. 88

Date of Inspection 12 April 2016



The downstream face as viewed from the lower left abutment, above, and the lower right embankment as viewed from the public road which crosses the embankment, below. Vegetation has been consistently excellent for many years.



AGREEMENT FOR CONSULTING SERVICES

The following is an agreement between **North Marin Water District**, hereinafter "**NMWD**", and **GENTERRA Consultants, Inc.**, hereinafter, "**Consultant**".

WHEREAS, Consultant is a duly qualified consulting firm, experienced in civil and geotechnical engineering for dams.

WHEREAS, in the judgement of the Board of Directors of the NMWD, it is necessary and desirable to employ the services of the Consultant to provide miscellaneous engineering services.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

PART A -- SPECIFIC PROVISIONS:

1. DESCRIPTION OF SERVICES AND PAYMENT: Except as modified in this agreement, the services to be provided and the payment schedule are:

- a. Specific work scope tasks, schedules and estimate of services cost shall be discussed, agreed upon and documented between NMWD and the Consultant prior to beginning any work under this agreement.
- b. The fee and fee payment for such work shall be as stipulated under the fee schedule included in Exhibit A of this agreement. Agreement cost shall not exceed \$40,000 in total without additional Board of Directors' authorization.

PART B -- GENERAL PROVISIONS

1. ASSIGNMENT/DELEGATION: Except as above, neither party hereto shall assign, sublet or transfer any interest in or duty under this agreement without written consent of the other, and no assignment shall be of any force or effect whatsoever unless and until the other party shall have so consented.

2. STATUS OF CONSULTANT: The parties intend that the Consultant, in performing the services hereinafter specified, shall act as an independent contractor and shall have the control of the work and the manner in which it is performed. The Consultant is not to be considered an agent or employee of NMWD, and is not entitled to participate in any pension plan, insurance, bonus or similar benefits NMWD provides its employees.

3. INDEMNIFICATION: NMWD is relying on the professional ability and training of the Consultant as a material inducement to enter into this agreement. The Consultant hereby warrants that all its work will be performed in accordance with generally accepted professional practices and standards, as well as the requirements of applicable federal, state and local laws, it being understood that neither acceptance of the Consultant's work by NMWD nor Consultant's failure to perform shall operate as a waiver or release.

- a. With respect to professional services under this agreement, Consultant shall assume the defense of and defend NMWD, its directors, officers, agents, and employees in any action at law or in equity in which liability is claimed or alleged to arise out of, pertain to, or relate to, either directly or indirectly, the intentional or willful misconduct, recklessness, or negligent act, error, or omission of Consultant (or any person or

organization for whom Consultant is legally liable) in the performance of the activities necessary to perform the services for District and complete the task provided for herein. In addition, Consultant shall indemnify, hold harmless, and release NMWD, its directors, officers, agents, and employees from and against any and all actions, claims, damages, disabilities or expenses, including attorney's fees and witness costs, that may be asserted by any person or entity including the Consultant, arising out of, pertaining to, or relating to, the negligent acts, errors or omissions, recklessness, or intentional or willful misconduct of the Consultant (or any consultant or subcontractor of Consultant) in connection with the activities necessary to perform the services and complete the task provided for herein, but excluding liabilities due to the sole negligence or willful misconduct of NMWD.

- b. With respect to all other than professional services under this agreement, Consultant shall indemnify, hold harmless, release and defend NMWD, its agents and employees from and against any and all actions, claims, damages, disabilities or expenses, including attorney's fees and witness costs that may be asserted by any person or entity, including the Consultant, arising out of or in connection with the activities necessary to perform those services and complete the tasks provided for herein, but excluding liabilities due to the sole negligence or willful misconduct of NMWD.

This indemnification is not limited in any way by any limitation on the amount or type of damages or compensation payable by or for the NMWD or its agents under workers' compensation acts, disability benefit acts or other employee benefit acts.

4. PROSECUTION OF WORK: The execution of this agreement shall constitute the Consultant's authority to proceed immediately with the performance of this contract. Performance of the services hereunder shall be completed by June 30, 2018, provided, however, that if the performance is delayed by earthquake, flood, high water or other Act of God or by strike, lockout or similar labor disturbance, the time for the Consultant's performance of this contract shall be extended by a number of days equal to the number of days the Consultant has been delayed.

5. METHOD AND PLACE OF GIVING NOTICE, SUBMITTING BILLS AND MAKING PAYMENTS: All notices, bills and payment shall be made in writing and may be given by personal delivery or by mail. Notices, bills and payments sent by mail should be addressed as follows:

North Marin Water District
P.O. Box 146
Novato, CA 94948
Attention: Drew McIntyre

Consultant:
Genterra Consultants, Inc.
180 Promenade Circle, Ste 300
Sacramento, CA 95834
Attention: J. Kulikowski

and when so addressed, shall be deemed given upon deposit in the United States Mail, postage prepaid. In all other instances, notices, bills and payments shall be deemed given at the time of actual delivery. Changes may be made in the names and addresses of the person to whom notices, bills and payments are to be given by giving notice pursuant to this paragraph.

6. MERGER: This writing is intended both as the final expression of the agreement between the parties hereto with respect to the included terms of the agreement, pursuant to California Code of Civil Procedure Section 1856 and as a complete and exclusive statement of the terms of the agreement. No modification of this agreement shall be effective unless and until such modification is evidenced by a writing signed by both parties.

7. SEVERABILITY: Each provision of this agreement is intended to be severable. If any term of any provision shall be determined by a court of competent jurisdiction to be illegal or invalid for any reason whatsoever, such provision shall be severed from this agreement and shall not affect the validity of the remainder of the agreement.

8. TERMINATION: At any time and without cause the NMWD shall have the right in its sole discretion, to terminate this agreement by giving written notice to the Consultant. In the event of such termination, NMWD shall pay the Consultant for services rendered to such date.

9. TRANSFER OF RIGHTS/OWNERSHIP OF DATA: The Consultant assigns to NMWD all rights throughout the work in perpetuity in the nature of copyright, trademark, patent, and right to ideas, in and to all versions of any plans and specifications, reports and document now or later prepared by the Consultant in connection with this contract.

The Consultant agrees to take such actions as are necessary to protect the rights assigned to NMWD in this agreement, and to refrain from taking any action which would impair those rights. The Consultant's responsibilities under this contract will include, but not be limited to, placing proper notice of copyright on all versions of any plans and specifications, reports and documents as NMWD may direct, and refraining from disclosing any versions of the reports and documents to any third party without first obtaining written permission of NMWD. The Consultant will not use, or permit another to use, any plans and specifications, reports and document in connection with this or any other project without first obtaining written permission of NMWD.

All materials resulting from the efforts of NMWD and/or the Consultant in connection with this project, including documents, reports, calculations, maps, photographs, computer programs, computer printouts, digital data, notes and any other pertinent data are the exclusive property of NMWD. Re-use of these materials by the Consultant in any manner other than in conjunction with activities authorized by NMWD is prohibited without written permission of NMWD.

Consultant shall deliver requested materials to NMWD in electronic format including but not limited to engineering plans (AutoCad, current edition) and specifications (MS Word, current edition).

10. COST DISCLOSURE: In accordance with Government Code Section 7550, the Consultant agrees to state in a separate portion of any report provided NMWD, the numbers and amounts of all contracts and subcontractors relating to the preparation of the report.

11. NONDISCRIMINATION: The Consultant shall comply with all applicable federal, state and local laws, rules and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, marital status, age, medical condition or physical handicap.

12. EXTRA (CHANGED) WORK: Extra work may be required. The Consultant shall not proceed nor be entitled to reimbursement for extra work unless it has been authorized, in writing, in advance, by NMWD. The Consultant shall inform the District as soon as it determines work beyond the scope of this agreement may be necessary and/or that the work under this agreement cannot be completed for the amount specified in this agreement. Said review shall occur before consultant

incurs 75% of the total fee approved for any phase of the work. Failure to notify the District shall constitute waiver of the Consultant's right to reimbursement.

13. CONFLICT OF INTEREST: The Consultant covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services hereunder. The Consultant further covenants that in the performance of this contract no person having any such interest shall be employed.

14. INSURANCE REQUIREMENTS FOR CONSULTANTS

Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the consultant, his agents, representatives, employees or subcontractors.

Minimum Scope of Insurance

Coverage shall be at least as broad as:

1. Commercial General Liability coverage
2. Automobile Liability
3. Workers' Compensation insurance as required by the State of California.
4. Professional Liability insurance appropriate to the consultant's profession. Architects' and engineers' coverage is to be endorsed to include contractual liability.

Minimum Limits of Insurance

Consultant shall maintain limits no less than:

1. General Liability (including operations, products and completed operations.): **\$1,000,000** per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: **\$1,000,000** per accident for bodily injury and property damage.
3. Workers' Compensation Insurance: as required by the State of California.
4. Professional Liability, **\$1,000,000** per occurrence.

Verification of Coverage

Consultant shall furnish the District with original certificates and amendatory endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the District before work commences. The District reserves the right to require at any time complete and certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications.

Subcontractors

Consultant shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor to the District for review and approval. All coverage for subcontractors shall be subject to all of the requirements stated herein.

Self-Insured Retentions

Any self-insured retentions must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such self-insured retentions as respects the District, its officers, officials, employees and volunteers; or the Consultant shall provide a

financial guarantee satisfactory to the District (such as a surety bond) guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

Other Insurance Provisions

The commercial general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The District, its officers, officials, employees, and volunteers are to be covered as insureds with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Consultant.
2. For any claims related to this project, the Consultant's insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the District, its officers, officials, employees, or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.
3. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the District.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII.

15. DISPUTE RESOLUTION: Any dispute or claim in law or equity between District and Consultant arising out of this agreement, if not resolved by informal negotiation between the parties, shall be mediated by referring it to the nearest office of Judicial Arbitration and Mediation Services, Inc. (JAMS) for mediation. Mediation shall consist of an informal, non-binding conference or conferences between the parties and the judge-mediator jointly, then in separate caucuses wherein the judge will seek to guide the parties to a resolution of the case. If the parties cannot agree to mutually acceptable member from the JAMS panel of retired judges, a list and resumes of available mediators numbering one more than there are parties will be sent to the parties, each of whom will strike one name leaving the remaining as the mediator. If more than one name remains, JAMS arbitrations administrator will choose a mediator from the remaining names. The mediation process shall continue until the case is resolved or until such time as the mediator makes a finding that there is no possibility of resolution.

At the sole election of the District, any dispute or claim in law or equity between District and Consultant arising out of this agreement which is not settled through mediation shall be decided by neutral binding arbitration and not by court action, except as provided by California law for judicial review of arbitration proceedings. The arbitration shall be conducted in accordance with the rules of Judicial Arbitration Mediation Services, Inc. (JAMS). The parties to an arbitration may agree in writing to use different rules and/or arbitrators.

16. BILLING AND DOCUMENTATION: The Consultant shall invoice NMWD for work performed on a monthly basis and shall include a summary of work for which payment is requested. The invoice shall state the authorized contract limit, the amount of invoice and total amount billed to date. The summary shall include time and hourly rate of each individual, a narrative description of work accomplished, and an estimate of work completed to date.

17. REASONABLE ASSURANCES: Each party to this agreement undertakes the obligation that the other's expectation of receiving due performance will not be impaired. When reasonable grounds for insecurity arise, with respect to performance of either party, the other may, in writing, demand adequate assurance of due performance and until the requesting party receives such assurance may, if commercially reasonable, suspend any performance for which the agreed

return has not been received. "Commercially reasonable" includes not only the conduct of the party with respect to performance under this agreement but also conduct with respect to other agreements with parties to this agreement or others. After receipt of a justified demand, failure to provide within a reasonable time, not to exceed 30 days, such assurance of due performance as is adequate under the circumstances of the particular case is a repudiation of this agreement. Acceptance of any improper delivery, service, or payment does not prejudice the aggrieved party's right to demand adequate assurance of future performance.

**NORTH MARIN WATER DISTRICT
"NMWD"**

Dated: _____

Chris DeGabriele, General Manager

**GENTERRA Consultants, Inc
"CONSULTANT"**

Dated: _____

Joseph Kulikowski, President



May 10, 2016

P2244 –Evaluation of Piezometers & Slope Protection

Mr. Drew McIntyre
AGM/Chief Engineer
North Marin Water District
999 Rush Creek Place, P.O. Box 146
Novato, CA 94948

Subject: Scope of Work and Cost Estimate
Evaluation of Existing Piezometers and Upstream Slope Protection
Stafford Dam (Novato Creek Dam), DSOD No. 88-000

Dear Mr. McIntyre:

In accordance with the scope of work that we discussed during the office meeting and our site visit on March 4, 2016, and as covered in subsequent Email communications between you and me, GENTERRA Consultants, Inc. (GENTERRA) is pleased to submit this proposal to the North Marin Water District (District) to present the scope of work and estimated budget required to perform an evaluation of the piezometers and the upstream slope protection at Stafford Dam (Novato Creek Dam). The dam is under the jurisdiction of the State of California Department of Water Resources, Division of Safety of Dams (DSOD). The instrumentation at the dam consists of 16 open well piezometers, seepage collection systems to measure flow from a toe drain and right abutment underdrain system, eight survey monuments, an accelerometer and a rain gauge. The existing upstream slope protection, which is also referred to as “armoring” in inspection reports, consists of a layer of concrete on the upstream sloping face of the dam. Based on our discussions and our initial evaluation of the 2014 Phreatic Level Monitoring Report prepared by the District dated October 23, 2015, an evaluation is needed of the existing piezometers to assess the validity of the data being obtained and their functionality. Also, based on our discussions and review of the DSOD report of the inspection of November 25, 2014, portions of the upstream slope protection show signs of deterioration and the slope protection requires rehabilitation to better serve its intended function and to extend its useful life.

Stafford Dam is an earthfill dam that is under the jurisdiction of State of California, Department of Water Resources, Division of Safety of Dams (DSOD), and is located in Marin County, California. Stafford Dam was built in 1951, was modified in 1985, and has a height of 79 feet, a dam crest length of 650 feet, and a crest width of 15 feet. The instruments located at this facility are used to estimate the phreatic surface within the dam embankment, to measure seepage through the dam and the abutment, and to measure movement of the dam embankment. All sixteen of the piezometers at Stafford Dam are located within the dam embankment and/or foundation, the seepage collection system for the toe drain is located near the downstream toe of the dam, six of the eight survey monuments are located on the crest of the dam, and the remaining two are located in each abutment.

GENTERRA proposes to perform an evaluation of the piezometers to further determine their current condition and to determine if rehabilitation is necessary, and to present recommendations with conceptual alternatives for rehabilitation and/or replacement or addition of piezometers, and to evaluate the condition and functionality of the upstream slope protection and develop recommendations for alternatives for rehabilitation of the upstream slope protection. The results of the evaluations of these two issues will be summarized in a single report.

QUALIFICATIONS

Since the firm was founded in 1995, GENTERRA has provided consulting engineering services for dams, reservoirs, levees, and other water storage and conveyance facilities, most of them located in California and under jurisdiction of the DSOD. These projects included the evaluation of dam safety of more than 150 dams under the jurisdictional review of the State of California Division of Safety of Dams (DSOD), and the geotechnical investigation, design, and preparation of plans, specifications, and construction cost estimates of many new, enlarged or modified earthfill dams that required applications, review and approval by the California DSOD. The services included geotechnical field and laboratory investigations; evaluation of stability under static and seismic conditions and overall safety; design and development of plans and specifications; construction observation and consultation; design and installation of instrumentation; coordination with State, Federal and local regulatory agencies; performance of dam failure inundation studies; risk assessments; and assisting in preparation of emergency action plans. Key and support project personnel, all of whom are employees of GENTERRA, have worked on more than 500 of these types of facilities in their careers. A Company Profile is attached to this proposal.

GENTERRA will commit a highly qualified, experienced team of professionals and support personnel to this project. The Project Manager/Senior Principal Engineer for our services to the District is Joseph J. Kulikowski, P.E., G.E. Mr. Kulikowski has more than 45 years of experience in civil and geotechnical engineering, with most of that time involved with the design and evaluation of dams and appurtenances. He spent almost seven years early in his career as an engineer with the DSOD performing design review, construction review, and inspection and monitoring review of dams. Since then, he has been a Principal with consulting firms specializing in dams in California and other states. He founded GENTERRA in January 1995. Mr. Kulikowski is a Registered Civil Engineer and a Registered Geotechnical Engineer in the State of California. He is a Fellow in the American Society of Civil Engineers and a member of the U.S. Society on Dams (USSD), the Association of State Dam Safety Officials (ASDSO) and the American Water Works Association. The resume for Mr. Kulikowski is attached.

Assisting Mr. Kulikowski on this project will be Dr. Soma Balachandran, Ph.D., P.E., G.E., who has more than 20 years of experience in evaluation of dams under static and seismic conditions, and Mr. Nicholas M. Josten, P.E., a Civil Engineer with more than 10 years of experience in the inspection, monitoring and rehabilitation of dams in California and other states. The resumes for Dr. Balachandran and for Mr. Josten are attached. Other personnel available for this project include civil,

geotechnical and structural engineers and support personnel with experience in the design, analysis, evaluation, monitoring and review of the performance of dams. All of the services described below will be provided by GENTERRA, and no subcontractors are planned to be used.

SCOPE OF SERVICES

GENTERRA proposes to perform the following tasks to provide the services that would be required to evaluate the existing piezometers and the upstream slope protection at Stafford Dam..

Task 1 – Review of Available Documents

GENTERRA will perform a review of all available pertinent documents on the design and performance of the dam, as well as the installation, repairs, inspections, and reports with tables and graphs of monitoring records. We will also review recent condition inspection reports for the dam and stability analyses. GENTERRA will acquire the documents from the District. The evaluation of available documents will assist us in determining the design purpose of the instrumentation, including the basis for locations and elevations of existing piezometers and the locations of the phreatic surface used in stability analyses. That will enable us to check the validity of threshold elevations of water level readings in the piezometers and to establish maximum levels for monitoring performance of the dam as compared to design assumptions. The review will also provide us with the details of the design, construction and prior work related to the upstream slope protection.

Task 2 – Field Evaluation of Dam, Piezometers and Upstream Slope Protection

Upon completion of the review of the available pertinent documents, GENTERRA representatives will perform a field evaluation of the dam, the existing piezometers and the existing slope protection on the upstream face. This field evaluation will enable GENTERRA to become familiar with the features, configuration, and overall condition of the dam, including the condition of the visible portions of the existing piezometers and the upstream slope protection, which will help to assess their overall condition and functionality.

Task 3 – Evaluation of Piezometers and Development of Recommendations

In this task, GENTERRA will perform an evaluation of the data provided by the District and the results of our inspection of the dam and the existing piezometers, and will evaluate both recent and historical plots of piezometer measurements and seepage flows to better understand trends observed in the monitoring program and to help assess the functionality and reliability of the piezometers at Stafford Dam. We will develop recommendations for any necessary rehabilitation, addition and/or replacement of the piezometers that may be practical and feasible improvements.

Task 4 – Evaluation of Upstream Slope Protection and Development of Recommendations

In this task, GENTERRA will perform an evaluation of the data provided by the District and the results of our inspection of the upstream slope protection. We will also evaluate the basis of design, previous evaluations and repairs, and the general condition of the upstream slope protection. We will develop recommendations with conceptual alternatives for the rehabilitation of the upstream slope protection, as well as a matrix comparing possible alternatives, including advantages and disadvantages of each alternative, with relative costs and benefits.

Task 5 – Preparation and Submittal of Report

Upon completion of Tasks 1 through 4, GENTERRA will prepare a report summarizing the results of our evaluation; our opinions and conclusions related to the current conditions and functionality of the piezometers and the upstream slope protection; recommendations for any necessary rehabilitation, addition and/or replacement of the piezometers; and recommendations with descriptions and a comparative matrix of conceptual alternatives for the rehabilitation of the upstream slope protection. We will provide a statement regarding the performance of the dam instrumentation data including a review of both the piezometric data and dam monument survey data.

COST ESTIMATE

We propose to perform the services described in this proposal on a time-and-materials basis in accordance with the enclosed 2016 Professional Fee Schedule. The estimated cost for the evaluation of the existing piezometers and the upstream slope protection, as described under Tasks 1 through 5 of this proposal, is \$19,965. We will not exceed the estimated cost without written authorization from the District. A breakdown of the costs by task and personnel is provided in the attached cost estimate, including the cost for equipment use and other expenses. Our Sacramento Branch Office will serve as the Project Office for our services to the District, and all mileage expenses will be determined from Sacramento. We will only charge for one-half of the actual driving time from Sacramento.

