



**NORTH MARIN WATER DISTRICT**  
**AGENDA**  
**REGULAR MEETING**  
 May 1, 2018 – 6:00 p.m.  
 District Headquarters  
 999 Rush Creek Place  
 Novato, California

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

Est. Time	Item	Subject
6:00 p.m.	<b>CALL TO ORDER</b>	
	1.	<b>APPROVE MINUTES FROM REGULAR MEETING</b> , April 17, 2018
	2.	<b>GENERAL MANAGER'S REPORT</b>
	3.	<b>OPEN TIME: (Please observe a three-minute time limit)</b>
		This section of the agenda is provided so that the public may express comments on any issues not listed on the agenda that are of interest to the public and within the jurisdiction of the North Marin Water District. When comments are made about matters not on the agenda, Board members can ask questions for clarification, respond to statements or questions from members of the public, refer a matter to staff, or direct staff to place a matter of business on a future agenda. The public may also express comments on agenda items at the time of Board consideration.
	4.	<b>QUARTERLY FINANCIAL STATEMENT</b> – March 31, 2018
	5.	<b>STAFF/DIRECTORS REPORTS</b>
	<b>CONSENT CALENDAR</b>	
	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.	
		<b>Consent - Approve Water Agreement</b>
		<u>Type</u> <u>DU</u> <u>EU</u>
	6.	<b>Consent – Approve:</b> 5300 Redwood Hwy      SFD      0      0      Resolution
	7.	<b>Consent – Approve:</b> College of Marin (IVC) Building No. 11 Fire Service      GVT      0      0      Resolution
	8.	<b>Consent – Approve:</b> Miller Pacific Engineering Group – Consulting Services Agreement
	9.	<b>Consent – Approve:</b> Rate Increase Letter to West Marin Water and Oceana Marin Sewer Customers
	10.	<b>Consent – Approve:</b> Authorized Signatories on District Accounts      Resolution
	11.	<b>Consent – Approve:</b> Auditor-Controller Appointment
	<b>ACTION CALENDAR</b>	
	12.	<b>Approve:</b> Resolution of Appreciation for Kerry Lemos      Resolution

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	
	13.	<b>Approve:</b> Resolution of Appreciation for David Bentley	Resolution
	14.	<b>Approve:</b> PRE Tank 4A Replacement Project – Request for Authorization to Conduct CEQA Public Review	
	15.	<b>Approve:</b> Revision of Board Policy 45 – Financial Reserves	
	16.	<b>Approve:</b> AMI Opt-Out Policy	
	17.	<b>Approve:</b> Exception to CalPERS 180-Day Wait Period Requirement for Retiring Employee	
		<b>INFORMATION ITEMS</b>	
	18.	Draft 2018 Strategic Plan Presentation By Rauch Communications	
	19.	Quarterly Progress Report – Water Conservation (July-March 2017/2018)	
	20.	FY 17-18 Third Quarter Progress Report – Engineering Department	
	21.	Initial Review – FY 2017/18 Proposed Novato Operations Budget	
	22.	Initial Review – FY 2018/19 Novato Recycled Water System Budget	
	23.	<b>MISCELLANEOUS</b>	
		Disbursements - Dated April 19, 2018	
		Disbursements - Dated April 26, 2018	
		Proof of Publication, Notice of Salinity Intrusion 4/17/2018	
		Press Release – NMWD Water Quality Supervisor Recognized for Outstanding Service	
		<u>News Articles:</u>	
		Forums set on plans for housing	
		Hayward fault big threat to Marin	
		Crucial talks set for housing in West Marin	
		Scientists predict greater frequency of severe weather	
		New call for fusion of sewer agencies	
		North Bay Water Reuse Authority to Host Public Meetings to Review Phase 2 Recycled Water Projects	
8:00 p.m.	24.	<b>ADJOURNMENT</b>	

1

**DRAFT**  
**NORTH MARIN WATER DISTRICT**  
**MINUTES OF REGULAR MEETING**  
**OF THE BOARD OF DIRECTORS**  
April 17, 2018

**CALL TO ORDER**

President Fraites called the regular meeting of the Board of Directors of North Marin Water District to order at 6:00 p.m. at the District Headquarters and the agenda was accepted as presented. Present were Directors Rick Fraites, Michael Joly, James Grossi, and Stephen Petterle. Also present were General Manager Drew McIntyre, District Secretary Terrie Kehoe, Auditor-Controller David Bentley and Chief Engineer Rocky Vogler.

District employees, Robert Clark (Maintenance/Operations Superintendent), Tony Arendell (Construction/Maintenance Superintendent), and Julie Blue were also in attendance. Paul Smedshammer from Core Utilities also in the audience.

**MINUTES**

On motion of Director Joly, seconded by Director Grossi the Board approved the minutes from the April 3, 2018 meeting as presented by the following vote:

AYES: Director Fraites, Grossi and Joly

NOES: None

ABSENT: Director Baker

ABSTAIN: Director Petterle

Director Baker arrived at 6:03 p.m.

**GENERAL MANAGER'S REPORT**

During the General Manager's report, Mr. McIntyre talked about the recent manager's meeting on April 5<sup>th</sup> with City of Novato, Novato Sanitary District and Novato Fire Protection District. Also mentioned was the meeting with Marin County and other local potential participants regarding the proposed NorthBay WATER organization on April 9<sup>th</sup> and their upcoming workshop on April 23<sup>rd</sup>. Today, Mr. McIntyre attended the Sonoma County Water Agency Board meeting where he spoke in favor of the FY19 Water Transmission System budget. In addition, Mr. McIntyre announced that we have a new Receptionist/Cashier, Monica Juarez due to the vacancy created when Lia Solar was promoted to the Engineering Services Representative position. Mr. McIntyre discussed the recent Ethics training and reminded the Board that direct communication between a majority of the Board,



1 either serially or all together on any water district matter should be avoided outside of Board  
2 meetings whether in person, by phone or by email.

3 **OPEN TIME**

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

6 **STAFF/DIRECTORS REPORTS**

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

9 Mr. Vogler provided an update on the Ridge Road Waterline Replacement Project and  
10 answered a question from Director Baker regarding the project work limits.

11 **MONTHLY PROGRSS REPORT**

12 The Monthly Progress Report was reviewed for March. Water Production is up 18%  
13 compared to a year ago in March. For the period from June through March water production is up  
14 9% compared to this same period last year. At the end of March, Stafford Lake is at 62% capacity  
15 and Novato has received 16.1 inches of rainfall, well below the average of 24.5 inches. On the  
16 Russian River, Lake Mendocino holds over 71,000AF and Lake Sonoma nearly 220,000AF. Mr.  
17 Bentley reviewed the Auditor-Controller's Monthly Report of Investments, which shows that the  
18 District has over \$17M invested earning a rate of return of 1.4%.

19 **ACTION CALENDAR**

20 **SONOMA-MARIN SAVING WATER PARTNERSHIP FIRST AMENDED MOU**

21 Mr. McIntyre explained the primary changes in the Sonoma-Marín Saving Water Partnership  
22 First Amended MOU which includes: replacement of the reference to the California Urban Water  
23 Conservation Council (CUWCC) with its new name, the California Water Efficiency Partnership  
24 (CalWEP); yearly water conservation funding requirements now based on total potable water  
25 production; streamlining the process for adding new signatories, and lastly establishing the effective  
26 date as the date that six signatories have executed the MOU.

27 On the motion of Director Petterle, and seconded by Director Baker, the Board approved the  
28 Sonoma-Marín Saving Water Partnership First Amended MOU:

29 AYES: Director Baker, Fraites, Grossi, Joly and Petterle

30 NOES: None

31 ABSENT: None

32 ABSTAIN: None

1 **INCREASE CORE UTILITES MONTHLY SUPPORT PAYMENT**

2 Mr. Bentley discussed the role Core Utilities plays as support to North Marin Water's day- to -  
3 day operations which includes IT infrastructure (servers, workstations, internet access, firewall,  
4 switches, hubs, virus protection email, backup and phone system), in addition to SCADA support  
5 and treatment plant process controls. Paul Smedshammer provided an overview of his history with  
6 the District and summarized CORE Utilities services and a general discussion ensued.

7 On the motion of Director Baker, and seconded by Director Joly, the Board approved a  
8 \$1,000 increase Core Utilities monthly support payment by the following vote:

9 AYES: Director Baker, Fraites, Grossi, Joly and Petterle

10 NOES: None

11 ABSENT: None

12 ABSTAIN: None

13 **OCEANA MARIN SEWER SYSTEM FINACIAL PLAN UPDATE**

14 Mr. Bentley explained how the financial plan; along with a proposed 5% rate increase will  
15 help keep the Oceana Marin System solvent through FY23.

16 On the motion of Director Petterle, and seconded by Director Baker, the Board approved the  
17 Oceana Marin Sewer System Financial Plan Update by the following vote:

18 AYES: Director Baker, Fraites, Grossi, Joly and Petterle

19 NOES: None

20 ABSENT: None

21 ABSTAIN: None

22 **WEST MARIN WATER SYSTEM FINANCIAL PLAN UPDATE**

23 Mr. Bentley provided an update of the West Marin Water System Financial Plan and  
24 proposed a 4.5% water rate and bimonthly service charge to help pay for upcoming capital  
25 improvement projects in West Marin. Director Baker commented that the District has been making  
26 significant infrastructure upgrades in West Marin to the credit of past Director Dennis Rodoni. He  
27 also suggested that Julie Blue be provided an opportunity to visit the District's West Marin facilities  
28 including Oceana Marin.

29 On the motion of Director Petterle, and seconded by Director Baker, the Board approved the  
30 West Marin Water System Financial Plan Update by the following vote:

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

NOES: None

ABSENT: None

ABSTAIN: None

#### **INFORMATION ITEMS**

##### **AMI UPDATE**

Mr. Clark provided an update of the Advanced Meter Infrastructure (AMI) project. Over the first month of the project Ferguson staff has converted just over 800 services to the new AMI system, and to date 4% of the project is fully complete. The project is expected to run through November 2018 with 19,946 service conversions. There was a general discussion about the project and pending Opt-Out policy. Mr. Bentley reported that a revised Opt-Out policy will return to the Board at the next meeting for consideration.

##### **INITIAL REVIEW-FY19 & FY20 CAPITAL IMPROVEMENT PROJECT BUDGET**

Ms. Blue discussed the initial review of the FY 19 & FY20 Capital Improvement Budget. A two year plan was presented, which included projects recommended for Novato Water, Recycled Water, West Marin Water and Oceana Marin Sewer enterprises. In addition, a debt service schedule was included detailing the principal and interest payment amounts required to fund prior and current CIPs. Additional review of the CIP budgets for Novato Water and Recycled Water is scheduled for May 15 and additional review of the West Marin Water and Oceana Marin Sewer CIP budgets is scheduled for June 5. Director Joly asked that more information be provided in the future on the District's total indebtedness as it relates to the proposed expenditures.

##### **INITIAL REVIEW- PROPOSED BY FY 18/19 EQUIPMENT BUDGET**

Ms. Blue provided an initial review of the proposed FY 18/19 Equipment Budget including a chart showing ten years of equipment purchases and a 5-Year Vehicle and Replacement Plan. Director Petterle commented that he recently observed one of the District's trucks with paint peeling off the tailgate. Robert Clark reported that this vehicle will be going to auction soon.

##### **2018 WATER YEAR CONDITIONS UPDATE**

Mr. McIntyre presented the 2018 Water Year Conditions Update noting good news in the current rainfall totals. The Kent Lake gauge on Lagunitas Creek was 31.6 inches which is 3.6 inches above the minimum "normal" year threshold of 28.0 inches thereby preventing a need to call for mandatory water conservation in the West Marin water system. On the Russian River, Sonoma

1 County Water Agency declared dry year conditions as of March 1, however with the current rainfall  
2 events, there is a good chance that water supply conditions on the Russian River will return to  
3 Normal on May 1.

4 **NBWA-CONFERENCE RECAP-APRIL 1, 2018**

5 Director Fraites reported that there was a discussion on global warming, which will cause the  
6 bay to continue to rise causing many negative consequences. Director Fraites stated the Sonoma  
7 County Water Agency General Manager, Grant Davis, provided a presentation on future flooding  
8 and Congressman Huffman spoke about how things are going in Washington D.C. Director Baker also  
9 attended the meeting and commented on the Army Corp of Engineers presentation well as the panel  
10 of guest speakers from Napa County and the Sonoma Resources Conservation District regarding  
11 lessons learned from the October 2017 fires. Mr. McIntyre, also in attendance at the conference,  
12 reported that SWRCB Vice Chair, Steve Moore, talked on water issues and stated that the State  
13 Water Board is focusing on rewarding water projects that provide regional solutions.

14 **MISCELLANEOUS**

15 The Board received the following miscellaneous items: Disbursements-Dated April 5<sup>th</sup> and  
16 April 12<sup>th</sup>, Self-Insured Workers' Comp – 3<sup>rd</sup> Quarter Status Report, Notice of Proposed Rate  
17 Increase Letter- Novato Service Area, Public Outreach Plan for 2018 and FY 18 3<sup>rd</sup> Quarter Labor  
18 Cost Report. Mr. McIntyre asked the Board for any input related to the proposed Outreach Plan  
19 prepared by Water Conservation Coordinator, Ryan Grisso.

20 The Board also received the following news articles: Effort to ventilate budgets advances,  
21 Development plans in flux at Novato site, Sonoma County launches first test of 'groundwater  
22 banking' to bolster supplies, Marin school fountain closed amid lead contamination tests, and Alex  
23 Petterle Obituary.

24 **ADJOURNMENT**

25 President Fraites adjourned the meeting at 7:22 p.m.

26 Submitted by

27  
28  
29  
30 Theresa Kehoe  
31 District Secretary  
32

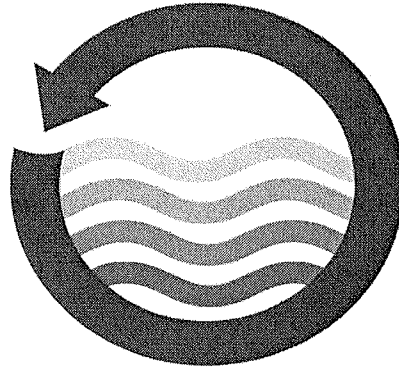
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**4**

# **NORTH MARIN WATER DISTRICT**



## **FINANCIAL STATEMENT FISCAL YEAR 2017-18**

**March 31, 2018**

**NORTH MARIN WATER DISTRICT  
FINANCIAL STATEMENTS  
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# MEMORANDUM

To: Board of Directors, Drew McIntyre  
 From: David L. Bentley, Auditor-Controller  
 Subj: Information – FY17/18 March Financial Statement  
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May 1, 2018

## FISCAL YEAR PERFORMANCE COMPARED TO THE ANNUAL BUDGET

### CONSOLIDATED SUMMARY

<b>Actual vs. Budget</b>	<b>Mar-18 Actual</b>	<b>FY17/18 Actual YTD</b>	<b>FY17/18 Budget</b>	<b>FYTD / Budget %</b>
Operating Revenue	\$1,306,197	\$15,990,001	\$19,692,000	81%
Operating Expense	1,394,718	13,899,799	19,150,000	73%
Non-Operating Revenue / (Expense)	(119,510)	(282,889)	(345,000)	82%
Net Income / (Loss)	(\$208,031)	\$1,807,313	\$197,000	917%
Other Sources / (Uses)*	3,075,229	5,802,039	(833,000)	-
Cash Increase / (Decrease)	\$2,867,198	\$7,609,351	(\$636,000)	-

\* See Page 8.

For the first nine months of the fiscal year the District generated a net income of \$1,807,313 and saw a net cash increase of \$7,609,351. On a seasonally adjusted basis, Operating Revenue came in 11% over budget and Operating Expense came in 2% under budget. \$6,748,009 (38%) of the Capital Improvement Projects Budget has been expended this fiscal year-to-date. At March 31, 2018, \$2,872,259 in loan and grant funds was owed the District for the Recycled Water Distribution System expansion to Central Novato. In March the District's cash balance increased \$2,867,198 due primarily to receipt of \$4.6M in loan funds for the AMI Project. At month end the ratio of total cash to budgeted annual operating expense (sans depreciation) stood at 114%.

## SUMMARY INCOME STATEMENTS BY SERVICE AREA PRESENTED IN ACCORDANCE WITH GENERALLY ACCEPTED ACCOUNTING PRINCIPALS

### NOVATO WATER

<b>Year over Year Comparison</b>	<b>Mar-18 Actual</b>	<b>FY17/18 Actual YTD</b>	<b>FY16/17 Actual YTD</b>	<b>FY18 vs 17 Up/(Down)</b>
Operating Revenue	\$1,222,193	\$14,573,809	\$12,220,960	19%
Operating Expense	1,270,459	12,630,983	12,405,037	2%
Other Income / (Expense)	(114,507)	(223,063)	(165,378)	35%
Net Income / (Loss)	(\$162,773)	\$1,719,762	(\$349,455)	-
Active Accounts	20,556	20,556	20,541	0%
Consumption (MG)	154	1,894	1,663	14%
Average Commodity Rate / 1,000 gal (net)	\$5.40	\$5.84	\$5.35	9%
Income / (Loss) / Active Account	(\$7.92)	\$83.66	(\$17.01)	-
Income / (Loss) / 1,000 Gal	(\$1.06)	\$0.91	(\$0.21)	-
Connection Fee Revenue	\$0	\$737,800	\$201,185	267%
FRC Transfer (to)/from Recycled Water	(\$62,684)	(\$5,582,035)	\$0	0%
Caltrans Capital Contribution	\$854	\$1,193	\$16,756	(93%)
MMWD AEEP Capital Contribution	\$0	\$245,000	\$245,000	0%
Developer 'In-Kind' Contributions	\$9,839	\$151,114	\$490,001	(69%)

Consumption for the fiscal year-to-date was 14% more than the prior year same period. Total operating revenue, which includes wheeling and other miscellaneous service charges, increased 19% (\$2,352,849) from the prior year same period due to the consumption increase and the 5% rate increase effective June 1, 2017. Total operating expense was 2% (\$225,946) more than last year same

period. The Stafford Treatment Plant produced 473 MG this fiscal year-to-date at a cost of \$3,643/MG<sup>1</sup> versus \$2,720/MG<sup>3</sup> from SCWA. The budget for Stafford is 750 MG at a cost of \$2,944/MG.

Staff time (hours) charged to Novato operations was 2% less than last year same period. Salary and benefit cost was \$4,786,287, which was 73% of the \$6,572,000 budget for Novato operations.

The fiscal year-to-date net income (which includes non-operating items such as interest revenue and expense) of \$1,719,762 compares to a budgeted net income for the year of \$213,000 and to a net income of \$349,455 for the prior year same period. \$3,121,438 (30%) of the Novato Water Capital Improvement Project Budget was spent versus \$979,392 (12%) for the prior year same period. \$737,800 in connection fees have been collected (\$780,000 is budgeted). Connection Fee reserves totaling \$5,582,035 were transferred this fiscal year-to-date to the Recycled Water Fund to cover the debt service and working capital requirements for expansion of the RW distribution system. The Novato Connection Fee Reserve has a net deficit of \$11,940,894 arising from transfers to the RW Fund in advance of Connection Fee receipts. That deficit will be reimbursed by future Connection Fee revenue and future recycled water loan and grant fund receipts. The Novato cash balance increased \$2,806,989 in March, due primarily to the receipt of \$4.6M in AMI Loan Funds, and stood at \$11,601,830 at month end, compared to a budgeted projection of \$7,000,000 at fiscal year-end.

<b>NOVATO RECYCLED</b>	<b>Mar-18</b>	<b>FY17/18</b>	<b>FY16/17</b>	<b>FY18 vs 17</b>
<b>Year over Year Comparison</b>	<b>Actual</b>	<b>Actual YTD</b>	<b>Actual YTD</b>	<b>Up/(Down)</b>
Operating Revenue	\$5,799	\$592,893	\$481,604	23%
Operating Expense	52,385	581,523	593,658	(2%)
Other Income / (Expense)	(8,663)	(126,814)	(158,633)	(20%)
Net Income / (Loss)	<u>(\$55,249)</u>	<u>(\$115,445)</u>	<u>(\$270,687)</u>	(57%)
Active Accounts	53	53	45	18%
Consumption (MG)	3.3	104.1	86.6	20%
Average Commodity Rate / 1,000 gal (net)	\$5.52	\$5.52	\$5.26	5%
Deer Island Production (MG)	0.0	7.0	6.2	13%
Novato Sanitary Production (MG)	0.6	64.2	51.4	25%
Las Gallinas Production (MG)	1.10	36.0	29.8	21%

104.1 MG was delivered to RW customers this fiscal year-to-date, 20% more than the prior year same period. Operating revenue was 23% more than last year same period due to the June 1, 2017 5% rate increase and the consumption increase. Total operating expense was \$12,135 (2%) less than the prior year same period. The recycled water was produced at a cost of \$2,362/MG<sup>2</sup> versus \$2,720/MG<sup>3</sup> from SCWA. The budgeted production cost of recycled water is \$2,725/MG.

The fiscal year-to-date net loss of \$115,445 compares to a budgeted net loss for the year of \$209,000 and a net loss of \$270,687 for the prior year same period. Some \$3,437,111 (53%) of the Capital Improvement Project Budget has been expended this fiscal year-to-date. Between February and March, \$1.69M in Recycled Water Central Area Expansion Grant Funds were received and used to reimburse the Novato Potable Water Fund for connection fees advanced to provide cash flow for the expansion project. The Novato Recycled cash balance stood at \$4,215,958 at month end, \$3.4M of which amount resides in restricted reserves for debt service, the Deer Island Facility Replacement Fund and the Recycled Water Capital Replacement and Expansion Fund.

<sup>1</sup> Stafford production cost = TP op expense (\$1,108,633) + SRF loan interest (\$192,183) + plant depreciation (\$420,829) / 473 MG produced

<sup>2</sup> Recycled Water production cost = purchase water cost (\$108,102) + treatment expense (\$14,775) + Deer Island RW Facility SRF loan interest (\$43,382) + Deer Island plant depreciation (\$86,939) / 107.2 MG produced

<sup>3</sup> SCWA production cost per MG = O&M charge (\$2,202) + debt service charge (\$154) + Russian River conservation charge (\$325) + Russian River projects charge (\$40)

# **WEST MARIN WATER**

## **Year over Year Comparison**

	<b>Mar-18 Actual</b>	<b>FY17/18 Actual YTD</b>	<b>FY16/17 Actual YTD</b>	<b>FY18 vs 17 Up/(Down)</b>
Operating Revenue	\$58,340	\$644,083	\$537,750	20%
Operating Expense	53,580	535,042	496,310	8%
Other Income / (Expense)	(1,770)	27,921	20,631	35%
Net Income / (Loss)	<u>\$2,990</u>	<u>\$136,962</u>	<u>\$62,071</u>	121%
Active Accounts	781	781	781	0%
Consumption (MG)	4.5	49.7	44.1	13%
Average Commodity Rate / 1,000 gal (net)	\$9.62	\$10.18	\$9.22	10%
Income/ (Loss) / Active Account	\$3.83	\$175.37	\$79.48	121%
Income / (Loss) / 1,000 Gal	\$0.66	\$2.75	\$1.41	95%
Connection Fee Revenue	\$0	\$45,600	\$8,000	470%

Consumption for the fiscal year-to-date was 49.7 MG, 13% more than prior year same period. Operating revenue of \$644,083 was \$106,333 (20%) more than last year due to consumption increase and the 5% rate increase effective July 1, 2017.

Operating expenditures were \$535,042, 8% more than the previous year same period. The expenditure increase is due in part to the unanticipated \$11,175 rehab cost of the Gallagher Well. The fiscal year-to-date net income of \$136,962 compares to a budgeted annual net income of \$138,000 and to a net income of \$62,071 for the prior year same period. \$136,454 (20%) of the Capital Improvement Project Budget was expended this fiscal year-to-date, and \$45,600 in connection fees were collected (\$23,000 is budgeted). The West Marin Water cash balance increased \$15,545 in March, and stood at \$1,477,263 at month end, compared to a budgeted projection of \$942,000 at June 30, 2018.

# **OCEANA MARIN SEWER**

## **Year over Year Comparison**

	<b>Mar-18 Actual</b>	<b>FY17/18 Actual YTD</b>	<b>FY16/17 Actual YTD</b>	<b>FY18 vs 17 Up/(Down)</b>
Operating Revenue	\$19,866	\$179,216	\$162,536	10%
Operating Expense	18,294	152,250	173,924	(12%)
Other Income / (Expense)	5,430	39,067	36,133	8%
Net Income / (Loss)	<u>\$7,002</u>	<u>\$66,033</u>	<u>\$24,745</u>	167%
Active Accounts	232	232	231	0%
Monthly Sewer Service Charge	\$86	\$86	\$78	10%
Income / (Loss) / Active Account	\$30.18	\$284.62	\$107.12	-

Operating revenue of \$179,216 was 10% more than the previous year same period due to the 10% rate increase effective July 1, 2017 and one additional account. Operating expenditures were 12% (\$21,674) less than the previous year same period. The fiscal year-to-date net income of \$66,033 compares to a budgeted annual income of \$49,000 and to a net income of \$24,745 for the prior year same period. 25% of the Capital Improvement Project Budget has been expended this fiscal year-to-date.

No connection fees have been collected (\$30,000 is budgeted). The Oceana Marin cash balance decreased \$18,021 in March and stood at \$409,152 at month end, compared to a budgeted projection of \$342,000 at June 30, 2018.