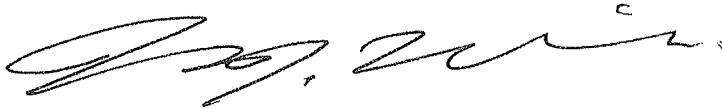
AUTHORIZATION

After we receive notification of your agreement with this scope of work and budget, we will prepare our Work Authorization and Agreement form for review and signature, or you can issue a Purchase Order referring to this proposal.

Thank you for this opportunity to provide the District with our services. We appreciate working with you to maintain the safety and good performance of this important facility. Please contact me, Soma Balachandran or Nick Josten at 888-423-0111 if you have any questions or wish to discuss this proposal in more detail.

Sincerely,

GENTERRA Consultants, Inc.



Joseph J. Kulikowski, P.E., G.E.
President/Senior Principal Engineer

Enclosure: Corporate Profile
 Resume for Joseph J. Kulikowski, PE, GE
 Resume for Soma Balachandran, PhD, PE, GE
 Resume for Nicholas M. Josten, PE
 2016 Fee Schedule
 Cost Estimate Spreadsheet

Cost Estimate - NMWD											
Evaluation of Existing Piezometers											
North Marin Water District											
Proposal No. P2244											
Revised 3/22/16											
Billing Rates are from 2016 Fee Schedule											
Task	Classification-->	Sr. Princ. Eng/	Principal	Project	Technician	Word	Total	Total	Expenses		TOTAL
	Role----->	Proj. Mgr	Engineer	Engineer	Support	Process.	Hours	Labor	Equipment	Travel,	COST
	Name----->	JJK	SB	SL/NMJ/JDD	JWK	TC		Cost	Use	Repro.,	
	Hourly Rate-->	\$285	\$260	\$190	\$95	\$80				Misc.	
Evaluation of Existing Piezometers											
1	Review of Available Documents	1	4	6	0	0	11	\$ 2,465	\$ -	\$ -	\$ 2,465
2	Field Evaluation of Dam, Piezometers and Upstream Slope Protection	1	4	4	4	0	13	\$ 2,465	\$ 250	\$ 100	\$ 2,815
3	Evaluation of Piezometers and Development of Recommendations	1	4	7	0	0	12	\$ 2,655	\$ -	\$ 20	\$ 2,675
4	Evaluation of Upstream Slope Protection and Development of Recommendations	1	15	24	2	0	42	\$ 8,935	\$ -	\$ 50	\$ 8,985
5	Preparation and Submittal of Report	1	4	8	0	2	15	\$ 3,005	\$ -	\$ 20	\$ 3,025
	Subtotal	5	31	49	6	2	93	\$ 19,525	\$ 250	\$ 190	\$ 19,965
Personnel Initials and Names:											
	JJK - Joseph J. Kulikowski, P.E., G.E.										
	SB - Soma Balachandran, PhD, P.E., G.E.										
	SL - Shuyu Liu, P.E.										
	NMJ - Nicholas M. Josten, P.E.										
	JWK - J. William Kulikowski										
	TC - Tanya Cason										



GENTERRA CONSULTANTS, INC.
2016 PROFESSIONAL FEE SCHEDULE
ENGINEERING AND GEOTECHNICAL CONSULTING SERVICES

FEES FOR PROFESSIONAL, TECHNICAL AND SUPPORT STAFF

GENTERRA Consultants, Inc. charges our clients for professional, technical and support services for time directly related to a project. Charges are not made for ordinary secretarial services, office management, accounting, maintenance or other activities not directly related to a project. Current personnel classifications and rates are summarized below:

<u>PERSONNEL CLASSIFICATION</u>	<u>RATE (\$ PER HOUR)</u>
Office Assistant ⁽¹⁾ (OFC ASST).....	60
Word Processor/Typist ⁽¹⁾ (WORD PROC)	80
Draftsperson/Technical Illustrator ⁽¹⁾ (TI).....	85
Field/Laboratory Technician ⁽¹⁾ (TECH).....	95
Senior Field/Laboratory Technician ⁽¹⁾ and CAD Designer ⁽¹⁾ (SR TECH/CAD).....	120
Supervisory Technician/Field Operations Manager ⁽¹⁾ (SUPV TECH).....	140
Staff Engineer/Geologist/Scientist ⁽¹⁾ (STAFF).....	150
Senior Staff Engineer/Geologist/Scientist ⁽¹⁾ (SR STAFF)	165
Project Engineer/Geologist/Scientist (PROJECT).....	190
Senior Project Engineer/Geologist/Scientist (SR PROJECT)	200
Associate (ASSOC).....	220
Senior Associate (SR ASSOC).....	230
Principal (PRINC).....	260
Senior Principal (SR PRINC).....	285

- (1) Overtime will be charged at 1.25 times the above listed rates for these personnel classifications. Prevailing wage rates will be applied for field personnel when required based on published rates for the project location. Overtime is defined as time charged to a project in excess of 8 hours per day and time worked on weekends and holidays.

Contract personnel, if used on a project, may be charged at the hourly rates listed above. Travel time will be charged at regular hourly rates.

Charges for services related to court appearances and for expert witness testimony will be 175% of regular hourly rates, with a minimum daily charge of 4 hours, plus expenses. Preparation for testimony for all expert and support personnel will be charged at regular hourly rates.

PROJECT-RELATED EXPENSES

Expenses directly related to a project will be billed as follows:

Subcontractors (drilling, trenching, surveying, testing, etc.), travel-related expenses (hotels, meals, vehicle rentals, air travel, etc.) and other project expenses (e.g., aerial photographs, outside reprographics, equipment rental, overnight shipping, project-related expendable supplies, etc.) will be charged at cost plus 15 percent.

Nuclear density gauges used on projects will each be charged at the rate of \$80.00 per day. A water level indicator used for wells and piezometers will be charged at the rate of \$45.00 per day. Rates for other special field equipment will be provided in advance of use on each project. In-house photocopy/reproduction will be billed at \$0.15 per page for black-and-white copies and \$1.50 per page for color copies and color digital photographs.

Mileage for project-related travel will be billed at Federal Approved Mileage Rate of \$0.575 per mile. Field vehicles used for site investigations and during construction are billed at \$15.00 per hour plus mileage charges.

Charges for laboratory soils testing are shown on a separate fee schedule.

CHANGES TO FEE SCHEDULE

This fee schedule applies to services rendered in the current year and/or until a new fee schedule is issued. GENTERRA Consultants, Inc. (GENTERRA) reviews and revises our fee schedule periodically. Unless other arrangements have been made, charges for services (including continuing projects initiated in the prior year) will be based on the most recently published fee schedule.

INVOICES

Invoices will be issued monthly, or at other specified intervals for some projects, and will be payable upon receipt unless other arrangements have been agreed upon. Interest of one percent per month (but not exceeding the maximum rate allowed by law) will be payable on accounts not paid within 30 days, unless prior agreement is made for other terms. Any attorney's fees or other costs incurred in collecting any delinquent account shall be paid by the client.

A retainer of 50 percent of the total fee is required for projects with total fees of \$5,000 or less, or for projects for which the cost of field studies and/or equipment account for more than 50 percent of the total fee. For projects with total fees of less than \$5,000, the balance of payment must be paid at the time the report is released to the client.

CONDITIONS

GENTERRA warrants that its services are performed, within the limits prescribed by our clients, in accordance with generally accepted standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. No other warranty, either express or implied, is included or intended in GENTERRA's proposals, contracts or reports.

DISCLOSURE

Client agrees to provide all information in Client's possession pertinent to actual or possible presence of hazardous materials on the site, and agrees to compensate GENTERRA for all costs associated with the unanticipated discovery of hazardous materials or damage to utilities not previously identified.

11

MEMORANDUM

To: Board of Directors

From: Drew McIntyre, Assistant General Manager/Chief Engineer
Carmela Chandrasekera, Associate Engineer

Re: Approve Bid Advertisement - Recycled Water Expansion Central Service Area – West Project

r:\folders by job no\6000 jobs\6058\bod memos\6058 rw west bod memo re approval for bid advertising.docx



May 13, 2016

RECOMMENDED ACTION: Board Authorize Bid Advertisement of the Recycled Water Expansion Central Service Area – West Project

FINANCIAL IMPACT: Estimated at \$6,500,000 (included in FY16 and FY17 CIP Budget Request)

Background

The Recycled Water Expansion Central Area project (see Attachment 1) consists of installation of two pipeline segments (totaling 5.8 miles in length), rehabilitation of the 0.5 MG Norman Tank for recycled water (RW) storage and on-site RW retrofits to enable service to various public sites (~10) and private sites (~29). The project has been divided into four separate bid packages:

1. East Project – Pipeline installation and public on-site RW retrofit work east of Highway 101.
2. West Project - Pipeline installation and public on-site RW retrofit work west of Highway 101.
3. Norman Tank Rehabilitation – Interior/Exterior Recoat and seismic upgrade of 0.5 MG surplus tank to be re-purposed for needed Recycled Water storage.
4. Private On-site Retrofits – both on the east and west side of Highway 101.

All of the above projects, except for right-of-way and Private On-site Retrofit work will be eligible for state funding assistance (i.e. loan/grants). More discussion on project financing is provided later within this memo. All work was designed by the District except for: (1) RW on-site retrofits using Russ Mitchell Associates, (2) SMART and Highway 101 trenchless crossings using CSW-Stuber/Stroeh, and (3) Norman Tank Trenchless Inlet/Outlet Line using Bennett Trenchless Engineers. Geotechnical engineering services have been provided by Miller Pacific Engineering Group.

At the April 19, 2016 meeting, the Board authorized bid advertisement of the East Project. The West Project is the second segment of the Central Service Area project scheduled to be constructed and is ready to move forward to the bid phase.

The following project schedule identifies key dates including the proposed bid advertising date.

SCHEDULE

Advertise Project	June 3, 2016
Plans & Specs available	June 3, 2016
Pre-Bid Meeting	June 28, 2016
Bid Opening	July 26, 2016
State SRF Financing Agreement (tentative)	June 2016
Federal Grant Award Notice (tentative)	June 2016
Board Authorization of Award (tentative)	August 16, 2016
Notice of Award (tentative)	August 19, 2016
Construction Complete (330 days)	July 15, 2017

Project Description and Costs

The 3.9 mile West Project pipeline connects to the East side Central Service Area project by installation of a 310 ft 16-inch pipe inside a 24-inch casing pipe horizontally directional drilled underneath Highway 101 from Redwood Blvd near Corinthian Ct. on the west side to Vintage Way on the east side. The 18,750 ft long 12-inch pipeline on the West Side extends north and south along Redwood Blvd and connects to S. Novato Blvd at two locations. The 12-inch pipeline to the north will connect to S. Novato Blvd from Rowland Blvd and then extend with 450 ft of 8-inch pipe on S. Novato Blvd (terminating near Lynwood Elementary School). From the southern extension from S. Novato Blvd., the pipeline will continue south to the bike path adjacent to Highway 101 and then along the bike path to Entrada Drive and then traverse west along Ignacio Blvd terminating approximately 300 ft east of County Club Drive. A 500 ft 12-inch pipeline horizontally directional drilled from Entrada Drive to Norman Tank completes the Central Service Area - West Project.

The current Engineer's Estimate is \$6,500,000. An updated Project Cost Summary will be prepared when bids are received.

The project will potentially receive a minimum of \$1.5M in federal grant funding from WaterSMART Grant funds via Bureau of Reclamation awards (announcement expected in June 2016). SRF approval for a 1% loan for the District's Central Novato Area Recycled Water Project is expected on or before June 2016. As part of this approval, NMWD was successful in obtaining Prop. 1 grant funds for up to 35% of eligible SRF costs.

The total estimated Recycled Water Expansion Central Service Area Project cost of ~\$11.9M remains unchanged from that included in the proposed CIP budget over three years (i.e., FY15, FY16 and FY17).

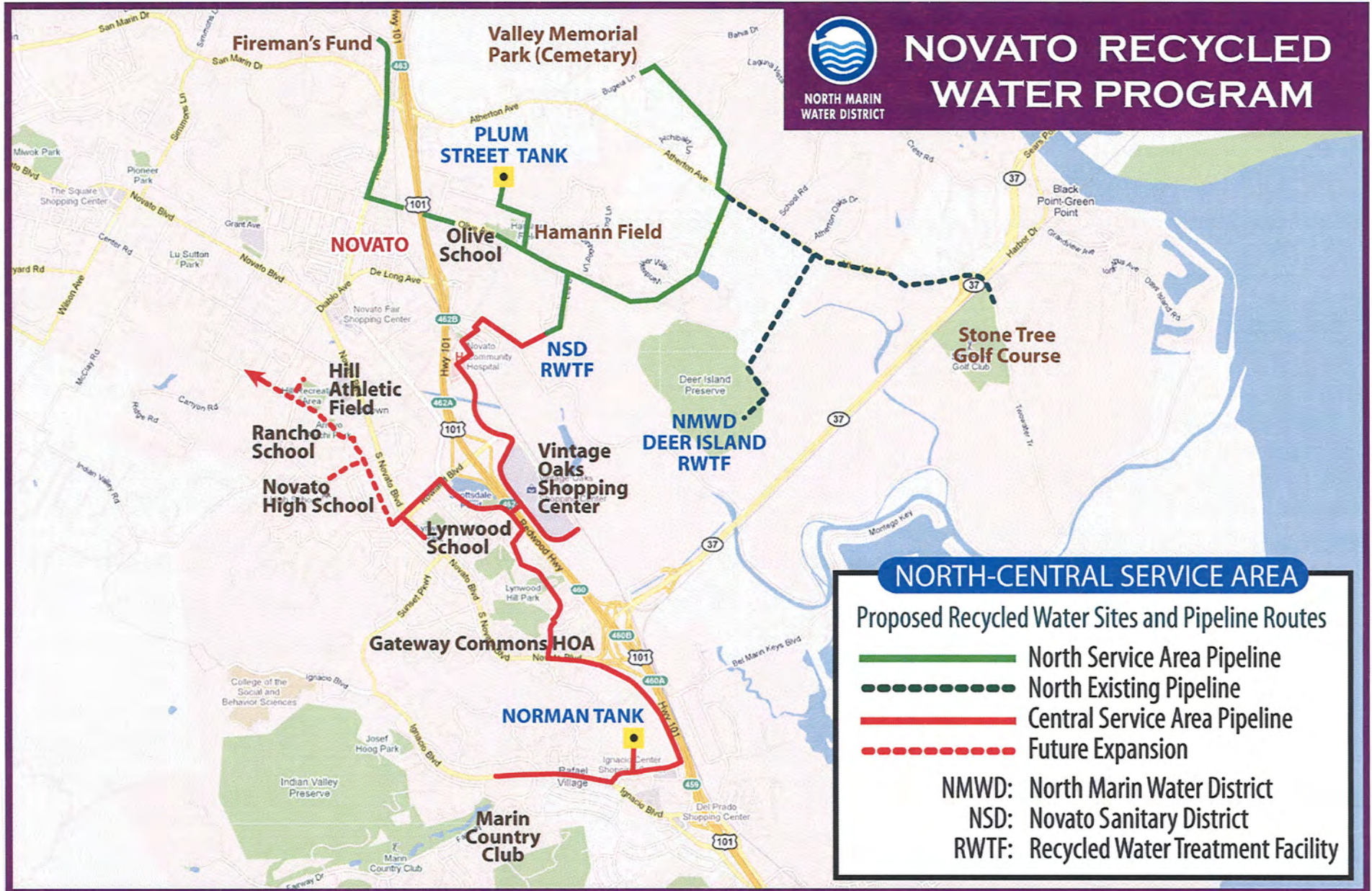
RECOMMENDATION

Board authorize bid advertisement of the Recycled Water Expansion Central Service Area – West Project.



NORTH MARIN
WATER DISTRICT

NOVATO RECYCLED WATER PROGRAM



12

MEMORANDUM

To: Board of Directors
From: Pablo Ramudo, Water Quality Supervisor *PR*
Subject: Third Quarter FY 15/16 – Water Quality Report
P:\LAB\WQ Supv\WQ Reports\2016\3rd Qtr FY16 WQ Rpt.doc

May 13, 2016

RECOMMENDED ACTION: Information**FINANCIAL IMPACT:** \$0

The water served to the communities of Novato and Point Reyes met federal and state primary and secondary water quality standards during the third quarter of fiscal year 2015-2016.

Following is a review of the activities and water quality issues in regards to:

- Source Water
- Treatment Performance
- Distribution System Water Quality
- Novato Recycled Water

NOVATO SYSTEM**Source Water: Stafford Lake**

Stafford Lake water was not used as a source of drinking water during the third quarter. Water quality was monitored on a bi-weekly basis for chemical and mineral components as well as microbiological activity.

Algae and plankton from the raw water intake were identified and enumerated. Total algae numbers were relatively low as is typical in winter months. Five species were present in appreciable numbers, including two cyanobacteria species capable of causing adverse taste and odors.

Treatment Performance: Stafford Treatment Plant

Stafford Treatment Plant remained off for the season. Several maintenance projects were underway during this time.

Distribution System: Novato

Of the 247 routine samples collected for compliance with the Total Coliform Rule, there were no coliform positive samples this quarter. Chlorine residual concentrations throughout our distribution system were good.

Average disinfection by-product concentrations were moderate and typical for this time of year.

Distribution System: Novato (continued)

A limited flushing program took place in February and March. Zone one was flushed as well as some areas of zone 2 in South-West Novato where sediment had been noted throughout the last year. Our program this year was designed to target areas where customer complaints indicated the need to remove accumulated sediments while recognizing the need for conservation during the state-wide drought declaration.

POINT REYES SYSTEM

Source Water: Coast Guard Wells

The rehabilitation of Coast Guard Well #2 was completed in February. The well was sampled to complete water quality testing needed to enable its use as a source of potable water after more than a year. Extensive chemical tests were completed and showed good results; however bacterial tests showed the presence of coliform bacteria. The well was flushed and tested weekly until the coliforms in the raw water were cleared.

Raw water quality was good throughout the quarter. Water quality parameters affected by salt water fluctuated throughout the quarter. The sodium concentration ranged from 45 - 57 mg/L, chloride ranged from 52 - 136 mg/L, and bromide ranged from 0.19 – 0.50 mg/L. Hardness ranged from 110mg/L to 180 mg/L.

Source Water: Gallagher Well

Chemical raw water quality was good throughout the quarter; however this well also showed the presence of coliform bacteria. The use of the well for potable water stopped in March and weekly flushing and testing was commenced until the bacteria in the raw water were cleared.

Water quality parameters affected by saltwater are very low from this source and are not prone to intrusion from seawater. Sodium concentration remained steady at around 11 mg/L, chloride at around 12 mg/L, and bromide at 0.06 mg/L. Hardness was also fairly steady- from 120 – 130 mg/L.

Treatment Performance: Point Reyes Treatment Plant

Treatment was optimal throughout most of the quarter and finished water quality was good. Iron and manganese were not detected in treated water. Gallagher Well supplied most of the potable water from the beginning of the quarter until early March when Coast Guard Well #4 was used as the sole source of supply. Although the high quality groundwater from each of our wells is filtered and disinfected prior to delivery to the distribution system, NMWD employs a conservative

Treatment Performance: Point Reyes Treatment Plant (continued)

multiple-barrier approach to treatment to provide the maximum safety to public health. In this case the coliform bacteria that were present in the raw water from Gallagher Well prompted us to switch to Well #4 until the coliform bacteria were cleared from the Gallagher Well. Extensive testing of the potable water produced at the Point Treatment Plant and distributed throughout the entire system showed that there were no coliform bacteria present and disinfection remained optimal.

Distribution System: Point Reyes

Of 23 routine samples collected for compliance with the Total Coliform Rule, there were no coliform positive samples this quarter. Chlorine residual concentrations throughout our distribution system were good.

Disinfection byproducts were low when sampled in mid-February; however these likely increased when production from Gallagher well ceased in March.

NOVATO RECYCLED WATER

Deer Island Recycled Water Facility

The Deer Island plant did not produce water during the quarter.



North Marin Water District- 3rd Quarter FY2015/2016

Bacteriological Quality Monitoring

Novato: 247 Samples Analyzed. No samples positive for coliform bacteria
 Point Reyes: 23 Samples analyzed. No samples positive for coliform bacteria.

Chemical Quality Monitoring

Constituent	Units	Maximum Contaminant level	SCWA North Marin Aqueduct	Stafford Treatment Plant	Point Reyes Treatment Plant
Conductivity	umhos/cm	900 *	300	NA**	290
TDS	mg/L	500 *	163	NA**	161
Hardness	mg/L	-	120	NA**	122
Alkalinity	mg/L	-	133	NA**	112
Calcium	mg/L	-	24.2	NA**	22.2
Magnesium	mg/L	-	17	NA**	16.2
Copper	mg/L	1.0*	ND	NA**	ND
Iron	mg/L	0.3*	ND	NA**	ND
Manganese	mg/L	0.05 *	ND	NA**	ND
Zinc	mg/L	5.0 *	ND	NA**	ND
Sodium	mg/L	-	20	NA**	12.7
Chloride	mg/L	250 *	8	NA**	15.2
Sulfate	mg/L	250 *	15	NA**	8.26
Fluoride	mg/L	2.0 (1.4-2.4)	0.10	NA**	0.12
Nitrite as N	mg/L	1.0	ND	NA**	ND
Nitrate as N	mg/L	10	0.53	NA**	0.61
pH	pH units	8.5 *	8.51	NA**	7.13
Turbidity	NTU	5	0.08	NA**	0.05
Color	PCU	15	<2.5	NA**	<2.5
Free Chlorine	mg/L	4.0	0.69	NA**	0.83
Total Chlorine	mg/L	4.0	0.72	NA**	0.89
Temperature	° C	-	14.2	NA**	14.5
Odor	TON	3	<1	NA**	<1

*Indicates secondary drinking water standard

**Stafford Treatment Plant off during this quarter.

ND = Not Detected

NA = Not Analyzed

13

MEMORANDUM

To: Board of Directors

May 13, 2016

From: David L. Bentley, Auditor-Controller

3

Subj: Second Review – Proposed FY 2016/17 Novato Water Equipment Budget

t:\acl\word\budget\17\equip budget 17 review 2.docx

RECOMMENDED ACTION: Provide Direction to Staff

FINANCIAL IMPACT: None at this time. \$245,000 proposed for June 21 Public Hearing

Since the April 19 review, no changes have been made to the proposed FY17 Equipment Budget.

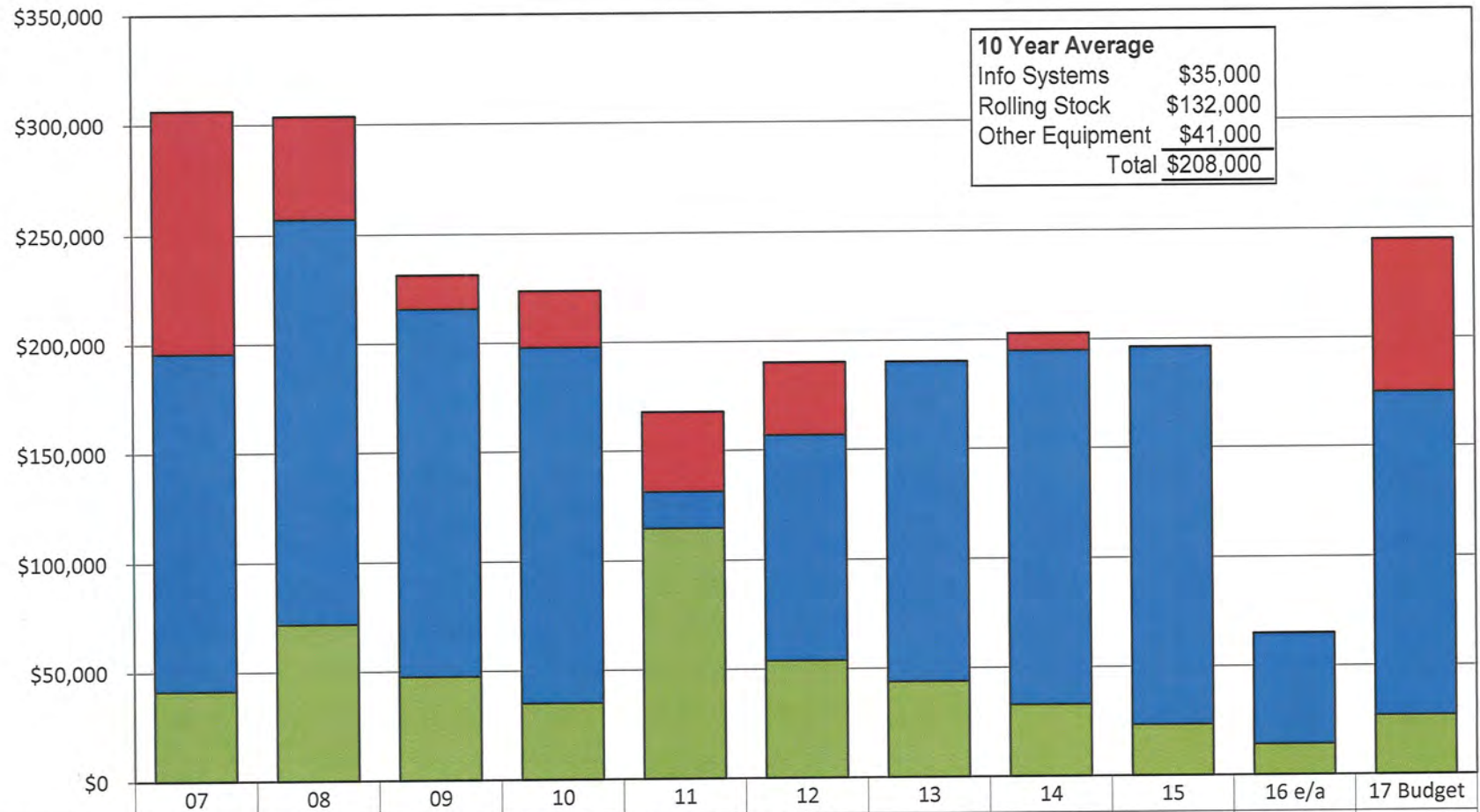
Following is a chart showing ten years of equipment purchases history (A), and a five-year vehicle and equipment replacement plan (B).

A public hearing and approval of the Equipment Budget is scheduled for June 21, 2016.

5/12/16

t:\acexcel\budget\17\equip17.xlsx]cha

10 Year History of Equipment Purchases



EQUIPMENT EXPENDITURES**Fiscal Year 2016/2017 Budget**

		Proposed	Description
1 CONSTRUCTION/MAINTENANCE			
a.	Leak Detector	\$8,000	Replace 12-year--old unit that requires frequent repair.
b.	Fittings & Hose for Emergency Hose Trailer	6,000	Additional Fittings & Hose (1"-6") for Hose Trailer
		\$14,000	
2 OPERATIONS/MAINTENANCE			
a.	STP Manganese Analyzer	\$13,000	Existing analyzer creates cyanide waste, requires several reagents to operate, and performs a single sample analyses at a time. The new analyzer will be plumbed with a multi-sample port input to allow testing of the various online process water stream points and will not produce hazardous waste nor require excess reagents.
b.	Lab Info Management Sys Software Upgrade	70,000	Replaces 2006 software to allow compatibility with current PC operating system software.
		\$83,000	
3 VEHICLE & ROLLING EQUIPMENT EXPENDITURES			
			<u>To Replace</u>
a.	Compact Track Loader w/Attachments	\$90,000	'00 Bobcat 763G w/1,600 hours has an electrical controller failure affecting the hydraulic system that costs more then the unit is worth. Will be auctioned
b.	1/2 Ton 4x4 Pickup w/Tool Box & Radio	30,000	'02 Chev K1500 4x4 w/117,000 miles that will be auctioned
c.	1/2 Ton Pickup w/Tool Box & Radio	28,000	'04 Chev C1500 w/119,000 miles that will be auctioned
		\$148,000	
Total		\$245,000	

	Adopted Budget 2015/16	Estimated Actual 2015/16	Proposed Budget 2016/17
RECAP			
Equipment	\$24,000	\$14,000	\$97,000
Rolling Stock	\$175,000	\$51,000	\$148,000
	\$199,000	\$65,000	\$245,000

5-Year Vehicle and Equipment Replacement Plan

Updated 4/14/2016

Note:

FY16/17	New Item Description	Replacement Item Description	Cost
1	Compact track Loader W attachments	#78 2000 Bobcat 763G	\$90,000
2	1/2 Ton 4x4 Pickup w/Tool Box and Radio	#47 2002 Chevy 4x4	\$30,000
3	1/2 Ton Pickup w/Tool Box and Radio	#53 2004 Chevy PU	\$28,000
4			
			Total \$148,000

Note: #53 and #78 (2000 Bobcat with bad hydraulics) will be auctioned.

FY17/18	New Item Description	Replacement Item Description	Cost
1	5 Yard Diesel Dump truck	#52 1999 Ford F450 3 YD Dump	\$120,000
2	3/4 Ton 4x4 Service Body & Radio	#507 2008 F350 w/Service Body	\$45,000
3	1/2 Ton Pickup w/Tool Box and Radio	#51 Chevy C1500 PU	\$28,000
4			
			Total \$193,000

Note: #19, #51 & #52 will be auctioned.

FY18/19	New Item Description	Replacement Item Description	Cost
1	1/2 Ton Pickup w/Tool Box and Radio	#58 Ford Ranger	\$25,000
2	Hybrid 4X4 SUV	#54 2004 Chevy Xcab	\$35,000
3	5 Yard Diesel Dump truck	#44 2002 International Dump	\$125,000
4			
			Total \$185,000

Note: #44, #54 & #58 will be auctioned

FY19/20	New Item Description	Replacement Item Description	Cost
1	1/2 Ton Pickup w/Tool Box and Radio	#59 Ford Ranger	\$25,000
2	Backhoe 4X4 diesel W Enclosed Cab	#77 2004 John Deere Backhoe	\$125,000
3	Hybrid Car w/ Radio	#510 2009 Toyota Prius	\$30,000
4			
			Total \$180,000

Note: #59, #77 & #510 will be auctioned

FY20/21	New Item Description	Replacement Item Description	Cost
1	1/2 ton V6 2WD w/Tool Box and Radio	#505 2008 Ford 3/4 ton 4X4	\$25,000
2	Hybrid 4X4 SUV	#512 2010 Ford 1/2 ton move to pool	\$65,000
3	Hybrid Car w/ Radio	#56 2005 Honda Civic	\$30,000
4	Hybrid Car w/ Radio	#57 2005 Honda Civic	\$30,000
5			
			Total \$150,000

Note: #505, #56 & #57 will be auctioned

14

MEMORANDUM

To: Board of Directors

May 13, 2016

From: David L. Bentley, Auditor-Controller 

Subj: Second Review - Proposed FY17 & FY18 Novato Capital Improvement Projects Budget

I:\aclword\budget\17\cip 17 review 2.docx

RECOMMENDED ACTION: Review and Provide Direction to Staff**FINANCIAL IMPACT:** None at this time - \$9.9 million FY17 & \$7.0 million FY18 Gross Expenditure Budget Proposed for Consideration

Presented for your second review is the proposed Capital Improvement Project (CIP) Budget for the Novato service area for fiscal years 2016/17 (FY17) and 2017/18 (FY18). Since the Board's last review, two changes have been made to the proposed CIP budget:

1. The projected cost for Automation of the Zone Valve at Slowdown Court is now \$100,000, an increase of \$40,000. This project will provide real-time operation of this zone 2 valve to adjust pressure and flow when the STP goes on and off.
2. The projected cost of the Stafford Lake Backfeed Dechlorination System was cut in half to \$50,000. Backfeeding of Russian River water into Stafford Lake is regulated by the District's NPDES permit regulates discharge into receiving waters.

The net internally funded, or "pay-go" expenditure over the coming two fiscal years is now \$6,746,000, down \$10,000 from the Board's previous CIP budget review.

Below is a summary identifying the significant projects (\$500,000 or more) proposed to be undertaken over the next two fiscal years. An explanation of each FY17 project is incorporated into the detail listing attached.

Project	FY17	FY18
San Mateo 24" Inlet/Outlet Pipe (2,200')	\$150,000	\$850,000
San Mateo Tank Recoat	120,000	1,900,000
Radio Read Meter Retrofit (Installation) ¹	3,000,000	1,900,000
Office/Yard Building Refurbish ²	3,000,000	0
SCWA CIP	1,603,000	648,000
Other Projects	2,071,000	1,655,000
Gross Project Outlay	\$9,944,000	\$6,953,000
Less Loan/Grant/SCWA Rate Funding	(7,603,000)	(2,548,000)
Net Project Outlay (internally funded)	\$2,341,000	\$4,405,000

¹ \$5M Radio Read Meter Retrofit to be funded by an SRF or bank loan.

² \$3M Office/Yard Building Refurbish to be funded by a bank loan.

Novato Water's CIP expenditure plan, when viewed over the current fiscal year and the next five years, averages \$2.4 million annually in internally funded projects, which is below the \$2.5M cap approved by the Board in February 2013 in response to the updated 2012 Novato Water Master Plan.

A public hearing for final budget review and approval is scheduled for June 21, 2016.

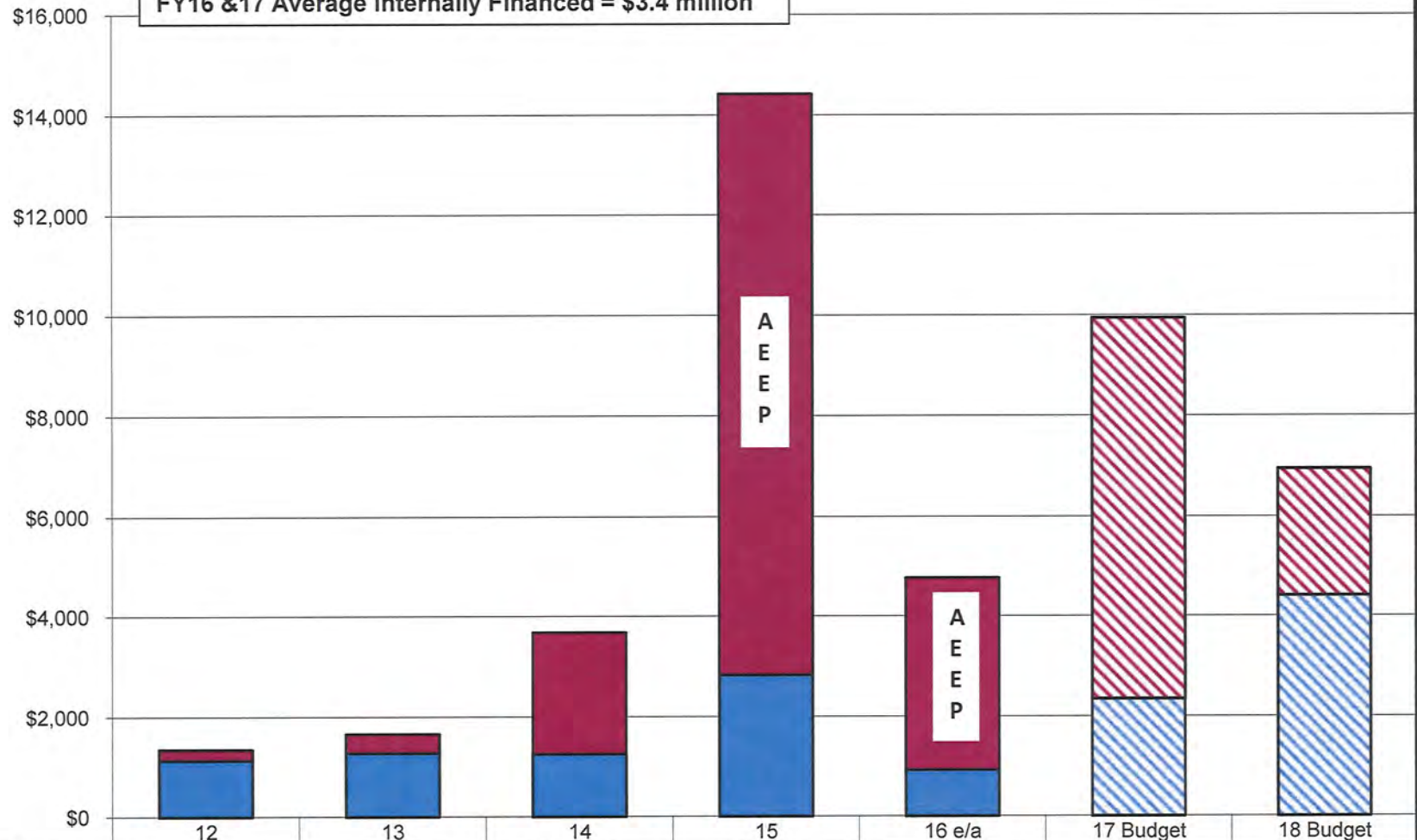
5/10/16

t:\acexcel\budget\17\5 yr cip fy17.xlsx\5 yr ip

Novato Water Capital Improvement Project Expenditures

Thousands

FY12-16 Average Internally Financed = \$1.5 million
 FY16 & 17 Average Internally Financed = \$3.4 million



	12	13	14	15	16 e/a	17 Budget	18 Budget
Debt/Grant Financed	\$215	\$377	\$2,424	\$11,590	\$3,830	\$7,603	\$2,548
Internally Financed	\$1,132	\$1,277	\$1,253	\$2,827	\$928	\$2,341	\$4,405
Total	\$1,347	\$1,653	\$3,677	\$14,418	\$4,758	\$9,944	\$6,953

PROPOSED CAPITAL IMPROVEMENT PROJECTS

5/10/16

Novato Service Area Potable Water

t:\acl\excel\budget\17\5 yr cip fy17.xlsx\5 yr ip

		FY17	FY18	FY17 Project Description
1. PIPELINE REPLACEMENTS/ADDITIONS				
	a. Main/Pipeline Replacements			
	1 Ridge Road 6" ACP (8"@1,400')	\$315,000		Install 1,400' of 8" water main from Ridge Rd PS to Forest Rd to replace 6" ACP that shows a high level of degradation.
	2 Other Main Replacements (60+ years old)		\$100,000	
		\$315,000	\$100,000	
	b. Main/Pipeline Additions			
1.7150.00	1 San Mateo 24" Inlet/Outlet Pipe (2,200')	\$150,000	\$850,000	Multiyear project to install 2,000' of 24" pipe from San Mateo Tank to the end of Palmo Way to improve northern Zone 2 fire flow.
	2 Other Main/Pipeline Additions		\$150,000	
		\$150,000	\$1,000,000	
	c. Polybutylene Service Line Replacements			
	1 Replace PB in Sync w/City Paving (30 Srvcs)	\$70,000	\$70,000	PB service replacement coordinated with City Overlay Program.
	2 Other PB Replacements (85 Services)	\$200,000	\$200,000	PB replacement for yet-to-be identified locations.
		\$270,000	\$270,000	
	d. Relocations to Sync w/City & County CIP			
1.8737.xx	1 Other Relocations	\$80,000	\$80,000	Relocate facilities for yet to be identified City/County Projects.
		\$80,000	\$80,000	
		\$815,000	\$1,450,000	

PROPOSED CAPITAL IMPROVEMENT PROJECTS
Novato Service Area Potable Water

5/10/16

t:\acexcel\budget17\5 yr cip fy17.xlsx\5 yr ip

		FY17	FY18	FY17 Project Description
2. SYSTEM IMPROVEMENTS				
1.7008.13 a.	RTU Upgrades	\$15,000		FY17 will complete the replacement of aging and unreliable RTUs.
1.6677.20 b.	Flushing Taps at Dead-Ends (12 biennially)		\$50,000	
1.7007.10 c.	DCA Repair/Replace (~14/yr)	\$190,000	\$190,000	Detector Check Assembly replacements.
1.7090.02 d.	Anode Installations (150/yr)	\$30,000	\$30,000	Place anodes on copper laterals for corrosion protection.
1.7132.02 e.	Radio Telemetry	\$25,000	\$25,000	Install radio transmitters to replace leased lines.
1.7146.00 f.	Tank Access Hatch/Level Alarms (15 Sites)	\$40,000		Remote alarm notification of unauthorized entry at tank sites.
1.7157.00 g.	Automate Zone Valve (Slowdown Ct)	\$100,000		To provide real-time operation of Zone 2 pressure and flow when STP goes on & off.
1.7158.00 h.	Radio Read Meter Retrofit (Note 1)	\$3,000,000	\$1,900,000	Pilot Program/Install -Advanced Metering Infrastructure system.
1.7136.00 i.	Facilities Security Enhancements	\$25,000		Ongoing program - FY17 focus on expansion of electronic card security access at various entry locations.
j.	25 Giacomini Exterior Paint	\$8,000		10-year-old home needs paint.
		<u>\$3,433,000</u>	<u>\$2,195,000</u>	