**NORTH MARIN WATER DISTRICT  
STATEMENT OF NET POSITION  
FOR THE PERIOD ENDING MARCH 31, 2018**

	TOTAL	NOVATO WATER	NOVATO RECYCLED	WEST MARIN WATER	OCEANA MARIN SEWER
<b>ASSETS</b>					
<b>Cash &amp; Investments</b>					
Unrestricted/Undesignated Cash	\$1,385,584	\$0	\$626,633	\$421,817	\$337,135
<b>Restricted Cash</b> (Note 1)					
Connection Fee Fund	\$96,560	\$0	\$0	\$96,560	\$0
Wohler Pipeline Financing Fund	410,531	410,531	0	0	0
Collector #6 Financing Fund	1,620,592	1,620,592	0	0	0
Revenue Bond Redemption Fund	30,000	0	0	30,000	0
Bank of Marin Project Fund	633,594	35,791	0	597,803	0
AMI Project Loan Fund	4,461,662	4,461,662	0	0	0
Deer Island RWF Replacement Fund	1,322,394	0	1,322,394	0	0
Capital Replacement & Expansion Fund	1,198,480	0	1,198,480	0	0
Tax Receipts Held in Marin Co Treasury	536	0	0	528	8
STP SRF Reserve-Marin Co Treasury	900,215	900,215	0	0	0
RWS North/South SRF Reserve Fund	614,299	0	614,299	0	0
RW Central Area SRF Reserve Fund	255,373		255,373	0	0
<b>Designated Cash</b> (Note 2)					
Liability Contingency Fund	98,885	0	0	98,885	0
Self-Insured Workers' Compensation Fund	187,233	152,918	9,463	18,514	6,338
Retiree Medical Benefits Fund	4,061,581	4,061,581	0	0	0
Maintenance Accrual Fund	0	0	0	0	0
Conservation Incentive Rate Fund	42,711	0	0	42,711	0
Operating Reserve Fund	429,317	0	189,317	174,000	66,000
<b>Total Cash</b>	<b>\$17,749,547</b>	<b>\$11,643,289</b>	<b>\$4,215,958</b>	<b>\$1,480,818</b>	<b>\$409,481</b>
Gain/(Loss) on MV of Investments	(41,459)	(41,459)	0	0	0
<b>Market Value of Cash &amp; Investments</b>	<b>\$17,708,088</b>	<b>\$11,601,830</b>	<b>\$4,215,958</b>	<b>\$1,480,818</b>	<b>\$409,481</b>
<b>Current Assets</b>					
Net Receivables - Consumers	\$762,815	\$685,258	\$33,153	(\$4,691)	\$49,094
Accrued Water Sales	1,481,169	1,368,378	19,616	93,175	0
Accounts Receivable-Other	348,157	199,063	72,667	0	76,427
RWS Central Expansion SRF Loan Rec	1,393,169	0	1,393,169	0	0
RWS Central Expansion Grant Rec	1,479,090	0	1,479,090	0	0
Prepaid Expense	173,693	172,491	0	0	1,202
Reimbursable Small Jobs	16,026	12,790	0	0	3,235
Interest Receivable	87,301	84,551	2,751	0	0
Inventories	485,118	485,118	0	0	0
Deposits Receivable	32,222	32,222	0	0	0
Deferred Expense - Backfed Water	111,906	111,906	0	0	0
<b>Total Current Assets</b>	<b>\$6,370,666</b>	<b>\$3,151,777</b>	<b>\$3,000,446</b>	<b>\$88,484</b>	<b>\$129,959</b>

**NORTH MARIN WATER DISTRICT  
STATEMENT OF NET POSITION  
FOR THE PERIOD ENDING MARCH 31, 2018**

	TOTAL	NOVATO WATER	NOVATO RECYCLED	WEST MARIN WATER	OCEANA MARIN SEWER
<b>Loans Receivable</b>					
Employee Loans (Note 3)	\$934,200	\$934,200	\$0	\$0	\$0
Due From Other Funds (Note 10)	415,518	415,518	0	0	0
Other Long Term Receivables (Note 4)	2,973,803	0	2,973,803	0	0
<b>Loans Receivable</b>	<b>\$4,323,521</b>	<b>\$1,349,718</b>	<b>\$2,973,803</b>	<b>\$0</b>	<b>\$0</b>
<b>Property and Plant</b>					
Land & Land Rights	\$1,473,091	\$1,368,872	\$0	\$103,411	\$808
Dam, Lake, & Source Facilities	5,596,066	5,103,654	0	492,412	0
Treatment Facilities	21,184,413	17,603,974	2,666,198	319,913	594,328
Storage Facilities	20,903,086	18,278,500	519,014	2,105,572	0
Transmission Facilities (16"+)	29,285,441	29,163,117	0	122,324	0
Distribution and Pumping Facilities	83,899,203	60,793,097	17,301,217	5,804,890	0
Sewer Mains, Pumps, & Laterals	1,198,156	0	0	0	1,198,156
<b>Sub-Total</b>	<b>\$163,539,456</b>	<b>\$132,311,214</b>	<b>\$20,486,428</b>	<b>\$8,948,522</b>	<b>\$1,793,293</b>
Less Accumulated Depreciation (Note 5)	(52,669,703)	(44,815,545)	(3,163,925)	(3,692,208)	(998,025)
<b>Net Property and Plant</b>	<b>\$110,869,753</b>	<b>\$87,495,669</b>	<b>\$17,322,503</b>	<b>\$5,256,313</b>	<b>\$795,268</b>
<b>Buildings and Equipment (Note 6)</b>					
Buildings	\$1,902,893	\$1,902,893	\$0	\$0	\$0
Office Equipment	706,136	706,136	0	0	0
Laboratory Equipment	317,047	317,047	0	0	0
Trucks & Automobiles	1,224,731	1,224,731	0	0	0
Construction Equipment	843,914	843,914	0	0	0
Tools, Shop Equipment	224,977	224,977	0	0	0
<b>Sub-Total</b>	<b>\$5,219,698</b>	<b>\$5,219,698</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
Less Accumulated Depreciation (Note 5)	(4,072,637)	(4,072,637)	0	0	0
<b>Net Buildings and Equipment</b>	<b>\$1,147,061</b>	<b>\$1,147,061</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Construction In Progress</b>					
Developer	\$415,964	\$412,966	\$0	\$3,430	(\$433)
District	20,491,933	4,761,322	15,155,524	425,135	149,952
<b>Total Construction in Progress</b>	<b>\$20,907,897</b>	<b>\$5,174,288</b>	<b>\$15,155,524</b>	<b>\$428,566</b>	<b>\$149,519</b>
<b>Net Utility Plant</b>	<b>\$132,924,711</b>	<b>\$93,817,018</b>	<b>\$32,478,027</b>	<b>\$5,684,879</b>	<b>\$944,787</b>
<b>Deferred Outflow of Resources</b>	<b>\$2,931,861</b>	<b>\$2,931,861</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>TOTAL ASSETS</b>	<b>\$164,258,846</b>	<b>\$112,852,205</b>	<b>\$42,668,234</b>	<b>\$7,254,181</b>	<b>\$1,484,226</b>

**NORTH MARIN WATER DISTRICT  
STATEMENT OF NET POSITION  
FOR THE PERIOD ENDING MARCH 31, 2018**

	TOTAL	NOVATO WATER	NOVATO RECYCLED	WEST MARIN WATER	OCEANA MARIN SEWER
<b>LIABILITIES AND NET ASSETS</b>					
<b>Current Liabilities</b>					
Trade Accounts Payable	\$1,326,195	\$1,255,146	\$71,049	\$0	\$0
Reimbursement Prog. Unclaimed Funds	14,810	5,660	0	9,150	0
Bond Debt Principal Payable-Current	24,000	0	0	24,000	0
Loan Debt Principal Payable-Current	1,375,719	799,515	576,204	0	0
Bank of Marin Principal Payable-Current	353,790	308,505	0	45,285	0
JP Morgan/Chase AMI Loan-Current	240,000	240,000	0	0	0
Bond/Loan Debt Interest Payable-Current	575	0	0	575	0
Accrued Interest Payable-SRF Loan	189,425	62,637	126,789	0	0
JP Morgan/Chase AMI Loan Interest Payable	9,109	9,109	0	0	0
Deposits/Performance Bonds	377,889	352,622	0	22,267	3,000
Unemployment Insurance Reserve (Note 8)	21,356	21,356	0	0	0
Workers' Comp Future Claims Payable	123,108	114,367	2,955	4,432	1,354
Payroll Benefits (Note 9)	862,589	791,529	24,020	36,030	11,009
Due To Other Funds (Note 10)	419,402	0	419,402	0	0
Deferred Revenue	177,826	116,852	0	0	60,974
<b>Total Current Liabilities</b>	<b>\$5,515,793</b>	<b>\$4,077,297</b>	<b>\$1,220,419</b>	<b>\$141,740</b>	<b>\$76,337</b>
<b>Restricted Liabilities</b>					
Construction Advances	\$304,153	\$293,453	\$10,000	\$0	\$700
<b>Total Restricted Liabilities</b>	<b>\$304,153</b>	<b>\$293,453</b>	<b>\$10,000</b>	<b>\$0</b>	<b>\$700</b>
<b>Long Term Liabilities (Note 7)</b>					
Bonds Outstanding - PR6 (FmHA)	\$35,000	\$0	\$0	\$35,000	\$0
Bonds Outstanding - PRE1 (FmHA)	13,000	0	0	13,000	0
JP Morgan/Chase AMI Loan Payable	4,360,000	4,360,000	0	0	0
STP Rehab SRF Loan	9,648,515	9,648,515	0	0	0
RWF SRF Loan	2,189,287	0	2,189,287	0	0
RWS North/South Expansion SRF Loan	7,335,476	0	7,335,476	0	0
RWS Central Expansion SRF Loan	5,865,035	0	5,865,035	0	0
Bank of Marin Loan	5,645,939	4,923,259	0	722,680	0
Net Pension Liability @ 6/30/16 (Note 17)	11,040,789	11,040,789	0	0	0
Retiree Health Benefits Payable (Note 2)	1,270,744	1,270,744	0	0	0
<b>Total Long Term Liabilities</b>	<b>\$47,403,784</b>	<b>\$31,243,307</b>	<b>\$15,389,797</b>	<b>\$770,680</b>	<b>\$0</b>
<b>Deferred Inflow of Resources</b>	<b>655,355</b>	<b>655,355</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL LIABILITIES</b>	<b>\$53,879,086</b>	<b>\$36,269,412</b>	<b>\$16,620,216</b>	<b>\$912,420</b>	<b>\$77,037</b>

**NORTH MARIN WATER DISTRICT  
STATEMENT OF NET POSITION  
FOR THE PERIOD ENDING MARCH 31, 2018**

	TOTAL	NOVATO WATER	NOVATO RECYCLED	WEST MARIN WATER	OCEANA MARIN SEWER
<b>Net Assets</b>					
<b>Invested in Capital Assets</b>					
Contributions in Aid of Construction	\$83,562,914	\$74,941,252	\$5,800,128	\$2,141,779	\$679,755
Grants in Aid of Construction	14,399,758	403,869	11,168,702	2,827,187	0
Connection Fees	39,468,414	25,617,001	11,962,815	1,337,835	550,763
<b>Total Investment</b>	<b>\$137,431,086</b>	<b>\$100,962,122</b>	<b>\$28,931,646</b>	<b>\$6,306,800</b>	<b>\$1,230,518</b>
<b>Restricted Reserves</b>					
Connection Fee Fund	(\$11,882,128)	(\$11,940,894)	\$0	\$96,560	(\$37,794)
Wohler Pipeline Financing Fund	410,531	410,531	0	0	0
Collector #6 Financing Fund	1,612,021	1,612,021	0	0	0
Revenue Bond Redemption Fund	30,000	0	0	30,000	0
Bank of Marin Project Fund	633,594	35,791	0	597,803	0
Deer Island RWF Replacement Fund	1,308,289	0	1,308,289	0	0
Capital Replacement & Expansion Fund	1,198,480	0	1,198,480	0	0
RWS North/South SRF Reserve Fund	614,299	0	614,299	0	0
RW Central Area SRF Reserve Fund	255,373	0	255,373	0	0
<b>Designated Reserves</b>					
Liability Contingency Fund	922,285	823,400	0	98,885	0
Maintenance Accrual Fund	4,390,681	4,390,681	0	0	0
Self-Insured Workers' Compensation Fund	454,805	429,229	6,509	14,083	4,984
Retiree Medical Benefits Fund	2,790,837	2,790,837	0	0	0
Conservation Incentive Rate Fund	42,712	0	0	42,712	0
Operating Reserve Fund	385,000	0	145,000	174,000	66,000
Earned Surplus - Prior Yrs	(33,038,424)	(25,824,067)	(6,067,860)	(1,228,763)	82,266
Net Income/(Loss)	1,803,569	1,715,647	(115,110)	136,987	66,044
Transfer (To)/From Reserves (see below)	1,016,752	1,177,494	(228,607)	72,694	(4,829)
<b>Total Restricted &amp; Designated</b>	<b>(\$27,051,326)</b>	<b>(\$24,379,330)</b>	<b>(\$2,883,628)</b>	<b>\$34,961</b>	<b>\$176,671</b>
<b>TOTAL NET POSITION</b>	<b>\$110,379,760</b>	<b>\$76,582,792</b>	<b>\$26,048,017</b>	<b>\$6,341,761</b>	<b>\$1,407,189</b>
<b>Transfer (To)/From Reserves</b>					
Connection Fee	1,219,034	1,220,354	0	(1,321)	0
Maintenance Reserve	(75,000)	(75,000)	0	0	0
RWF Replacement Fund	(86,250)	0	(86,250)	0	0
Retiree Medical Insurance Fund	(61,343)	(61,343)	0	0	0
(Gain)/Loss Self-Insured WC Fund	100,793	93,134	2,643	3,845	1,171
Bank of Marin Project Fund	64,852	349	0	64,503	0
Operating Reserve Fund	(145,333)	0	(145,000)	5,667	(6,000)
<b>Total Transfer</b>	<b>\$1,016,752</b>	<b>\$1,177,494</b>	<b>(\$228,607)</b>	<b>\$72,694</b>	<b>(\$4,829)</b>

**NORTH MARIN WATER DISTRICT  
SOURCES AND USES OF FUNDS STATEMENT - ALL SERVICE AREAS COMBINED  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>YTD Actual</b>	<b>Annual Budget</b>	<b>YTD/ Budget %</b>	<b>Prior YTD Actual</b>
<b>OPERATING REVENUE</b>				
Water Sales	\$12,133,729	\$14,532,000	83%	\$9,763,090
Bimonthly Service Charge	3,423,208	4,562,000	75%	3,251,194
Sewer Service Charge	178,916	239,000	75%	161,936
Wheeling & Misc Service Charges	254,173	359,000	71%	226,630
<b>TOTAL OPERATING REVENUE</b>	<b>\$15,990,026</b>	<b>\$19,692,000</b>	<b>81%</b>	<b>\$13,402,850</b>
<b>OPERATING EXPENDITURES</b>				
Source of Supply	\$3,938,383	\$5,065,000	78%	\$4,109,947
Pumping	308,359	401,000	77%	245,636
Operations	715,238	810,000	88%	641,485
Water Treatment	1,801,825	2,340,000	77%	1,603,426
Sewer Service	102,048	143,000	71%	120,690
Transmission & Distribution	2,180,127	3,260,000	67%	2,209,916
Consumer Accounting	487,704	677,000	72%	467,989
Water Conservation	219,387	450,000	49%	238,751
General & Administrative	1,570,574	2,478,000	63%	1,467,091
Depreciation	2,579,922	3,526,000	73%	2,563,998
<b>TOTAL OPERATING EXPENDITURES</b>	<b>\$13,903,568</b>	<b>\$19,150,000</b>	<b>73%</b>	<b>\$13,668,929</b>
<b>NET OPERATING INCOME (LOSS)</b>	<b>\$2,086,458</b>	<b>\$542,000</b>	<b>385%</b>	<b>(\$266,079)</b>
<b>NON-OPERATING REVENUE/(EXPENSE)</b>				
Tax Proceeds	\$62,424	\$109,000	57%	\$61,721
Interest Revenue	184,263	161,000	114%	119,264
Miscellaneous Revenue	103,426	137,000	75%	126,152
Bond & Loan Interest Expense	(630,639)	(732,000)	86%	(571,770)
Miscellaneous Expense	(2,364)	(20,000)	12%	(2,613)
<b>TOTAL NON-OP REVENUE/(EXPENSE)</b>	<b>(\$282,889)</b>	<b>(\$345,000)</b>	<b>82%</b>	<b>(\$267,247)</b>
<b>NET INCOME/(LOSS)</b>	<b>\$1,803,569</b>	<b>\$197,000</b>	<b>916%</b>	<b>(\$533,326)</b>
<b>OTHER SOURCES/(USES) OF FUNDS</b>				
Add Depreciation Expense	\$2,579,922	\$3,526,000	73%	\$2,563,998
Connection Fees	783,400	833,000	94%	239,585
Loan Proceeds	6,393,836	6,200,000	103%	0
Grant Proceeds	1,797,317	5,333,000	34%	1,548,107
Marin County Club Loan Principal Pmts	24,572	0	-	0
Caltrans AEEP Capital Contribution	1,193	0	-	16,756
StoneTree RWF Loan Principal	143,604	217,000	66%	140,206
MMWD AEEP Capital Contribution	245,000	245,000	100%	245,000
Capital Equipment Expenditures	(37,526)	(210,000)	18%	(28,979)
Capital Improvement Projects	(6,747,586)	(17,745,000)	38%	(4,604,065)
Bond & Loan Principal Payments	(808,914)	(1,802,000)	45%	(1,022,438)
Change in Working Capital	1,430,965	2,570,000	56%	45,173
<b>TOTAL OTHER SOURCES/(USES)</b>	<b>\$5,809,667</b>	<b>(\$833,000)</b>	<b>-</b>	<b>(\$856,657)</b>
<b>CASH INCREASE/(DECREASE)</b>	<b>\$7,613,235</b>	<b>(\$636,000)</b>	<b>-</b>	<b>(\$1,389,983)</b>

**NORTH MARIN WATER DISTRICT  
INCOME STATEMENT AND CASH FLOW BY SERVICE AREA  
FOR THE PERIOD ENDING MARCH 31, 2018**

<b><u>SUMMARY INCOME STATEMENT</u></b>					<b>OCEANA MARIN SEWER</b>
	<b>TOTAL</b>	<b>NOVATO WATER</b>	<b>NOVATO RECYCLED</b>	<b>WEST MARIN WATER</b>	
Operating Revenue	\$15,990,026	\$14,573,809	\$592,893	\$644,108	\$179,216
Operating Expense	13,903,568	12,634,752	581,523	535,042	152,250
<b>OPERATING INCOME/(LOSS)</b>	<b>\$2,086,458</b>	<b>\$1,939,056</b>	<b>\$11,370</b>	<b>\$109,066</b>	<b>\$26,966</b>
Non-Operating Revenue/(Expense)	(282,889)	(223,409)	(126,480)	27,921	39,078
<b>NET INCOME/(LOSS)</b>	<b>\$1,803,569</b>	<b>\$1,715,647</b>	<b>(\$115,110)</b>	<b>\$136,987</b>	<b>\$66,044</b>
<b>CAPITAL CONTRIBUTIONS</b>					
SCWA Prop 84 Water Conserv Grant	\$45,229	\$45,229	\$0	\$0	\$0
RW Central Area Expansion Grant	1,752,088	0	1,752,088	0	0
Developer In-Kind Contributions	1,837,309	151,114	1,682,521	3,430	244
Caltrans AEEP Capital Contributions	1,193	1,193	0	0	0
MMWD Capital Contribution	245,000	245,000	0	0	0
Connection Fees	783,400	737,800	0	45,600	0
FRC Transfer	0	(5,582,035)	5,582,035	0	0
<b>CAPITAL CONTRIBUTIONS</b>	<b>\$4,664,219</b>	<b>(\$4,401,699)</b>	<b>\$9,016,644</b>	<b>\$49,030</b>	<b>\$244</b>
<b>CHANGE IN NET POSITION</b>	<b>\$6,467,788</b>	<b>(\$2,686,052)</b>	<b>\$8,901,534</b>	<b>\$186,018</b>	<b>\$66,288</b>
Net Position June 30, 2017	103,911,972	79,268,844	17,146,483	6,155,744	1,340,901
Net Position March 31, 2018	<u>\$110,379,760</u>	<u>\$76,582,792</u>	<u>\$26,048,017</u>	<u>\$6,341,761</u>	<u>\$1,407,189</u>
<b>CASH FLOW STATEMENT</b>					
Net Income/(Loss)	\$1,803,569	\$1,715,647	(\$115,110)	\$136,987	\$66,044
Add back Depreciation	2,579,922	2,052,065	355,515	144,357	27,984
<b>Cash Generated From Operations</b>	<b>\$4,383,490</b>	<b>\$3,767,712</b>	<b>\$240,405</b>	<b>\$281,345</b>	<b>\$94,028</b>
<b>Other Sources (Uses) of Funds</b>					
Connection Fee Revenue	783,400	\$737,800	\$0	\$45,600	\$0
Loan Proceeds	6,393,836	4,360,000	2,033,836	0	0
Grant Proceeds	1,797,317	45,229	1,752,088	0	0
Capital Assets Acquisition	(6,785,112)	(3,158,542)	(3,437,111)	(136,454)	(53,005)
Caltrans AEEP Capital Contribution	1,193	1,193	0	0	0
StoneTree RWF Loan Principal Pmts	143,604	0	143,604	0	0
MMWD AEEP Capital Contribution	245,000	245,000	0	0	0
Marin Country Club Loan Principal Pmts	24,572	0	24,572	0	0
Principal Paid on Debt	(808,914)	(394,520)	(357,527)	(56,867)	0
Consumer Receivables Decr (Incr)	1,303,576	1,102,578	207,158	40,890	(47,051)
Construction Advances (Decr) Incr	69,097	69,097	0.00	0	0
Other Assets Decr (Incr)	635,992	(443,586)	1,143,030	2,089	(65,541)
Other Liabilities (Decr) Incr	1,617,189	23,533	1,534,172	1,202	58,282
Trade Accounts Payable (Decr) Incr	(2,194,888)	(1,811,205)	(382,270)	0	(1,414)
Connection Fee Transfer	(0)	(5,582,035)	5,582,035	0	0
Interdistrict Loan Due To (From)	3,884	5,141,590	(5,137,706)	0	0
<b>Total Other Sources (Uses)</b>	<b>\$3,229,745</b>	<b>\$336,131</b>	<b>\$3,105,882</b>	<b>(\$103,539)</b>	<b>(\$108,729)</b>
<b>Net Cash Provided (Used)</b>	<b>\$7,613,235</b>	<b>\$4,103,842</b>	<b>\$3,346,287</b>	<b>\$177,806</b>	<b>(\$14,700)</b>
<b>MV Cash &amp; Investments June 30, 2017</b>	<b>10,094,852</b>	<b>7,497,987</b>	<b>869,672</b>	<b>1,303,012</b>	<b>424,181</b>
<b>MV Cash &amp; Investments Mar 31, 2018</b>	<u><b>\$17,708,087</b></u>	<u><b>\$11,601,830</b></u>	<u><b>\$4,215,958</b></u>	<u><b>\$1,480,818</b></u>	<u><b>\$409,481</b></u>



**NOVATO WATER**  
**DETAIL INCOME STATEMENT**  
**FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>OPERATING REVENUE</b>				
Water Sales	\$841,615	\$11,178,904	86%	\$9,004,687
Bill Adjustments	(10,899)	(118,852)	-138%	(107,931)
Bimonthly Service Charges	362,764	3,264,876	75%	3,102,689
Account Turn-on Charges	6,293	55,372	76%	48,182
New Account Charges	445	5,525	79%	5,330
Returned Check Charges	9	432	43%	1,242
Hydrant Meter Up/Down Charges	100	3,260	326%	1,300
Backflow Service Charges	12,147	105,013	76%	100,503
Lab Service-Outside Clients	870	18,991	76%	18,379
Wheeling Charges - MMWD	8,849	60,288	66%	46,579
<b>TOTAL OPERATING REVENUE</b>	<b>\$1,222,193</b>	<b>\$14,573,809</b>	<b>82%</b>	<b>\$12,220,960</b>
<b>TOTAL EXPENDITURES</b>				
<b>SOURCE OF SUPPLY</b>				
Supervision & Engineering	\$921	\$7,720	39%	\$7,470
Operating Expense - Source	179	3,190	32%	7,715
Maint/Monitoring of Dam	3,401	19,342	31%	22,681
Maint of Lake & Intakes	136	2,375	14%	5,186
Maint of Structures	0	0	-	500
Maint of Watershed	316	29,231	60%	30,566
Water Quality Surveillance	1,210	6,280	25%	661
Erosion Control	0	0	-	550
Purchased Water	338,034	3,750,381	81%	3,929,614
<b>SOURCE OF SUPPLY</b>	<b>\$344,198</b>	<b>\$3,818,519</b>	<b>79%</b>	<b>\$4,004,944</b>
<b>PUMPING</b>				
Maint of Structures & Grounds	\$1,511	\$17,813	66%	\$23,759
Maint of Pumping Equipment	3,610	28,382	42%	11,106
Electric Power	19,558	221,537	88%	178,825
<b>PUMPING</b>	<b>\$24,679</b>	<b>\$267,732</b>	<b>77%</b>	<b>\$213,690</b>
<b>OPERATIONS</b>				
Supervision & Engineering	\$27,653	\$195,401	116%	\$172,978
Operating Expense - Operations	40,917	314,246	88%	248,722
Maintenance Expense	6,011	39,004	67%	35,228
Telemetry Equipment/Controls Maint	9,578	70,423	76%	87,430
Leased Lines	1,405	12,575	74%	13,413
<b>OPERATIONS</b>	<b>\$85,563</b>	<b>\$631,649</b>	<b>91%</b>	<b>\$557,771</b>

**NOVATO WATER**  
**DETAIL INCOME STATEMENT**  
**FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>WATER TREATMENT</b>				
Supervision & Engineering	\$10,557	\$140,007	133%	\$93,657
Operating Expense - Water Treatment	595	195,180	53%	241,971
Purification Chemicals	11,342	353,160	83%	202,870
Sludge Disposal	196	79,553	78%	77,812
Maint of Structures & Grounds	11,598	38,856	52%	67,584
Maint of Purification Equipment	24,749	176,909	100%	163,423
Electric Power	10,520	124,967	91%	83,618
Water Quality Programs	14,390	101,278	96%	96,690
Laboratory Direct Labor	41,836	300,244	76%	305,383
Lab Service-Outside Clients	870	25,296	37%	27,436
Water Quality Supervision	8,899	66,888	85%	68,115
Laboratory Supplies & Expense	9,508	53,727	63%	50,872
Customer Water Quality	2,579	33,746	49%	37,746
Lab Cost Distributed	(3,591)	(25,275)	101%	(21,574)
<b>WATER TREATMENT</b>	<b>\$144,046</b>	<b>\$1,664,536</b>	<b>77%</b>	<b>\$1,495,603</b>
<b>TRANSMISSION &amp; DISTRIBUTION</b>				
Supervision & Engineering	\$54,045	\$484,664	82%	\$425,306
Maps & Records	10,897	110,560	65%	119,891
Operation of T&D System	16,232	112,302	59%	116,006
Facilities Location	10,637	102,024	104%	112,638
Safety: Construction & Engineering	5,725	31,775	47%	47,018
Customer Service Expense	18,289	147,121	73%	112,540
Flushing	16,177	23,397	48%	40,193
Storage Facilities Expense	7,930	66,929	45%	94,743
Cathodic Protection	115	10,331	40%	10,747
Maint of Valves/Regulators	13,779	132,516	63%	117,471
Maint of Mains	11,048	143,147	116%	103,178
Leak Detection - Mains	0	2,217	32%	7,172
Backflow Prevention Program	13,707	145,684	48%	121,296
Maint of Copper Services	7,463	94,005	53%	111,282
Maint of PB Service Lines	30,327	298,370	66%	366,766
Single Service Installations	(606)	11,531	-	10,311
Maint of Meters	17,942	89,403	85%	47,413
Detector Check Assembly Maint	6,989	47,130	71%	70,016
Maint of Hydrants	2,230	17,568	23%	38,818
<b>TRANSMISSION &amp; DISTRIBUTION</b>	<b>\$242,925</b>	<b>\$2,070,675</b>	<b>68%</b>	<b>\$2,072,805</b>
<b>CONSUMER ACCOUNTING</b>				
Meter Reading	\$12,944	\$120,350	59%	\$122,311
Collection Expense - Labor	2,856	17,304	44%	14,886
Collection Expense - Agency	356	2,308	77%	1,552
Billing & Consumer Accounting	25,827	211,719	77%	215,802
Contract Billing	1,500	12,712	71%	12,563
Stationery, Supplies & Postage	4,330	40,227	73%	42,900
Online Payment Processing Fees	3,207	38,082	123%	23,003
Lock Box Service	912	8,208	75%	8,208
Uncollectable Accounts	3,334	11,499	82%	10,989
Office Equipment Expense	743	18,496	123%	6,570
Distributed to West Marin (4.1%)	(1,409)	(13,681)	86%	(12,786)
<b>CONSUMER ACCOUNTING</b>	<b>\$54,600</b>	<b>\$467,225</b>	<b>72%</b>	<b>\$445,996</b>