PROPOSED CAPITAL IMPROVEMENT PROJECTS**Novato Service Area Potable Water**

5/10/16

t:\acexcel\budget\17\5 yr cip fy17.xlsx\5 yr ip

		FY17	FY18	FY17 Project Description
3. BUILDING, YARD, STP. IMPROVEMENTS				
	a.	Administration Building		
1.6501.43	1	Electronic Document Management System	\$150,000	Manage digital document creation, storage, retrieval & expiration.
1.6501.46	2	Office Emergency Generator	\$150,000	Customer service, lab and operations equipment requires an emergency power supply when primary power is interrupted.
1.6501.44	3	Office/Yard Building Refurbish (Note 2)	\$3,000,000	50-year-old building requires significant upgrading.
	4	Other Admin Building Improvements		
			\$50,000	
			\$3,300,000	
		Corp Yard/Warehouse/Construction Office		
	1	SMART Crossing Upgrade (Golden Gate Pl)	\$58,000	Shared Cost with Golden Gate Transit.
	2	Other Yard Improvements		
			\$30,000	
			\$58,000	
	b.	Stafford Treatment Plant		
	1	Dam Concrete Repair	\$70,000	\$50,000 Repair west face of Stafford dam
1.6600.82	2	STP Emergency Power Generator	\$150,000	Power for the chlorine gas scrubber in the event primary power is interrupted. Recommended by County Health and Safety Dept.
	3	Coat Concrete Clearwells (Both Units)		\$490,000
	4	Lake Backfeed De-Chlorination System	\$50,000	Backfeeding to Stafford Lake is regulated by NPDES permit which requires dechlorination.
	5	Other Treatment Plant Improvements		\$75,000
			\$270,000	\$615,000
			\$3,628,000	\$695,000

PROPOSED CAPITAL IMPROVEMENT PROJECTS**Novato Service Area Potable Water**

5/10/16

t:\acl\excel\budget\17\5 yr cip fy17.xlsx\5 yr ip

		FY17	FY18	FY17 Project Description
4. STORAGE TANKS/PUMP STATIONS				
a.	Clear Tank Sites			
1	Woodland Heights (120,000 gal, 1974)		\$65,000	
		\$0	\$65,000	
b.	Tank Rehabilitation			
1	San Mateo Recoat (5 MG)	\$120,000	\$1,900,000	Tank recoat and chlorine mixing system.
		\$120,000	\$1,900,000	
1.6112.24 c.	Lynwood P.S. Motor Control Center	\$165,000		Move motor controls above-ground.
d.	San Marin & Lynwood PS Can Rehab	\$60,000		Inspection and rehab of pump barrels.
1.6141.00 e.	Crest PS (Design/Const) /Reloc School Rd PS	\$120,000		Design phase of Crest zone pump station.
		<u>\$465,000</u>	<u>\$1,965,000</u>	

PROPOSED CAPITAL IMPROVEMENT PROJECTS

5/10/16

Novato Service Area Potable Water

t:\acexcel\budget\17\5 yr cip fy17.xlsx\5 yr ip

	FY17	FY18	FY17 Project Description
5. SONOMA COUNTY WATER AGENCY (NMWD Share of CIP Program) (Note 3)			
a. Local Hazard Mitigation Prog Plan/Design	\$3,000		Funding Source: Common Facilities Fund
b. System-wide Meter Replacements	\$12,000	\$12,000	Funding Source: Common Facilities Fund
c. Isolation Valve Seismic Hazard Mitigation	\$34,000		Funding Source: Common Facilities Fund
d. Mirabel Chlorine Lines Replacements	\$13,000		Funding Source: Common Facilities Fund
e. Caisson 5 Motor & Discharge Head Replace	\$62,000		Funding Source: Common Facilities Fund
f. Mark West Creek Crossing Seismic Mitigation	\$597,000	\$72,000	Funding Source: Common Facilities Fund
g. Mirabel Chlorine Building Water Supply	\$19,000	\$12,000	Funding Source: Common Facilities Fund
h. pH Pump Replacement		\$13,000	Funding Source: Common Facilities Fund
i. Russian River Crossing Seismic Mitigation	\$756,000	\$39,000	Funding Source: Common Facilities Fund
j. Wohler Motor Replacements	\$3,000	\$46,000	Funding Source: Common Facilities Fund
k. Wohler Road Fiber Optic Cable	\$2,000	\$48,000	Funding Source: Common Facilities Fund
l. Caisson 6 Valve Replacement & Vault		\$7,000	Funding Source: Common Facilities Fund
m. Mirabel Maintenance Building		\$36,000	Funding Source: Common Facilities Fund
n. Replace River Diversion Structure MCC	\$10,000	\$45,000	Funding Source: Common Facilities Fund
o. Wohler Power Delivery Substation 1 & 2 Upgrade		\$15,000	Funding Source: Common Facilities Fund
p. Collectors 3 & 5 Liquefaction Mitigation		\$27,000	Funding Source: Common Facilities Fund
q. River Diversion Structure Seismic Mitigation	\$34,000	\$31,000	Funding Source: Common Facilities Fund
r. Mirabel Surge Tanks		\$12,000	Funding Source: Common Facilities Fund
s. Collector 6 Liquefaction Mitigation		\$40,000	Funding Source: Common Facilities Fund
t. Mirabel Dam Bladder Replacement	\$50,000	\$186,000	Funding Source: Common Facilities Fund
u. Hwy 101 HOV Lane (Lakeville to Old Redwood Hwy)	\$5,000		Funding Source: Pipeline Fund
v. Ely BPS Flood Control & Electrical Upgrade		\$3,000	Funding Source: Pipeline Fund
w. Local Hazard Mitigation Prog Plan/Design	\$3,000	\$4,000	Funding Source: Pipeline Fund
	<u>\$1,603,000</u>	<u>\$648,000</u>	

PROPOSED CAPITAL IMPROVEMENT PROJECTS
Novato Service Area Potable Water

5/10/16

t:\acl\excel\budget\17\5 yr cip fy17.xlsx\5 yr ip

	FY17	FY18	FY17 Project Description
GROSS PROJECT OUTLAY	\$9,944,000	\$6,953,000	
LESS FUNDED BY LOANS/GRANTS/OTHER			
a. Radio Read Meter Retrofit (Note 1)	(\$3,000,000)	(\$1,900,000)	Funded by SRF or Bank Loan
b. Office/Yard Building Refurbish (Note 2)	(\$3,000,000)	\$0	Funded by Bank Loan
c. Sonoma County Water Agency CIP (Note 3)	(\$1,603,000)	(\$648,000)	Funded by Wholesale Water Rate or Bond Issue
	<u>(\$7,603,000)</u>	<u>(\$2,548,000)</u>	
NET PROJECT OUTLAY	<u>\$2,341,000</u>	<u>\$4,405,000</u>	
Total Number of District Projects	25	18	
DEBT SERVICE			
Novato			
a. EDA Loan	\$18,000	\$18,000	
b. STP SRF Loan	\$1,044,000	\$1,044,000	
c. AEEP Bank Loan	\$482,000	\$482,000	
d. Admin Building Renovation Loan		\$211,000	
e. Advanced Metering Infrastructure Loan		\$291,000	
	<u>\$1,544,000</u>	<u>\$2,046,000</u>	
TOTAL DEBT SERVICE	<u>\$1,544,000</u>	<u>\$2,046,000</u>	
NET PROJECT & DEBT SERVICE OUTLAY	<u>\$3,885,000</u>	<u>\$6,451,000</u>	

PROPOSED CAPITAL IMPROVEMENT PROJECTS

5/10/16

Novato Service Area Potable Water

t:\acexcel\budget\17\5 yr cip fy17.xlsx\5 yr ip

	FY17	FY18	FY17 Project Description
Novato Studies carried under General Administrative Expense			
a. Stafford Lake Sanitary Survey	\$40,000		
b. Local Water Supply Enhancement Study	\$100,000	\$100,000	
c. Novato Water Master Plan Update (every 5 yrs)	\$85,000		
d. Cost of Service Study Peer Review	\$30,000		
e. Stafford Lake Water Rights Update	\$50,000	\$50,000	
f. STP Efficiency Improvements	\$150,000		
	<u>\$455,000</u>	<u>\$150,000</u>	

Note 1 - Radio Read Meter Retrofit to be funded by SRF or Bank Loan

Note 2 - Office/Yard Refurbish to be funded by Bank Loan

Note 3 - SCWA CIP Projects to be funded by SCWA Wholesale water rate or NMWD Bank Loan.

15

MEMORANDUM

To: Board of Directors

May 13, 2016

From: David L. Bentley, Auditor-Controller

Subj: Additional Review - FY 2016/17 Proposed Novato Operations Budget

t:\aclword\budget\17\ops review 17 ll.docx

RECOMMENDED ACTION: Information Only**FINANCIAL IMPACT:** \$24.2 Million Spending Plan Proposed for June 21 Public Hearing**Changes Since the Last Review**

A number of additions and refinements to the proposed budget have been made since the Board's initial review on May 3. The most significant is the addition of two Apprentice Electrical/Mechanical Technicians (E/M Techs) at an annual cost, including benefits, of \$182,000. Current staffing includes an E/M Tech, a Senior E/M Tech, and a Maintenance Supervisor who manages the group. The incumbent E/M Tech just took a job with another employer, and the Senior E/M Tech and the Maintenance Supervisor both indicate they plan to retire in about 18 months. Thus there is a need to begin training new staff to maintain the District's facilities. Other changes include a 5% spot adjustment for the Water Quality Supervisor (\$7,000), a \$35,000 reduction in power cost to reflect reduced water sales volume, and finally a \$6,000 reduction in projected revenue for lab services as Las Gallinas Valley Sanitary District has selected another provider. The combined impact of these changes decreases net income by \$161,000.

Budget Summary

The fiscal year 2016/17 (FY17) budget projects a net "bottom line" cash deficit of \$705,000. A rate increase of 5% is factored into the budget effective June 1, 2016, as well as a Temporary Drought Revenue Recovery Surcharge (Surcharge) budgeted to run from June 1, 2016 through October 31, 2016. The 5% increase adds \$770,000 to FY17 budgeted revenue, and the Surcharge adds \$725,000 (combined total \$1,495,000).

The \$705,000 budgeted deficit compares to a FY16 projected cash decrease of \$440,000. FY17 water sales volume is budgeted at 2.2BG, consistent with the FY16 projected sales volume, but significantly below the 2.7BG budgeted for the past several years. FY16 water consumption projected to be the lowest since 1979.

Looking simply at operating revenue (water sales) less operating expenditures, the proposed FY17 budget projects a net operating income of \$931,000. FY16 projected net operating income is \$975,000. Total budgeted outlay, which includes capital improvement projects and debt service, is budgeted at \$24.2 million, down 4% from the FY16 budget.

Water Sales - Water sales volume is budgeted at 2.2BG, consistent with the current fiscal year estimated actual, and 24% below the 10-year average. The chart on page 6 of the budget document shows a 10-year history of billed consumption. The proposed 5% rate increase is structured as a 7% commodity rate increase and no increase in the fixed service charge. If approved, the median residential customer would see an average monthly increase of \$2.85. The proposed rate increase would generate \$770,000 in additional revenue next fiscal year. In addition, implementation of the aforesaid Surcharge would generate an estimated \$725,000 in additional revenue. The Surcharge would add \$0.90 per month on average to the typical residential water bill and \$9.00 per month, on average, to the typical non-residential water bill.

Operating Expenditures are projected to decrease 2% (\$345,000) from the FY16 budget. Purchased Water is budgeted to decrease \$1 million due to reduced sales volume, while increases in the cost for labor (including the addition of 2 apprentice E/M Techs) and increased purchases of materials, services and supplies offset the savings in purchased water cost.

Staffing - The proposed budget includes a staffing level of 55.7 full-time equivalent (FTE) employees, up 3.0 FTE (6%) from the current year budget. Two Apprentice Treatment Plant Operators were hired earlier this year after a Senior Treatment Plant Operator retired, and two Apprentice E/M Techs are budgeted to be hired in FY17 in anticipation of the pending retirement of the Senior E/M Tech and the Maintenance Supervisor. A 5% spot adjustment is included for the Auditor-Controller and the Water Quality Supervisor, and a Maintenance Foreman position has been created to be filled, on a competitive basis, by an existing employee. The proposed staffing level of 55.7 FTE is down 3.4 FTE (6%) from the level adopted in the FY08 budget.

<u>FTE Staffing</u>	<u>FY17</u>	<u>FY16</u>	<u>Reason for Change</u>
Administration	9.0	9.0	
Consumer Services	6.0	6.0	
Construction/Maintenance	12.0	12.0	
Engineering	7.7	7.7	
Maintenance	10.0	8.0	2 Apprentice E/M Techs in anticipation of pending retirements
Operations	6.0	5.0	2 Apprentices replace Sr TP Operator
Water Quality	<u>5.0</u>	<u>5.0</u>	
	<u>55.7</u>	<u>52.7</u>	

For budgeting purposes, a 2.7% cost-of-living salary increase has been factored into the budget effective October 1, 2016, as well as a 1.6% salary increase to offset the negotiated requirement that employees pay an additional 1.6% of salary toward their retirement benefit. The COLA and CalPERS offset adjustments would increase total salaries by \$153,000, pushing up the total overheaded cost of payroll by \$200,000 (2.6%).

The District's average CalPERS retirement contribution rate will decrease 0.5% (to 20.2%) from the amount budgeted last year. Over the past four years employees have annually contributed a larger share of the retirement obligation, and beginning October 1, 2016, all employees will pay 100% of the CalPERS employee contribution. The CalPERS Board is scheduled to approve 2017 group health insurance rates in June. For budgeting purposes, a 6.7% increase in group health insurance rates effective January 1, 2017 is assumed, which is the average rate of increase over the past 10 years, and which would increase budgeted labor cost by \$59,000. The cost for first dollar worker's compensation insurance is budgeted to increase 10%. While the District intends to continue self-insuring this coverage, proposals have been requested for standard workers' compensation insurance to provide a current calculation of savings (or loss) accrued through self-insuring this coverage.

Total budgeted operating expenditures are down \$345,000 (2%) compared to the adopted FY16 budget. An analysis of the significant differences between the FY16 budget and the proposed FY17 operating budget follows, listed in decreasing order of magnitude.

Component	Increase/ (Decrease) vs. FY16 Budget	FY17 % Change
Labor	\$390,000	6%
Materials, Services & Supplies	206,000	6%
Depreciation	100,000	4%
Vehicle Expense	23,000	9%
Distributed G&A & Overheads	-44,000	-6%
Purchased Water Cost	-1,020,000	-22%
Net Decrease	<u>(\$345,000)</u>	<u>-2%</u>

This budget draft will be fine-tuned in conjunction with preparation of the West Marin Budgets and will be presented for final review and approval at the June 21 public hearing.

Proposed
BUDGET

Additional Review

**Novato Potable Water
Operating Budget**
FISCAL YEAR
2016-17

NORTH MARIN WATER DISTRICT

999 RUSH CREEK PLACE, NOVATO, CA

TABLE OF CONTENTS
NORTH MARIN WATER DISTRICT
NOVATO POTABLE WATER
PROPOSED 2016/17 OPERATING BUDGET

Budget Summary	1
Operating Budget Detail	2
<u>Supplemental Information</u>	
Source and Use of Funds Pie Chart.....	5
Novato Water - Billed Consumption History	6
Novato Water - Operating Expense History	7

NOVATO WATER
BUDGET SUMMARY
Fiscal Year 2016/17

	Proposed Budget 2016/17	Estimated Actual 2015/16	Adopted Budget 2015/16
OPERATING INCOME			
1 Water Sales	\$16,655,000	\$15,163,000	\$17,768,000
2 Wheeling & Misc Service Charges	340,000	335,000	380,000
3 Total Operating Income	\$16,995,000	\$15,498,000	\$18,148,000
OPERATING EXPENDITURES			
4 Source of Supply	\$3,868,000	\$3,916,000	\$4,869,000
5 Pumping	325,000	241,000	367,000
6 Operations	761,000	667,000	609,000
7 Water Treatment	2,059,000	1,642,000	1,975,000
8 Transmission & Distribution	3,113,000	2,727,000	2,698,000
9 Consumer Accounting	629,000	603,000	592,000
10 Water Conservation	459,000	393,000	450,000
11 General Administration	2,050,000	1,754,000	2,149,000
12 Depreciation Expense	2,800,000	2,580,000	2,700,000
13 Total Operating Expenditures	\$16,064,000	\$14,523,000	\$16,409,000
14 NET OPERATING INCOME (LOSS)	\$931,000	\$975,000	\$1,739,000
NON-OPERATING INCOME/(EXPENSE)			
15 Interest Revenue	\$52,000	\$56,000	\$64,000
16 Miscellaneous Revenue	132,000	104,000	83,000
17 Interest Expense	(481,000)	(494,000)	(510,000)
18 Miscellaneous Expense	(20,000)	\$0	(20,000)
19 Total Non-Operating Income/(Expense)	(\$317,000)	(\$334,000)	(\$383,000)
20 NET INCOME/(LOSS)	\$614,000	\$641,000	\$1,356,000
OTHER SOURCES/(USES) OF CASH			
21 Add Depreciation Expense	\$2,800,000	\$2,580,000	\$2,700,000
22 Connection Fees	100,000	895,000	538,000
23 Caltrans AEEP Capital Contribution	0	2,600,000	2,740,000
24 MMWD AEEP Capital Contribution	245,000	245,000	245,000
25 Loans	6,000,000	100,000	2,000,000
26 Capital Equipment Expenditures	(245,000)	(65,000)	(199,000)
27 Capital Improvement Projects	(8,341,000)	(4,928,000)	(9,040,000)
28 Debt Principal Payments	(1,063,000)	(1,050,000)	(1,035,000)
29 Connection Fee Transfer to RWS	(815,000)	(708,000)	(717,000)
30 Working Capital Increase/(Decrease)	0	(750,000)	0
31 Total Other Sources/(Uses)	(\$1,319,000)	(\$1,081,000)	(\$2,768,000)
32 CASH INCREASE/(DECREASE)	(\$705,000)	(\$440,000)	(\$1,412,000)

North Marin Water District

NOVATO WATER OPERATING BUDGET DETAIL

Fiscal Year 2016/17

	Proposed Budget 16/17	Estimated Actual 15/16	Adopted Budget 15/16	Actual 14/15	Actual 13/14	Actual 12/13	Actual 11/12	Actual 10/11
STATISTICS								
1 Active Meters	20,525	20,525	20,525	20,498	20,505	20,492	20,490	20,464
2 Avg Commodity Rate/1,000 Gal (Net)	\$5.36	\$5.04	\$5.05	\$4.87	\$4.81	\$4.32	\$4.05	\$3.82
3 Potable Consumption (BG)	2.20	2.20	2.70	2.44	2.95	3.02	2.82	2.79
OPERATING INCOME								
4 Water Sales	\$16,725,000	\$15,230,000	\$16,000,000	\$16,101,706	\$18,385,017	\$16,626,526	\$14,220,429	\$12,727,649
5 Bill Adjustments	(70,000)	(67,000)	(92,000)	(82,790)	(95,470)	(104,567)	(58,770)	(66,248)
6 Sales to MMWD	0	0	0	0	432,294	0	0	0
7 Wheeling Charges-MMWD	88,000	66,000	120,000	119,144	100,527	251,980	58,802	53,662
8 Miscellaneous Service Revenue	252,000	269,000	260,000	276,388	265,496	223,619	197,752	145,787
9 TOTAL OPERATING INCOME	\$16,995,000	\$15,498,000	\$16,288,000	\$16,414,448	\$19,087,864	\$16,997,558	\$14,418,213	\$12,860,850
OPERATING EXPENSE								
SOURCE OF SUPPLY								
11 Supervision & Engineering	\$18,000	\$9,000	\$19,000	\$11,641	\$9,698	\$9,103	\$9,064	\$8,965
12 Operating Expense - Source	10,000	13,000	11,000	11,044	10,497	6,821	11,488	5,927
13 Maintenance/Monitoring of Dam	63,000	17,000	50,000	11,635	19,438	38,295	25,716	8,290
14 Maintenance of Lake & Intakes	18,000	7,000	21,000	511	11,701	14,481	10,377	8,619
15 Maintenance of Watershed	43,000	17,000	41,000	15,151	17,015	23,405	8,188	2,152
16 Water Purchased for Resale to MMWD	0	0	0	0	253,539	0	0	0
17 Water Quality Surveillance	26,000	3,000	17,000	7,467	13,713	12,776	16,385	12,377
18 Contract Water - SCWA	3,690,000	3,850,000	4,710,000	4,333,100	5,698,211	5,135,330	5,047,469	3,790,789
19 TOTAL SOURCE OF SUPPLY	\$3,868,000	\$3,916,000	\$4,869,000	\$4,390,549	\$6,033,812	\$5,240,211	\$5,128,687	\$3,837,119
PUMPING								
20 Operating Expense	\$3,000	\$0	\$3,000	\$237	\$0	\$0	\$0	\$641
21 Maintenance of Structures/Grounds	35,000	30,000	39,000	51,544	46,502	24,115	29,042	17,153
22 Maintenance of Pumping Equipment	67,000	16,000	70,000	51,013	27,696	35,637	50,797	17,354
23 Electric Power - Pumping	220,000	195,000	255,000	213,909	255,711	263,471	204,927	233,222
24 TOTAL PUMPING	\$325,000	\$241,000	\$367,000	\$316,703	\$329,909	\$323,223	\$284,766	\$268,370
OPERATIONS								
25 Supervision & Engineering	\$167,000	\$252,000	\$182,000	\$241,264	\$219,520	\$187,986	\$185,838	\$185,361
26 Operating Expense	411,000	304,000	255,000	244,900	274,893	264,400	255,272	191,713
27 Maintenance Expense	82,000	26,000	84,000	37,667	79,906	101,036	105,545	94,633
28 Telemetry Equipment/Controls Maint	84,000	67,000	71,000	86,544	62,223	44,349	67,936	83,047
29 Leased Line Expense	17,000	18,000	17,000	17,986	17,675	17,921	18,930	20,841
30 TOTAL OPERATIONS	\$761,000	\$667,000	\$609,000	\$628,361	\$654,217	\$615,692	\$633,521	\$575,595

North Marin Water District

NOVATO WATER OPERATING BUDGET DETAIL

Fiscal Year 2016/17

	Proposed Budget 16/17	Estimated Actual 15/16	Adopted Budget 15/16	Actual 14/15	Actual 13/14	Actual 12/13	Actual 11/12	Actual 10/11
WATER TREATMENT								
31 Supervision & Engineering	\$92,000	\$118,000	\$97,000	\$112,433	\$111,096	\$112,612	\$100,916	\$121,459
32 Operating Expense	297,000	256,000	288,000	333,020	285,050	308,301	206,957	320,882
33 Purification Chemicals	425,000	166,000	425,000	358,907	316,762	400,627	253,797	464,140
34 Sludge Disposal	85,000	88,000	87,000	72,720	66,085	103,196	100,861	84,618
35 Maintenance of Structures/Grounds	89,000	60,000	80,000	79,728	60,148	52,242	82,839	71,772
36 Purification Equipment Maintenance	161,000	152,000	140,000	104,290	137,838	137,793	136,782	105,217
37 Electric Power - Treatment	134,000	120,000	134,000	120,592	135,637	112,767	114,184	128,913
38 Laboratory Expense (net)	776,000	682,000	724,000	691,990	655,315	602,901	568,124	517,044
39 TOTAL WATER TREATMENT	\$2,059,000	\$1,642,000	\$1,975,000	\$1,873,680	\$1,767,931	\$1,830,439	\$1,564,460	\$1,814,045
TRANSMISSION & DISTRIBUTION								
40 Supervision & Engineering	\$750,000	\$551,000	\$485,000	\$562,934	\$486,544	\$427,430	\$423,813	\$466,110
41 Maps & Records	141,000	105,000	138,000	108,956	77,995	106,669	96,058	74,154
42 Operation of T&D System	632,000	498,000	556,000	404,243	511,708	460,489	478,959	422,375
43 Storage Facilities Expense	161,000	139,000	147,000	167,362	134,352	87,843	140,564	158,247
44 Maintenance of Valves & Regulators	221,000	153,000	208,000	151,691	91,709	117,299	132,239	190,866
45 Maintenance of Mains	133,000	215,000	126,000	149,898	72,176	86,906	49,922	146,814
46 Backflow Prevention Program	173,000	150,000	131,000	156,590	147,878	102,338	84,714	124,121
47 Maintenance of Copper Services	182,000	148,000	183,000	202,193	141,987	175,880	190,698	164,388
48 Maintenance of PB Service Lines	459,000	568,000	443,000	432,820	411,357	483,006	443,509	347,802
49 Maintenance of Meters	106,000	97,000	132,000	100,401	94,418	93,360	135,900	146,170
50 Detector Check Assembly Maint	74,000	66,000	71,000	65,749	52,369	7,581	38,361	36,509
51 Maintenance of Hydrants	81,000	37,000	78,000	25,655	22,154	28,531	33,980	50,354
52 TOTAL TRANSMISSION & DISTRIB	\$3,113,000	\$2,727,000	\$2,698,000	\$2,528,492	\$2,244,647	\$2,177,332	\$2,248,717	\$2,327,910
CONSUMER ACCOUNTING								
53 Meter Reading & Collection	\$223,000	\$187,000	\$209,000	\$166,919	\$182,216	\$180,030	\$170,589	\$142,581
54 Billing & Accounting	266,000	274,000	256,000	269,054	256,653	247,897	282,702	282,046
55 Contract Billing	18,000	17,000	19,000	16,946	17,561	18,110	18,231	18,285
56 Postage & Supplies	63,000	60,000	53,000	60,032	61,791	64,497	63,359	70,347
57 Credit Card Fees	25,000	26,000	23,000	23,893	14,149			
58 Lock Box Service	11,000	11,000	11,000	10,080				
59 Uncollectible Accounts	17,000	17,000	15,000	14,818	19,500	23,230	26,685	32,723
60 Office Equipment Expense	22,000	28,000	21,000	16,743	23,905	8,290	8,690	9,835
61 Distributed to Other Operations	(16,000)	(17,000)	(15,000)	(16,233)	(15,276)	(13,961)	(15,726)	(15,762)
62 TOTAL CONSUMER ACCOUNTING	\$629,000	\$603,000	\$592,000	\$562,252	\$560,499	\$528,093	\$554,530	\$540,055

North Marin Water District

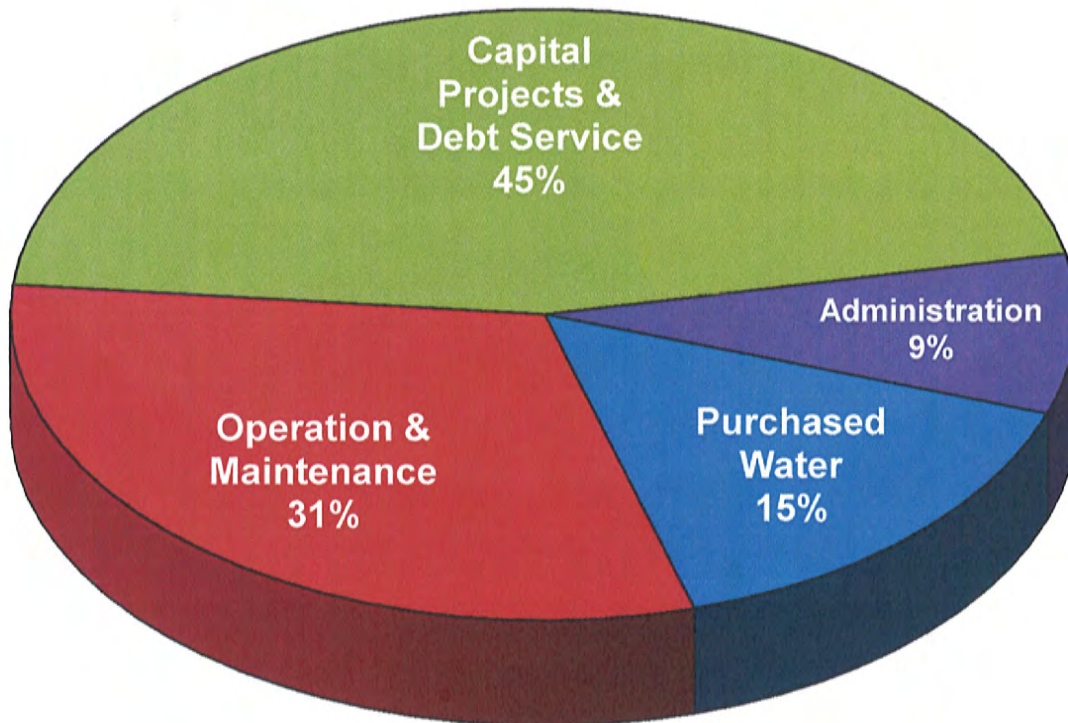
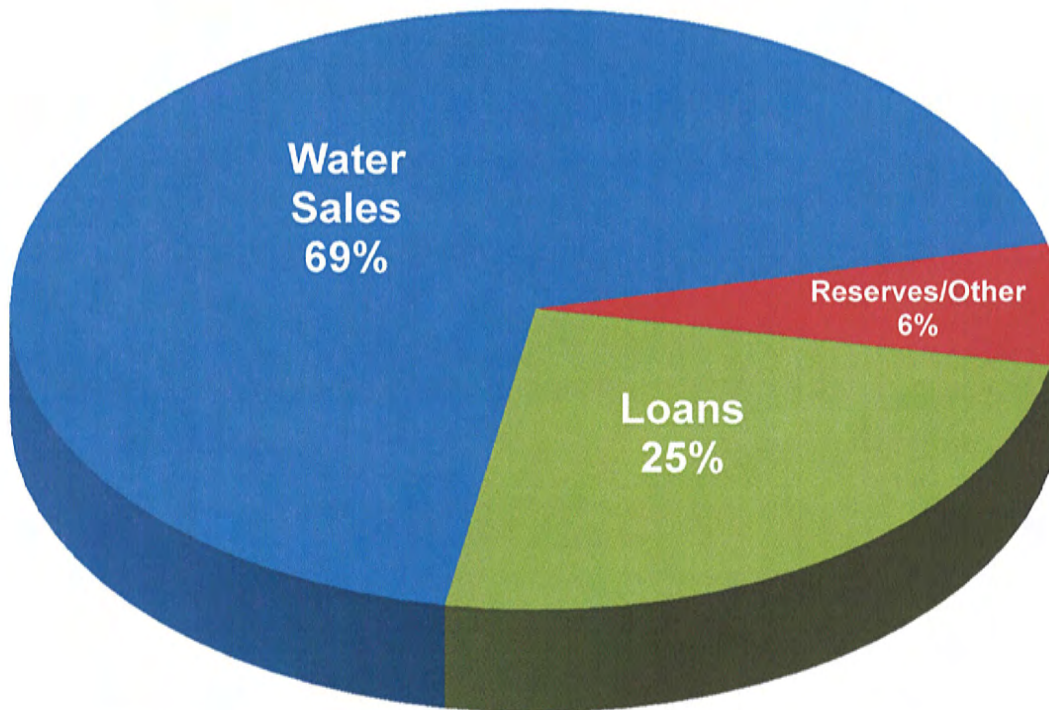
NOVATO WATER OPERATING BUDGET DETAIL

Fiscal Year 2016/17

	Proposed Budget 16/17	Estimated Actual 15/16	Adopted Budget 15/16	Actual 14/15	Actual 13/14	Actual 12/13	Actual 11/12	Actual 10/11
WATER CONSERVATION								
63 Residential	\$380,000	\$340,000	\$345,000	\$410,154	\$362,499	\$222,637	\$213,883	\$338,093
64 Commercial	19,000	5,000	25,000	5,352	2,605	1,169	1,414	15,423
65 Public Outreach/Information	40,000	26,000	50,000	34,148	51,638	28,477	41,251	19,047
66 Large Landscape	20,000	22,000	30,000	10,747	12,702	13,966	13,780	10,337
TOTAL WATER CONSERVATION	\$459,000	\$393,000	\$450,000	\$460,401	\$429,444	\$266,249	\$270,328	\$382,900
GENERAL & ADMINISTRATION								
67 Director's Expense	\$33,000	\$34,000	\$32,000	\$30,400	\$25,300	\$14,400	\$15,000	\$15,100
68 Legal Fees	13,000	13,000	12,000	9,956	20,906	10,112	7,098	8,572
69 Human Resources	30,000	24,000	34,000	33,977	28,386	35,917	21,860	32,112
70 Auditing Services	17,000	19,000	21,000	18,380	21,050	20,600	28,900	27,800
71 Consulting Services/Studies	455,000	138,000	290,000	107,015	0	53,327	34,731	
72 General Office Salaries	1,338,000	1,279,000	1,533,000	1,191,792	1,184,164	1,214,210	1,252,684	1,177,170
73 Office Supplies	47,000	22,000	47,000	36,877	46,174	37,232	22,743	38,870
74 Employee Events	12,000	13,000	12,000	7,379	7,227	6,204	5,931	4,469
75 Other Administrative Expense	13,000	10,000	16,000	13,390	13,240	18,150	17,254	17,414
76 Election Cost	0	0	70,000	0	250	0	250	0
77 Dues & Subscriptions	60,000	56,000	57,000	53,296	47,842	45,607	49,260	47,775
78 Vehicle Expense	8,000	8,000	8,000	8,112	8,112	8,112	8,118	8,112
79 Meetings, Conf & Training	202,000	147,000	184,000	136,863	117,425	112,402	97,626	101,472
80 Telephone, Water, Gas & Electricity	41,000	41,000	39,000	38,580	33,328	32,995	26,172	29,012
81 Building & Grounds Maintenance	55,000	69,000	51,000	48,891	35,642	41,194	36,438	35,902
82 Office Equipment Expense	94,000	96,000	90,000	97,868	90,231	82,349	89,291	74,325
83 Insurance Premiums & Claims	118,000	157,000	103,000	102,073	72,192	76,473	113,556	118,451
84 Retiree Medical Benefits	173,000	172,000	174,000	175,580	159,691	166,699	160,725	147,084
85 (Gain)/Loss on Overhead Charges	(122,000)	(49,000)	(70,000)	(85,682)	(222,710)	(136,354)	(297,783)	(172,628)
86 G&A Distributed to Other Operations	(155,000)	(130,000)	(169,000)	(113,218)	(76,538)	(77,443)	(101,630)	(104,515)
87 G&A Applied to Construction Projects	(382,000)	(365,000)	(385,000)	(353,998)	(389,569)	(392,205)	(327,881)	(269,439)
88 Expensed Improvement Projects								122,785
89 Expensed Equipment Purchases							3,383	29,993
TOTAL GENERAL & ADMINISTRATION	\$2,050,000	\$1,754,000	\$2,149,000	\$1,557,531	\$1,222,343	\$1,369,981	\$1,263,726	\$1,489,836
90 Depreciation Expense	\$2,800,000	\$2,580,000	\$2,700,000	\$2,507,124	\$2,445,634	\$2,417,032	\$2,372,380	\$2,309,166
91 TOTAL OPERATING EXPENSE	\$16,064,000	\$14,523,000	\$16,409,000	\$14,825,093	\$15,688,436	\$14,768,252	\$14,321,115	\$13,544,996
92 NET OPERATING INCOME/(LOSS)	\$931,000	\$975,000	(\$121,000)	\$1,589,355	\$3,399,428	\$2,229,306	\$97,098	(\$684,146)

**NOVATO POTABLE WATER
FISCAL YEAR 2016-17**

SOURCE OF FUNDS = \$24.2 MILLION



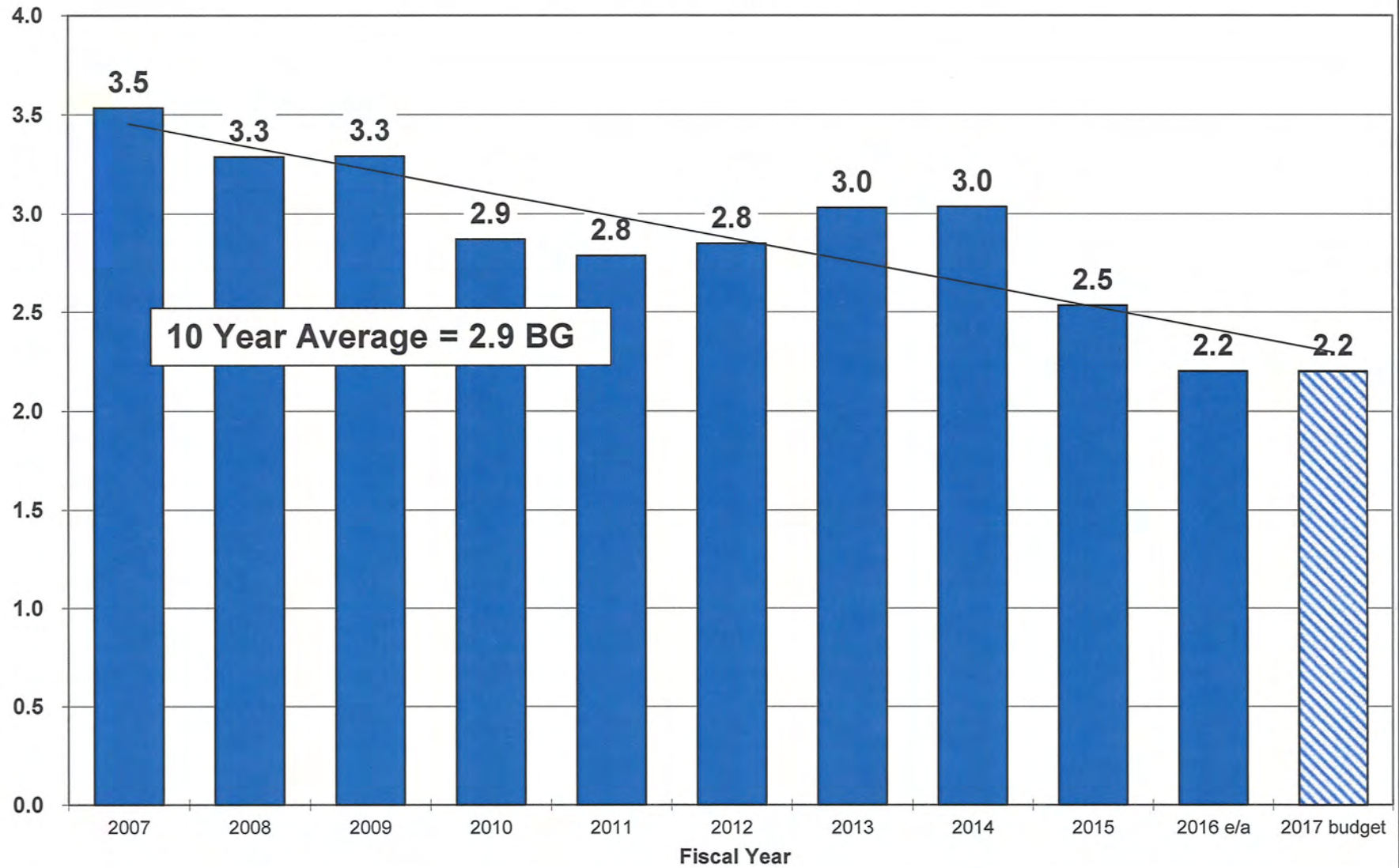
USE OF FUNDS = \$24.2 MILLION

5/12/16

t:\acexcel\budget\17[sales17.xlsx]stat rpt data

Billion
Gallons

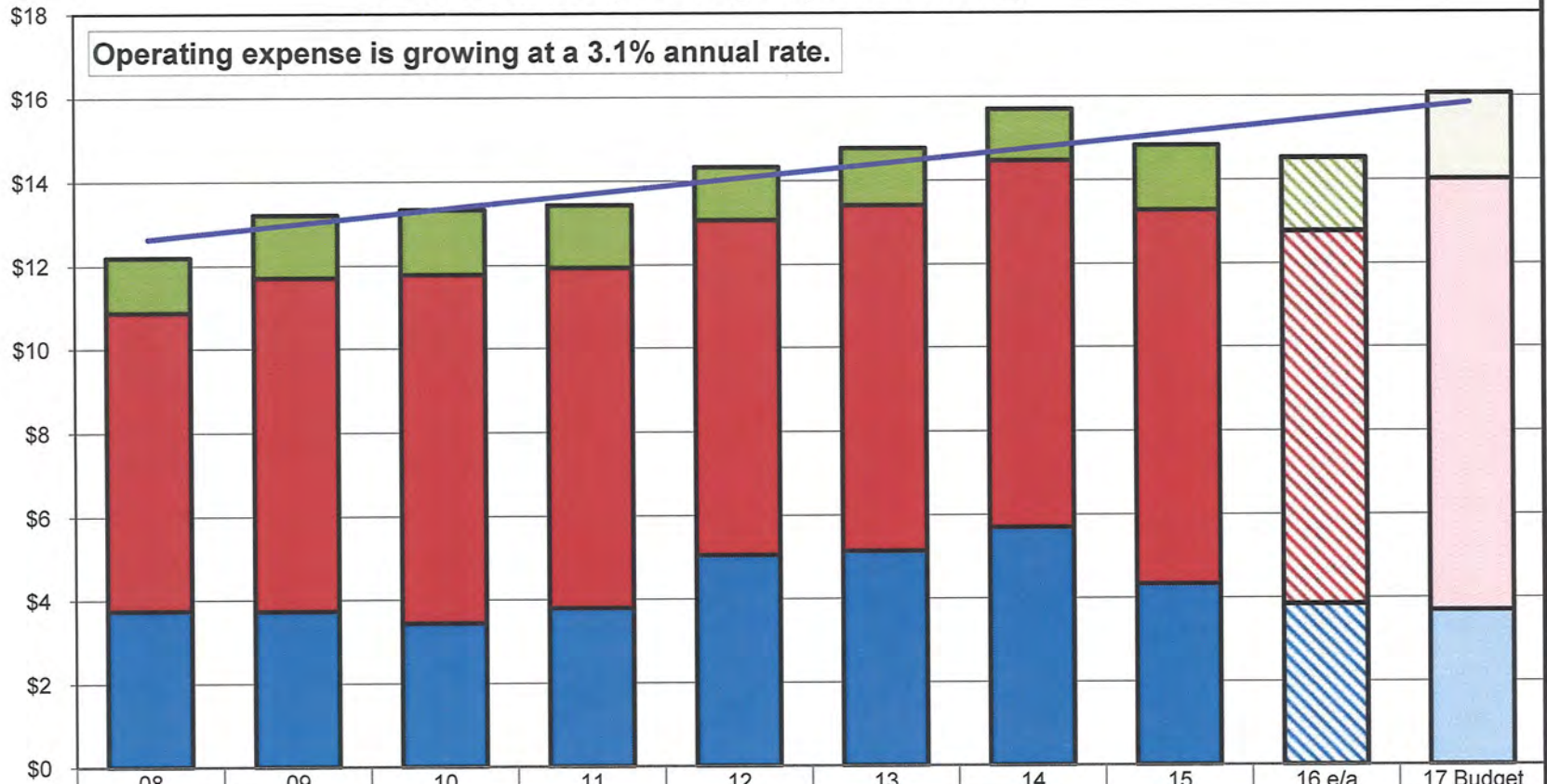
Novato Water Billed Consumption *10 Year History*



Million \$

Novato Water Operating Expense History

Operating expense is growing at a 3.1% annual rate.