**NOVATO WATER**  
**DETAIL INCOME STATEMENT**  
**FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>WATER CONSERVATION</b>				
Residential	\$19,598	\$168,271	48%	\$190,137
Commercial	363	5,106	27%	976
Public Outreach/Information	4,508	18,661	47%	14,443
Large Landscape	2,795	22,810	84%	28,635
<b>TOTAL WATER CONSERVATION</b>	<b>\$27,263</b>	<b>\$214,848</b>	<b>49%</b>	<b>\$234,191</b>
<b>GENERAL AND ADMINISTRATIVE</b>				
Directors Fees	\$2,688	\$27,338	67%	\$22,773
Legal Fees	1,722	14,251	84%	15,086
Human Resources	29,353	46,044	79%	23,976
Auditing Fees	0	19,706	116%	16,220
Consulting Services/Studies	11,088	145,072	34%	23,449
General Office Salaries	132,495	1,065,501	80%	1,087,274
Safety: General District Wide	3,138	27,133	42%	28,869
Office Supplies	3,073	18,155	39%	27,104
Employee Events	63	10,256	85%	5,607
Other Administrative Expense	666	9,131	54%	10,714
Dues & Subscriptions	236	53,095	77%	58,298
Vehicle Expense	845	6,253	78%	6,929
Meetings, Conferences & Training	26,521	118,417	50%	126,799
Recruitment Expense	192	1,892	63%	1,140
Gas & Electricity	2,000	24,750	63%	29,679
Telephone	503	4,890	61%	6,320
Water	0	1,552	78%	1,142
Buildings & Grounds Maint	5,335	39,142	71%	44,499
Office Equipment Expense	6,833	72,876	62%	77,532
Insurance Premiums & Claims	7,844	68,717	59%	63,999
Retiree Medical Benefits	14,272	129,901	76%	127,728
(Gain)/Loss on Overhead Charges	(83,477)	(84,987)	218%	(132,737)
G&A Applied to Other Operations (5.9%)	(15,593)	(119,769)	71%	(109,636)
G&A Applied to Construction	(27,296)	(251,812)	65%	(216,336)
<b>GENERAL &amp; ADMINISTRATIVE</b>	<b>\$122,498</b>	<b>\$1,447,504</b>	<b>64%</b>	<b>\$1,346,430</b>
<b>Depreciation (Note 5)</b>	<b>228,455</b>	<b>2,052,065</b>	<b>73%</b>	<b>2,033,608</b>
<b>TOTAL OPERATING EXPENSE</b>	<b>\$1,274,228</b>	<b>\$12,634,752</b>	<b>73%</b>	<b>\$12,405,037</b>
<b>OPERATING INCOME/(LOSS)</b>	<b>(\$52,035)</b>	<b>\$1,939,056</b>	<b>441%</b>	<b>(\$184,077)</b>

**NOVATO WATER  
DETAIL INCOME STATEMENT  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>NON-OPERATING REVENUE</b>				
Interest:				
Wohler Pipeline Financing Fund	\$443	\$6,362	159%	\$4,276
Collector #6 Financing Fund	1,740	25,002	167%	16,811
Retiree Medical Insurance Fund	3,511	61,343	161%	39,396
Self-Insured Workers' Comp Fund	619	9,166	131%	6,380
Aqueduct Energy Efficiency Proj Fund	41	567	-	398
Funds Held in County Treasury	0	2,935	37%	2,825
Recycled Water Advance (Note 10)	0	0	-	6,735
<b>Total Interest Revenue</b>	<b>\$6,354</b>	<b>\$105,376</b>	<b>146%</b>	<b>\$76,820</b>
Rents & Leases	1,967	83,967	101%	65,495
Other Non-Operating Revenue	8,319	35,616	71%	64,203
Gain/(Loss) on MV of Investments	(1,166)	(23,090)	-	(18,950)
<b>NON-OPERATING REVENUE</b>	<b>\$15,474</b>	<b>\$201,869</b>	<b>152%</b>	<b>\$187,568</b>
<b>NON-OPERATING EXPENSE</b>				
Bank of Marin AEEP Loan Interest Exp	\$14,980	\$137,380	72%	\$144,905
STP SRF Loan Interest Expense	21,208	192,183	74%	206,031
Drought Loan Interest Expense	0	0	0%	654
Debt Issuance Costs	85,030	85,030	-	0
JP Morgan/Chase AMI Loan Interest Expense	9,109	9,109	-	0
Other Non-Operating Expense	0.0	1,577	8%	1,356
<b>NON-OPERATING EXPENSE</b>	<b>\$130,327</b>	<b>\$425,278</b>	<b>90%</b>	<b>\$352,945</b>
<b>NET INCOME/(LOSS)</b>	<b>(\$166,888)</b>	<b>\$1,715,647</b>	<b>1699%</b>	<b>(\$349,455)</b>
<b>BEGINNING FUND EQUITY</b>				
		\$79,268,844		\$74,118,378
NET INCOME/(LOSS)	(166,888)	1,715,647		(349,455)
SCWA 84 Water Conservation Grant	2,663	45,229	-	16,156
Developer 'In-Kind' Contributions	9,839	151,114	-	490,001
Caltrans AEEP Capital Contribution	854	1,193	-	16,756
MMWD AEEP Capital Contribution	0	245,000	100%	245,000
Connection Fees	0	737,800	95%	201,185
FRC Transfer to Recycled Water	(62,684)	(5,582,035)	319%	(664,286)
Prior Period Adjustment (Note 12)	0	0	-	(247,077)
<b>ENDING FUND EQUITY</b>		<b>\$76,582,792</b>		<b>\$73,826,658</b>

**NOVATO RECYCLED WATER  
DETAIL INCOME STATEMENT  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>OPERATING REVENUE</b>				
Recycled Water Sales	\$2,808	\$565,817	64%	\$455,668
Bimonthly Service Charges	2,991	25,425	75%	21,924
Water Loads	0	1,625	-	4,000
Account Turn-on Charges	0	26	-	12
<b>TOTAL OPERATING REVENUE</b>	<b>\$5,799</b>	<b>\$592,893</b>	<b>65%</b>	<b>\$481,604</b>
<b>OPERATING EXPENSE</b>				
<b>SOURCE OF SUPPLY</b>				
Purchased Water - NSD	\$2,064	\$78,313	51%	\$69,194
Purchased Water - LGVSD	1,510	29,789	47%	24,547
<b>SOURCE OF SUPPLY</b>	<b>\$3,574</b>	<b>\$108,102</b>	<b>50%</b>	<b>\$93,741</b>
<b>PUMPING</b>				
Maint of Pumping Equipment	\$0	\$0	0%	\$891
Electric Power	100	2,253	75%	1,979
<b>PUMPING</b>	<b>\$100</b>	<b>\$2,253</b>	<b>45%</b>	<b>\$2,871</b>
<b>OPERATIONS</b>				
Supervision & Engineering	\$343	\$7,870	66%	\$7,605
Operating Expense - Operations	253	5,287	25%	8,113
Potable Water Consumed	0	6,213	56%	2,716
Maintenance Expense	2,510	18,185	364%	11,610
Telemetry Equipment/Controls Maint	117	9,467	73%	10,722
<b>OPERATIONS</b>	<b>\$3,223</b>	<b>\$47,022</b>	<b>76%</b>	<b>\$40,766</b>
<b>WATER TREATMENT</b>				
Purification Chemicals	\$0	\$1,977	49%	\$809
Maint of Purification Equipment	0	11,310	126%	2,354
Electric Power	0	0	0%	2,106
Laboratory Direct Labor	0	923	15%	1,622
Customer Water Quality	0	0	-	128
Water Quality Supervision	0	0	-	3,534
Lab Expense Distributed from Novato	7	566	19%	955
<b>WATER TREATMENT</b>	<b>\$7</b>	<b>\$14,775</b>	<b>62%</b>	<b>\$11,509</b>
<b>TRANSMISSION &amp; DISTRIBUTION</b>				
Supervision & Engineering	\$330	\$1,600	8%	\$4,952
Maps & Records	0	0	0%	72
Operation of T&D System	0	2,229	223%	631
Facilities Location	0	112	-	0
Customer Service Expense	0	0	0%	2,965
Storage Facilities Expense	280	1,429	14%	10,336
Maint of Valves/Regulators	0	488	49%	22
Maint of Meters	0	717	72%	0
Maint of Mains	0	5,768	-	24,486
<b>TRANSMISSION &amp; DISTRIBUTION</b>	<b>\$610</b>	<b>\$12,343</b>	<b>18%</b>	<b>\$43,463</b>

**NOVATO RECYCLED WATER  
DETAIL INCOME STATEMENT  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>CONSUMER ACCOUNTING</b>				
Distributed from Novato (0.2%)	\$67	\$662	66%	\$613
<b>CONSUMER ACCOUNTING</b>	\$67	\$662	66%	\$613
<b>GENERAL AND ADMINISTRATIVE</b>				
Consulting Services/Studies	\$0	\$0	-	\$6,786
Distributed from Novato (2.4%)	\$5,319	\$40,851	70%	\$39,897
<b>GENERAL &amp; ADMINISTRATIVE</b>	\$5,319	\$40,851	70%	\$46,682
<b>Depreciation</b> (Note 5)	39,485	355,515	74%	354,012
<b>TOTAL OPERATING EXPENSE</b>	\$52,385	\$581,523	64%	\$593,658
<b>OPERATING INCOME/(LOSS)</b>	<u>(\$46,586)</u>	<u>\$11,370</u>	284%	<u>(\$112,054)</u>
<b>NON-OPERATING REVENUE</b>				
Interest:				
General Funds	\$3,835	\$4,695	47%	\$0
RWF Replacement Fund	1,996	9,095	-	2,543
Capital Repl & Exp Fund	1,208	8,961	-	96
Self-Insured Workers' Comp Fund	0	0	-	79
StoneTree RWF Loan	4,790	34,391	101%	30,022
<b>Total Interest Revenue</b>	\$11,828	\$57,142	130%	\$32,739
Other Non-Operating Revenue	0	0	-	10,557
<b>NON-OPERATING REVENUE</b>	\$11,828	\$57,142	-	\$43,296
<b>NON-OPERATING EXPENSE</b>				
RWF SRF Loan Interest Expense	\$4,908	\$43,382	75%	\$47,177
Expansion SRF Loan Interest Expense	15,249	140,239	73%	147,686
Other Non-Operating Expense	0	0	-	331
Interest-Advance from Novato (Note 10)	0	0	-	6,735
<b>NON-OPERATING EXPENSE</b>	\$20,157	\$183,622	74%	\$201,929
<b>NET INCOME/(LOSS)</b>	<u>(\$54,915)</u>	<u>(\$115,110)</u>	47%	<u>(\$270,687)</u>
<b>BEGINNING FUND EQUITY</b>		\$17,146,483		\$11,252,112
NET INCOME/(LOSS)	(54,915)	(115,110)		(270,687)
Developer 'In-Kind' Contributions	0	1,682,521		0
FRC Transfer from Novato	62,684	5,582,035	319%	664,286
RW Central Area Expansion Grant	26,053	1,752,088	33%	1,531,951
Prior Period Adjustment (Note 12)	0	0		(39,672)
<b>ENDING FUND EQUITY</b>		<u>\$26,048,017</u>		<u>\$13,137,991</u>



**WEST MARIN WATER  
DETAIL INCOME STATEMENT  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>OPERATING REVENUE</b>				
Water Sales	\$44,979	\$522,517	83%	\$423,487
Bill Adjustments	(1,426)	(16,283)	-	(16,821)
Bimonthly Service Charges	14,768	132,908	75%	126,581
Account Turn-on Charges	45	797	80%	582
New Account Charges	0	110	11%	125
Returned Check Charges	0	9	-	63
Backflow Service Charges	0	4,051	81%	3,733
<b>TOTAL OPERATING REVENUE</b>	<b>\$58,365</b>	<b>\$644,108</b>	<b>79%</b>	<b>\$537,750</b>
<b>OPERATING EXPENSE</b>				
<b>SOURCE OF SUPPLY</b>				
Supervision & Engineering	\$0	\$724	-	\$44
Operating Expense	28	2,302	38%	3,033
Maint of Structures	0	8,200	103%	7,925
Water Quality Surveillance	0	535	53%	261
<b>SOURCE OF SUPPLY</b>	<b>\$28</b>	<b>\$11,761</b>	<b>78%</b>	<b>\$11,262</b>
<b>PUMPING</b>				
Maint of Structures and Grounds	\$0	\$397	6%	\$6,710
Maint of Pumping Equip	0	17,999	180%	2,634
Electric Power	2,022	19,978	71%	19,731
<b>PUMPING</b>	<b>\$2,022</b>	<b>\$38,374</b>	<b>85%</b>	<b>\$29,075</b>
<b>OPERATIONS</b>				
Supervision & Engineering	\$1,067	\$13,245	132%	\$7,238
Operating Expense	1,109	6,817	43%	12,525
Maint of Telemetry Equipment	0	12,913	61%	19,488
Leased Lines	408	3,593	60%	3,698
<b>OPERATIONS</b>	<b>\$2,585</b>	<b>\$36,568</b>	<b>69%</b>	<b>\$42,949</b>
<b>WATER TREATMENT</b>				
Supervision & Engineering	\$216	\$3,304	47%	\$3,294
Operating Expense	1,290	27,619	132%	11,629
Purification Chemicals	0	1,698	34%	6,073
Maint of Structures & Grounds	50	292	29%	267
Maint of Purification Equipment	49	10,152	42%	6,694
Electric Power	946	16,448	78%	13,907
Laboratory Direct Labor	4,913	35,166	107%	30,888
Laboratory Services	630	2,705	68%	1,438
Water Quality Supervision	351	1,623	20%	1,019
Customer Water Quality	319	1,954	49%	2,914
Lab Expense Distributed from Novato	3,246	21,554	113%	18,191
<b>WATER TREATMENT</b>	<b>\$12,009</b>	<b>\$122,513</b>	<b>83%</b>	<b>\$96,314</b>

**WEST MARIN WATER  
DETAIL INCOME STATEMENT  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>TRANSMISSION &amp; DISTRIBUTION</b>				
Supervision & Engineering	\$545	\$4,364	31%	\$11,027
Maps & Records	0	0	0%	218
Facilities Location - USA	379	12,609	180%	6,380
Customer Service Expense	540	9,148	152%	4,869
Flushing	4,910	4,910	164%	2,616
Storage Facilities Expense	1,014	11,789	41%	14,798
Cathodic Protection	0	1,394	20%	1,345
Maint of Valves	0	378	6%	768
Maint of Mains	2,010	7,924	198%	8,611
Water Quality Maintenance	7	1,700	85%	0
Maint of Backflow Devices	0	1,056	21%	510
Backflow Dev Inspection/Survey	706	6,057	202%	2,408
Maint of Copper Services	0	675	13%	7,028
Maint of PB Service Lines	0	19,027	95%	23,196
Maint of Meters	285	2,310	46%	8,552
Detector Check Assembly Maint	0	1,654	83%	304
Maint of Hydrants	0	3,621	362%	0
Single Service Installation	0	8,494	-	1,018
<b>TRANSMISSION &amp; DISTRIBUTION</b>	<b>\$10,396</b>	<b>\$97,110</b>	<b>76%</b>	<b>\$93,648</b>
<b>CONSUMER ACCOUNTING</b>				
Meter Reading	\$78	\$5,852	49%	\$8,245
Collection Expense - Labor	0	492	49%	210
Uncollectable Accounts	109	109	11%	409
Distributed from Novato (3.6%)	1,168	11,496	88%	10,847
<b>CONSUMER ACCOUNTING</b>	<b>\$1,355</b>	<b>\$17,949</b>	<b>66%</b>	<b>\$19,710</b>
<b>WATER CONSERVATION</b>				
Water Conservation Program	\$747	\$4,540	45%	\$4,560
<b>TOTAL WATER CONSERVATION</b>	<b>\$747</b>	<b>\$4,540</b>	<b>45%</b>	<b>\$4,560</b>
<b>GENERAL AND ADMINISTRATIVE</b>				
Consulting Services/Studies	\$764	\$1,874	19%	\$2,700
Distributed from Novato (3.6%)	7,811	59,996	71%	51,855
<b>GENERAL &amp; ADMINISTRATIVE</b>	<b>\$8,575</b>	<b>\$61,870</b>	<b>65%</b>	<b>\$54,555</b>
<b>Depreciation (Note 5)</b>	<b>15,864</b>	<b>144,357</b>	<b>74%</b>	<b>144,237</b>
<b>TOTAL OPERATING EXPENSE</b>	<b>\$53,580</b>	<b>\$535,042</b>	<b>75%</b>	<b>\$496,310</b>
<b>OPERATING INCOME/(LOSS)</b>	<b>\$4,785</b>	<b>\$109,066</b>	<b>106%</b>	<b>\$41,440</b>

**WEST MARIN WATER  
DETAIL INCOME STATEMENT  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>NON-OPERATING REVENUE</b>				
Interest - General Funds	(\$51)	\$5,416	-	\$3,491
Interest - FRC	105	1,321	44%	1,001
Interest - Self-Insured WC Fund	0	119	-	220
Interest - Bank of Marin Project Fund	646	9,523	95%	6,941
Interest - CIR Fund	0	0	-	438
Rents & Leases	0	5,000	125%	4,344
Tax Proceeds - OL-2 G.O. Bond	0	2	-	1
Tax Proceeds - PR-2 Tax Allocation	79	30,218	57%	29,879
Other Non-Operating Revenue	0	19	-	3
<b>NON-OPERATING REVENUE</b>	<b>\$779</b>	<b>\$51,618</b>	<b>74%</b>	<b>\$46,318</b>
<b>NON-OPERATING EXPENSE</b>				
Bank of Marin Loan Interest Expense	\$2,199	\$20,166	81%	\$21,270
PRE-1 Revenue Bond Interest Exp	158	1,425	47%	1,875
PR-6 Revenue Bond Interest Exp	192	1,725	58%	2,100
Drought Loan Interest Expense	0	0	0%	72
Other Non-Operating Expense	0	381	-	370
<b>NON-OPERATING EXPENSE</b>	<b>\$2,549</b>	<b>\$23,697</b>	<b>76%</b>	<b>\$25,687</b>
<b>NET INCOME/(LOSS)</b>	<b>\$3,015</b>	<b>\$136,987</b>	<b>96%</b>	<b>\$62,071</b>
<b>BEGINNING FUND EQUITY</b>				
NET INCOME/(LOSS)	3,015	136,987		62,071
Developer 'In-Kind' Contributions	0	3,430	-	0
Connection Fees	0	45,600	198%	8,000
<b>ENDING FUND EQUITY</b>		<b>\$6,341,761</b>		<b>\$6,115,809</b>

**OCEANA MARIN SEWER  
DETAIL INCOME STATEMENT  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>OPERATING REVENUE</b>				
Sewer Service Charges	\$19,866	\$178,916	75%	\$161,936
Inspection Fees	0	300	-	600
<b>TOTAL OPERATING REVENUE</b>	<b>\$19,866</b>	<b>\$179,216</b>	<b>75%</b>	<b>\$162,536</b>
<b>OPERATING EXPENSE</b>				
<b>SEWAGE COLLECTION</b>				
Supervision & Engineering	\$2,349	\$10,931	61%	\$9,391
Inspection	0	384	38%	558
Operating Expense	291	6,308	90%	4,982
Facilities Location	607	1,651	165%	1,472
Maint of Telemetry Equipment	2,454	4,196	105%	4,281
Maint of Lift Stations	1,011	6,225	125%	9,971
Maint of Manholes	0	0	0%	987
Maint of Sewer Mains	0	0	0%	2,062
Electric Power	811	10,247	85%	9,166
<b>SEWAGE COLLECTION</b>	<b>\$7,523</b>	<b>\$39,941</b>	<b>74%</b>	<b>\$42,869</b>
<b>SEWAGE TREATMENT</b>				
Operating Expense	\$2,077	\$31,971	97%	\$31,837
Maint of Equipment	0	805	10%	1,815
Laboratory Direct Labor	493	5,150	86%	4,123
Lab Expense Distributed from Novato	338	3,156	158%	2,428
Electric Power	561	6,984	116%	4,822
<b>SEWAGE TREATMENT</b>	<b>\$3,469</b>	<b>\$48,065</b>	<b>87%</b>	<b>\$45,025</b>
<b>SEWAGE DISPOSAL</b>				
Operating Expense	\$1,232	\$6,263	52%	\$12,800
Maint of Pump Stations	0	1,693	21%	1,522
Maint of Storage Ponds	175	3,650	91%	13,329
Maint of Irrigation Field	0	2,436	30%	5,146
<b>SEWAGE DISPOSAL</b>	<b>\$1,407</b>	<b>\$14,042</b>	<b>44%</b>	<b>\$32,796</b>
<b>CONSUMER ACCOUNTING</b>				
Collection Expense - County of Marin	\$0	\$345	-	\$344
Distributed from Novato (0.6%)	174	1,523	76%	1,326
<b>CONSUMER ACCOUNTING</b>	<b>\$174</b>	<b>\$1,868</b>	<b>93%</b>	<b>\$1,670</b>

**OCEANA MARIN SEWER  
DETAIL INCOME STATEMENT  
FOR THE PERIOD ENDING MARCH 31, 2018**

	<b>MARCH 2018</b>	<b>YEAR TO DATE ACTUAL</b>	<b>YTD/ BUDGET%</b>	<b>PRIOR YTD ACTUAL</b>
<b>GENERAL AND ADMINISTRATIVE</b>				
Distributed from Novato (1.1%)	\$2,464	\$18,923	70%	\$17,885
Liability Insurance	159	1,427	71%	1,539
<b>GENERAL AND ADMINISTRATIVE</b>	<b>\$2,622</b>	<b>\$20,350</b>	<b>70%</b>	<b>\$19,424</b>
<b>Depreciation</b> (Note 5)	3,099	27,984	55%	32,141
<b>TOTAL OPERATING EXPENSE</b>	<b>\$18,294</b>	<b>\$152,250</b>	<b>68%</b>	<b>\$173,924</b>
<b>OPERATING INCOME/(LOSS)</b>	<b>\$1,572</b>	<b>\$26,966</b>	<b>169%</b>	<b>(\$11,389)</b>
<b>NON-OPERATING REVENUE</b>				
Rents & Leases	\$0	\$500	-	\$500
Interest - Connection Fee Reserve	0	0	-	70
Interest - General Funds	3,933	5,314	133%	4,204
Interest - Self Insured WC Fund	11	51	-	75
Tax Proceeds - OM-1/OM-3 Tax Alloc	84	32,204	58%	31,841
Other Non-Operating Revenue	1,414	1,415	-	0
<b>NON-OPERATING REVENUE</b>	<b>\$5,441</b>	<b>\$39,484</b>	<b>66%</b>	<b>\$36,689</b>
<b>NON-OPERATING EXPENSE</b>				
Other Non-Operating Expense	\$0	\$406	-	\$556
<b>NON-OPERATING EXPENSE</b>	<b>\$0</b>	<b>\$406</b>	<b>-</b>	<b>\$556</b>
<b>NET INCOME/(LOSS)</b>	<b>\$7,013</b>	<b>\$66,044</b>	<b>87%</b>	<b>\$24,745</b>
<b>BEGINNING FUND EQUITY</b>		<b>\$1,340,901</b>		<b>\$1,256,555</b>
<b>NET INCOME/(LOSS)</b>	<b>7,013</b>	<b>66,044</b>		<b>24,745</b>
<b>CONTRIBUTED CAPITAL</b>				
Contribution in Aid of Construction	0	244	-	0
Connection Fees	0	0	0%	30,400
<b>ENDING FUND EQUITY</b>		<b>\$1,407,189</b>		<b>\$1,311,700</b>

**NORTH MARIN WATER DISTRICT  
ANALYSIS OF WORKERS' COMP AND CONNECTION FEE FUNDS  
FOR THE PERIOD ENDING MARCH 31, 2018**

		NOVATO WATER	WEST MARIN WATER	OCEANA MARIN SEWER	RECYCLED WATER
<b>WORKERS' COMPENSATION FUND</b>	<b>TOTAL</b>				
<b>WC Cash Balance 6/30/17</b>	\$733,571	\$701,035	\$24,268	\$8,268	\$0
Less: Projected Prior FY Claims Liability	192,121	178,673	6,340	2,113	4,995
Add: Funds borrowed to subsidize operations	14,147	0	0	0	14,147
<b>WC Reserve Balance 6/30/17</b>	<b>\$555,597</b>	<b>\$522,362</b>	<b>\$17,928</b>	<b>\$6,155</b>	<b>\$9,152</b>
Add: WC Expense Charged to Operations FYTD	81,945	76,127	2,950	901	1,967
Interest Earned	9,337	9,166	119	51	0
Subtotal	\$646,879	\$607,656	\$20,997	\$7,108	\$11,119
Less: Claims Expense Paid	138,806	128,950	4,997	1,527	3,331
Excess Insurance Premium	44,269	41,126	1,594	487	1,062
Administration Fees	9,000	8,361	324	99	216
<b>WC Reserve Balance 03/31/18</b>	<b>\$454,805</b>	<b>\$429,218</b>	<b>\$14,083</b>	<b>\$4,995</b>	<b>\$6,509</b>
Add: Projected Claims Liability	123,108	114,367	4,432	1,354	2,955
Funds borrowed to subsidize operations	(390,668)	(390,668)	0	0	0
<b>WC CASH BALANCE 03/31/18</b>	<b>\$187,245</b>	<b>\$152,918</b>	<b>\$18,514</b>	<b>\$6,349</b>	<b>\$9,463</b>

<b>CONNECTION FEE FUND</b>				
<b>Connection Fee Cash Balance 6/30/17</b>	\$98,780	\$0	\$98,780	\$0
Add: funds borrowed to subsidize operations	(5,693,040)	(5,655,246)	0	(37,794)
<b>Connection Fee Reserve Balance 6/30/17</b>	<b>(\$5,594,260)</b>	<b>(\$5,655,246)</b>	<b>\$98,780</b>	<b>(\$37,794)</b>
Add: Connection Fees Collected FYTD	783,400	737,800	45,600	0
Interest Earned	1,321	0	1,321	0
Subtotal	(\$4,809,539)	(\$4,917,446)	\$145,701	(\$37,794)
Less: Fees Expended FYTD	1,509,908	1,441,413	49,141	19,355
Fees transferred to RWS FYTD (Note 14)	5,582,035	5,582,035	0	0
<b>Connection Fee Reserve Balance 03/31/18</b>	<b>(\$11,901,483)</b>	<b>(\$11,940,894)</b>	<b>\$96,560</b>	<b>(\$57,149)</b>
Less: Funds borrowed to subsidize operations	(11,998,043)	(11,940,894)	0	(57,149)
<b>CONNECTION FEE CASH BALANCE 03/31/18</b>	<b>\$96,560</b>	<b>\$0</b>	<b>\$96,560</b>	<b>\$0</b>

**NORTH MARIN WATER DISTRICT  
CONNECTION FEE ANALYSIS  
FOR THE PERIOD ENDING MARCH 31, 2018**

The Connection Fee (FRC) Fund is comprised of cash available from collection of Facility Reserve Charge Fees. The FRC fee is charged to developers based upon the estimate of cost necessary to construct capacity to serve the new development. These funds are restricted by law for expansion of the facilities within the service area where the new development occurs. Funds are disbursed from the Connection Fee Reserve as expenditures to increase system capacity to serve new development are incurred.

<b>FY17 CONNECTION FEE EXPENDITURES</b>	<b>TOTAL EXPENDITURE</b>	<b>% FUNDED BY CONNECTION FEES</b>	<b>TOTAL FROM CONNECTION FEES<sup>1</sup></b>
<b>Novato Water</b>			
Bank of Marin AEEP Debt Service	\$361,531	25%	\$90,383
STP Rehab SRF Loan Debt Service	584,874	25%	146,218
Water Conservation Expenditures	214,848	100%	214,848
San Marin Pump Station Can Rehab	29,077	25%	7,269
Center Rd 6" CIP	553,800	50%	261,736
Grant Ave Bridge Pipeline Replacement	157,751	50%	78,876
Detector Check Assembly Upgrades	123,242	25%	30,811
San Mateo Tank Recoat	1,843,024	25%	450,967
Ridge Road 6" ACP	184,388	50%	66,118
San Mateo 24" Inlet/Outlet	41,984	50%	7,081
Crest Rd Main Replacement	69,071	50%	34,536
Dam Concrete Repair	196,349	25%	15,863
Stafford Spillway Repairs	81,894	25%	20,473
Advanced Meter Info Retrofit	914,056	25%	16,234
	<u>\$5,355,890</u>		<u>\$1,441,413</u>
<b>Recycled Water</b>			
NBWRA Grant Program Administration	\$18,508	100%	18,508
RW Expansion Central Area Local Share	5,045,381	100%	5,045,381
RW Expansion North Area Debt Service	185,739	100%	185,739
RW Expansion South Area Debt Service	332,407	100%	332,407
	<u>\$5,582,035</u>		<u>\$5,582,035</u>
<b>West Marin Water</b>			
Bank of Marin Debt Service	\$53,069	25%	\$15,545
Water Conservation Expenditures	4,540	100%	4,540
Repl PRE Tank #4A	169,216	25%	22,892
Green Sand Filter Media Replace	46,634	25%	6,164
	<u>\$273,459</u>		<u>\$49,141</u>
<b>Oceana Marin Sewer</b>			
OM Wastewater Treatment Pond	\$38,709	50%	19,355
	<u>\$11,250,093</u>		<u>\$7,091,944</u>

<sup>1</sup> The Percentage Funded by Connection Fees is the percentage of total project cost paid by FRC funds, which are allocated to new growth based on historic NMWD practice. The Total From Connection Fees amounts shown are FRC (connection fee) expenditures only, and do not include operations funding, which is also used to pay for these projects.

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**NORTH MARIN WATER DISTRICT  
EQUIPMENT EXPENDITURES  
PERIOD ENDING MARCH 31, 2018**

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	MARCH 2018	FYTD TOTAL	FY 17/18 BUDGET	(OVER) UNDER	Notes
<b>1 ADMINISTRATION</b>					
a. Virtual Server	\$8,600	\$8,600	\$6,000	(\$2,600)	
	\$8,600	\$8,600	\$6,000	(\$2,600)	
<b>2 CONSTRUCTION</b>					
a. Fittings & Hose for Emergency Hose Trailer		\$0	\$6,000	\$6,000	1
	\$0	\$0	\$6,000	\$6,000	
<b>3 OPERATIONS/MAINTENANCE</b>					
a. Replacement Closed Circuit TV System		\$0	\$15,000	\$15,000	1
b. Replacement Incubator		0	15,000	15,000	1
c. Metals Analyzer		0	105,000	105,000	1
	\$0	\$0	\$135,000	\$135,000	
<b>3 VEHICLE &amp; ROLLING EQUIPMENT EXPENDITURES</b>					
a. Hybrid 4x4 SUV		\$0	\$35,000	\$35,000	1
b. 1/2 Ton Pickup w/Tool Box & Radio*	0	28,926	28,000	(926)	1
	\$0	\$28,926	\$63,000	\$34,074	
<b>TOTAL EQUIPMENT EXPENDITURES</b>	<b>\$8,600</b>	<b>\$37,526</b>	<b>\$210,000</b>	<b>\$166,474</b>	

**Notes:**

(1) Replacement item.

\* Purchased Cargo Van (Ford Transit Connect)



**NORTH MARIN WATER DISTRICT  
OVERHEAD ACCOUNT ANALYSIS  
FOR PERIOD ENDING MARCH 31, 2018**

	YEAR TO DATE ACTUAL	ANNUAL BUDGET	YTD/ BUDGET%	PRIOR YTD ACTUAL
<b><u>Material Handling</u></b>				
Material Overhead Recovered (15%)	\$45,100	\$130,000	35%	\$31,891
Labor	\$55,525	\$110,000	50%	\$48,849
Materials, Supplies & Expense	5,559	10,000	56%	2,883
Correction to Inventory Counts	2,976	0	-	(2,703)
Depreciation	5,854	10,000	59%	7,527
	<u>\$69,913</u>	<u>\$130,000</u>	54%	<u>\$56,556</u>
Net Material Handling Gain / (Loss)	<u>(\$24,813)</u>	<u>\$0</u>	-	<u>(\$24,665)</u>
<b><u>Construction Supplies</u></b>				
Const Supplies Overhead Recovered (10%)	\$193,960	\$260,000	75%	\$190,926
Labor	\$48,216	\$95,000	51%	\$49,608
Materials, Supplies & Expense	65,345	94,000	70%	53,122
Small Tools	14,710	24,000	61%	7,275
Depreciation	871	2,000	44%	2,105
	<u>\$129,141</u>	<u>\$215,000</u>	60%	<u>\$112,110</u>
Net Constr Supplies Gain / (Loss)	<u>\$64,819</u>	<u>\$45,000</u>	144%	<u>\$78,816</u>
<b><u>Vehicle &amp; Equipment</u></b>				
Vehicle & Equipment Recovered <sup>1</sup>	\$273,570	\$388,000	71%	\$220,822
Labor	\$46,680	\$98,000	48%	\$50,774
Materials, Supplies & Expense	52,224	84,000	62%	68,026
Fuel	51,164	83,000	62%	48,030
Depreciation	90,078	132,000	68%	94,531
	<u>\$240,145</u>	<u>\$397,000</u>	60%	<u>\$261,361</u>
Net Vehicle & Equip Gain / (Loss)	<u>\$33,424</u>	<u>(\$9,000)</u>	-371%	<u>(\$40,539)</u>
<b><u>Payroll</u></b>				
Overheaded Payroll Recovered	\$5,868,198	\$8,155,000	72%	\$5,920,581
Salary Including Leave Time	\$3,900,899	\$5,473,000	71%	\$3,754,303
Employer FICA & Medicare Tax	303,164	408,000	74%	287,634
Insurance <sup>2</sup>	667,545	1,007,000	66%	670,779
Worker's Compensation	121,985	115,000	106%	90,816
Retiree Medical Accrual	60,313	83,000	73%	60,125
CalPERS Retirement	717,552	1,066,000	67%	709,756
Unreconciled Difference	85,184	0	-	228,083
	<u>\$5,856,641</u>	<u>\$8,152,000</u>	72%	<u>\$5,801,496</u>
Net Payroll Gain / (Loss)	<u>\$11,557</u>	<u>\$3,000</u> <sup>3</sup>		<u>\$119,085</u>
<b>Total Overhead Gain / (Loss)</b>	<b><u>\$84,987</u></b>	<b><u>\$39,000</u></b>	<b>218%</b>	<b><u>\$132,697</u></b>

<sup>1</sup> Vehicle & Equipment Recovered is the amount charged to projects and operations to recover the expense of owning and operating the asset. The recovery rate is \$7/hr for vehicles 3/4-ton and under and \$14/hr for larger vehicles. An additional 50% is charged to developer projects to reflect the fair market value of the asset used.

<sup>2</sup> Insurance Includes Medical, Dental, Vision, Cafeteria, Life & Unemployment.

<sup>3</sup> Projected gain on self-insured worker's compensation gives rise to the budgeted payroll gain.

**NORTH MARIN WATER DISTRICT  
EXPENDITURES BY CATEGORY  
FOR PERIOD ENDING MARCH 31, 2018**

OPERATING EXPENSE				West	Oceana	YTD Total	Annual	YTD	Prior YTD	%
		Novato	Recycled	Marin	Marin		Budget	Budget	Actual	Change
								%		
1	Salaries & Benefits	\$ 4,786,287	\$ 47,375	\$ 173,275	\$ 47,949	\$ 5,054,886	\$6,978,000	72%	\$ 5,147,893	-2%
2	Water Purchases	3,750,381	108,102	-	-	3,858,483	4,867,000	79%	4,023,355	-4%
3	Depreciation	2,052,065	355,515	144,357	27,984	2,579,921	3,526,000	73%	2,563,998	1%
4	Materials, Services & Supplies	1,095,916	17,882	61,436	31,976	1,207,210	1,933,000	62%	1,063,168	14%
5	Consulting Services/Studies	145,072	-	1,874	-	146,946	382,000	38%	32,934	346%
6	Chemicals	353,160	1,977	1,698	-	356,835	434,000	82%	209,753	70%
7	Electric Power	346,504	2,253	36,426	17,230	402,413	459,000	88%	314,155	28%
8	Vehicles and Equipment (Distrib.)	168,933	2,926	12,514	2,569	186,942	287,000	65%	164,979	13%
9	Tools & Supplies (Distrib.)	154,256	3,415	9,917	2,669	170,257	185,000	92%	173,700	-2%
10	Retiree Medical Expenses	129,901	-	-	-	129,901	172,000	76%	127,728	2%
11	Water Conservation Rebates	20,702	-	500	-	21,202	104,000	20%	40,223	-47%
12	Insurance & Claims	68,717	-	-	1,427	70,144	144,000	49%	65,538	7%
13	Offices Supplies & Postage	58,382	-	-	-	58,382	102,000	57%	93,007	-37%
15	Overhead Charges (Gain)/Loss	(84,987)	-	-	-	(84,987)	(39,000)	218%	(132,737)	-36%
16	Distributed Costs (Lab/G&A/ConsAcctg)	(410,537)	42,079	93,045	20,446	(254,967)	(384,000)	66%	(218,764)	17%
17	<b>Total Operating Expense</b>	<b>12,634,752</b>	<b>581,524</b>	<b>535,042</b>	<b>152,250</b>	<b>13,903,568</b>	<b>19,150,000</b>	<b>73%</b>	<b>13,668,930</b>	<b>2%</b>
18	Interest Expense & Other	425,279	183,957	23,697	406	633,339	752,000	84%	580,383	9%
19	<b>Total Expenses</b>	<b>\$ 13,060,031</b>	<b>\$ 765,481</b>	<b>\$ 558,739</b>	<b>\$ 152,656</b>	<b>\$ 14,536,907</b>	<b>\$ 19,902,000</b>	<b>73%</b>	<b>\$ 14,249,313</b>	<b>2%</b>
<b>Warehouse, Shop &amp; Yard</b>										
20	Salaries & Benefits	150,421	-	-	-	150,421	299,000	50%	149,231	1%
21	Materials, Services & Supplies	190,055	-	-	-	190,055	307,000	62%	176,633	8%
22	Depreciation	98,724	-	-	-	98,724	-	0%	104,163	-5%
23	Distributed Costs	(439,200)	-	-	-	(439,200)	(606,000)	72%	(430,027)	2%
	<b>Total W/H, Shop &amp; Yard</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		<b>-</b>	
<b>District Capital Outlay</b>										
25	Salaries & Benefits	402,912	130,198	26,373	9,295	568,778	817,000	70%	420,757	35%
26	Equipment Expenditures	37,315	-	-	-	37,315	210,000	18%	28,979	29%
27	Debt Principal Payments	394,521	357,527	56,866	-	808,914	1,799,000	45%	1,022,438	-21%
28	Materials, Services & Supplies	2,718,526	3,306,913	110,082	43,711	6,179,232	16,928,000	37%	4,249,815	45%
29	<b>Total District Capital Outlay</b>	<b>3,553,274</b>	<b>3,794,638</b>	<b>193,321</b>	<b>53,006</b>	<b>7,594,239</b>	<b>19,754,000</b>	<b>38%</b>	<b>5,721,989</b>	<b>33%</b>
<b>Developer Funded Projects</b>										
30	Salaries & Benefits	87,265	132	48	6,670	94,115	222,000	42%	146,957	-36%
31	Materials, Services & Supplies	143,417	49	(3,258)	2,707	142,915	130,000	110%	181,741	-21%
32	<b>Total Developer Projects</b>	<b>230,682</b>	<b>181</b>	<b>(3,210)</b>	<b>9,377</b>	<b>237,030</b>	<b>352,000</b>	<b>67%</b>	<b>328,698</b>	<b>-28%</b>
33	<b>Total</b>	<b>\$ 16,843,987</b>	<b>\$ 4,560,300</b>	<b>\$ 748,850</b>	<b>\$ 215,039</b>	<b>\$ 22,368,176</b>	<b>\$ 40,008,000</b>	<b>56%</b>	<b>\$ 20,300,000</b>	<b>10%</b>

**NORTH MARIN WATER DISTRICT  
VEHICLE FLEET ANALYSIS  
FOR PERIOD ENDING MARCH 31, 2018**

Fiscal Year to Date

Vehicle Cost per Mile

Year	Description	Veh#	Assigned	Mileage	Expense <sup>1</sup>	Recovery <sup>2</sup>	Gain/(Loss)	Mileage	Life to Date	FYTD18	FY17	FY16
1	2002 Chev K1500 4x4	47	Corda, Joe	7,441	\$2,986	\$4,472	\$1,486	137,127	\$0.37	\$0.40	\$0.38	\$0.42
2	2003 Dodge Dakota 4x4	49	Stompe	4,166	\$2,559	\$3,347	\$788	103,105	\$0.42	\$0.61	\$0.46	\$0.32
3	2004 Chev C1500	53	STP	3,208	\$1,752	\$1,600	(\$153)	126,757	\$0.46	\$0.55	\$0.46	\$0.67
4	2004 Chev C1500 Xtra Cab	54	Pool	2,326	\$1,209	\$1,149	(\$60)	99,663	\$0.46	\$0.52	\$0.79	\$3.67
5	2005 Honda Civic Hybrid	56	Engineering	1,135	\$731	\$1,159	\$428	79,067	\$0.29	\$0.64	\$1.81	\$0.44
6	2005 Honda Civic Hybrid	57	Wtr Cons/Pool	2,380	\$696	\$1,360	\$664	76,821	\$0.23	\$0.29	\$0.15	\$0.20
7	2005 Ford Ranger	58	FSR/Pool	1,368	\$667	\$936	\$270	129,532	\$0.45	\$0.49	\$1.07	\$0.32
8	2006 Chev Colorado	501	LeBrun	4,748	\$1,421	\$3,666	\$2,245	142,763	\$0.37	\$0.30	\$0.20	\$0.40
9	2007 Chev Colorado	504	Rodriguez	9,088	\$2,286	\$8,292	\$6,005	68,522	\$0.40	\$0.25	\$0.36	\$0.35
10	2008 Ford F250 4x4	505	Maintenance	2,351	\$4,915	\$3,458	(\$1,457)	92,981	\$0.77	\$2.09	\$1.80	\$0.56
11	2008 Ford F250 4x4	506	STP	4,994	\$3,706	\$2,401	(\$1,305)	70,435	\$0.77	\$0.74	\$0.63	\$0.57
12	2008 Chev Colorado 4x4	509	Engineering	2,691	\$998	\$2,130	\$1,131	99,023	\$0.34	\$0.37	\$0.29	\$0.41
13	2009 Toyota Prius Hybrid	510	Clark	10,882	\$1,501	\$4,320	\$2,819	115,877	\$0.19	\$0.14	\$0.13	\$0.40
14	2010 Ford F150 4x4	511	STP	5,929	\$2,470	\$2,849	\$379	77,720	\$0.50	\$0.42	\$0.69	\$0.54
15	2010 Ford F150	512	Kurfirst	5,994	\$2,639	\$9,072	\$6,433	100,491	\$0.48	\$0.44	\$0.44	\$0.74
16	2010 Ford F150	513	STP	8,216	\$4,002	\$5,246	\$1,245	74,574	\$0.46	\$0.49	\$0.54	\$0.69
17	2012 Ford F250	515	Reed	7,250	\$2,749	\$9,499	\$6,750	48,440	\$0.60	\$0.38	\$0.84	\$0.47
18	2012 Ford F250	516	Castellucci	5,393	\$3,138	\$5,891	\$2,752	53,529	\$0.52	\$0.58	\$0.47	\$2.44
19	2014 Ford F150	517	Grisso	1,756	\$620	\$3,549	\$2,929	10,468	\$0.37	\$0.35	\$0.21	\$0.66
20	2015 Ford F250 4x4	518	Kehoe, Chris	10,866	\$4,453	\$10,756	\$6,303	62,589	\$0.39	\$0.41	\$0.41	\$0.38
21	2015 Ford Escape 4X4	520	Arendell	11,285	\$2,731	\$6,488	\$3,757	42,351	\$0.24	\$0.24	\$0.18	\$0.31
22	2015 Ford F150 4X4	521	Lemos	7,781	\$2,417	\$2,971	\$554	30,777	\$0.29	\$0.31	\$0.17	\$0.36
23	2016 Nissan Frontier	522	Roberto	10,181	\$3,123	\$8,397	\$5,273	24,958	\$0.35	\$0.31	\$0.38	-
24	2017 Ford Escape 4X4	523	Lab	4,738	\$1,536	\$2,872	\$1,336	12,038	\$0.31	\$0.32	\$0.30	-
25	2016 Nissan Frontier	524	Bynum	7,131	\$2,777	\$7,812	\$5,035	9,531	\$0.33	\$0.39	-	-
26	2018 Ford Cargo Van	526	On-Call	0	\$3,669	(\$91)	\$5,035	0	-	-	-	-
<b>Total 3/4 Ton &amp; Under</b>				<b>143,298</b>	<b>\$58,080</b>	<b>\$113,689</b>	<b>\$55,609</b>	<b>1,889,139</b>	<b>\$0.42</b>	<b>\$0.41</b>	<b>\$0.47</b>	<b>\$0.48</b>
1	1999 Ford F350 W/Svc Body	19	Pool	1,267	\$2,734	\$3,402	\$668	134,924	\$0.80	\$2.16	\$2.08	\$2.42
2	2002 Int'l 5 Yd Dump	44	Construction	2,798	\$4,749	\$11,725	\$6,976	99,214	\$1.75	\$1.70	\$6.81	\$1.51
3	1999 Ford F550 3-Yd Dump	52	Construction	1,850	\$3,795	\$5,664	\$1,868	90,435	\$1.01	\$2.05	\$1.68	\$1.15
4	2006 Int'l 4300 Crew	503	Bergstrom/Barrilleaux	2,320	\$2,945	\$16,986	\$14,041	40,207	\$1.83	\$1.27	\$3.75	\$2.19
5	2009 Peterbilt 325 Crew	508	Breit/Crew	2,107	\$3,710	\$17,647	\$13,937	31,265	\$2.15	\$1.76	\$4.04	\$1.35
6	2012 Int'l 5 Yd Dump	514	Rupp	3,747	\$5,501	\$11,396	\$5,895	33,763	\$1.42	\$1.47	\$1.14	\$1.15
7	2015 Int'l 5 Yd Dump	519	Sjoblom	4,377	\$5,629	\$12,596	\$6,967	25,821	\$1.04	\$1.29	\$1.10	\$0.78
8	2017 Ford F350 4x4	525	Ielmorini/Davenport	7,563	\$3,279	\$16,184	\$12,905	8,446	\$0.44	\$0.43	\$0.52	\$0.78
<b>Total 1 Ton &amp; Over</b>				<b>26,029</b>	<b>\$32,341</b>	<b>\$95,599</b>	<b>\$63,258</b>	<b>464,075</b>	<b>\$1.28</b>	<b>\$1.24</b>	<b>\$2.50</b>	<b>\$1.14</b>

<sup>1</sup> Expense amount shown excludes depreciation (approximately \$85,000 for FY18).

<sup>2</sup> Recovery is the amount charged to projects and operations to recover the expense of owning and operating the vehicle. Commencing 7/1/17 the recovery rate for vehicles 3/4-ton and under is \$7/hr and the recovery rate for vehicles 1-ton and over is \$14/hr. An additional 50% is charged to developer projects to reflect the fair market value of the vehicle being used.

<sup>3</sup> Purchased used in 2004 with 32,500 miles. Mileage shown is total incurred since District purchase.

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**NORTH MARIN WATER DISTRICT  
WATER CONSERVATION PROGRAM DETAIL  
FOR PERIOD ENDING MARCH 31, 2018**

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Description			COST THRU JUNE 2017	MARCH 2018	FYTD TOTAL	FY 17/18 BUDGET	(OVER) UNDER	TOTAL COST
<b>NOVATO</b>								
a. Residential								
1-7700-01	1-7700-26	1 Cash for Grass	\$378,476	\$3,066	\$16,783	\$65,000	\$48,217	\$395,260
1-7700-02	1-7700-27	2 Landscape Efficiency Rebates	22,667	0	815	5,000	4,185	23,482
1-7700-03		3 Fixtures Purchases	44,652	494	997	5,000	4,003	45,649
1-7700-06	1-7700-28	4 Washing Machine Rebates	343,746	163	2,551	10,000	7,450	346,297
1-7700-07		5 Demonstration Garden Improvements	54,416	0	0	1,000	1,000	54,416
1-7700-11	1-7700-29	6 Toilet Rebate SF	964,946	2,203	12,230	30,000	17,770	977,176
1-7700-12	1-7700-30	7 Toilet Rebate MF	18,173	0	0	2,000	2,000	18,173
1-7700-13		8 Residential Audits	328,236	1,555	35,063	67,000	31,937	363,298
1-7700-15		9 High Efficiency Toilet Distribution	242,177	0	0	0	0	242,177
1-7700-16		10 Water Waste Ordinance Monitoring	85,576	127	4,626	10,000	5,375	90,202
1-7700-17	1-7700-31	11 Swimming Pool Cover Rebate	2,997	0	220	1,000	781	3,216
1-7700-19	1-7700-32	12 ET Controller Rebate	30,385	315	2,166	5,000	2,834	32,551
1-7700-08		13 Administration	1,312,551	10,044	79,528	140,000	60,472	1,392,079
1-7700-20		14 New Development Wtr Cons Program	73,519	1,631	11,743	15,000	3,257	85,262
1-7700-21	1-7700-33	15 Demand Offset Rebate Program	2,797	0	19	2,000	1,981	2,816
1-7700-23		16 Grant Administration	2,314	0	986	1,000	14	3,300
1-7700-24	1-7700-34	17 Hot Water Recirculation Rebate	1,927	0	189	2,000	1,812	2,116
1-7700-25		18 Residential Fill Station	66,064	0	357	0	(357)	66,421
b. Commercial								
1-7701-02	1-7701-05	1 Toilet Rebate Program	66,961	0	100	10,000	9,900	67,061
1-7701-03	1-7701-04	2 Commercial Audits	15,890	363	5,006	9,000	3,994	20,896
c. Public Outreach/Information								
1-8672-16		1 Fall Newsletter	56,769	0	10,599	8,000	(2,599)	67,368
1-8672-17		2 Spring Newsletter	74,879	3,258	3,258	9,000	5,742	78,137
1-8672-18		3 Summer Newsletter	20,290	0	0	0	0	20,290
1-7700-04		4 Public Outreach / H <sub>2</sub> O Fair	110,892	798	4,161	7,000	2,839	115,053
1-7700-05		5 Marketing	149,846	452	644	16,000	15,356	150,490
1-7700-22		6 Public Outreach/Leadership Novato	11,098	0	0	0	0	11,098
d. Large Landscape								
1-8653-02		1 Large Landscape Audits	89,427	153	266	3,000	2,734	89,693
1-7702-01		2 Large Landscape Budgets	36,181	113	1,379	1,000	(379)	37,560
1-7702-02	1-7702-04	3 Large Landscape Irrig Efficiency Rebates	14,460	0	0	4,000	4,000	14,460
1-8653-01		4 CIMIS Station Maintenance	18,653	15	168	2,000	1,832	18,821
1-7702-03		5 Administration-Large Landscape	40,984	2,514	20,997	10,000	(10,997)	61,980
<b>TOTAL NOVATO WATER CONSERVATION</b>			<b>\$4,681,949</b>	<b>\$27,263</b>	<b>\$214,848</b>	<b>\$440,000</b>	<b>\$225,152</b>	<b>\$4,896,796</b>
<b>WEST MARIN WATER</b>								
2-5166-00		a. Water Conservation Program	\$81,581	\$747	\$4,540	\$10,000	\$5,461	\$86,121
<b>TOTAL WATER CONSERVATION EXPENDITURES<sup>1</sup></b>			<b>\$81,581</b>	<b>\$747</b>	<b>\$4,540</b>	<b>\$10,000</b>	<b>\$5,461</b>	<b>\$86,121</b>

<sup>1</sup>FY18 total excludes \$254,457 (5,813.5 AF x \$43.77) paid to SCWA for water conservation services provided to NMWD.