Admin	\$1.3	\$1.5	\$1.5	\$1.5	\$1.3	\$1.4	\$1.2	\$1.6	\$1.8	\$2.1
O&M	\$7.1	\$8.0	\$8.3	\$8.1	\$8.0	\$8.3	\$8.8	\$8.9	\$8.9	\$10.3
Purch Wtr	\$3.7	\$3.7	\$3.4	\$3.8	\$5.0	\$5.1	\$5.7	\$4.3	\$3.9	\$3.7
Total	\$12.2	\$13.2	\$13.3	\$13.4	\$14.3	\$14.8	\$15.7	\$14.8	\$14.5	\$16.1
Regression	\$12.6	\$13.0	\$13.3	\$13.7	\$14.1	\$14.4	\$14.8	\$15.1	\$15.5	\$15.8

Fiscal Year

16

MEMORANDUM

To: Board of Directors
From: David L. Bentley, Auditor-Controller
Subj: Additional Review – FY 2016/17 Novato Recycled Water System Budget
t:\aclword\budget\17rw17 review 2.docx

May 13, 2016

RECOMMENDED ACTION: Information Only**FINANCIAL IMPACT:** \$8.9 Million FY17 Expenditure Plan

There were no significant changes to the Recycled Water Budget since the Board's May 3 initial review.

Budget Summary

The FY 2016/17 (FY17) Recycled Water System (RWS) budget projects demand of 140MG next fiscal year (see chart of historical water use attached), consistent with the current year estimated actual. Consistent with the potable water rate increase, a 7% commodity rate increase is proposed to be effective June 1, 2016. The proposed increase is projected to generate \$48,000 in additional revenue next fiscal year.

Operating expenses (excluding depreciation) are budgeted to decrease 3% (\$10,000) from the existing FY16 budget. The FY17 budget projects purchase of 90MG (\$126,000) of tertiary treated water from Novato Sanitary District and 45MG (\$63,000) from Las Gallinas Valley Sanitary District, both at \$1,400/MG. The Deer Island Plant is budgeted to produce 5MG this summer to keep it in good running order, and will continue to serve as a backup facility.

The \$11.7 million project to expand recycled water distribution facilities to central Novato will break ground in FY17, with \$7.5 million anticipated to be expended over the 12-month period. The District is close to finalizing the 1% State Revolving Fund loan to construct the facilities, along with a \$1.5 million grant and a contribution from Marin Country Club for their share of the expansion. Additional Federal/State grant funds may be forthcoming as well but are not included at this time due to pending confirmation.

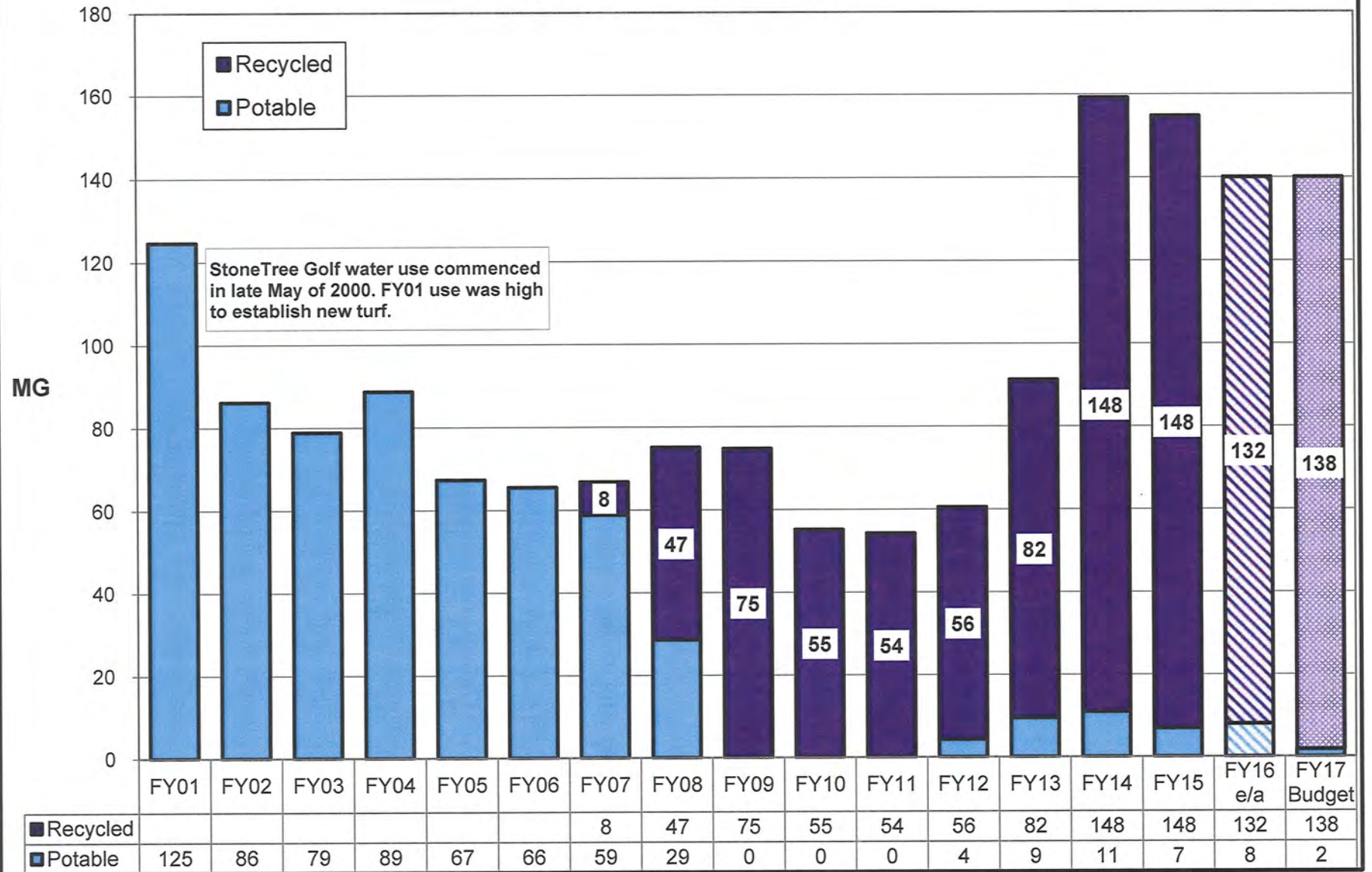
The RWS is budgeted to receive \$815,000 in Connection Fee monies from the Novato potable water system in FY17 to pay for the expansion loan debt service and to cover the \$80,000 cost of the NBWRA's grant administration. With the Connection Fee monies, the proposed budget projects a cash surplus next fiscal year of \$405,000.

As with the Novato budget, staff will continue to fine-tune the RWS budget, and return it for final review and approval at the June 21 public hearing.

NOVATO RECYCLED WATER
BUDGET SUMMARY
Fiscal Year 2016/17

	<i>Proposed Budget 2016/17</i>	<i>Estimated Actual 2015/16</i>	<i>Adopted Budget 2015/16</i>
# BASIC DATA			
1 Active Meters	44	44	44
2 Average Commodity Rate	\$5.26	\$4.92	\$4.92
3 Consumption (MG)	140	140	155
OPERATING INCOME			
4 Recycled Water Sales	\$737,000	\$689,000	\$762,000
5 Bimonthly Service Charge	29,000	29,000	28,000
6 Total Operating Income	\$766,000	\$718,000	\$790,000
OPERATING EXPENDITURES			
7 Purchased Water - NSD	\$126,000	\$110,000	\$140,000
8 Purchased Water - LGVSD	63,000	\$60,000	77,000
9 Pumping	6,000	3,000	8,000
10 Operations	58,000	71,000	40,000
11 Water Treatment	25,000	7,000	21,000
12 Transmission & Distribution	32,000	13,000	32,000
13 Consumer Accounting	1,000	1,000	1,000
14 General Administration	56,000	47,000	58,000
15 Depreciation	480,000	472,000	472,000
16 Total Operating Expenditures	\$847,000	\$784,000	\$849,000
17 NET OPERATING INCOME (LOSS)	(\$81,000)	(\$66,000)	(\$59,000)
NON-OPERATING INCOME/(EXPENSE)			
18 Interest Revenue	\$6,000	\$5,000	\$10,000
19 Stone Tree Golf Interest Payments	39,000	45,000	44,000
20 Deer Island SRF Loan Interest Expense	(63,000)	(68,000)	(68,000)
21 Distrib System SRF Loans Interest Exp	(201,000)	(207,000)	(212,000)
22 Consulting Services/Studies	0	(48,000)	(30,000)
23 Total Non-Operating Income/(Expense)	(\$219,000)	(\$273,000)	(\$256,000)
24 NET INCOME/(LOSS)	(\$300,000)	(\$339,000)	(\$315,000)
OTHER SOURCES/(USES) OF FUNDS			
25 Add Depreciation Expense	\$480,000	\$472,000	\$472,000
26 Fed Grant/SRF Loan - Central Expansion	7,500,000	700,000	3,500,000
27 Connection Fees Transferred from Novato	815,000	708,000	717,000
28 Stone Tree Golf Principal Repayment	212,000	206,000	206,000
29 Capital Improvement Projects	(7,680,000)	(775,000)	(3,680,000)
30 Deer Island SRF Loan Principal Payments	(210,000)	(205,000)	(205,000)
31 Distrib System SRF Loan Principal Pmts	(412,000)	(404,000)	(402,000)
32 Total Other Sources/(Uses)	\$705,000	\$702,000	\$608,000
33 CASH INCREASE/(DECREASE)	\$405,000	\$363,000	\$293,000

Recycled Water Use History



PROPOSED CAPITAL IMPROVEMENT PROJECTS

5/10/16

Novato Service Area Recycled Water

t:\acl\excel\budget\17\5 yr cip fy17.xlsx\5 yr ip

		FY17	FY18	FY17 Project Description	
6. RECYCLED WATER					
5.7127.00	a.	NBWRA Grant Program Administration	\$80,000	\$80,000	Continued support of NBWRA to obtain/administer recycled water project Federal/State grants for the Central Project.
5.6058.10	b.	Expansion to Central Area (Note 4)	\$7,500,000	\$3,500,000	Install 5.8 miles of RW pipeline, rehab existing 0.5MG Norman Tank and retrofit ~ 39 sites for RW.
	c.	Other Recycled Water Expenditures	\$100,000	\$100,000	Retrofit existing potable irrigation customers to RW.
			<u>\$7,680,000</u>	<u>\$3,680,000</u>	
LESS FUNDED BY LOANS/GRANTS/OTHER					
	e.	RW Sys Expansion (Note 4)	(\$7,500,000)	(\$3,500,000)	Funded by 1% SRF Loan, \$2.25M MCC Contrib & \$1.5M Grant
		NET PROJECT OUTLAY	<u>\$180,000</u>	<u>\$180,000</u>	
DEBT SERVICE					
RECYCLED WATER					
	g.	RW Facility SRF Loan	\$273,000	\$273,000	
	h.	RW North Expansion SRF Loan	\$282,000	\$282,000	
	i.	RW South Expansion SRF Loan	\$332,000	\$332,000	
	j.	RW Central Expansion SRF Loan		\$372,000	
		TOTAL DEBT SERVICE	<u>\$887,000</u>	<u>\$1,259,000</u>	
		NET PROJECT & DEBT SERVICE OUTLAY	<u>\$1,067,000</u>	<u>\$1,439,000</u>	

Note 4 - \$11.7M RW Central Expansion funded by \$1.5M Federal Grant, \$9.6M SRF loan & \$800K local contribution. Marin Country Club Contribution with debt service paid from FRC funds.

17

DISBURSEMENTS - DATED MAY 12, 2016

Date Prepared 5/10/16

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
P/R*	Employees	Net Payroll PPE 4/30/16	\$125,198.57
EFT*	US Bank	Federal & FICA Taxes PPE 4/30/16	56,287.58
EFT*	State of California	State Taxes & SDI PPE 4/30/16	9,886.39
EFT*	CalPERS	Pension Contribution PPE 4/30/16	33,057.49
1	Aberegg, Michael	Progress Pymt #11: Recycled Water Central Service Area East (Balance Remaining on Contract \$8,005)	715.00
2	Able Tire & Brake	Tires (4) ('07 Chevy Colorado), Tires (2) ('09 Toyota Prius) & Tires (2) ('05 Ford Ranger)	1,004.65
3	Asbury Environmental	Used Oil Recycling (125 gal)	120.00
4	AT&T	Leased Lines (\$534) & Voice Lines	609.00
5	Automation Direct	PLC Parts for Thorson St	932.00
6	AWWA CA-NV SEC	Conference Registration Contact Hours Application (Jennison)	20.00
7	Badger Meter	Cellular Meter Monthly Charge (19)	16.72
8		Cafeteria Plan: Uninsured Medical Reimbursement	151.00
9	Cel Analytical	Lab Testing	473.00
10	DeGabriele, Chris	Exp Reimb: April Mileage	332.10
11		Cafeteria Plan: Uninsured Medical Reimbursement	153.22
12	Demeduc, Faith	Novato "Toilet Rebate"	100.00
13	Dodd, Tyler	Refund Deposit/New Development/WC Restriction-Novato	1,000.00
14	Fisher Scientific	Maxi Pipet Tips (600)	171.63
15	Ghilotti Construction	Refund Security Deposit on Hydrant Meter Less Final Bill	1,094.07


Seq	Payable To	For	Amount
16	Golden Gate Petroleum	Gasoline (\$2.40/gal) & Diesel (\$1.96/gal)	1,923.55
17	Grainger	Marking Chalk (48-17 oz cans), Paint (36-17oz cans), Battery Chargers (3), Penetrating Lubricant (12-16oz cans), Bushings (8) (STP), Gas Detector (4) (\$3,545), Oxygen Sensor (3) (\$742) & Pocket Calculators (2) (STP)	5,235.43
18	Graw, Victoria	Novato "Toilet Rebate"	100.00
19	Hines, Dale & Carol	Refund Overpayment on Closed Account	97.83
20	Irish & Son Welding	Weld Fittings at Point Reyes Tanks (6 hrs) & Weld Stands inside Tank (4 hrs)	1,200.00
21	Jhaveri, Neil	Novato "Toilet Rebate"	200.00
22	MacArthur	Aquapoxy (3 gal)	483.48
23	Maltby Electric	Conduits (100) (\$65), Elbows (8) & Strut Channel (40) (\$64)	192.85
24	McLellan Co, WK	Street Restoration (Chevron Car Wash) (\$11,942) & Misc Paving	15,699.78
25	National Meter & Automation	1 1/2" Meters (4)	1,344.63
26	Novato Disposal Service	April Trash Removal	438.29
27	Novato Chevrolet Inc.	Brake Light ('07 Chevy Colorado)	93.72
28	Office Depot	Quarterly Office Supply Order: Chair (\$304) (Ladd), Notepad (123) (\$44), Folders (375) (\$313), Binder Clips (388), Pens (192) (\$261), Label Making Tape (2 rolls) (\$96), File Folder Fasteners (500) (\$57), Index Dividers (2), Desk Pad Calendar, Laminator (Construction)	2,130.33
29	Pace Supply	Plugs (2), Hex Nuts (690), Nipples (2), 8" x 6" Reducers (2) (\$203) & Valves (3) (\$1,263)	1,822.32
30	Petro Tech	Replacement Nozzle for Fuel Tank	606.33
31	Pitti, Jerry	Novato "Toilet Rebate"	100.00
32	Reed, Corey	Exp Reimb: "Manage for Success: Effective Utility Leadership Practices" Self-Study Course	113.68
33		Cafeteria Plan: Uninsured Medical Reimbursement	102.93


Seq	Payable To	For	Amount
34	Schwartz, James	Novato "Washer Rebate"	50.00
35	Scott Technology Group	Quarterly Maintenance on Engineering Copier (1/16-4/15/16)	563.57
36	Snap-On Industrial	Auto, Truck Repair Subscriptions (\$4,380) & Light Duty Vehicle Scanner (\$3,289)	7,669.11
37	Sonoma County Water Agency	March Contract Water (Excludes \$193,860 Adjustment)	214,023.14
38	Spaet, Dorothy	Novato "Washer Rebate"	50.00
39	SpeedTech Lights	18" Mini Light Bar ('16 Nissan Frontier)	212.74
40	Synectic Technologies	Quarterly Phone System Maintenance (4/16-7/16)	446.70
41	US Postal Service	Meter Postage	1,000.00
42	Vali Cooper & Associates	Progress Pymt #2: Construction Management Services for AEEP Reaches A-D MSN B3 Project (Balance Remaining on Contract \$8,152)	6,736.23
43	Verizon Wireless	Cellular Charges: Data (\$190) & Airtime (\$136) (19)	325.58
44	Waste Management	Removal of Fallen Oak Tree from STP Site	290.24
45	Winzer Corporation	Zip Ties (200), Nutserts (77) & Installation Tool	377.83

TOTAL DISBURSEMENTS

\$494,952.71

The foregoing payroll and accounts payable vouchers totaling \$494,952.71 are hereby approved and authorized for payment.