**NORTH MARIN WATER DISTRICT  
CAPITAL IMPROVEMENT PROJECTS  
PERIOD ENDING MARCH 31, 2018**

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Description		COST THRU JUNE 2017	MARCH 2018	FYTD TOTAL	FY 17/18 BUDGET	(OVER)/UNDER BUDGET	TOTAL COST
<b>1 PIPELINE REPLACEMENTS/ADDITIONS</b>							
a. Main/Pipeline Replacements							
1-7161-00	1 Ridge Road 6" ACP (8" @ 1,400')	\$52,152	\$45,406	\$132,137	\$325,000	\$192,863	\$184,289
1-7161-01	2 Ridge Road 6" ACP-Materials Purchase	\$0	100	100	0	(100)	100
1-7168-00	3 Center Rd 6" CIP (8"@1,200')	30,329	2,620	523,471	175,000	(348,471)	553,800
b. Main/Pipeline Additions							
1-7150-00	1 San Mateo 24" Inlet/Outlet Pipe (2,200')	27,824	122	14,161	50,000	35,839	41,984
1-7145-00	2 Zone A Pressure Improvements - Ignacio	388,145	0	896	0	(896)	389,041
c. PB Service Line Replacements							
1-7139-21	1 Replace PB in Sync w/City Paving (30 Svcs)	0	122	1,419	70,000	68,581	1,419
1-7123-20	2 Other PB Replacements (85 Services)	0	2,221	49,226	180,000	130,774	49,226
1-7123-21	3 Replace PB-Lamont Ave	0	0	732	0	(732)	732
1-7123-22	4 Repl PB-Brooke/Robinhood/McIntosh/Charmaine/Timothy	0	980	980	0	(980)	980
1-7169-00	5 Country Lane 2" Plastic	5,997	0	120	0	(120)	6,117
1-7174-00	6 Grant Ave Bridge Pipe Replacement	0	0	157,751	0	(157,751)	157,751
1-7175-00	7 Crest Road Main Replacement	0	358	69,071	0	(69,071)	69,071
1-7176-00	8 Replace Shady Lane Service Saddles	0	2,099	2,099	0	(2,099)	2,099
d. Relocations to Sync w/City & County CIP							
1-8737-xx	1 Other Relocations	0	0	0	80,000	80,000	0
<b>TOTAL PIPELINE REPLACEMENTS/ADDITIONS</b>		<b>\$504,447</b>	<b>\$54,027</b>	<b>\$952,163</b>	<b>\$880,000</b>	<b>(\$72,162)</b>	<b>\$1,456,610</b>
e. Aqueduct Replacements & Enhancements							
1-7118-02	1 MSN B2-Utility Agreement Costs <sup>4</sup>	\$74,192	\$854	\$1,193	\$0	\$0	\$75,385
1-7118-11	2 AEEP Post Construction Costs	816	0	1,426	0	(1,426)	2,242
		<b>\$75,008</b>	<b>\$854</b>	<b>\$2,619</b>	<b>\$0</b>	<b>(\$1,426)</b>	<b>\$77,626</b>
<b>2 SYSTEM IMPROVEMENTS</b>							
1-8677-21	a. Flushing Taps at Dead-Ends (12 biennially)	\$0	\$0	\$0	\$50,000	\$50,000	\$0
1-7007-11	b. Detector Check Assembly Repair/Repl (~14/yr)	0	25,673	119,816	190,000	70,184	119,816
1-7090-04	c. Anode Installations (150/yr)	0	0	0	30,000	30,000	0
1-7132-04	d. Radio Telemetry	0	0	4,141	25,000	20,859	4,141
1-7157-00	e. Automate Zone Valve-Slowdown Ct	1,112	0	0	100,000	100,000	1,112
1-7158-00	f. Advanced Meter Information Retrofit <sup>1</sup>	860,747	19,607	53,309	4,700,000	4,646,691	914,056
1-7136-00	g. Facilities Security Enhancements	50,091	0	1,598	0	(1,598)	51,689
<b>TOTAL SYSTEM IMPROVEMENTS</b>		<b>\$911,951</b>	<b>\$45,280</b>	<b>\$178,864</b>	<b>\$5,095,000</b>	<b>\$4,866,136</b>	<b>\$1,090,814</b>
<b>3 BUILDINGS, YARD, &amp; S.T.P. IMPROVEMENTS</b>							
a. Administration Building							
1-6501-43	1 Electronic Document Management System	\$0	\$0	\$0	\$150,000	\$150,000	\$0
1-6501-44	2 Office/Yard Building Renovation <sup>2</sup>	51,870	0	727	1,500,000	1,499,273	52,598
b. Corp Yard/Warehouse/Construction Office							
1-6502-47	1 Other Yard Improvements	0	0	0	30,000	30,000	0
c. Stafford Treatment Plant							
1-6600-69	1 Stafford Dam Concrete Repair	142,844	0	53,505	50,000	(3,505)	196,349
1-6600-89	2 Coat Concrete Clearwalls (Both Units)	0	1,361	1,696	490,000	488,304	1,696
1-6600-70	3 Watershed Erosion Control	0	0	3,534	0	(3,534)	3,534
1-6600-90	4 Stafford Dam Armoring Retrofit	0	0	0	0	0	0
1-6600-91	5 Stafford Spillway Repairs	0	1,299	81,894	0	(81,894)	81,894
<b>TOTAL BUILDING, YARD, &amp; STP IMPROVEMENTS</b>		<b>\$194,714</b>	<b>\$2,660</b>	<b>\$141,355</b>	<b>\$2,220,000</b>	<b>\$2,078,645</b>	<b>\$336,069</b>
<b>4 STORAGE TANKS &amp; PUMP STATIONS</b>							
1-6221-21	a. San Mateo Tank Recoat (5 MG)	\$39,156	\$12,221	\$1,803,868	\$1,900,000	\$96,132	\$1,843,024
1-7170-00	b. Hydro pneumatic Tank Repairs	0	902	15,157	30,000	14,843	15,157
1-6112-24	c. Lynwood Pump Station Motor Control Center	102,499	428	737	100,000	99,263	103,237

**NORTH MARIN WATER DISTRICT  
CAPITAL IMPROVEMENT PROJECTS  
PERIOD ENDING MARCH 31, 2018**

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Description		COST THRU JUNE 2017	MARCH 2018	FYTD TOTAL	FY 17/18 BUDGET	(OVER)/UNDER BUDGET	TOTAL COST
1-6112-25	d. Lynwood Pump Station Can Rehab	0	4,275	16,575	15,000	(1,575)	16,575
1-6117-27	e. San Marin Pump Station Can Rehab	29,077	0	0	15,000	15,000	29,077
1-6141-00	f. Crest P.S.(Design/Const)/Reloc School Rd P.S.	43,169	703	2,581	60,000	57,419	45,750
1-6207-20	g. Old Ranch Road Tank Replacement	0	6,785	7,518	0	(7,518)	7,518
<b>TOTAL STORAGE TANKS &amp; PUMP STATIONS</b>		<b>\$213,901</b>	<b>\$25,313</b>	<b>\$1,846,437</b>	<b>\$2,120,000</b>	<b>\$273,563</b>	<b>\$2,060,338</b>
<b>5 RECYCLED WATER</b>							
5-7127-00	a. NBWRA Grant Program Administration	\$1,268,876	\$0	\$18,508	\$80,000	\$61,492	\$1,287,384
5-6058-10	b. Expansion to Central Area <sup>3</sup>	1,118,933	14	3,058	6,365,000	6,361,942	1,121,990
5-6058-15	c. RW Central Right of Way Costs <sup>3</sup>	86,978	0	360	0	(360)	87,338
5-6058-20	d. RW Central Private Onsite Retrofit <sup>3</sup>	154,940	71,221	200,679	0	(200,679)	355,619
5-6058-25	e. RW Central Public Onsite Retrofit <sup>3</sup>	29,038	0	420	0	(420)	29,458
5-6058-30	f. RW Exp-Central-East Side Const <sup>3</sup>	3,230,293	51,749	860,863	0	(860,863)	4,091,156
5-6058-35	g. RW-Central East-Rowland Way <sup>3</sup>	346,919	0	6,943	0	(6,943)	353,862
5-6058-40	h. RW Exp-Central-West Side Const <sup>3</sup>	6,334,951	291	522,684	0	(522,684)	6,857,635
5-6058-50	i. RW Central-Norman Tank Rehab/Const <sup>3</sup>	141,522	2,223	977,263	0	(977,263)	1,118,785
5-6058-60	j. RW Central-Highway101 Crossing	9,252	0	846,333	0	(846,333)	855,585
5-6234-20	k. Upgrade Auto-Fill Valve at Reservoir Tank	0	0	0	50,000	50,000	0
	l. Other Recycled Water Expenditures	0	0	0	50,000	50,000	0
<b>TOTAL RECYCLED WATER</b>		<b>\$12,721,702</b>	<b>\$125,499</b>	<b>\$3,437,111</b>	<b>\$6,545,000</b>	<b>\$3,107,890</b>	<b>\$16,158,812</b>
<b>6 WEST MARIN WATER SYSTEM</b>							
2-6263-20	a. Replace PRE Tank #4A (25K Gal w/82K Gal)	\$77,648	\$4,491	\$91,568	\$550,000	\$458,432	\$169,216
2-7160-00	b. Green Sand Filter Media Replace	21,977	0	24,657	75,000	50,343	46,634
2-8829-00	c. PB Replace in Sync w/County Paving	0	0	0	50,000	50,000	0
2-6604-21	d. Gallagher Well Motor Operated Valve	0	0	14,490	0	(14,490)	14,490
2-6601-32	e. TP Solids Handling	190,918	2,628	5,340	0	(5,340)	196,258
2-6609-20	f. New Gallagher Well #2	0	357	399	0	(399)	399
<b>TOTAL WEST MARIN WATER SYSTEM</b>		<b>\$290,543</b>	<b>\$7,476</b>	<b>\$136,454</b>	<b>\$675,000</b>	<b>\$538,546</b>	<b>\$426,998</b>
<b>7 OCEANA MARIN SEWER SYSTEM</b>							
8-8672-28	a. Infiltration Repair	\$39,195	\$0	\$0	\$40,000	\$40,000	\$39,195
8-7163-00	b. Design/Install 8th Disposal Trench (300')	15,674	0	595	80,000	79,405	16,269
8-7085-02	c. Tahiti Way Lift Pumps Rebuild (2)	33,114	0	0	20,000	20,000	33,114
8-7164-00	d. Tahiti Way Power Relocation	0	0	0	20,000	20,000	0
8-7171-00	e. Pond Dredging & Relining	0	167	715	50,000	49,285	715
8-6607-22	f. OM Treatment Pond-Storm Damage-FEMA	3,964	167	35,163	0	(35,163)	39,127
8-7173-00	g. OM Treatment Pond Rehab-404 Grant-FEMA	0	6,748	12,585	0	(12,585)	12,585
8-7172-00	h. OM Force Main & Lift Station Upgrade	0	0	3,947	0	(3,947)	3,947
<b>TOTAL OCEANA MARIN SEWER SYSTEM</b>		<b>\$91,946</b>	<b>\$7,082</b>	<b>\$53,005</b>	<b>\$210,000</b>	<b>\$156,995</b>	<b>\$144,951</b>
<b>TOTAL PROJECT EXPENDITURES</b>		<b>\$15,004,211</b>	<b>\$268,191</b>	<b>\$6,748,009</b>	<b>\$17,745,000</b>	<b>\$10,948,185</b>	<b>\$21,752,220</b>
<b>8 LESS FUNDED BY GRANTS, LOANS &amp; REIMBURSEMENTS</b>							
<b>(Accrued)/Deferred</b>							
	a. RW Expansion - Central Service Area SRF Loan <sup>3</sup>	(\$2,796,097)	(\$21,269)	\$1,402,928	\$0	(\$1,402,928)	(\$1,393,169)
	b. RW Expansion - Central Service Area Grant <sup>3</sup>	(3,664,767)	(\$7,375)	2,185,677	0	(2,185,677)	(1,479,090)
	c. MSN Aqueduct Caltrans Reimb-Segment B2 <sup>4</sup>	(270)	(854)	(1,193)	0	1,193	(1,463)
	d. Office/Yard Building Renovation <sup>2</sup>	(51,870)	0	(727)	0	727	(52,597)
<b>FUNDING BY OTHERS (ACCRUED)/DEFERRED</b>		<b>(\$6,513,004)</b>	<b>(\$29,498)</b>	<b>\$3,586,685</b>	<b>\$0</b>	<b>(\$3,586,685)</b>	<b>(\$2,926,319)</b>

**NORTH MARIN WATER DISTRICT  
CAPITAL IMPROVEMENT PROJECTS  
PERIOD ENDING MARCH 31, 2018**

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Description	COST THRU JUNE 2017	MARCH 2018	FYTD TOTAL	FY 17/18 BUDGET	(OVER)/UNDER BUDGET	TOTAL COST
<b>Received</b>						
a. RW Expansion - Central Service Area SRF Loan <sup>3</sup>	(\$1,899,538)	(\$6,955)	(\$2,572,328)	(\$2,773,160)	(\$200,832)	(\$4,471,866)
b. RW Expansion - Central Service Area Grant <sup>3</sup>	(1,881,701)	(18,678)	(3,877,113)	(\$2,559,840)	1,317,273	(5,758,814)
c. MSN Aqueduct Caltrans Reimb-Segment B2 <sup>4</sup>	(59,974)	0	0	0	0	(59,974)
d. Office/Yard Building Renovation <sup>2</sup>	0	0	0	(1,500,000)	(1,500,000)	0
<b>FUNDING BY OTHERS RECEIVED</b>	<b>(\$3,841,213)</b>	<b>(\$25,633)</b>	<b>(\$6,449,441)</b>	<b>(\$6,833,000)</b>	<b>(\$383,559)</b>	<b>(\$10,290,654)</b>
<b>NET PROJECT EXPENDITURES</b>	<b>\$4,649,994</b>	<b>\$213,060</b>	<b>\$3,885,253</b>	<b>\$10,912,000</b>	<b>\$6,977,941</b>	<b>\$8,535,247</b>

CIP SUMMARY-GROSS EXPENDITURES:	Current Month	FYTD Total	FY 17/18 Budget	FYTD/ Budget%
Novato Water Capital Projects	\$128,134	\$3,121,438	\$10,315,000	30%
Novato Recycled Water Capital Projects	125,499	3,437,111	6,545,000	53%
West Marin Water Capital Projects	7,476	136,454	675,000	20%
Oceana Marin Sewer Capital Projects	7,082	53,005	210,000	25%
<b>Gross Capital Improvement Project Outlays</b>	<b>\$268,190</b>	<b>\$6,748,009</b>	<b>\$17,745,000</b>	<b>38%</b>

CIP SUMMARY-NET EXPENDITURES:	Current Month	FYTD Total	FY 17/18 Budget	FYTD/ Budget%
Novato Water Capital Projects	\$127,281	\$3,119,518	\$8,815,000	35%
Novato Recycled Water Capital Projects	71,222	576,275	1,212,000	48%
West Marin Water Capital Projects	7,476	136,454	675,000	20%
Oceana Marin Sewer Capital Projects	7,082	53,005	210,000	25%
<b>Net Capital Improvement Project Outlays</b>	<b>\$213,060</b>	<b>\$3,885,253</b>	<b>\$10,912,000</b>	<b>36%</b>

**Notes to Capital Improvement Projects Schedule:**

- (1) FY18 Radio Read Meter Retrofit cost funded by \$4.6M Loan. Loan origination fee is \$85,300.
- (2) Office/Yard Refurbish to be funded by Bank Loan.
- (3) \$11.7M RW Central Expansion funded by Federal Grants, SRF Loan, local contribution & Marin Country Club contribution. Debt service paid from FRC Funds.
- (4) Funding provided 100% by Caltrans.

CONSULTING SERVICES/STUDIES						
1-4055-00	a. Stafford Lake Sanitary Survey	\$12,068	\$127	\$694	\$0	(\$694)
1-4056-00	b. Novato Creek Steelhead Recovery	33,482	0	8,001	0	(8,001)
1-4057-00	c. Local Water Supply Enhancement Study	0	0	0	150,000	150,000
1-7039-02	d. Novato Water Master Plan Update	458	3,192	33,028	45,000	11,972
1-4058-00	e. Cost of Service Study Peer Review	0	0	0	30,000	30,000
1-4059-00	f. Stafford Lake Water Rights Update	0	0	0	50,000	50,000
1-4060-00	g. STP Efficiency Improvements	0	0	0	75,000	75,000
1-4063-00	h. Novato Asset Management Study	0	3,463	32,289	75,000	42,711
1-4064-00	i. Pipe Crossing Repairs-Novato & Rush Creek & Leveroni Bank	11,506	0	60,990	0	(60,990)
1-4069-00	j. Strategic Long Range Plan	0	239	3,738	0	(3,738)
2-4061-00	k. Digitize West Marin Water Facility Maps	10,200	764	1,874	10,000	8,126
5-4045-00	l. RW Engineering Report Update	31,589	0	0	0	0
8-4062-00	m. Oceana Marin Vulnerability Study	0	0	0	25,000	25,000
		<b>\$99,303</b>	<b>\$7,785</b>	<b>\$140,614</b>	<b>\$460,000</b>	<b>\$319,386</b>
						<b>\$239,917</b>

## North Marin Water District Financial Statement Notes

### Note 1 - Restricted Cash

**Connection Fee Fund:** Cash available from collection of Connection Fees. The fee is charged to developers based upon the estimate of cost necessary to construct capacity to serve the new development. These funds are restricted by law for expansion of the water or sewer facilities within the service area where the development occurs. Funds are disbursed from the Connection Fee Reserve as expenditures are incurred to increase system capacity to serve new development. The fund balance accrues interest monthly.

**Wohler Pipeline Financing Fund:** In December 2002 the Sonoma County Water Agency sold \$6.8 million (par) of 30-year revenue bonds to finance the Wohler to Forestville Pipeline. NMWD's share of the debt is \$844,050 ( $\$6,800,000 \times 11.2 / 90.4$ ). In January 2003 the District established this designated cash and corresponding reserve account and transferred \$844,050 of FRC money into the fund. The Wohler Pipeline Financing Fund is credited with interest monthly.

**Collector #6 Financing Fund:** The Sonoma County Water Agency received a \$15.8 million State Revolving Fund loan commitment at an interest rate of 2.8% repayable over 20 years for construction of Collector #6. NMWD's share of Collector #6 is \$1,950,000 ( $\$15,800,000 \times 11.2 / 90.4$ ). In January 2003 the District established this designated cash and corresponding reserve account and transferred \$1,950,000 of FRC money into the fund. The Collector #6 Financing Fund is credited with interest monthly.

**Revenue Bond Redemption Fund:** Comprised of one year of debt service as required by West Marin revenue bond covenants. These funds are restricted for payment of bond principal, interest and administration fees. The fund balance does not accrue interest.

**Bank of Marin Project Fund:** The District received an \$8 million loan from the Bank of Marin in October 2011 to fund the Aqueduct Energy Efficiency Project. The 20-year, 3.54% annual percentage rate loan requires monthly payments of \$46,067 and will be fully amortized on 10/27/2031. In June 2012 the Board authorized reallocating \$1 million of this loan to West Marin Water to repay Novato Water \$223,000 owed for previous loans to fund Long Range Improvement Projects and the remainder to fund the Solids Handling Facility at the Point Reyes Water Treatment Plant. The unexpended fund balance accrues interest monthly.

**Deer Island RWF Replacement Fund:** The State Revolving Fund (SRF) loan agreement required the District to agree to establish and maintain a Water Recycling Capital Reserve Fund (WRCRF) for the expansion, major repair, or replacement of the Deer Island Recycled Water Treatment Plant. The WRCRF is maintained in compliance with the "Policy for Implementing the State Revolving fund for Construction of Wastewater Treatment Facilities" in effect at the time the agreement was signed by the District. The September 2003 Recycled Water Master Plan prepared by Nute Engineering recommended limiting the reserve to fund replacement of the RWF electrical and mechanical equipment (including transmission pumps) as they wear out. The cost of said equipment was \$1,483,000 which, at Nute's recommended 6% interest rate factor and 25-year life, renders an annual funding requirement \$115,000. The fund balance accrues interest monthly.

**Recycled Water Capital Replacement and Expansion Fund:** The 2011 Interagency Agreements for Recycled Water between NSD, LGVSD & NMWD require that any payments to the Distributor (NMWD) by the End User (Consumers) in excess of actual costs (marginal payments) shall be deposited in this fund. Operation and Maintenance Costs are defined as the actual cost of: labor (including general and administrative overhead plus tools and supplies normally applied), equipment and vehicle charges, consumables (such as chemicals and electrical power), and spare parts and/or replaced components necessary to reliably treat and deliver recycled water to the End Users. Operation and Maintenance Costs do not include costs for major capital replacement or process changes.

**Tax Receipts held in Marin County Treasury:** Balance of tax proceeds collected and disbursed by the County of Marin for repayment of the Olema (OL-2) general obligation bond debt. The County credits interest to these funds quarterly.



**STP SRF Reserve Fund – Marin County Treasury:** The 2004 Stafford Treatment Plant State Revolving Fund (SRF) loan agreement requires the District to build a Reserve Fund equal to one year of payments (\$1,044,474) in the Marin County Treasury during the first ten years of the 20-year repayment period. Every January 1 and July 1, commencing January 1, 2010, the District deposits with the County 10% of the semi-annual SRF payment. The County credits the fund with interest quarterly, and will use the Reserve to pay the last 2 semi-annual SRF loan payments.

**RWS North/South SRF Reserve Fund:** The State Water Resource Control Board Agreements for the seven Clean Water State Revolving Fund Loans made for expansion of the Recycled Water System distribution system require that the District establish a reserve fund equal to one year's debt service (\$614,299) prior to the construction completion date.

**RWS Central SRF Reserve Fund:** The State Water Resource Control Board Agreement for the Clean Water State Revolving Fund Loan made for expansion of the Recycled Water System distribution system requires that the District establish a reserve fund equal to one year's debt service (\$255,373) prior to the construction completion date.

## **Note 2 - Designated Cash**

**Liability Contingency Fund:** Established in 1986 when the District first elected to self-insure its general liability risk. This reserve was funded with \$1 million initially and \$200,000 annually thereafter until it reached a balance of \$2 million. In FY98 the West Marin Water System was included in the fund and built-up a proportional reserve of \$74,000 over several years. Commencing FY93, \$1 million of the reserve was made available to fund loans to eligible employees under the District's Employer Assisted Housing Program. In August 2008, \$500,000 was transferred into this reserve from the Self-Insured Workers' Compensation Fund and made available to fund Employer Assisted Housing Program loans. Currently there are \$1,234,200 in Employer Assisted Housing Loans outstanding (see Note 3). In March 2005, \$652,400 was expended from the fund to purchase a home at 25 Giacomini Road in Point Reyes Station. The home is currently rented. In 2006, \$8,885 was added from the sale of surplus property in West Marin. The fund balance does not accrue interest.

**Self-Insured Workers' Compensation Fund:** Commencing July 2011, the District began self-insuring its workers' compensation liability. The savings accrued through self-insuring the liability is reserved in this fund for possible future claims expense. The District carries a workers' compensation excess policy for claims that exceed \$750,000. See schedule on page 21.

**Retiree Medical Benefits Fund:** NMWD pays the cost of health insurance for retirees between the ages of 55 and 65 and spouse under any group plan offered by CalPERS. The retiree must be at least 55 and have a minimum of 12 years of NMWD service at the date of retirement. NMWD's contribution toward the chosen plan is capped in the same manner as all other NMWD employees in the same class. Coverage terminates for the spouse when the spouse becomes eligible for Medicare, or for both the retiree and spouse when the retiree becomes eligible for Medicare. When the retiree or spouse becomes eligible for Medicare, NMWD pays up to the couple annuitant rate, which is capped at \$3,830 per year (\$319/month). In August 2003, NMWD transferred \$2.55 million (\$2.3 million for current retirees plus \$250,000 for future retirees) from unrestricted cash into a reserve to fund this obligation. In 2010 the Board directed staff to add \$1,500 per employee annually as a payroll overhead to accrue and accelerate amortization of this liability. The accrual is maintained as a Long-Term Liability entitled Retiree Health Benefits Payable. The Retiree Health Benefits Payable plus the Retiree Medical Benefits Reserve Fund currently has a balance of \$3.9M. In 2015 an Actuarial Analysis calculated NMWD's total actuarial liability at \$5.6 million. The Retiree Medical Benefits cash fund earns interest monthly. Accounting Standards require that the \$5.6M reserve be fully funded in 20 years.

**Drought Contingency (Rate Stabilization) Fund:** In August 2008, the Board directed staff to establish this reserve with \$135,000 from the Self-Insured Workers' Compensation Fund for the Novato district to draw upon during dry years. A threshold of 3.2 billion gallons of potable consumption was established as a benchmark for 'normal' years. During any fiscal year that water sales volume exceeds 3.2BG, the incremental revenue generated is deposited into the Drought Contingency Reserve. In those years when sales volume falls below the benchmark, funds are withdrawn from the reserve to maintain the budgeted revenue forecast. The goal is to build a reserve equal to 20% (currently \$2,500,000) of budgeted annual

water commodity sales. In FY09 \$50,335 was added to the reserve. The fund was fully depleted in FY10. The fund balance accrues interest monthly.

**Maintenance Accrual Fund:** Established in FY91 to provide a source of maintenance money for replacement of treatment, storage, transmission and distribution facilities as they wear out. The annual contribution from operating reserves was initially \$200,000. Net polybutylene claim settlement proceeds of \$671,060 were closed into the fund in FY93. In FY94 the annual contribution was reduced to \$100,000. The District's goal is to build a reserve equal to 10% of the net book value of Novato's existing plant, currently \$7.0M. Funds are borrowed from the Maintenance Accrual Fund to offset the shortfall in unrestricted Cash & Investments. The fund balance does not accrue interest.

**Conservation Incentive Rate Fund:** In 2004 and 2005, a Conservation Incentive Tier Rate was enacted in Novato and West Marin respectively. Monies derived from this tier-rate charge are set aside in the Conservation Incentive Rate Reserve, and used for conservation programs designated by the Board.

**Operating Reserve Fund:** This reserve, comprised of four months of budgeted operating expenditures (less depreciation) as recommended by the District's financial advisors, serves to ensure adequate working capital for operating, capital, and unanticipated cash flow needs that arise during the year. The fund balance does not accrue interest.

### **Note 3 – Employee Loans**

**Housing Loans:** The District's Employer Assisted Housing Program allows up to \$300,000 to be loaned to an employee for a period of up to 15 years for the purchase of a home within the District service territory that will enable the employee to respond rapidly to emergencies affecting the operation of the District. Repayment is due upon sale, termination of employment, or other event as described in the Program. Interest on the loan is contingent upon and directly proportional to the appreciation in value occurring on the purchased property. There are five employee-housing loans currently outstanding totaling \$934,200: a \$250,000 loan dated August 2004, a \$39,200 loan dated September 2004, a \$150,000 loan dated November 2007, a \$245,000 loan dated June 2010, and a \$250,000 loan dated March 2015.

### **Note 4 – Other Long Term Receivables**

The District entered into a temporary water service agreement with Black Point Golf Links in 1999 to provide potable water for StoneTree Golf Course until recycled water was available. In 2006 the District received a \$4.3 million 20-year 2.4% SRF loan to finance the Deer Island Recycled Water project, and Black Point Partners agreed to pay the District \$3,612,640 in bimonthly payments of \$41,762 at 2.4% coinciding with StoneTree's water service payments. The final payment from StoneTree is due in February 2024.

In 2015 the District entered into an agreement with Marin Country Club for their share of the pipeline extension to provide recycled water for the Marin Country Club Golf Course. In 2016 the District received a \$6.6 million 30-year 1.0% SRF loan to finance the Recycled Water Central project, and Marin Country Club agreed to pay the District \$1,265,295 in bimonthly payments of \$8,142 at 1.0% over 30 years for their share of the pipeline extension. Marin Country Club also agreed to pay \$430,463 of the District's local share of the project in bimonthly payments of \$8,242 over 10 years at 2.8%, which is the Novato Potable Fund's weighted average cost of debt. The payments will coincide with Marin Country Club's water service payments. The final payment from Marin Country Club is due in November 2047.

### **Note 5 – Depreciation**

Assets are assigned a useful life based on consultations with the District Chief Engineer and a survey of other water agencies. Depreciation is computed on a straight-line basis over the estimated useful life of the various classes of property as follows:

North Marin Water District  
Financial Statement Notes

<u>Facility</u>	<u>Life (Years)</u>
Aqueduct.....	150
Dam.....	100
Buildings & Structures.....	40
Mains.....	50
Pumping Equipment.....	25
Water Treatment Equipment.....	20
Storage & Transmission (16"+) Facilities.....	50
Distribution Facilities (includes Pump Stations).....	50
Office, Laboratory, Construction & Shop Tools & Equipment.....	10
Vehicles 1 ton or greater.....	10
All other vehicles.....	5
Sewer Mains.....	40
Sewer Pumps.....	10

**Note 6 - Capitalization Policy**

The Government Finance Officers Association *Guide for State and Local Governments* recommends that a capitalization policy incorporate a minimum threshold of \$5,000 and an estimated useful life of at least two years. It also cautions that federal grant and loan requirements prevent the use of capitalization thresholds in excess of \$5,000. Thus NMWD's capitalization threshold is \$5,000.

**Note 7 – Bond & Loan**

**Servicing Schedule for Fiscal Year 2017-2018**

<u>Service Area</u>	<u>Description</u>	<u>Issue Date</u>	<u>Rate</u>	<u>Original Amount</u>	<u>Payment Due</u>	<u>Final Pmt</u>	<u>FY18</u>		<u>6/30/18 Outstanding Balance</u>
							<u>Interest Expense</u>	<u>Principal Paid</u>	
1 Novato	SRF Loan - STP	2004	2.39%	\$16,528,850	7/1 & 1/1	7/1/29	\$254,401	\$790,074	\$10,050,647
2 Novato	Bank Loan Marin	2011	3.54%	\$7,000,000	27 <sup>th</sup> /mo	10/27/31	\$181,888	\$300,153	\$5,155,896
Novato Total							\$436,289	\$1,090,227	\$15,206,543
3 RW TP	SRF Loan	2006	2.4%	\$4,302,560	6/19	6/19/27	\$57,718	\$215,648	\$2,189,287
4 RW North	SRF Loans (4)	2013	2.6%	\$4,375,605	Varies	Varies	\$89,924	\$189,808	\$3,351,885
5 RW South	SRF Loans (3)	2013	2.2%	\$5,359,858	Varies	Varies	\$96,062	\$233,145	\$4,278,721
6 RW Central	SRF Loan	2016	1.0%	\$4,610,852	12/18	12/31/47	\$0	\$0	\$4,610,852
Recycled Water Total							\$243,704	\$638,601	\$14,430,745
7 PRE	PRE-1 Revenue	1980	5.0%	\$240,000	10/1 & 4/1	4/1/20	\$1,900	\$12,000	\$26,000
8 Point Reyes	PR-6 Revenue	1981	5.0%	\$217,800	7/1 & 1/1	7/1/21	\$2,300	\$11,000	\$45,000
9 WM Water	Bank Loan Marin	2012	3.54%	\$1,000,000	27 <sup>th</sup> /mo	10/27/31	\$26,699	\$44,059	\$756,524
West Marin Water Total							\$30,899	\$67,059	\$827,524
FY18 Total							\$710,892	\$1,795,887	\$30,464,812

1. In April 2004 the California State Department of Water Resources approved a 2.39% 20-year loan for reconstruction of the Stafford Water Treatment Plant. The project was completed in FY09 with repair of the Outlet Tower Sluice Gate. Interest paid during construction totaled \$1,636,378. The loan covenants require an annual reserve fund contribution of \$104,447 (10% of the annual debt service obligation) be deposited into the Marin County Treasury during each of the first ten years of the repayment period. Debt service is funded 25% by Facility Reserve Charges. The first payment was made in December 2009.
2. In October 2011 Bank of Marin made a 20-year 3.54% (APR) loan of \$8 million to fund the District's share of the Aqueduct Energy Efficiency Project. See Note 15 below, and note to loan 9 above.
3. In August 2006 the California State Department of Water Resources approved a 2.4% 20-year loan of \$4,264,545 for construction of the Deer Island Recycled Water Facility. With the addition of \$38,015 in Construction Period Interest, the loan principal totaled \$4,302,560. The project was completed in June 2007, and the first payment was made June 19, 2008.
4. In July 2011 the California State Department of Water Resources approved a series of four 2.6% 20-year loans which totaled \$4,375,605 for the Recycled Water North Service Area Expansion Project. The projects were completed on October 31, 2012, and the first payment was made in November of 2012.
5. In March 2012 the California State Department of Water Resources approved a series of three 2.2% 20-year loans totaling \$5,361,952 for the Recycled Water South Service Area Expansion Project. The projects were completed on September 4, 2013, and the first payment was made in December of 2013.
6. In May 2016 the California State Department of Water Resources approved a 1.0% 30-year loan of \$6,592,295 for the Recycled Water Central Service Area Expansion. The project will be completed in December 2017, and the first payment will be made December 31, 2018.
7. The Paradise Ranch Estates private water system was created by David Adams and Sons in 1952 to provide water to 85 homes in the PRE subdivision located north of Inverness Park. Problems with water quality and quantity developed and in 1969 the Marin County Health Department issued a boil-water order to all customers of the company. In 1972 the County declared a moratorium on issuance of building permits. A suit by property owners resulted in an agreement reached in Marin Superior Court in late 1978 directing Adams to finance a District feasibility study for the takeover of the system. This culminated in formation of Improvement District PRE-1 and an election authorizing issue of \$240,000 of 5% 40-year revenue bonds, which, in conjunction with a \$720,000 Farmers Home Administration grant, financed system rehabilitation. Service was provided from the Point Reyes System by installation of an additional well, expansion of the treatment plant, and a 6-inch pipeline connection at the Inverness Park pump station extending 1.6 miles along Sir Francis Drake Boulevard to the newly reconstructed Paradise Ranch Estates distribution system. On 4/22/80 the USDA purchased the revenue bond issue in its entirety.
8. In 1981 work commenced on rehabilitating the Point Reyes Inverness Park water system. 18,865 feet of pipeline was either replaced or installed, a 300,000-gallon tank was added in Point Reyes Station and a 100,000-gallon tank was added in Inverness Park. Total cost of these improvements was \$820,015. A 72% grant combined with a \$217,800 5% 40-year revenue bond acquired 8/28/81 by the Farmers Home Administration financed the project.
9. In June 2012 the Board authorized reallocating \$1 million of the Bank of Marin loan to West Marin Water to repay Novato Water \$223,000 owed for loans to fund Long Range Improvement Projects and the remainder to fund the Solids Handling Facility at the Point Reyes Water Treatment Plant. See note to loan 2 above.

#### **Note 8 – Unemployment Insurance Reserve**

NMWD uses the "Reimbursable Method" of paying for Unemployment Costs. Under this method, the District reimburses the State Employment Development Department for all unemployment benefits paid on our behalf. The reserve is maintained at an amount equal to the higher of the average claim amount

paid over the last 5 years or 52 times the maximum weekly benefit amount (currently \$450 x 52 = \$23,400).

**Note 9 – Payroll Benefits**

Payroll Benefits payable includes payroll taxes; vacation, sick, and holiday leave; Section 125 payments; cancer, long term care and disability insurance premiums; union dues; and employee benefit fund.

**Note 10 - Interest Policy on Inter-District Loans**

In the event an improvement district expends all of its Undesignated Funds, it shall borrow funds from that improvement district's Board Designated Fund reserves to meet ongoing requirements. In the event an improvement district expends all of its Board Designated Fund reserves, it may receive a loan from the Novato Improvement District in an amount sufficient to meet its ongoing requirements. Restricted Funds shall not be used to finance ongoing normal operating expenses.

No interest shall be paid by an improvement district on funds borrowed from that improvement district's Board Designated Fund reserves. Interest on loans from the Novato Improvement District shall be paid by the recipient district to the Novato district based upon the outstanding loan balance at the close of the previous accounting period. Interest shall be calculated at the higher of: 1. The weighted average interest rate of Novato improvement district debt (2.78% at 6/30/17); or 2. The average interest rate earned on the District treasury since the close of the previous accounting period; plus \$50 per month.

**Note 11 – Budget Augmentations**

- 1) At the last Board Meeting on October 3, 2017, the Board approved the budget augmentation to the Recruitment Expense account (56406.01.11) by \$30,000.00 for the retention of the consulting firm Ralph Andersen & Associates to recruit a successor Auditor-Controller; and
- 2) At the same Board Meeting noted above, the Board approved the budget augmentation to the General Office Salaries account (56102.01.11) by \$40,000.00 for the additional salaries for the overlap of the successor Auditor-Controller with the retiring Auditor-Controller.

**Note 12 – Prior Period Adjustment**

**Note 13 – Explanation of Financial Statement Components**

The District's financial statement is comprised of four components: 1) Statement of Net Position, 2) Sources and Uses of Funds Statement – All Service Areas Combined, 3) Income Statement and Cash Flow by Service Area, and 4) Notes to the Financial Statements. This report also contains other supplementary information in addition to the basic financial statements themselves.

**The Statement of Net Position** (page 4) reports the District's assets and liabilities and provides information about the nature and amount of investments in resources (assets) and the obligations to the District's creditors (liabilities). The difference between assets and liabilities is reported as *net position*. Over time, increases or decreases in the fund balance may serve as a useful indicator of whether the financial position of the District is improving or deteriorating.

**The Sources and Uses of Funds Statement – All Service Areas Combined** (page 8) compares fiscal year-to-date performance against the Board approved annual budget – presented in the adopted budget format. This Sources and Uses of Funds Statement varies from the income statement in that it includes capital expenditures, debt principal repayment, connection fee revenue, and cash infusions from debt issuance.

**The Income Statement and Cash Flow by Service Area** (page 9) presents the net income (loss) for the fiscal year-to-date (FYTD) period for each of the District's four service areas. The income and expenses on this report are presented in conformity with Generally Accepted Accounting Principles (GAAP) and comply with Governmental Accounting Standards Board pronouncements. Accordingly, all income and expenses are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. This statement measures the success of each service area's operations and can be used to determine whether the service area has successfully recovered all costs through user fees and other charges.

Also included at the bottom of page 9 is a statement of Cash Flow by Service Area. The primary purpose of this statement is to reconcile in an informative manner the difference between the net income/(loss) for the period of each service area with the resultant change in cash balance that occurred over the same period.

**Notes to the Financial Statements** (page 31) provide a summary of significant accounting policies and assumptions and other information of value to the financial statement reader.

**Other Supplementary Information** includes Detail Income Statements presented in accordance with GAAP for each of the four service areas (pages 10, 14, 16, 19). These statements present income and expenditures in close detail for further analysis. Other supplementary schedules of note include the Vehicle Fleet Analysis (page 25), Equipment Expenditures (page 22) and Capital Improvement Project Expenditures (page 27), which show outlays to date, compared with budget authority.

**Note 14 –Connection Fee Transfers from Novato Water To Recycled Water**

The following Connection Fee (FRC) reserve amounts have been transferred to the Recycled Water fund:

	Expansion Local Share			NBWRA	SRF RWF		Expansion		Total	Transfer Executed
	North	South	Central		Loan		SRF Loan	CIP		
FY07				\$29,725					\$29,725	
FY08				\$50,478	\$22,795				\$73,273	
FY09				\$150,455	\$22,795				\$173,250	
FY10	\$133,659			\$75,198	\$22,795				\$231,652	\$133,659
FY11				\$133,319	\$22,795				\$156,114	
FY12	\$233,478	\$265,500		\$115,883	\$22,795				\$637,656	
FY13				\$315,023	\$22,795	\$464,572			\$802,390	\$1,970,401
FY14	\$236,291	\$723,525	\$4,024	\$63,035	\$22,795	\$500,529			\$1,550,200	\$1,550,200
FY15		\$17,563	(\$4,024)	\$38,283	\$22,795	\$614,299			\$688,916	\$688,916
FY16			\$66,729	\$102,842	\$22,795	\$614,299			\$806,664	\$806,664
FY17			\$362,524	\$194,636	\$22,795	\$614,299	\$36,687		\$1,230,940	\$1,230,940
FY18			\$5,045,381	\$18,508		\$518,146			\$5,582,035	\$5,582,035
	<b>\$603,428</b>	<b>\$1,006,588</b>	<b>\$5,474,634</b>	<b>\$1,287,385</b>	<b>\$227,950</b>	<b>\$3,326,144</b>	<b>\$36,687</b>		<b>\$11,962,815</b>	<b>\$11,962,815</b>

**Note 15 –Debt Service Coverage Ratio**

Debt Service Coverage Ratio is the ratio of net income/(loss) plus interest expense, depreciation, and connection fee revenue for the fiscal year to the sum of the fiscal year's principal and interest payments on the District's total debt.

	FY14	FY15	FY16	FY17	Budget FY18
Net Income/(Loss)	\$3,815,820	\$1,050,523	\$378,468	(\$117,451)	\$197,000
Depreciation	\$3,128,302	\$3,183,725	\$3,286,353	\$3,416,411	\$3,526,000
Interest Expense	\$830,830	\$847,951	\$807,035	\$757,781	\$732,000
Connection Fees	\$152,800	\$801,600	\$278,690	\$1,034,585	\$833,000
Total Available For Debt Service	\$7,927,751	\$5,883,799	\$4,750,546	\$5,091,326	\$5,288,000
Annual Debt Service	\$2,448,968	\$2,534,473	\$2,528,938	\$2,527,022	\$2,534,000
Debt Service Coverage Ratio	3.24	2.32	1.88	2.01	2.09

**Note 16 – Deferred Inflow and Deferred Outflow of Resources**

*Deferred Inflow of Resources* is the changes in actuarial assumptions and the differences between the actual contribution & proportionate share of contribution, which for FY16 was \$655,355 and is recognized in FY17. *Deferred Outflow of Resources* is the fiscal year 2017 pension contribution (\$926,447) adjusted by the difference in actual & expected experience, difference between projected and actual earnings on investments, and the differences in proportions of net pension liability share of contributions from the CalPERS Actuarial Report (\$2,005,413) for a total of \$2,931,860 at June 30, 2017

	Deferred Outflow	Deferred Inflow
FY17 Pension Contributions	\$926,447	
Differences between actual & expected experience	\$22,831	
Changes in actuarial assumptions		(\$280,202)
Net difference between projected & actual earnings on investments	\$1,458,356	
Differences between actual contribution & proportionate share of		(\$375,153)
Adjustment due to differences in proportions of net pension liability	\$524,226	
Total at June 30, 2017	\$2,931,860	(\$655,355)

**Note 17 – Net Pension Liability**

The net pension liability<sup>1</sup> is required by GASB68 for accounting purposes and is the difference between the total pension liability (the present value of projected benefit payments to employees based on their past service) and the assets (mostly investments reported at fair value) set aside in a trust and restricted to paying benefits to current employees, retirees, and their beneficiaries.

	<b>FY17 Entries</b>	<b>PY Deferral Amortization</b>	<b>Net Pension Adjustment</b>
Net Pension Liability 6/30/2016	\$8,619,837		\$8,619,837
Reclassify FY16 Contributions to FY17	(\$828,792)		(\$828,792)
Defer FY17 Contributions	\$926,447		\$926,447
Difference between Expected & Actual Experience <sup>2</sup>	(\$6,490)	(\$13,561)	(\$20,051)
Change in Proportion <sup>3</sup>	\$308,659	(\$267,014)	\$41,645
Pension Expense <sup>4</sup>	\$544,527	\$147,431	\$691,958
Change in Actuarial Assumptions <sup>5</sup>	(\$26,574)	\$152,076	\$125,502
Difference in Actual Contrib & Proportionate Share of Contrib <sup>6</sup>	(\$339,974)	\$162,477	(\$177,497)
Difference between Projected & Actual Earnings on Investments	\$1,843,149	(\$181,409)	\$1,661,740
Net Pension Liability 6/30/2017	\$11,040,789	\$0	\$11,040,789

<sup>1</sup> Net Pension Liability (NPL) = Total Pension Liability (TPL) – fiduciary net position (market value of assets)

<sup>2</sup> The Difference between the Expected and Actual Experience measures the difference between what the projected actuarial factors for retirement age, salary increases, and mortality rates were assumed to be with what NMWD's factors actually turned out to be.

<sup>3</sup> Change in Proportion reflects the difference from the prior year of NMWD's net pension liability as a percentage of the CalPERS Miscellaneous Pool aggregate net pension liability

<sup>4</sup> Pension Expense = service cost + interest on TPL + current period benefit changes – member contributions – expected earnings on plan investments + administrative expenses + recognition of deferred outflows – recognition of deferred inflows

<sup>5</sup> Actuarial Assumptions include projections of retirement age, discount and inflation rates, salary increases, return on investment, mortality rates, and retiree cost-of-living adjustments.

<sup>6</sup> The Difference in Actual Contribution and Proportionate Share of Contributions identifies the difference between NMWD's actual pension contribution compared to its proportionate share of the actuarially required cumulative contribution of all employers in the CalPERS Miscellaneous Pool based on NMWD's net pension liability relative to the CalPERS Miscellaneous Pool aggregate net pension liability.

Unfunded Accrued Liability (UAL) is the Actuarial Valuation which relates to funding and is a calculation of Entry Age Normal Accrued Liability and Plan's Market Value of Assets. This District's UAL at June 30, 2016 (latest available) is \$12,242,255.



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## MEMORANDUM

To: Board of Directors  
From: Rocky Vogler, Chief Engineer *RV*  
Subject: Water Service Agreement – 5300 Redwood Hwy.  
APN 019-300-019 - Lot 4 (Sonoma County)  
R:\Folders by Job No\2800 Jobs\2809 5300 Redwood\2809 Agmt BOD Memo.doc

April 27, 2018

**RECOMMENDED ACTION:** The Board approve authorization of this agreement

**FINANCIAL IMPACT:** None (Owner funded)

The project entails lowering 60 feet of existing parallel 2-inch size PVC water main and 2-inch PVC conduit (120 feet total), and relocation of a 1-inch service located 14 feet from the existing 8,000 gallon Windhaven concrete tank to 130 feet west of the new home driveway entrance on Cloud Lane (referred to as 5300 Old Redwood Hwy South). The meter shall be outfitted with a cellular type reader. The project is located in the unincorporated area of Petaluma (see attached map), with the original water main and an existing 8,000 gallon water tank completed under Job 1 2312.00 in 1990 (known as Windhaven Subdivision). The lowering will accommodate the new driveway to the proposed residence. Connection fees were paid by the 1990 agreement and all costs for lowering the PVC lines will be funded by the owner. Though water service will be relocated to a lower elevation on the same parcel, it still qualifies as low pressure water service and the owner will enter into a separate "Low Pressure Water Service Agreement Outside District Boundaries". The owner will also install a new 5,000 gallon tank under ownership of the property owner and separated (by air gap) from the NMWD system. It will be dedicated to fire protection and for irrigation usage. In addition, a new access road will be constructed to provide NMWD access to its existing 8,000 gallon concrete tank.

Sanitary sewer service will be via private septic on the 40 acre parcel.

Environmental Document Review

The County of Sonoma adopted a Negative Declaration for the Windhaven Subdivision on August 11, 1987, when the subdivision map was approved.

RECOMMENDATION:

That the Board approve authorization of this agreement.

Approved by GM



Date

*4.27.18*

RESOLUTION NO. 18-xx  
AUTHORIZATION OF EXECUTION  
OF  
WATER SERVICE FACILITIES CONSTRUCTION AGREEMENT  
WITH  
JARROD BAUMANN

---

BE IT RESOLVED by the Board of Directors of NORTH MARIN WATER DISTRICT that the President and Secretary of this District be and they hereby are authorized and directed for and on behalf of this District to execute that certain water service facilities construction agreement between this District and Jarrod Baumann, providing for the installation of water distribution facilities to provide domestic water service to that certain real property known as 5300 Redwood Hwy, Sonoma County Assessor's Parcel Number 019-300-019, PETALUMA, CALIFORNIA.

\* \* \*

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 1<sup>st</sup> day of May, 2018, by the following vote:

AYES:

NOES:

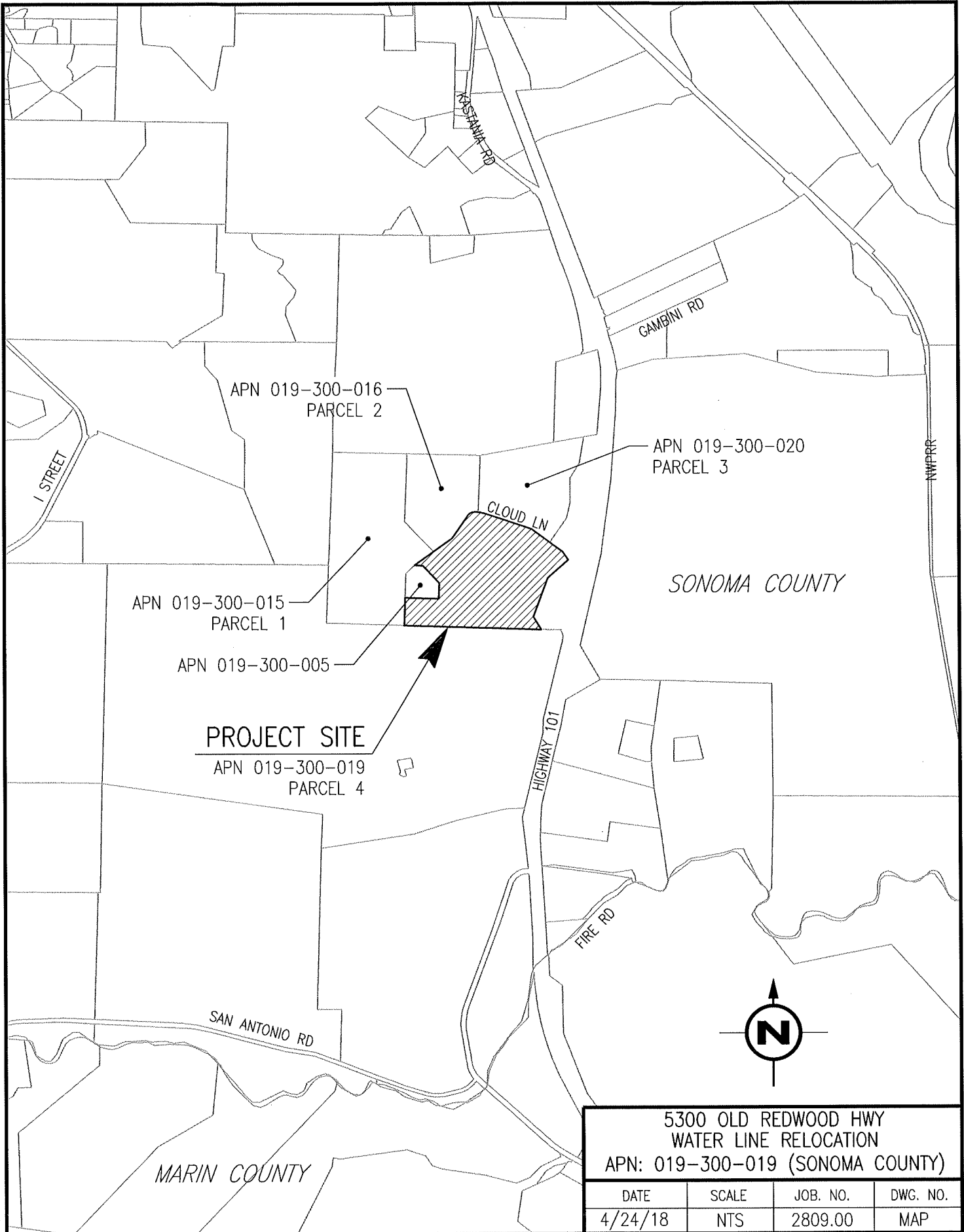
ABSENT:

ABSTAINED:

(SEAL)

---

Theresa Kehoe, Secretary  
North Marin Water District



5300 OLD REDWOOD HWY WATER LINE RELOCATION APN: 019-300-019 (SONOMA COUNTY)			
DATE	SCALE	JOB. NO.	DWG. NO.
4/24/18	NTS	2809.00	MAP

LOW PRESSURE  
WATER SERVICE AGREEMENT  
OUTSIDE DISTRICT BOUNDARIES  
FOR 5300 REDWOOD HIGHWAY  
SONOMA COUNTY ASSESSOR'S PARCEL NUMBER  
019-300-019

---

*THIS AGREEMENT*, is made and entered into as of \_\_\_\_\_, 2018, by and between NORTH MARIN WATER DISTRICT, herein called "District," and JARROD R. BAUMANN, owner of specific property within the Windhaven subdivision and an individual herein called "Applicant"; and

*WHEREAS*, Sonoma County Assessor's Parcel No. (APN) 019-300-019, commonly known as 5300 (formerly 5200) Redwood Highway South was formerly known as APN 019-300-18 in 1990; and

*WHEREAS*, APN 019-300-019 is known as Lot 4 of the Windhaven Subdivision; and

*WHEREAS*, by Resolution No. 86-186, adopted on August 11, 1987, the Planning Commission, County of Sonoma, adopted a Negative Declaration and approved the project known as Windhaven Subdivision which includes Lot Nos. 2, 3 and 4; and

*WHEREAS*, the District entered into an Outside District Boundaries Water Service Facilities Construction Agreement on October 8, 1990 for Lot's 2, 3 and 4 of the Windhaven Subdivision and Lot 4 has remained a vacant parcel to this date; and

*WHEREAS*, all fees were paid for low pressure water service to Lot 4 (APN 019-300-019) in the 1990 Windhaven Subdivision Water Service Agreement with the stipulation that the Applicant for Lot 4 shall enter into a separate low pressure water service agreement with the District regarding the conditions under which low pressure service will be provided; and

*WHEREAS*, the Applicant is the owner of said real property along U.S. Highway No. 101 in Sonoma County, California, outside the boundaries of the District as set forth above and which is hereinafter referred to as "Applicant's land"; and

*WHEREAS*, said land lies south of the city of Petaluma, but water service is not presently available to said land from existing facilities owned and operated by the City of Petaluma; and

*WHEREAS*, the District owns and operates a 42-inch aqueduct known as the NORTH MARIN AQUEDUCT paralleling the east side of U.S. Highway No. 101 for the purpose of transporting water to the District's Novato Service Area, and surplus water from said aqueduct can be made available to said lands on a limited basis; and

*WHEREAS*, as part of the above referenced 1990 Agreement, the District contacted the Sonoma County Planning Department, Sonoma Local Agency Formation Commission, Sonoma County Water Agency, Sonoma County Board of Supervisors, San Antonio Volunteer Fire Department, City of Petaluma, City of Novato, Marin County Planning Department and Marin Local Agency Formation Commission, regarding water service to this land and received no objection thereto; and

*NOW THEREFORE*, the parties hereto agree as follows:

1. The Applicant hereby applies to the District for limited water service to the Applicant's land and shall comply with and be bound by all terms and conditions of this agreement, the District's regulations, policies, standards and specifications. The District shall provide surplus water service to the Applicant's land in accordance with its regulations from time to time in effect. The term "surplus water" as used herein shall mean quantities of water which are not normally required by the District, as determined solely by the District, to provide normal water service to customers within the District's Novato Service Area which is that portion of the territory of the District which includes the City of Novato and the land contiguous thereto.