5/9/16
 Auditor-Controller Date


5/9/2016
 General Manager Date

DISBURSEMENTS - DATED MAY 5, 2016

Date Prepared 5/3/16

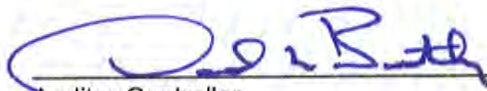
The following demands made against the District are listed for approval and authorization for payment in accordance with Section 31302 of the California Water Code, being a part of the California Water District Law:


Seq	Payable To	For	Amount
1	Allied Heating & Air Conditioning	Quarterly Maintenance on HVAC System (12/1/15-2/29/16)	400.19
2	All Star Rents	Tamper Rental (4 hrs), & High Weed Mower Rental (1 day)	268.09
3	Alpha Analytical Labs	Lab Testing	18.00
4	American Family Life Ins	April Employee Contribution for Accident, Disability & Cancer Insurance	3,702.03
5	AT&T	Internet Service @ PRTP (3/20-4/19)	82.67
6	AT&T	Data Lines	1.34
7	Automation Direct	PLC Parts for Sunset Tank	959.00
8	Baker, Jack	North Bay Watershed Association Meeting on 3/4/16 (\$212), North Bay Watershed Association 2016 Conference on 4/22/16 (\$212), & April Director's Fee (\$424)	848.00
9	Bastogne	Refund Overpayment on Open Account	57.99
10	Bay Bolt	Flange Bolts for Sunset Tank Mixing System	831.60
11	California State Disbursement	Wage Assignment Order	811.50
12	CalPERS	Fees for FY16 GASB-68 Reports & Schedules	1,300.00
13	CalPERS	Health Insurance Premium (Employees \$49,437, Retirees \$10,512, & Employee Contribution \$13,256)	73,204.76
14	CSW/Stuber-Stroeh Engineering	Progress Pymt #36: Marin Sonoma Narrows AEEP Project (Balance Remaining on Contract \$16,267)	3,222.76
15	Durkin Signs & Graphics	NMWD Vehicle Decals (12 sets)	435.22
16	Evoqua Water Technologies	Service on Deionization System	222.50

Seq	Payable To	For	Amount
17	Fisher Scientific	Buffers (2) (Lab)	82.59
18	Fraites, Rick	SCWA Water Advisory Committee on 4/4/16 (\$212), April Director's Fee (\$424)	636.00
19	Fremouw Environmental Service	Auto Shop Solid Oily Waste Disposal	357.09
20	Friedman's Home Improvement	Gravel Snake Bag (4 ft) (18) (Sediment Control)	57.09
21	Golden Gate Petroleum	Gasoline (\$2.54/gal) & Diesel (\$2.11/gal)	1,740.49
22	Grainger	Drill Bit Set (29 Piece) (Breit)	140.51
23	Hach	Reagent & Buffer Solution	469.99
24	Irish & Son Welding	Welding Services	960.00
25		Cafeteria Plan: Uninsured Medical Reimbursement	113.00
26	Lincoln Life	Deferred Compensation PPE 4/30/16	14,864.26
27		Cafeteria Plan: Childcare Reimbursement	416.66
28	McAghon, Andrew	Lawn-Be-Gone Mulching Program (800 S.F.)	520.00
29	McLellan, WK	Misc Paving	16,785.87
30	McMaster-Carr Supply	Vacuum Gauge (2)	58.55
31	McMahon, T.A.	Novato "Cash for Grass" Rebate	200.00
32	Miller Pacific Engineering	Prog Pymt #2: Recycled Water Central Service Area (Bal Remaining on Contract \$31,189)	19,991.00
33	Mitchell, Russ & Associates	Recycled Water Retrofit Design	16,040.00
34	MSC Industrial Supply	Air Supply & Carbon Dioxide Generator Parts (STP)	322.91
35	Nationwide Retirement Solutions	Deferred Compensation PPE 4/30/16	1,400.00
36	Nerviani's Backflow	Backflow Testing (2)	180.00
37	Novato Sanitary District	Annual Deer Island Lease	20.00
38	Novato Police Dept	Telephone Answering Service (Jan-April)	600.00
39	O'Neill, John	Novato "Toilet" Rebate	100.00

Seq	Payable To	For	Amount
40	Pace Supply	1/2" PVC Pipe & Fittings for Pt. Reyes Tanks, Nuts (710), Flanges (3), Elbows (5) & Flanges (2)	1,255.59
41	Peterson Trucks	Fuel Injection Primer Pump	160.07
42	Petterle, Stephen	April Director's Fee	424.00
43	Planka, David	Novato "Cash for Grass" Rebate	360.00
44		Cafeteria Plan: Childcare Reimbursement	208.33
45	RMC Water & Environment	Progress Pymt#7: RW Production Evaluation (Balance Remaining on Contract \$15,794)	4,726.00
46	Rodoni, Dennis	April Director's Fee	424.00
47	Schoonover, John	April Director's Fee Less Deferred	374.00
48	State Water Resources Control	D4 Certification Renewal (Jeff Corda) (11/16-11/19) (Budget \$0), & T3 Certification Renewal (Jeff Corda) (11/16-11/19) (Budget \$0)	195.00
49	Thomas Scientific	Glass Ampules (40) (Lab), Tergajet Cleaner (4 lbs), & Petri Dishes (100)	172.71
50	USA BlueBook	PVC Suction Hose (\$673), & Dry Gauges (2) (\$443)	1,115.50
51	Verizon Wireless	April CIMIS Station Data Transfer Fee	34.42
52	Walker, Brian	Novato "Toilet" Rebate	300.00
TOTAL DISBURSEMENTS			<u>\$172,171.28</u>

The foregoing payroll and accounts payable vouchers totaling \$172,171.28 are hereby approved and authorized for payment.


5/2/16
 Auditor-Controller Date


5/2/2016
 General Manager Date

NORTH MARIN WATER DISTRICT CHECK REQUEST

PAYEE JACK BAKER	DATE <u>4/6/16</u> (TODAY'S DATE)
425 Corte Norte	
Novato, CA 94949	
AMOUNT: \$212.00	

I attended the NBWS on 3/4/16
 (NAME OF MEETING OR WORKSHOP) (DATE OF MEETING)

and wish to be compensated as provided under the Board Compensation Policy.

SIGNATURE

CHARGE TO: 56001-01-11

DISPOSITION OF CHECK

☐ MAIL TO PAYEE
☐ HOLD FOR _____
☒ OTHER:
ACH PAYMENT

APPROVED TO PAY BY _____

T:\FORMS\CHECK REQUEST FOR BOARD.DOC
Rev. 0815

Prepared By <u>C. J.</u>	Accounting Review	POST DATE <u>4/6</u>	Vendor No. BAKE01
-----------------------------	-------------------	-------------------------	----------------------



Invoice Number (CK Req ID)	Invoice (CK Req) Date	Invoice (CK Req) Amount
CKRQ 040616	4/6/16	\$212.00

NMWD Comment	

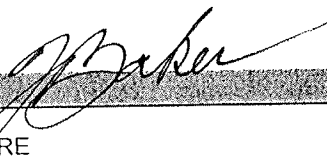
Job Number	GL Account	Amount
	56001-01-11	\$212.00
TOTAL		\$212.00

NORTH MARIN WATER DISTRICT CHECK REQUEST

PAYEE JACK BAKER	DATE <u>4/28/16</u> <small>(TODAY'S DATE)</small>
425 Corte Norte	AMOUNT: \$212.00
Novato, CA 94949	

I attended the NORTH BAY WATERSHED ASSOC. 2016 CONFERENCE on 4/22/16
IN NAPA ~~CA~~
(NAME OF MEETING OR WORKSHOP) (DATE OF MEETING)

and wish to be compensated as provided under the Board Compensation Policy.


 SIGNATURE

CHARGE TO: 56001-01-11

DISPOSITION OF CHECK

☐ MAIL TO PAYEE
☐ HOLD FOR _____
☒ OTHER:
ACH PAYMENT


 APPROVED TO PAY BY

T:\FORMS\CHECK REQUEST FOR BOARD.DOC
REV. 0815

Prepared By	Accounting Review	POST DATE	Vendor No.
			BAKE01



Invoice Number (CK Req ID)	Invoice (CK Req) Date	Invoice (CK Req) Amount
CKRQ		\$212.00

NMWD Comment

Job Number	GL Account	Amount
	56001-01-11	\$212.00
TOTAL		\$212.00

NORTH MARIN WATER DISTRICT CHECK REQUEST

PAYEE RICK FRAITES	
50 Forrest Rd	DATE <u>4/10/16</u> (TODAY'S DATE)
Novato, CA 94947	AMOUNT: \$212.00

I attended the SCWA - W.A.C. (Water Advisory Committee) on 4/4/16
(NAME OF MEETING OR WORKSHOP) (DATE OF MEETING)

and wish to be compensated as provided under the Board Compensation Policy.

Rick Fraites
SIGNATURE

CHARGE TO: 56001-01-11

DISPOSITION OF CHECK

☒ MAIL TO PAYEE

☐ HOLD FOR _____


☐ OTHER _____

APPROVED TO PAY BY _____

T:\FORMS\CHECK REQUEST FOR BOARD.DOC
REV. 0815

RECEIVED

APR 11 2016

Prepared By	Accounting Review	POST DATE	Vendor No. FRAI01	 <small>NORTH MARIN WATER DISTRICT</small>
Invoice Number (CK Req ID)	Invoice (CK Req) Date	Invoice (CK Req) Amount		
CKRQ		\$212.00		
NMWD Comment				
Job Number	GL Account	Amount		
	56001-01-11	\$212.00		
TOTAL		\$212.00		

**NOVATO FOUNDATION FOR
PUBLIC EDUCATION**

BOARD OF DIRECTORS

Kathryn Hansen
Dale Kline
Tamara Ressler
Ricardo Rivas-Avalos

ADVISORY COUNCIL

Sylvia Barry
Jeff Belingheri
Mary Jane Burke
Debbie Butler
Berta Campos-Anicetti
David Gershik
Jim Hogeboom
Kerry Mazzoni
Regina Bianucci Rus
Edward Sangster
Sarah Sangster
Elizabeth Sleath
Jennifer Treppa

EXECUTIVE DIRECTOR

Susan Mathews

SCHOOLS SERVED

Early Intervention Preschool
Hamilton
Loma Verde
Lu Sutton
Lynwood
Olive
Pleasant Valley
Rancho
San Ramon
NOVA
San Jose
Sinaloa
Marin Oaks
Nexus Academy
Novato High
San Marin High

MAIL

448 Ignacio Blvd. #410
Novato, CA 94949

OFFICE

330 Ignacio Blvd. # 201
Novato, CA 94949

CONTACT

415-883-4262 x3117
info@nfpe.org
www.novatoschoolfuel.org

*May 14th
Tour of Novato
Sponsor*

SCHOOL FUEL



March 17, 2016

RECEIVED

MAY 11 2016

North Marin Water District

North Marin Water District
999 Rush Creek Place
PO Box 146
Novato, CA 94948

Dear ~~Business~~, *Sponsor,*

Thank you very much for your donation to School Fuel, the Novato Foundation for Public Education. Your generous gift of \$250 in March 2016 is truly appreciated.

We are very grateful for your support of our foundation. The diminished public resources available for our public schools have made private donations and creative fundraising crucial to ensuring that our students will get the excellent preparation they need to be successful in life.

Your support has helped School Fuel bring a number of classes and programs to the Novato schools – helping ensure that our students get an excellent and varied education. Thank you for being such a caring example for our community.

As you know, School Fuel is a 501(c)(3) non-profit organization. School Fuel's tax ID no. is 48-1302986. A copy of our IRS determination letter is available on our website. No goods or services were provided in exchange for this contribution. Please retain this letter as your receipt for tax purposes.

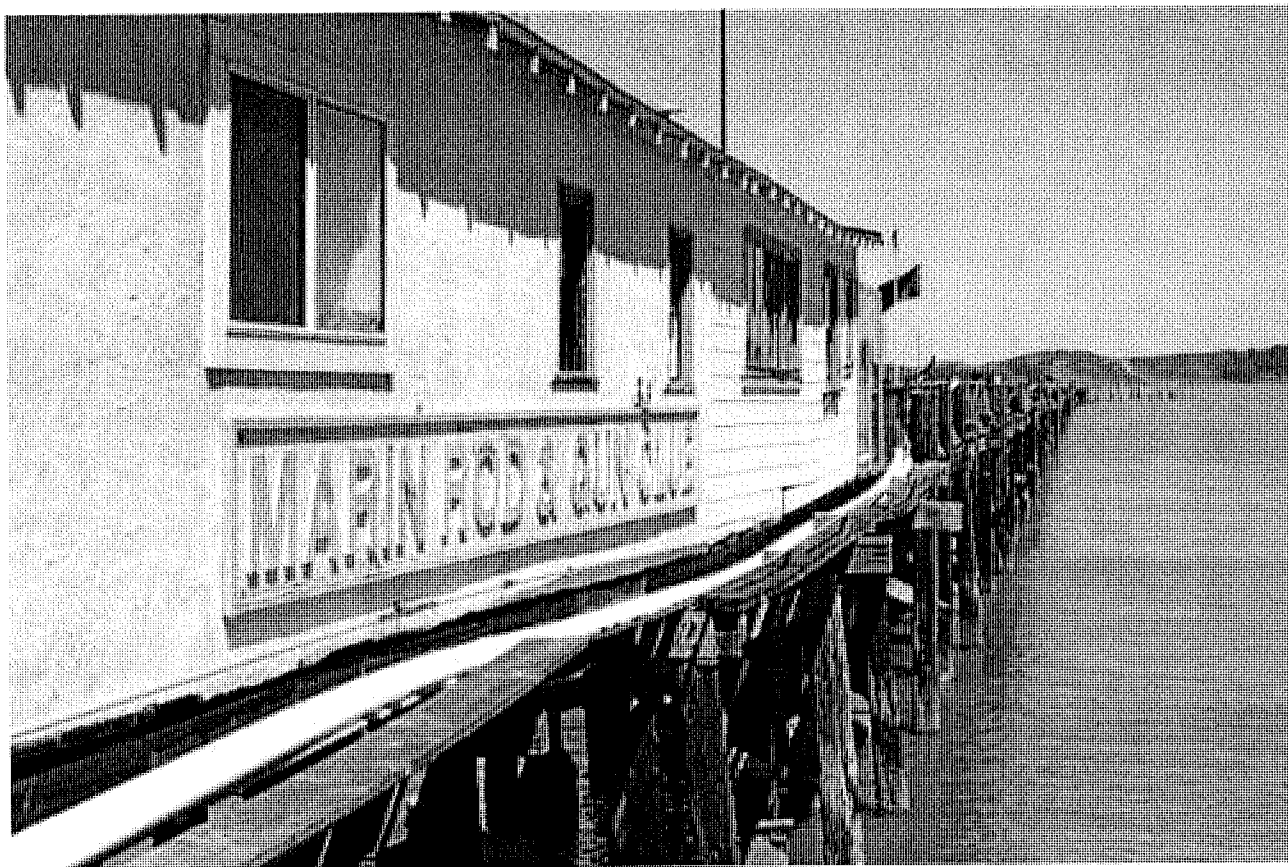
Thank you again. Together we are making a great difference!

With Sincere Appreciation,

Susan Mathews

School Fuel Executive Director

Marin IJ Editorial: Keep desalination in MMWD plan as insurance



The pier at the Marin Rod and Gun Club in San Rafael stretches a half mile out into San Francisco Bay. (IJ photo/Alan Dep) 2006

POSTED: 05/08/16, 2:40 PM PDT | UPDATED: 2 HRS AGO 3 COMMENTS

Marin Municipal Water District's new long-term water management plan says the future need for a costly desalination plant is being effectively supplanted by ratepayers' conservation.

The district, however, would be wise to retain the plant as a possible tool, especially after having spent millions to study, demonstrate and defend its now-shelved plans to build a desalination plant in San Rafael, on the edge of San Pablo Bay.

Those plans have its detractors, who forced the district to win approval of a 2010 ballot measure requiring voter approval of a desalination plant before proceeding with construction. A competing measure, that would have effectively built a political wall blocking work on planning and study of desalination, lost to the district-sponsored measure. MMWD voters recognized it would be shortsighted to foreclose a viable option in the face

of a long-term drought.

Desalination became a hot potato, and directors lost interest — politically.

The debate led MMWD directors to put the plan on the backburner, saying conservation by ratepayers had been so effective, moving forward with desalination was no longer needed.

But board members retained it as a possible option. It should be.

MMWD ratepayers' success in reducing water use, even in response to the state's drought emergency, is impressive and should continue to be a primary goal.

But residential and commercial growth, no matter how modest in our county, will continue to increase demand for water. There also is no guarantee Marin will face another 1976-level drought, which required a level of rationing that was far greater than restrictions imposed by the state emergency.

In addition, MMWD ratepayers' water supply relies on water piped to the county from Sonoma County. That conduit can be relied on as long as MMWD's longstanding contract with the Sonoma County Water Agency is extended.

Desalination has its critics. Many say it hurts the environment, is too costly and takes too much energy to run.

Last year, a plant began producing drinkable water in Carlsbad, and other communities across the state are also looking into desalination.

Thanks to the success of Marin ratepayers' water-saving ethic, there is no foreseeable need to build a desalination plant.

It would be a huge public investment.

But while fading in its role as an option, MMWD should not rule out desalination as a possibility. It may be in the district's rearview mirror as it continues to see success through conservation, but we agree with Director Jack Gibson's concerns that it would be shortsighted, at this time, to remove desalination from its 25-year plan — even as a remote possibility.

Marin's flush water districts seek easing of state conservation mandate



Marin Municipal Water District's seven reservoirs are at more than 98 percent capacity. Above, the spillway of Alpine Lake Dam dumped overflow water on Jan. 24. (Frankie Frost/Marin Independent Journal)

By Mark Prado, Marin Independent Journal

POSTED: 05/08/16, 6:21 PM PDT | UPDATED: 7 HRS AGO 3 COMMENTS

Marin residents once again met water conservation goals last month and local managers are hoping for a break later this month from the state mandates.

State orders issued last May require the Marin Municipal Water District to cut use by 20 percent and the North Marin Water District by 24 percent to battle drought. The state developed those percentages by looking at per-capita water use. The higher the water use, the more a community has to cut back.

The latest figures show that in April, Marin Municipal customers saved 22 percent compared with the same month in 2013, the baseline year the state is using to measure conservation efforts. That was the last year California was not in drought.

The district's cumulative decrease is 21 percent since June, above the state-requested goal of 20 percent for the district. The agency has 190,000 customers between Sausalito and San Rafael.

"Our customers continue to do a great job meeting the state's conservation goal for MMWD," said Libby

Pischel, water district spokeswoman.

Marin Municipal's reservoirs are at 98.35 percent of capacity as of Friday. The average storage for this time of year is 90.16 percent. Last year at this time, before conservation measures were in place, reservoirs were 90.87 percent full.

April data for the North Marin Water District's Novato service area shows a 26 percent decrease in water use compared to April 2013. Since the state order went into place, the district's customers have averaged a 32 percent savings, ahead of the 24 percent goal.

The North Marin Water District serves 60,000 customers in Novato and West Marin.

The state's water-saving rules were to remain in effect only through February. But in November Gov. Jerry Brown announced a plan to continue the conservation measures through October 2016. The state Water Resources Control Board approved that request in February.

But more rains have come since then and the state board is expected to look at easing rules.

The state Water Resources Control Board is considering making changes to the conservation levels for each community as it reviews supply conditions when it meets May 19.

The region established the Sonoma-Marín Saving Water Partnership in 2010. The group includes nine North Bay cities and water districts that use Russian River water, including the two Marin water agencies.