2. The Applicant acknowledges and agrees that authorization of this agreement and the provision of surplus water to the Applicant's lands by the District shall be subject to the following conditions:

(a) In the event a water shortage emergency should occur in the District's Novato Service Area, the District shall have the right to restrict water service to said land.

(b) The Applicant shall pay for water delivered at such rates and charges as may be established by the District from time to time for water service outside District boundaries.

(c) Low pressure water service will be rendered to said land in accordance with District Regulation 11 entitled "Low Pressure Service". The Owner of said land shall install a privately owned and maintained Reduced Pressure Principal (RPP) backflow device and booster pump system for the water service to said land in accordance with local ordinances and plumbing codes prior to connecting the service to any existing structure or occupancy of any new structure, shall inform any buyer of said land of the water service conditions herein described, and shall provide the buyer a copy of this agreement prior to any final sales transaction. Said private pumping equipment shall not be a part of District's water system. The maintenance of said pumping facilities shall be the responsibility of the owner of said land. The Applicant shall submit plans and specification for said private pumping system to the District for approval prior to installation.

3. Water service to be provided pursuant to this agreement to the Applicant's land shall be limited to use for a single family residence plus associated outside domestic use plus ancillary stock water use, but not including pasture or commercial agricultural irrigation.

4. Prior to procurement of any materials by the District or scheduling of either construction inspection or installation of the facilities by the District, the Applicant shall:

a. deliver to the District vellum or mylar prints of any revised utility plans approved by the City or County to enable the District to determine if any revisions to the final water facilities construction drawings are required. The proposed facilities to be installed are shown on Drawing No. 1.2809.001, entitled, "5300 OLD REDWOOD HWY WATER LINE RELOCATION", a copy of which is attached, marked Exhibit "A", and made a part hereof. (For purposes of recording, Exhibit "A" is not attached but is on file in the office of the District.)

b. grant or cause to be granted to the District without cost and in form satisfactory to the District all easements and rights of way shown on Exhibit "A" or otherwise required by the District for the facilities.

c. deliver to the District a written construction schedule to provide for timely withdrawal of guaranteed funds for ordering of materials to be furnished by the District and scheduling of either construction inspection or construction pursuant to Section 6 hereof.

5. Initial Charges for new service, estimated District costs, and estimated applicant installation costs are as follows:

**Initial Charges**

Meter Charges .....		\$	0.00	\$	0.00
Reimbursement Fund Charges .....	1 @	\$	0.00	\$	0.00
Facilities Reserve Charges .....	1 @	\$	0.00	\$	0.00

**Subtotal - Initial Charges (paid under J-2312) . \$ 0.00**

**Estimated District Costs**

Pipe, Fittings & Appurtenances .....	\$	2,462.00
District Construction Labor .....	\$	10,661.00
Engineering & Inspection .....	\$	2,514.00
Bulk Materials .....	\$	600.00

**Subtotal - Estimated District Costs ..... \$ 16,237.00**

**Estimated Applicant Installation Costs**

Installation Labor .....	\$	10,596.00
Contractor Furnished - Pipe Fittings & Appurtenances .....	\$	0.00
Bulk Materials .....	\$	1,811.00

**Subtotal - Estimated Applicant Installation Costs \$ 12,407.00**

**TOTAL ESTIMATED WATER FACILITIES COSTS ..... \$ 28,644.00**



6. Financial Arrangements to be made by the Applicant shall consist of the following:

Initial Charges and Estimated District Costs

The Applicant shall either pay to the District or provide a two (2) year irrevocable letter of credit in form satisfactory to the District and payable at sight at a financial institution in the Novato area the sum of Initial Charges and Estimated District Costs as set forth in Section 5 hereof in the amount of **\$16,237**. If the Applicant provides the two (2) year irrevocable letter of credit, the District shall immediately draw down Initial Charges and shall draw upon the remaining funds guaranteed by the letter at any time the District deems appropriate to recover the Estimated District Costs which normally will be at least thirty (30) days prior to the anticipated start of construction for the ordering of materials to be furnished by the District.

Alternate No. 1 – Installation By Applicant: If the Applicant elects to install the facilities or hire a private contractor to install the facilities, the Applicant shall provide financial guarantees satisfactory to the District in the form of a performance bond in the amount of **\$12,407** conditioned upon installation of the facilities and furnishing of bulk materials and a maintenance bond in the amount of **\$3,102** conditioned upon payment of the cost of maintaining, repairing, or replacing the facilities during the period of one (1) year following completion of all the facilities and acceptance by the District. Performance and maintenance bonds shall be executed by a California admitted surety insurer with a minimum A.M. Best rating of A-VII. In lieu of posting bonds, the Applicant may provide an irrevocable letter or letters of credit payable at sight at a financial institution in the Novato area guaranteeing funds in the same amounts. All financial guarantees shall be provided by the Applicant rather than the contractor. The Applicant or contractor, whichever performs the work, shall be properly licensed therefore by the State of California and shall not be objectionable to the District.

Alternate No. 2 – Installation By District: If the Applicant requests the District to install the facilities and the District consents to do so, the Applicant shall either pay to the District the total Estimated Installation Costs set forth in Section 7 hereof in the amount of **\$ 12,407** or shall include such amount in the irrevocable letter of credit provided for the Initial Charges and Estimated District Costs set forth first above. The District shall draw upon installation funds guaranteed by the letter at any time the District deems appropriate which normally will be at least thirty (30) days prior to the anticipated start of construction.

Whenever an irrevocable letter of credit is required by this agreement, the Applicant may substitute a certificate of deposit at a financial institution in the Novato area provided the certificate may be cashed at sight by the District at any time.

7. It is understood and agreed that water facilities provided by the District are for domestic service and limited fire protection only, and that sizing of said facilities does not provide

sufficient capacity for agricultural purposes. As a part of the original 1990 Windhaven Subdivision Water Service Agreement, an 8,000 gallon storage tank was constructed on Applicant's land (APN 019-300-019). This existing tank will provide water to the dwelling to be constructed on Applicant's land and is owned, operated and maintained by the District as part of the District's system. Said tank is also utilized by the District to control the operation of the District's pump station serving all properties/dwellings connected to the system (that is, Lots 2, 3 and 4).

8. The Applicant acknowledges and agrees that the water service to be provided by the District pursuant to this Agreement will be limited service, particularly with regard to pressure and storage for water to be used in emergencies. The Applicant acknowledges and agrees that the Applicant and/or its successors have full responsibility for construction, operation, and maintenance of facilities for fire protection, and that it shall be Applicant's sole responsibility to make the necessary arrangements with the Sonoma County Fire Department for all fire protection requirements. The Applicant plans to construct one 5,000 gallon water tank for fire suppression, i.e. for fire hydrant and fire sprinklers. The Applicant shall hold the District harmless from any and all claims arising out of or in any way related to inadequate fire protection including any temporary interruptions in domestic water service.

9. No direct connection from District water service to any required supplemental private fire storage protection system shall be made. Should any private supplemental fire protection storage system be filled through the District service, an appropriate air gap system shall be installed and maintained by Applicant to prevent any potential cross connection. Applicant shall install and maintain in good working order, shut off valves to prevent overflow. The private fire protection system and connection thereto either through hydrants or standpipes or hose bibs shall have appropriate signage identifying that the water is not for human consumption.

10. Applicant shall be required to meet District Regulation 15, sections E and F related to water conservation.

11. Water service through District facilities will not be furnished to any residence unless the residence is connected to a public sewer system or to a wastewater disposal system approved by all governmental agencies having regulatory jurisdiction. This restriction shall not apply to temporary water service during construction.

12. All estimated costs set forth in this agreement shall be subject to periodic review and revision at the District's discretion. In the event the Applicant has not completed financial arrangements with the District in accordance with Section 6 hereof prior to expiration of six (6) months from the date of this agreement, all Initial Charges and estimated costs set forth in Section 5 hereof shall be revised to reflect then current District charges and estimates. In the event the Applicant has not secured final land use approval for the project from the County of Sonoma,

recorded a final map and diligently commenced construction of improvements required by the County and the District prior to expiration of one (1) year from the date of this agreement, the District may, at its option, either retract financial certifications issued to County and State agencies and terminate this agreement or require amendment of this agreement and review of all Initial Charges and estimated costs contained herein. The Applicant shall pay any balance due upon demand or furnish a guarantee of such payment satisfactory to the District.

13. All extensions of time granted by the County of Sonoma for the Applicant to comply with conditions of land use approval or to construct improvements pursuant to a subdivision improvement agreement shall require concurrent extensions of this agreement and shall be cause for review and revision of all Initial Charges and estimated costs set forth in Section 5 hereof. The Applicant shall apply to the District for extension of this agreement prior to approval of the Applicant's requests for such extensions by the County of Sonoma.

14. In the event of sale of this parcel, the Applicant shall provide to the buyer(s) a copy of this Agreement so that there is complete disclosure of the limited nature of the water service. In addition, upon execution of this Agreement, District shall have it recorded.

15. This agreement shall bind and benefit the successors and assigns of the parties hereto; however, this agreement shall not be assigned by the Applicant to any other party without the prior written consent of the District. Assignment shall be made only by a separate document, Low Pressure Water Service Agreement Outside District Boundaries for 5300 Redwood Highway Sonoma County Assessor's Parcel Number 019-300-019 prepared by the District at the Applicant's written request.

**NORTH MARIN WATER DISTRICT**  
"District"

**NOTARIZED:**

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Rick Fraites, President

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Theresa Kehoe, Secretary

(SEAL)

**JARROD R. BAUMANN**  
An Individual  
"Applicant"

---

JARROD R. BAUMANN

**NOTES:** *If the Applicant executing this agreement is a corporation, a certified copy of the bylaws or resolutions of the Board of Directors of said corporation authorizing designated officers to execute this agreement shall be provided.*

*This agreement must be executed by the Applicant and delivered to the District within thirty (30) days after it is authorized by the District's Board of Directors. If this agreement is not signed and returned within thirty days, it shall automatically be withdrawn and void. If thereafter a new agreement is requested, it shall incorporate all Initial Charges (connection fees) and cost estimates pursuant to District Regulations then in effect.*

**ALL SIGNATURES MUST BE ACKNOWLEDGED BEFORE A NOTARY PUBLIC.**

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## MEMORANDUM

To: Board of Directors April 27, 2018

From: Rocky Vogler, Chief Engineer *RW*

Subject: Water Service Agreement – College of Marin (IVC) Building No. 11 – Fire Service  
r:\folders by job no\2800 jobs\2817 01com (ivc) building 11\2817.01 bod memo.doc

**RECOMMENDED ACTION:** The Board approve authorization of this agreement.

**FINANCIAL IMPACT:** None: Developer Funded

The College of Marin's Indian Valley Campus, is located at 1800 Ignacio Blvd (see attached map). The Measure B parcel tax approved in 2016, funds a series of improvements to update and maintain College of Marin facilities and buildings. The Indian Valley Campus (IVC) anticipates five separate improvement projects requiring water facility improvements, and Building No. 11 renovation is the first of the five projects. Building no. 11 is a two story wood structure office building being renovated with envelope improvements, window replacements, mechanical repairs, flooring, painting and other minor repairs. The renovation also includes installation of automatic fire protection systems, requiring a dedicated fire service.

New water facilities include 60 feet of 4-inch PVC main and one 4-inch fire service. A new 2-inch RPP back flow prevention device will be required for the existing 2-inch meter which will continue to provide domestic water service. No new landscaping will be installed with this project. These facilities will receive normal pressure water from Zone 2. This project has a projected additional demand of 1 EDU due to addition of some water fixtures, but as the College of Marin Indian Valley Campus is currently utilizing only 45 EDUs of the total 52 EDUs of historical connection fees previously paid, no additional connection fees are required at this time. The updated COM (IVC) total demand is 46 EDUs. The projected demand will be reassessed with each improvement project in the future.

Sewer service is provided by the Novato Sanitary District.

As has been customary with previous public agency projects, North Marin Water District will invoice the College of Marin for payment of actual costs as costs are incurred.

Environmental Document Review

A Negative Declaration was prepared for the College of Marin Indian Valley Campus Facilities Improvement projects and a Notice of Determination was filed with the County Clerk on November 14, 2017.

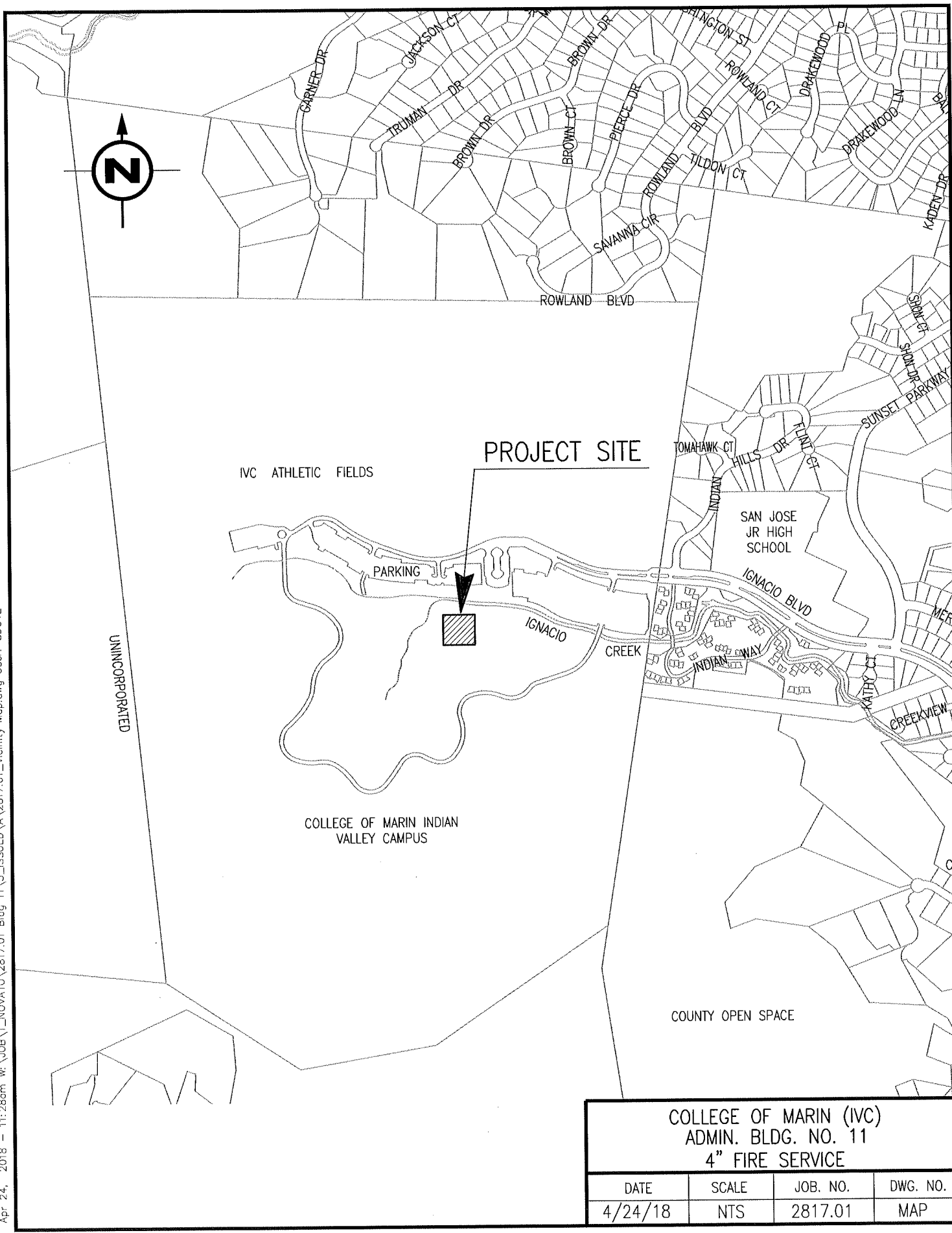
RECOMMENDATION:

That the Board approve authorization of this agreement.

Approved by GM *RW*

Date 4.27.18

Apr 24, 2018 - 11:28am w:\JOB\1\_NOVATO\2817.01 Bldg 11\3\_ISSUED\A\2817.01\_Vicinity Map.dwg User: SDOVE



COLLEGE OF MARIN (IVC) ADMIN. BLDG. NO. 11 4" FIRE SERVICE			
DATE	SCALE	JOB. NO.	DWG. NO.
4/24/18	NTS	2817.01	MAP

PART ONE  
WATER SERVICE FACILITIES CONSTRUCTION AGREEMENT  
FOR  
COLLEGE OF MARIN INDIAN VALLEY CAMPUS (IVC) BLDG 11

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*THIS AGREEMENT*, which consists of this Part One and Part Two, Standard Provisions, attached hereto and a part hereof, is made and entered into as of \_\_\_\_\_, 2018, by and between NORTH MARIN WATER DISTRICT, herein called "District," and MARIN COMMUNITY COLLEGE DISTRICT, A Community College, herein called "Applicant."

*WHEREAS*, the Applicant, pursuant to District Regulation 1, the State of California Subdivision Map Act and all applicable ordinances of the City of Novato and/or the County of Marin, has pending before the City or County a conditionally approved Tentative Subdivision Map, Precise Development Plan, Tentative Parcel Map or other land use application for the real property in the District commonly known as Marin County Assessor's Parcel Number 150-480-12 and the project known as COLLEGE OF MARIN (IVC) BLDG 11, consisting of one (1) lot for commercial/ institutional development; and

*WHEREAS*, prior to final approval by the City or County of a Subdivision Map, Precise Development Plan, Parcel Map or other land use application and recording of a final map for the project, the Applicant shall enter into an agreement with the District and complete financial arrangements for water service to each lot, unit or parcel of the project;

*WHEREAS*, the Applicant is the owner of real property in the District commonly known as 1800 Ignacio Blvd, Novato (Marin County Assessor's Parcel 150-480-12); and

*WHEREAS*, an agreement for Indian Valley Campus was executed in 1973 (NMWD job-1465) and the historical water demand established for the services installed and for which connection fees were paid equaled 22 equivalent dwelling units (EDUs); and

*WHEREAS*, an agreement for College "C" – Indian Valley Campus was executed in 1976 (NMWD job-1705) in which fees were paid for an additional 15 EDUs (for a total of 37 EDUs);

*WHEREAS*, an agreement for Indian Valley Campus Physical Education Center was executed in 1977 (NMWD job-1776) and fees were paid for an additional 15 EDUs (for a total of 52 EDUs);



*WHEREAS*, an agreement for College of Marin, Phase 1-Swing Space was executed in July 2008 (NMWD job-2716) and no additional fees were paid for additional EDUs, but 2 EDUs were reserved for projected water use associated with the project.

*WHEREAS*, an agreement for College of Marin Phase 2 was executed in December 2008 and although the project demand of 14 EDUs was estimated, no additional Facility Reserve Charge fees were collected since the combined average historical usage for this property over the prior ten (10) years equated to an average day peak month consumption of 38 EDUs, compared to a total of 52 EDUs for which Facilities Reserve Charges have previously been paid (leaving a balance of 0 EDUs in reserve), and

*WHEREAS*, the project water demand is 1 EDU but no additional Facility Reserve Charge fees are due since the combined average historical usage for this property over the last 10 years equates to an average day peak month consumption of 45 EDUs compared to a total of 52 EDUs for which Facilities Reserve Charges have previously been paid (leaving a balance of 6 EDUS in reserve) and

*NOW THEREFORE*, the parties hereto agree as follows:

1. The Applicant hereby applies to the District for water service to said real property and project and shall comply with and be bound by all terms and conditions of this agreement, the District's regulations, standards and specifications and shall construct or cause to be constructed the water facilities required by the District to provide water service to the real property and project. Upon acceptance of the completed water facilities, the District shall provide water service to said real property and project in accordance with its regulations from time to time in effect.

2. Prior to the District issuing written certification to the City, County or State that financial arrangements have been made for construction of the required water facilities, the Applicant shall complete such arrangements with the District in accordance with Section 5 of this agreement.

3. Prior to release or delivery of any materials by the District or scheduling of either construction inspection or installation of the facilities by the District, the Applicant shall:

a. deliver to the District vellum or mylar prints of any revised utility plans approved by the City or County to enable the District to determine if any revisions to the final water facilities construction drawings are required. The proposed facilities to be installed are shown on Drawing No. 1.2817.01, entitled, "COLLEGE OF MARIN (IVC) BLDG 11", a copy of which is attached, marked Exhibit "A", and made a part hereof. (For purposes of recording, Exhibit "A" is not attached but is on file in the office of the District.)

b. grant or cause to be granted to the District without cost and in form satisfactory to the District all easements and rights of way shown on Exhibit "A" or otherwise required by the District for the facilities.

c. deliver to the District a written construction schedule to provide for timely withdrawal of guaranteed funds for ordering of materials to be furnished by the District and scheduling of either construction inspection or construction pursuant to Section 5 hereof.

4. Except for fire service, new water service shall be limited to the number and size of services for which Initial Charges are paid pursuant to this agreement. Initial Charges for new services, estimated District costs and estimated applicant installation costs are as follows:

**Initial Charges**

Meter Charges (Domestic) (Existing) .....	..... One 2-inch @	\$ 0.00	\$ 0.00
Fire Service Bypass Meters (Included in Estimated District Costs) .....	... One 5/8-inch @	\$ 0.00	\$ 0.00
Reimbursement Fund Charges (Domestic) (Existing) .....	..... 2-inch @	\$ 3,140.00	\$ 3,140.00
Reimbursement Fund Charges (Credit) .....	..... 2-inch @	\$ 3,140.00	\$ <3,140.00>
Facilities Reserve Charges .....	..... Fifty-two @	\$ 28,600.00	\$ 1,487,200.00
Facilities Reserve Charges (Credit) .....	..... Fifty-two @	\$ <28,600.00>	\$ <1,487,200.00>
<b>Subtotal - Initial Charges .....</b>		<b>\$</b>	<b>0.00</b>

**Estimated District Costs**

Pipe, Fittings & Appurtenances .....	\$ 8,189.00
District Construction Labor .....	\$ 24,625.00
Engineering & Inspection .....	\$ 1,904.00
Bulk Materials .....	\$ 2,585.00
<b>Subtotal –Estimated District Costs .....</b>	<b>\$ 37,303.00</b>

**Estimated Applicant Installation Costs**

Installation Labor .....	\$ 0.00
Contractor Furnished – Pipe Fittings & Appurtenances .....	\$ 0.00
Bulk Materials .....	\$ 0.00
<b>Subtotal- Estimated Applicant Installation Costs .....</b>	<b>\$ 0.00</b>

**TOTAL ESTIMATED WATER FACILITIES COSTS .....** **\$ 37,303.00**

(Bulk materials are such items as crushed rock, imported backfill, concrete, reinforcing steel, paving materials, and the like, which are to be furnished by the contractor performing the work.)

5. Financial Arrangements to be made by the Applicant shall consist of the following:

### Estimated Installation Costs

Installation By District: Due to the proprietary nature of construction required to install said facilities, the District reserves the right to install the facilities utilizing District construction forces. The District will invoice The College of Marin for payment of actual costs as costs are incurred.

6. Water service through the facilities to be installed pursuant to this agreement will not be furnished to any building unless the building is connected to a public sewer system or to a waste water disposal system approved by all governmental agencies having regulatory jurisdiction. This restriction shall not apply to temporary water service during construction.

7. New construction in the District's Novato service area is required to be equipped with high efficiency water conserving equipment and landscaping specified in Regulation 15 sections e. and

8. All estimated costs set forth in this agreement shall be subject to periodic review and revision at the District's discretion. In the event the Applicant has not completed financial arrangements with the District in accordance with Section 5 hereof prior to expiration of six (6) months from the date of this agreement, all Initial Charges and estimated costs set forth in Section 4 hereof shall be revised to reflect then current District charges and estimates. In the event the Applicant has not secured final land use approval for the project from the City of Novato or County of Marin, recorded a final map and diligently commenced construction of improvements required by those agencies and the District prior to expiration of one (1) year from the date of this agreement, the District may, at its option, either retract financial certifications issued to City, County and State agencies and terminate this agreement or require amendment of this agreement and review of all Initial Charges and estimated costs contained herein. The Applicant shall pay any balance due upon demand or furnish a guarantee of such payment satisfactory to the District.

9. All extensions of time granted by the City of Novato or the County of Marin for the Applicant to comply with conditions of land use approval or to construct improvements pursuant to a subdivision improvement agreement shall require concurrent extensions of this agreement and shall be cause for review and revision of all Initial Charges and estimated costs set forth in Section 4 hereof. The Applicant shall apply to the District for extension of this agreement prior to approval of the Applicant's requests for such extensions by either the City of Novato or the County of Marin.

10. This agreement shall bind and benefit the successors and assigns of the parties hereto; however, this agreement shall not be assigned by the Applicant without the prior written consent of the District. Assignment shall be made only by a separate document prepared by the District at the Applicant's written request.