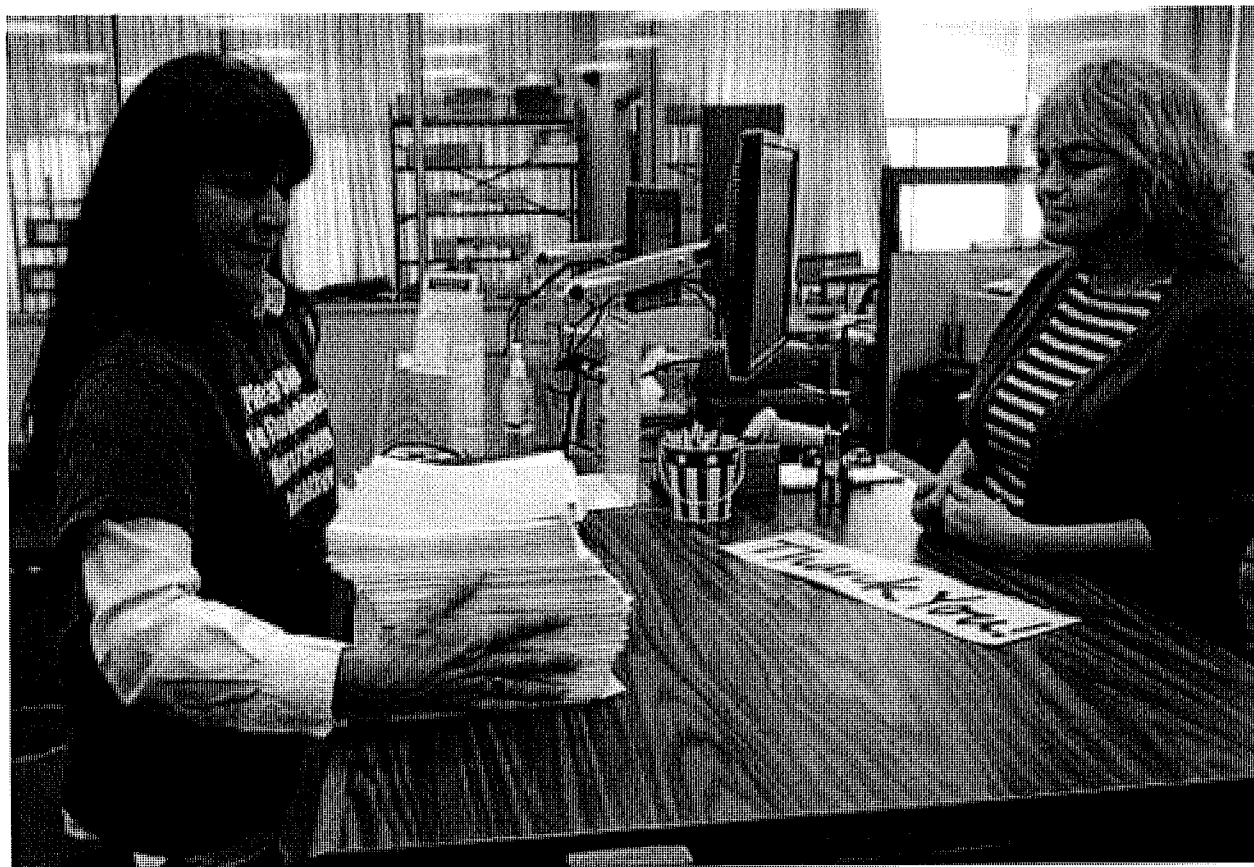
In response to drought conditions in 2013, the partnership asked people to save 20 gallons a day through a voluntary conservation program dubbed the "20 Gallon Challenge." The program offered water-saving tips and prizes — water-saving dishwashers, landscaping and toilets — to get people to participate.

Now Chris DeGabriele, general manager of North Marin, has sent a letter on behalf of the partnership to state water officials asking them to rescind conservation rules for the region.

"Drought conditions do not exist in Sonoma or Marin counties local and regional water supply," DeGabriele said. "Reservoirs are full, and normal water year conditions prevail on Lagunitas Creek and the Russian River."

Advertisement

Marin fluoride ballot measure falls short of signatures



Dawna Gallagher-Stroeh, who led a petition drive to force the Marin Municipal Water District to stop fluoridating, delivers a stack of signature forms to Maureen Hogan at the county elections office Monday. (Alan Dep/Marin Independent Journal)

By Mark Prado, Marin Independent Journal

POSTED: 05/09/16, 7:07 PM PDT | UPDATED: 6 HRS AGO 14 COMMENTS

Backers of a Marin anti-fluoridation initiative have fallen about 2,500 signatures short of getting their issue on the November ballot.

Since November, Clean Water Sonoma-Marín has sought to gather 11,000 signatures to put an item on the ballot requiring the Marin Municipal Water District to stop using fluoride in water until it could detail what's in the chemical and report that to residents. It also wanted the district to provide a report showing that it is safe to ingest.

But the deadline was Monday, and the group had mustered only 8,500 signatures.

"I feel what we did is raise awareness," said Dawna Gallagher-Stroeh,

director of Clean Water Sonoma-Marín, who led the effort as she submitted signatures to election officials at the Civic Center. "The water district's mission is to provide clean and safe drinking water. The public should have the right to know what's in the water."

The group had 180 days to gather signatures within the boundaries of the Marin Municipal district, which stretches from Sausalito to San Rafael. About 190,000 are served by the water district.

The group raised about \$35,000 for the effort and had 200 volunteers collecting signatures, but Gallagher-Stroeh said myriad other local and state measures diluted the group's effort to get the number of signatures needed to qualify.

For its part, the water district and its attorneys have said the agency is required to fluoridate.

"We are legally obligated to fluoridate our water and we have done that since 1973," said Michael Ban, the environmental and engineering services manager for the water district.

Fluoridation at Marin Municipal began in December 1973 after 57 percent of voters gave approval in November 1972. Opponents failed to block it in court and in an appeal to the state Department of Health.

It was taken up again by voters in 1978 after water to five West Marin communities was accidentally overdosed with up to eight times the accepted level of fluoride for about two weeks in late 1977. In that vote, 53 percent of voters gave approval to continue fluoridation.

In 1995, Assembly Bill 733 was passed into law. The law requires public water systems that have more than 10,000 connections to provide fluoridated water as long as they don't use ratepayer funds. The district receives about \$1 million annually in rental income and uses about \$140,000 of that for fluoridation.

The North Marin Water District, which provides water to Novato and West Marin, doesn't fluoridate its water and does not fall under the rules of AB 733.

Last year, Marin Municipal lowered the amount of fluoride it puts into the drinking supply after the federal government said some children were getting too much, causing white splotches on their teeth.

It was the first change since the government urged cities to add fluoride to water supplies to prevent tooth decay more than 50 years ago.

Since 1962, the government has recommended a range of 0.7 milligrams per liter for warmer climates where people drink more water to 1.2 milligrams in cooler areas. The new standard is 0.7 milligrams everywhere and it

Advertisement

was adopted by Marin Municipal as of May 1, 2015. Previously the district added 0.9 milligrams per liter of water.

The district said 0.9 milligrams is equivalent to one drop in 15 gallons, while the new standard is equivalent to one drop in 18 gallons.

Water board member Larry Bragman said he doesn't think fluoridation is needed anymore, noting that fluoride is put in toothpaste, mouthwash and other dental products. But he said the district is bound legally to supply it, barring the voters overturning its use.

While he doesn't believe ingesting fluoride is a health issue for the general public, he noted the district's annual water quality report will provide more details about fluoride and include a cautionary statement about using fluoridated water for infant formula.

"I will keep advocating for the reduction and elimination of fluoride," said Bragman, adding its use should be a personal choice.

Gov. Brown seeks permanent water saving measures amid pushback on state mandate



Water rushes over Cataract Falls toward Alpine Lake in late January. Marin Municipal Water District's reservoirs, which include Alpine Lake and six other basins, are at more than 98 percent capacity. (Frankie Frost/Marin Independent Journal)

By Ellen Knickmeyer, Associated Press

POSTED: 05/09/16, 7:36 PM PDT

UPDATED: 6 HRS AGO 3 COMMENTS

SAN FRANCISCO >> An executive order by Gov. Jerry Brown would make permanent some of the measures adopted to deal with the current drought, including prohibitions against excessive water use while washing cars and watering lawns, it was announced Monday.

But California water officials will also consider lifting a mandatory statewide water conservation order for cities and towns after a rainy, snowy winter eased the state's five-year drought.

Brown, who ordered the conservation in April 2015 at the worst of California's driest four-year stretch in history, made clear Monday that conservation must continue even if the statewide target is lifted.

Assemblyman Marc Levine, D-San Rafael, agreed.

“Climate change will produce more frequent, more severe, and longer droughts in California,” he said in a statement. “To prevent irreparable harm we must expand our water planning for drought and prepare for less reliable supplies of water.”

Under Brown’s order, the state’s roughly 400 water districts would be required to keep reporting their monthly water use, a requirement laid down last summer.

Water-wasting practices, such as letting lawn sprinklers send water streaming into the street or washing cars in the driveway without a shut-off nozzle on the hose, would be banned permanently.

Brown’s order also requires more intensive drought planning by both urban water districts and by farms, and directs state water officials to prepare new water restrictions in case the drought carries into 2017. Agriculture was exempted from the statewide mandatory cutback order but many rural water districts serving farms saw their water allotments cut.

Meanwhile, members of the state Water Resources Control Board — czars of the state’s drought emergency program — will decide May 18 whether to remove the 11-month-old statewide order for mandatory water use cuts. The conservation effort required at least 20 percent water conservation overall by most of the water districts serving California’s nearly 40 million people.

MARIN DISTRICTS

State orders issued last May require the Marin Municipal Water District to cut use by 20 percent and the North Marin Water District by 24 percent beginning June 1, 2015. The state developed those percentages by looking at per-capita water use. Marin’s water agencies are now asking for a break, noting water supplies are strong. Marin Municipal reservoirs were 98 percent full as of Monday.

Cities and water agencies that can prove they have enough water to get by if the wet winter proves a blip, and drought continues another three years, would be able to get out from under a mandatory conservation target. The rest would be required to save enough water to cover that longer-term drought shortfall.

“This is not a time to start using water like it’s 1999 ... this year could simply be a punctuation mark in a mega-drought,” warned Felicia Marcus, chairwoman of the state water board.

California residents had achieved a nearly 25 percent overall cut in water use, saving an amount of water that would supply 17 percent of the state’s population for a year. Water districts paid families to rip out water-thirsty lawns and tried name-and-shame techniques for celebrities and others who failed to conserve.

But the state has been under pressure from water agencies to relax conservation requirements after

snowfall and rain returned to nearly normal in some parts of the state this year.

Advertisement

‘JUST NOT ENOUGH’

The actions by the governor and state water officials “are making permanent the idea that conservation programs are not a drought-only policy,” said Peter Gleick, president of the California-based Pacific Institute think-tank on water policy. “Even without a drought emergency, we have to do a better job of monitoring and measuring and managing water. There’s just not enough of it anymore for everybody.”

Gleick said he was concerned by the state’s emphasis now on turning more conservation decisions back to local water districts, saying state water authorities would need to monitor closely to make sure local water agencies were working in the best interests of the state as a whole.

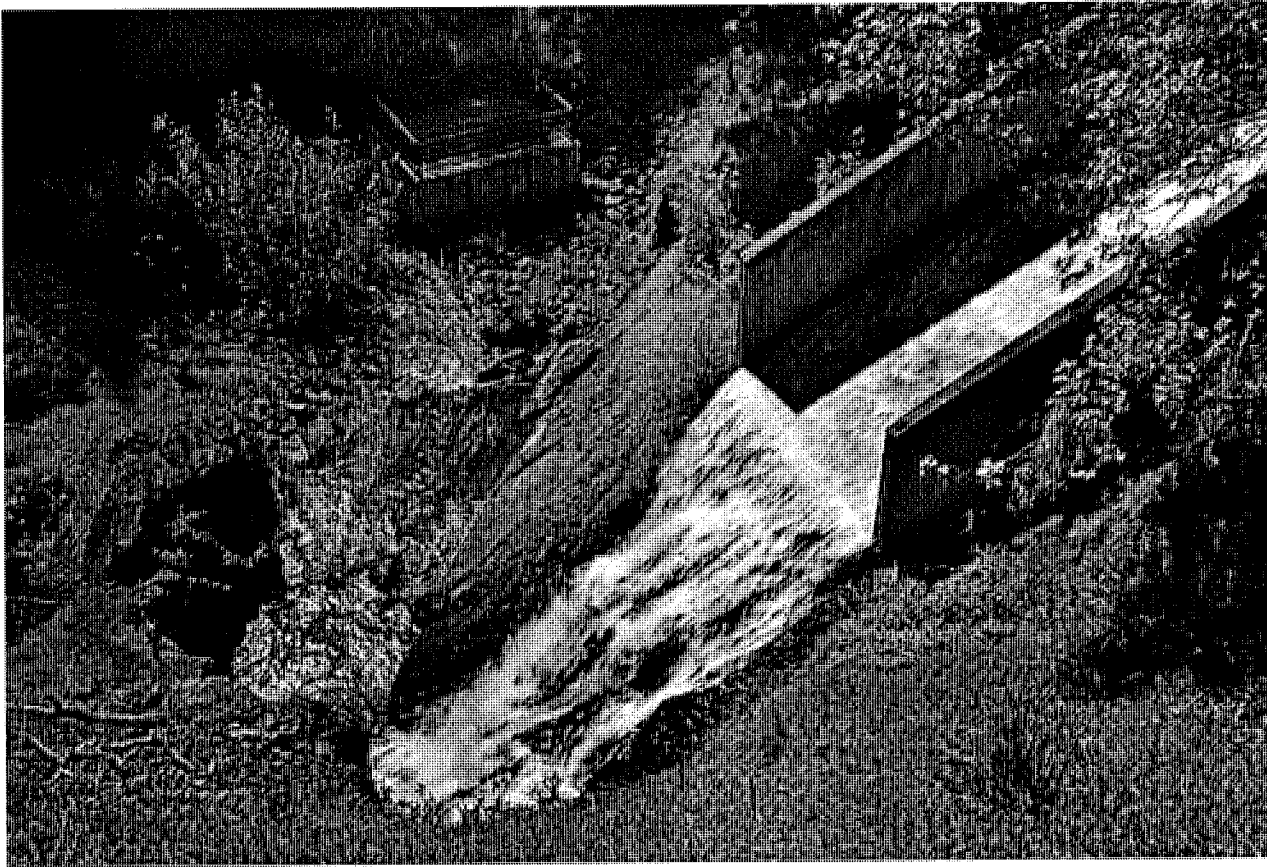
A strong El Niño brought Northern California winter storms that have filled water reservoirs in that part of the state higher than in most years, and laid down Sierra Nevada snowpack that is vital to the state’s year-round water supply.

But nearly 90 percent of California remains in moderate drought or worse. Southern California overall is heading deeper into, not out of, the fifth year of drought, the government’s U.S. Drought Monitor said last week.

“We got a reprieve” thanks to El Niño, Marcus, the water board chairwoman, said Monday. With climate change already making California hotter and drier long-term, “We need to use this moment wisely to prepare for the years ahead.”

IJ reporter Mark Prado contributed to this report.

Marin IJ Editorial: Water ruling should be based on reality



Phoenix Lake is full again as water runs down the spillway into Ross Creek on Friday, March 18, 2016, in Ross, Calif. (Robert Tong/Marin Independent Journal)

POSTED: 05/09/16, 1:42 PM PDT | UPDATED: 13 HRS AGO 1 COMMENT

Compared with the rest of the state, Marin has been a fortunate slice of drought-parched California.

Our reservoirs have been spilling and the storage at Lake Sonoma, a vital water source for both the Marin Municipal and North Marin water districts, has been healthy, thanks to winter rains and conservation.

While voluntary conservation has been effective for years, a statewide emergency made it mandatory, resulting in an order that MMWD customers limit their water use by 20 percent and North Marin by 24 percent.

Residential and business customers in both districts exceeded the state orders.

It is likely that a single wet winter, after an historic drought, will not bring an end to the state's water restrictions. State officials, however, should be open to lowering the restrictions to better reflect the local water supply.

When the state Water Resources Control Board meets on May 19, it plans to consider making changes to the conservation levels to better reflect local water supplies.

That doesn't mean it should lift reasonable conservation measures.

Having a statewide focus on conserving water is important and certainly helps in the success toward meeting mandates. But when there is no local sign of a drought — such as a dried-up reservoir and struggling creeks — it makes those restrictions seem more arbitrary.

Combine that with water rate hikes approved to fill the budget holes created by 20-percent cuts in water use and you have ratepayers grumbling, not surprisingly, about being punished for their success in conserving water.

Those rates don't seem to come down after water supplies return to normal.

Rescinding or relaxing state water restrictions in Marin is not going to end our community's long-standing focus on conservation and especially discouraging water waste.

North Marin's general manager, Chris DeGabriele, has been preaching conservation for decades — and he's been effective.

In fact, conservation is one of the reasons local and North Bay supplies are in such good shape. That ethic is embedded in consumers' rates and practices.

DeGabriele, in a letter to the state board, said, "Drought conditions do not exist in Marin or Sonoma counties' local and regional water supply."

He makes a good case for basing the state's decisions on local reality.

Advertisement

MALT nabs Gallagher land

By Samantha Kimmey
05/05/2016

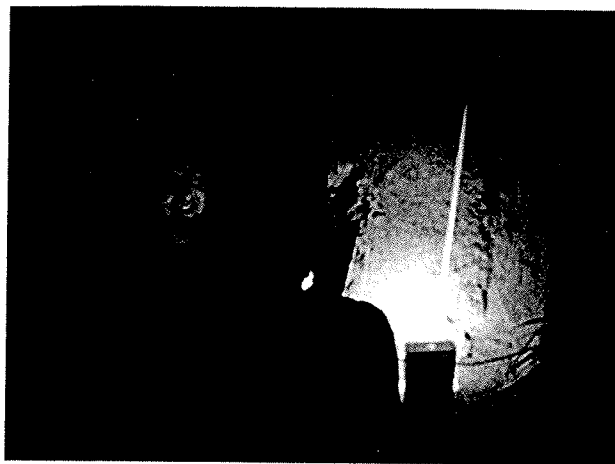
The Marin Agricultural Land Trust closed on a \$1.5 million agricultural easement on the Gallagher Ranch, which borders Black Mountain and federal parkland and includes pastureland and forest traversed by Lagunitas Creek. The five co-owners of the 330-acre ranch, which has been in the family since the 1800s, put the property on the market in years past because some of the cousins did not want to keep investing in the upkeep. They had interest from buyers who weren't interested in ongoing agriculture, but with the money from the easement, brothers Kevin and Paul can buy out their cousins, keep the property in the family and continue grazing cattle. Paul noted in a press statement that the cousins could have made more by selling the property. "They could have easily just said no [to the easement]. Our cousins helped us out, and were thankful for them." The Giacomini family leases about half of the ranch to graze dairy cattle, and MALT says the brothers want to lease 18 acres for organic row cropping. According to MALT, the new easement is one of the first to be funded in part by a new state program called the Sustainable Agricultural Land Conservation Program, which provided \$490,050 for the project. California State Coastal Conservancy granted \$475,000 and the county provided \$519,950 through its Farmland Preservation Program, covering the remainder of the easement's cost.

Laser Reveals Movement of Water Through Soil

Soil scientist Daniel Hirmas, a professor at University of Kansas (Lawrence), and his team are studying soil hydrology with the possibility of improving management of water resources in agriculture. Hirmas has been researching the ease of water movement, or hydraulic conductivity, through soil. This happens in larger empty spaces, or macropores, that help move water through the soil.

Soil pore size is important to conductivity; a soil pore that is twice as large as another will conduct 16 times the volume of water compared with the smaller pore in the same amount of time. This movement is called preferential flow.

Hirmas has been using a multistriple laser triangulation (MLT) scanner to conduct his research. The MLT scanner was originally developed for engineering purposes, and Hirmas adapted its use to study soil pores and preferential flow. To determine whether the MLT scanner could be used to predict preferential flow, Hirmas designed a study. The research group took saturated soil and allowed blue dye to flow through the sample. An easily identifiable visible pattern developed. The areas of the soil that turned blue showed larger pores. These pores allowed the dyed water to pass through—a preferential flow pattern. When the same soil sample was scanned using MLT, the pattern from the laser significantly matched that of the dye



Daniel Hirmas uses a multistriple laser triangulation scanner at night in a soil pit to determine the soil's hydraulic conductivity. Photograph provided by D. Hirmas.

pattern. Using math to account for the difference between the two states of the soil, Hirmas was able to make predictions about water movement.

Hirmas' work was recently published in *Vadose Zone Journal*. The research is the product of teams from University of Kansas and Rutgers University (New Brunswick, N.J.).

Survey Shows Californians' Support for Recycled Water

According to a statewide survey conducted by Xylem, California residents are overwhelmingly in support of using treated wastewater, or recycled water, in their everyday lives. The survey polled 3,000 randomly selected California voters and found that 76% of respondents believe recycled water should be used as a long-term solution for managing water resources, regardless of whether a water shortage continues.

The survey defined recycled water as former wastewater that has been treated and purified so that it can be reused for drinking purposes. Nearly half (49%) of respondents are very supportive of using recycled water as an additional local water supply and another 38% are somewhat supportive. Of survey respondents, 42% are very willing to use recycled water in their everyday lives and an additional 41% are somewhat willing. These findings confirm that a significant number of Californians support the use of recycled water.

According to the findings, 89% of residents are more willing to use recycled water after reading an educational statement explaining the treatment processes that recycled wastewater undergoes to become safe and drinkable again. Further, 88% agree that seeing a demonstration of the water purification process would make them more comfortable using and drinking recycled water. These findings suggest that education is a key component in gaining even stronger support for recycled water across the state.

Californians do not view the use of recycled water as a short-term fix to the state's five-year drought. Eighty-eight percent of California residents agree that even if El Niño brings increased rainfall to California, the state should continue to invest in the use of recycled water for drinking purposes. In fact, if El Niño brings the expected rainfall to California, only 12% of respondents say it would cause them to be less concerned about saving water.