**NORTH MARIN WATER DISTRICT**  
"District"

**ATTEST:**

\_\_\_\_\_  
Rick Fraites, President

\_\_\_\_\_  
Theresa Kehoe, Secretary

(SEAL)

**MARIN COMMUNITY COLLEGE DISTRICT**  
A Community College  
"Applicant"

(SEAL)

\_\_\_\_\_  
Greg Nelson, V.P. Finance and Operations

**NOTES:** *If the Applicant executing this agreement is a corporation, a certified copy of the bylaws or resolutions of the Board of Directors of said corporation authorizing designated officers to execute this agreement shall be provided.*

*This agreement must be executed by the Applicant and delivered to the District within thirty (30) days after it is authorized by the District's Board of Directors. If this agreement is not signed and returned within thirty days, it shall automatically be withdrawn and void. If thereafter a new agreement is requested, it shall incorporate the Initial Charges (connection fees) and cost estimates then in effect.*

**ALL SIGNATURES MUST BE ACKNOWLEDGED BEFORE A NOTARY PUBLIC.**

RESOLUTION NO. 18-  
AUTHORIZATION OF EXECUTION  
OF  
WATER SERVICE FACILITIES CONSTRUCTION AGREEMENT  
WITH  
MARIN COMMUNITY COLLEGE DISTRICT

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BE IT RESOLVED by the Board of Directors of NORTH MARIN WATER DISTRICT that the President and Secretary of this District be and they hereby are authorized and directed for and on behalf of this District to execute that certain water service facilities construction agreement between this District and Marin Community College District, providing for the installation of water distribution facilities to provide domestic water service to that certain real property known as 1800 Ignacio Blvd, Marin County Assessor's Parcel Number 150-480-12, NOVATO, CALIFORNIA.

\* \* \*

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 1st day of May, 2018, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

(SEAL)

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Theresa Kehoe, Secretary  
North Marin Water District

8

## MEMORANDUM

To: Board of Directors

Date: April 27, 2018

From: Rocky Vogler, Chief Engineer *RV*

Subject: Miller Pacific Engineering Group – Consulting Services Agreement

R:\NON JOB No ISSUES\Consultants\MPEG\FY17-18\Agmts\_BOD Memos\MPEG FY17\_18 genl servs agmt BOD memo.doc

**RECOMMENDED ACTION:** Authorize the General Manager to execute a new General Engineering Services agreement for Consulting Geotechnical Services between NMWD and Miller Pacific Engineering Group with a not-to-exceed limit of \$60,000.

**FINANCIAL IMPACT:** \$60,000

Attached is an agreement for Miller Pacific Engineering Group (MPEG) to provide continuing FY18 and FY19 outsourcing support. MPEG has a long and proven track record with the District of providing high quality and responsive services at reasonable cost. To best meet project demands, a General Engineering Services Agreement is desired with individual task orders on a job-by-job basis. The current agreement was established in November 2015, and the associated funding has been allocated/expended.

A summation of contract billings for MPEG general engineering services for the last five years is provided as follows:

TABLE I

Contract Issuance Year	Billing Year	Total Billings
FY16	FY16, 17 & 18	\$51,823
FY14	FY13 & 14	\$48,504
FY13	FY12 & 13	\$18,032
FY11	FY11 & 12	\$30,118
FY10	FY10 & 11	\$16,904

A cost breakdown for the \$60,000 FY16 contract by task is summarized as follows:

TABLE 2

Starting FY16 Contract Amount	\$60,000
Carryover balance from FY14 Contract	\$5,195
Amended Balance	\$65,195
Projects (billings to date)	
RW Central Service Area (Norman Tank Seismic)	<\$11,985>
Atherton Tank	<\$1,997>
RW Central (Norman Tank HDD)	<\$20,000>
RW Central Phs 2 Geotech	<\$5,000>
PRE Tank 4A	<\$3,381>
Oceana Marin Ponds	<\$2,319>
Marindale Ranch	<\$3,534>
Summit Lane Water Line Break	<\$608>
Old Ranch Rd Tank Site	<\$3,000>
Remaining Balance on Contract	\$13,372

Approved by GM *[Signature]*Date 4.27.18

Total billings under the FY16 contract are \$51,823, leaving a balance of \$13,372 on the contract. It is important to note that although there is \$13,372 left on the contract, there is an outstanding amount of funds previously authorized for open task orders in the amount of \$12,752, leaving a balance of \$620 of unallocated funds on this contract.

One of the first task orders to be funded through this Agreement will be for compaction testing for the Ridge Road Waterline Replacement Project, estimated at \$3,500.

RECOMMENDATION

Authorize the General Manager to execute a new General Engineering Services agreement for Consulting Geotechnical Services between NMWD and Miller Pacific Engineering Group with a not-to-exceed limit of \$60,000.



## **AGREEMENT FOR CONSULTING SERVICES**

The following is an agreement between **North Marin Water District**, hereinafter "**NMWD**", and **Miller Pacific Engineering Group**, hereinafter, "**Consultant**".

**WHEREAS**, Consultant is a duly qualified consulting firm, experienced in geotechnical engineering and geotechnical services.

**WHEREAS**, in the judgment of the Board of Directors of the NMWD, it is necessary and desirable to employ the services of the Consultant for general 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. The scope of work and fee amount covered by this agreement shall be that specified on a task by task basis.
- b. The fee for the work shall be on a time and expense (T & E) basis utilizing the fee schedule included in Attachment A of this agreement and shall not exceed \$60,000 without prior written authorization by NMWD.

### **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, 2019, 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: Rocky Vogler

Consultant:  
Miller Pacific Engineer Group  
504 Redwood Way, #220  
Novato, CA 94947  
Attention: Scott Stephens

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 calculations, 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.

**18. PREVAILING WAGE REQUIREMENTS:** Prevailing Wage Rates apply to all Consultant personnel performing work under the Agreement for which wage determinations have been made by the Director of Industrial Relations pursuant to California Labor Code Sections 1770–1782,. Consultant shall comply with all applicable prevailing wage labor code requirements

**NORTH MARIN WATER DISTRICT  
"NMWD"**

Dated: \_\_\_\_\_

\_\_\_\_\_  
Drew McIntyre, General Manager

**MILLER PACIFIC ENGINEERING GROUP  
"CONSULTANT"**

Dated: \_\_\_\_\_

\_\_\_\_\_  
Scott Stephens

**MILLER PACIFIC ENGINEERING GROUP**  
a California corporation

**SCHEDULE OF CHARGES**  
**PROFESSIONAL ENGINEERING AND TESTING SERVICES**

<u>Professional and Technical Personnel</u>	<u>Hourly Rate</u>
Staff Engineer/Geologist – Level 1-3 .....	\$90 - \$100 - \$110
Project Engineer/Geologist – Level 1-3 .....	\$120 - \$130 - \$140
Senior Engineer/Geologist – Level 1-3 .....	\$160 - \$170 - \$180
Associate Engineer/Geologist – Level 1-3.....	\$195 - \$205 - \$215
Principal Level 1-3 .....	\$220 - \$230 - \$240
Project Assistant/Word Processor .....	\$75
Technician Level 1-3 .....	\$85 - \$90 - \$95
Senior Technician Level 1-2 .....	\$105 - \$110
Prevailing Wage.....	\$130

Other Inside Charges

Mileage .....	\$ 0.80 per mile
Vehicle (Field) .....	\$9 per hour
Nuclear Density Gage .....	\$8 per test
Inclinometer.....	\$150 per day / \$85 per half day
Laser Level.....	\$50 per day
Sampling Equipment .....	\$50 per day / \$30 half day

Outside Services..... Cost + 20%

Exploration, drilling equipment and instrumentation, in-situ monitoring, specialized laboratory testing, per diem, shipping, courier/delivery services, outside reproduction, and other services and supplies not normally provided.

\*NOTES:

1. Field site visits and travel time are normal hourly rates, portal to portal.
2. Overtime – Weekday & Saturday add \$25  
Overtime – Sunday/Holiday/Night add \$35
3. Rates are for normal Geotechnical Engineering and Geological services. Rates for depositions and testimony are \$470 per hour for Principal; \$420 per hour for Associate; and \$365 per hour for Senior. All other personnel are \$260 per hour. These fees are due and payable at the time of service.
4. Schedule of charges is effective as of March, 2017. It is subject to revision annually and at other times without notice.

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## MEMORANDUM

To: Board of Directors April 27, 2018

From: Julie Blue, Auditor-Controller 

Subj: Rate Increase Letter to West Marin Water and Oceana Marin Sewer Customers  
t:\ac\word\budget\wm\19\2018 prop 218 ltr cover memo.docx

**RECOMMENDED ACTION:** Approve Letter to Customers

**FINANCIAL IMPACT:** \$750

California law requires that customers be notified of a water or sewer rate increase at least 45 days prior to the public hearing where the Board considers adoption of said increase. A public hearing is scheduled for Tuesday, June 26, 2018 at 6:00 PM at the Dance Palace in Point Reyes Station. The June 26 public hearing date requires that the notification letters be postmarked no later than May 13, 2018. The letters will be printed in-house and the marginal postage, stationary and copying cost for the 1,013 active customers will be approximately \$750.

**West Marin Water**

The rate increase proposed for West Marin Water customers will generate 4.5% (\$37,000 annually) in additional revenue. Consistent with the structure of the increase proposed for Novato customers, both the commodity rate and the bimonthly service charge component of the water bill are proposed to increase 4.5% effective July 1, 2018.

The dollar amount of the increase for each customer will vary based upon their individual water use. The Annual Water Cost Calculator on the District's website allows each customer to see the impact of the proposed increase on their annual water cost based upon their water use over the past 12 months. The median residential customer, assuming no change in water use, would see a 4.5% increase, amounting to \$2.49 per month (\$30 annually).


**Oceana Marin Sewer**

A 5% rate increase (a \$4 increase to \$90 per month) effective July 1, 2018 is proposed for Oceana Marin sewer service. The increase would generate approximately \$11,000 annually and would support projects identified in the 2016 Oceana Marin Master Plan Update. In contrast to the 10% rate increases adopted in 2016 and 2017 to finance the CIP plan on a pay-go basis, the current 5-year financial plan includes annual 5% rate increases and forecasts borrowing \$650,000 to complete the CIP plan.

The proposed letters are attached for Board review and comment. Legal counsel is reviewing the letters to assure compliance with the notification requirements of California law.

**RECOMMENDATION:**

Approve mailing the rate increase letters to customers.

Approved by GM 

Date 4.27.18



May 11, 2018

999 Rush Creek Place  
P.O. Box 146  
Novato, CA 94948-0146

**PHONE**  
415.897.4133

**EMAIL**  
info@nmwd.com

**WEB**  
www.nmwd.com

## **RE: Notice of Proposed Water Cost Increase – West Marin Service Area**

Dear Customer:

This letter is to advise you of **proposed increases to West Marin water rates** that would take effect on July 1, 2018. It also provides information about a **Public Hearing scheduled on June 26, 2018**, at which time written and oral comments will be considered and a vote on the increase will be taken by the North Marin Water District Board of Directors.

### **HOW MUCH IS THE PROPOSED RATE INCREASE?**

A 4.5% increase in the cost of water is proposed, which would result in an average increase of \$2.49 per month (\$30 annually) for the typical (median) single-family residential customer who consumes 49,300 gallons of water annually. Those using less than the median would see an increase less than \$30 annually, and those using more would pay more. The increase for non-residential customers (commercial, institutional and irrigation accounts) would vary based on water use and meter size. The median non-residential account would also see an annual 4.5% cost increase. A detailed description of the proposed water rate increases is included on page 3.

You can determine the increase in your annual water cost based on your 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 <http://www.nmwd.com/accountbalance.php>.

### **REASON FOR THE PROPOSED INCREASE**

The District's mission is to provide an adequate supply of safe, reliable and high-quality water at reasonable cost consistent with good conservation practices and minimum environmental impact. Maintaining and renovating the infrastructure of the rural West Marin Water System is expensive. Today the system includes 26 miles of pipeline, over 1 million gallons of finished water storage distributed across 13 tanks, 7 pump stations, 168 fire hydrants, a multitude of valves, 3 wells, and a water treatment plant, all designed to serve 781 customers. Sufficient revenue to finance the ongoing system operation and renovation must be generated.

DIRECTORS: JACK BAKER • RICK FRAITES • MICHAEL JOLY • STEPHEN PETTERLE • JOHN SCHOONOVER

OFFICERS: DREW MCINTYRE, General Manager • KATIE YOUNG, District Secretary • DAVID L. BENTLEY, Auditor-Controller • ROCKY VOGLER, Chief Engineer

**ADDITIONAL INFORMATION**

Greater detail of the various rates and customer categories is provided on page 3.

**A public hearing before the NMWD Board of Directors to consider the proposed rate increase is scheduled for 6:00 pm, Tuesday, June 26, 2018, at the Dance Palace (503 B Street) in Point Reyes Station.**

You are invited to present oral or written testimony on the proposal at the public hearing. You have the right to protest this proposed rate increase. 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 adopted.

Your written protest must be received prior to the close of the June 26, 2018 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 about the North Marin Water District, including the history of the West Marin Water System, or to view the most recent Coastal Area Water Cost Comparison or the District's audited financial statement, visit NMWD's website at [www.nmwd.com](http://www.nmwd.com) or call the District Secretary at (415) 897-4133.

Sincerely,



Drew McIntyre  
General Manager

<b>PROPOSED</b>			
<b>West Marin Water System Rate Changes</b>			
<b>EFFECTIVE JULY 1, 2018</b>			
<b>BIMONTHLY SERVICE CHARGE</b>	<b><u>Existing</u></b>	<b><u>Proposed</u></b>	<b><u>% Increase</u></b>
For STANDARD 5/8 x 3/4-INCH METER.....	\$31.50	\$33.00	4.5%
For 1-inch residential meter for fire service.....	\$35.70	\$37.50	4.5%
For 1-inch meter.....	\$63.00	\$66.00	4.5%
For all meters in Paradise Ranch Estates.....	\$47.50	\$50.00	4.5%
<b>QUANTITY CHARGE</b>			
<u>Residential Rate Per Dwelling Unit</u>			
First 400 gallons per day.....	\$8.55	\$8.93	4.5%
From 401 to 900 gallons per day.....	\$11.84	\$12.37	4.5%
From 901+ gallons per day.....	\$18.99	\$19.84	4.5%
<u>Commercial, Institutional &amp; Irrigation Rate</u>			
November 1 through May 31.....	\$8.64	\$9.03	4.5%
June 1 through October 31.....	\$11.95	\$12.49	4.5%
<b>PLUS A HYDRAULIC ZONE CHARGE/1,000 GAL</b>			
<u>Zone</u>			
1 Point Reyes Station.....	\$0.00	\$0.00	0%
2 Bear Valley, Silver Hills, Inverness Park & Lower Paradise Ranch Estates (Elevation 0' - 365').....	\$0.22	\$0.23	4.5%
3 Olema.....	\$0.84	\$0.88	4.5%
4 Upper Paradise Ranch Estates (Elevation 365'+).....	\$5.71	\$5.97	4.5%
Additional Commodity Rate for Consumers Outside the Improvement District Boundary.....	\$3.42	\$3.57	4.5%





999 Rush Creek Place  
P.O. Box 146  
Novato, CA 94948-0146

**PHONE**  
415.897.4133

**EMAIL**  
info@nmwd.com

**WEB**  
www.nmwd.com

May 11, 2018

**RE: Notice of Proposed Oceana Marin Sewer Service Cost Increase**

Dear Customer:

This letter is to advise you of a **proposed increase to the Oceana Marin sewer service charge** that would take effect on July 1, 2018. It also provides information about a **Public Hearing scheduled on June 26, 2018**, at which time written and oral comments will be considered and a vote on the increase will be taken by the North Marin Water District Board of Directors.

**How much is the proposed rate increase?**

Current Oceana Marin sewer service charges are \$86/month (\$1,032/year). A **5% increase** is proposed equaling \$90/month (\$1,080/year).

**How will the proposed increase affect my sewer bill?**

Oceana Marin sewer service charges are collected on the Marin County property tax bill, which is rendered annually for the fiscal year period July 1 through June 30. The proposed sewer service charge increase would add \$4 per month to the cost of sewer service for all customers in Oceana Marin, resulting in a total annual charge for fiscal year 2018/19 of \$1,080 (\$90 per month for July 2018 through June 2019).

**Why are rates being increased?**

In January 2016 the District concluded a Master Plan Update that identified over \$3 million in projects necessary to improve the reliability and redundancy of the Oceana Marin Wastewater System. Constructing these improvements will be financially challenging for the 232 customers of the Oceana Marin utility. Even if the projects are constructed over a 20-year period, the cost would still average \$150,000 annually. The proposed rate increase, if enacted, would generate \$11,000 of additional revenue annually (\$48/year X 232 customers). The entire Master Plan Update is available for review at: <http://www.nmwd.com/pdfs/agenda/011916.pdf>.

Additional rate increases will be necessary in future years as the District continues to improve the reliability of the existing facilities and to construct redundant facilities in order to protect against potential system failure and sewage spills. Prior year's rate increases were in-line with financing the CIP plan as a pay-go basis while the current 5-year financial plan includes annual rate increases of 5% and forecasts borrowing funds to complete the plan.

DIRECTORS: JACK BAKER • RICK FRAITES • MICHAEL JOLY • STEPHEN PETTERLE • JOHN SCHOONOVER

OFFICERS: DREW MCINTYRE, General Manager • KATIE YOUNG, District Secretary • DAVID L. BENTLEY, Auditor-Controller • ROCKY VOGIER, Chief Engineer

## Public Hearing

**A public hearing before the NMWD Board of Directors to consider the proposed sewer service charge increase is scheduled for 6:00 pm, Tuesday, June 26, 2018, at the Dance Palace (503 B Street) in Point Reyes Station.**

You are invited to present oral or written testimony on the proposal at the public hearing. You have the right to protest this proposed rate increase. 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 the proposed increase will not be imposed.

Your written protest must be received prior to the close of the June 26, 2018 public hearing. Written protests must be signed by the property owner and must include a description of the parcel (parcel number or service address). Send or deliver written protests to:

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

For more information about the North Marin Water District, including a history of the Oceana Marin Sewer System, or to view the most recent Coastal Area Sewer Cost Comparison or the District's audited financial statement, visit NMWD's website at [www.nmwd.com](http://www.nmwd.com) or call the District Secretary at (415) 897-4133.

Sincerely,



Drew McIntyre  
General Manager

10

## MEMORANDUM

To: Board of Directors

April 27, 2018

From: David L. Bentley, Auditor-Controller

Subj: Approve: Authorize Signatories on District Accounts

I:\financial\investments\treasury signatories may 2018.doc

**RECOMMENDED ACTION: Approve Signatories on District Accounts****FINANCIAL IMPACT: None**

The General Manager Drew McIntyre, Auditor-Controller David Bentley, and Senior Accountant Nancy Holton are the personnel presently authorized to perform purchase and sale of financial securities for the District's investment portfolio. They are also authorized to transfer and disburse funds to accommodate ongoing operational needs. We recommend adding Julie Blue, incoming Auditor-Controller, and removing David Bentley, who is retiring, as signatories for these accounts.

Local Account

US Bank

Purpose of the Account

Operating Account

SRF Loan Payment Pass-Through Account

Trustee Account

US Bank Safekeeping

Safeguarding of Investment Securities

Loan Payment Account

Bank of Marin

Aqueduct Expansion Loan

Brokers

Ladenburg Thalmann

Purchase/Sale of Securities

Time Value Investments

Purchase/Sale of Securities

State Treasurer

Local Agency Investment Fund

Demand Deposit Account

**Recommendation:**

Authorize the following personnel to transact business with the institutions shown above:

- 1) General Manager Drew McIntyre
- 2) Auditor-Controller Julie Blue
- 3) Senior Accountant Nancy Holton

Approved by GM



Date

4.27.18



11

## MEMORANDUM

To: Board of Directors  
From: Drew McIntyre, General Manager  
Subj: Auditor-Controller Appointment  
U:\gm\bd misc 2018\J Blue A-C appoint.docx

April 27, 2018



**RECOMMENDED ACTION:** Board of Directors appoint Julie Blue to the Auditor-Controller position effective May 2, 2018

**FINANCIAL IMPACT:** None at this time

At the February 20, 2018 meeting the Board had an opportunity to interview the top three applicants to fill the Auditor-Controller vacancy created by David Bentley's retirement on May 2, 2018. After this interview process, Julie Blue was selected as the best qualified candidate and her first day at North Marin Water District was March 19<sup>th</sup>. Since that time David has been training Julie on the duties and responsibilities of the position. It is now time to officially appoint Julie Blue as the Auditor-Controller effective May 2, 2018 so that the transition and assumption of responsibilities coincides with David Bentley's retirement.

**RECOMMENDED ACTION:**

Board appoint Julie Blue as Auditor-Controller of the North Marin Water District effective May 2, 2018.

Approved by GM



Date

4.27.18

12

MEMORANDUM

To: Board of Directors  
From: Drew McIntyre, General Manager  
Subj: Resolution of Appreciation for Kerry Lemos  
t:\gm\bod misc 2018\lemos memo resolution.docx

April 27, 2018

**RECOMMENDED ACTION:** Board Approve the Resolution of Appreciation to Kerry Lemos

**FINANCIAL IMPACT:** None

Kerry Lemos is retiring after 31 years of employment with the North Marin Water District. Thus it is appropriate to convey appreciation for Kerry's many years of service to the District and adopt the attached resolution of appreciation.

**RECOMMENDED ACTION:**

Board adopt the resolution of appreciation to Kerry Lemos after many years of employment with the North Marin Water District.

**Resolution 18-XX**  
**North Marin Water District**  
Resolution of Appreciation  
To  
**Kerry L. Lemos**

**WHEREAS:**

- Kerry Lemos was employed by the District on August 17, 1987 and worked first as an Electrical/ Mechanical Technician; and
- In 1992, Kerry advanced to Senior Electrical/Mechanical Technician. Kerry received tutelage from the legendary Lou Butti, and advanced through the Electrical/Mechanical section ranks and was promoted to Maintenance Supervisor in 2005; and
- During his 31 years of employment, Kerry has made many valuable contributions to the District's water systems, which have doubled in size and increased in complexity with the addition of computerized instrumentation and controls; and
- In 1995, during the Mt. Vision fire, Kerry's efforts were instrumental in ensuring that ample water supply was available for fire protection; and
- Kerry has also had the good fortune to see improvements at the Oceana Marin sewer facilities and no longer must respond in the middle of the night to power outages at the Oceana Marin lift station; and
- Kerry has been instrumental in developing an efficient Maintenance Department and eagerly took on fleet maintenance responsibility in 2006; and
- As supervisor, Kerry has been an effective leader in his section. Peers and staff have always found Kerry easy to work with and always willing to help; and
- Kerry has also played a key role in managing the District's Cathodic Protection Program, and completed Basic, Intermediate and Advance Corrosion Control certifications between 1989-1994; and
- On May 31, 2018 Kerry Lemos will retire from the District, and his last official day at the District will be April 27, 2018. His expertise, professionalism and team spirit will be sorely missed.

**THEREFORE BE IT RESOLVED:**

That the Board of Directors of North Marin Water District hereby commends and expresses its appreciation to Kerry L. Lemos for many years of dedicated and loyal service, and valued contributions to the District.

**BE IT FURTHER RESOLVED:**

That the Board of Directors, on behalf of the staff, officers and Directors of the North Marin Water District, extend to Kerry Lemos sincere good wishes in his retirement and for many happy productive years filled with all the good things of life.

Dated at Novato, California  
May 1, 2018

---

Rick Fraites, President  
North Marin Water District

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 1<sup>st</sup> day of May by the following vote:

AYES:  
NOES:  
ABSENT:  
ABSTAINED:

---

Theresa Kehoe, Secretary  
North Marin Water District

(SEAL)

13

MEMORANDUM

To: Board of Directors  
From: Drew McIntyre, General Manager  
Subj: Resolution of Appreciation for David Bentley  
t:\gm\bod misc 2018\bentley memo resolution.docx

April 27, 2018

**RECOMMENDED ACTION:** Board Approve the Resolution of Appreciation to David L. Bentley

**FINANCIAL IMPACT:** None

David Bentley is retiring on May 2, 2018 after 31 years of employment with the North Marin Water District. Thus it is appropriate to convey appreciation for David's many years of dedicated service to the District and adopt the attached resolution of appreciation.

**RECOMMENDED ACTION:**

Board adopt the resolution of appreciation to David Bentley after many years of employment with the North Marin Water District.



**Resolution 18-XX**  
**North Marin Water District**  
Resolution of Appreciation  
To  
**David L. Bentley**

**WHEREAS:**

- David Bentley, a native of California, received his Bachelor of Science in Business Administration from Humboldt State University; and
- David Bentley, upon graduation, went into the Administration/Finance field, worked as a Certified Public Accountant, and prior to coming to the District worked for 8 years in accounting and finance positions for various public and private agencies; and
- David Bentley was hired as the Auditor-Controller of the North Marin Water District in 1987; and
- For the past thirty-one years, David Bentley's performance as Auditor-Controller of the North Marin Water District has been exemplary, marked by his excellent fiscal performance and reporting to the Novato and West Marin communities; and
- David Bentley served as a mentor to all whom he worked with, fostering a culture of professionalism, accountability, service, teamwork, and the pursuit of innovative solutions to complex problems; and
- In 2001, David Bentley successfully completed consolidation of all individual West Marin Water Improvement Districts into one enterprise fund for efficient and effective financial accountability and better communication with our customers; and
- In 2004, David Bentley guided the District into self-insuring its workers' compensation liability, saving over \$1 million in premiums over the years; and
- In 2005-6, David Bentley developed and implemented the District's Conservation Incentive Rate and subsequent Conservation Incentive Tiered Rate as effective tools in reducing water demand among high-use residential customers; and
- In 2008, David Bentley was appointed the City of Novato's Citizen Budget Advisory Committee and continues to support the local community in this capacity; and
- In 2009, David Bentley created the infamous Financial Dashboard program that has been used each year as part of the budget development and rate setting process; and
- Since 2009, under David Bentley's leadership, the District has received annual GFOA Certificate of Achievement Awards for Excellence in Financial Reporting; and
- In 2014, David Bentley provided innovative financial leadership by recommending and implementing payoff of the District's CalPERS Side Fund liability of \$2.1M; and
- In 2014, David Bentley was successfully appointed as a member of ACWA's Region 1 Board of Directors; and
- Since 2016, David Bentley has pioneered the successful piloting and full-scale

implementation of the District's Advanced Meter Infrastructure project which is on schedule for completion in Fall of this year; and

- David Bentley is now bidding farewell after a full career of service.

**THEREFORE BE IT RESOLVED:**

That the Board of Directors and staff of North Marin Water District hereby expresses its deep appreciation to David Bentley for his many years of dedication, loyal service and valuable contributions to North Marin Water District and the Novato and West Marin communities; and

**BE IT FURTHER RESOLVED:**

That the Board of Directors and staff of North Marin Water District extend their best wishes to David Bentley for all his future endeavors and wish him many happy and rewarding years filled with all the good things of life.

Dated at Novato, California  
May 1, 2018

---

Rick Fraites, President  
North Marin Water District

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 1<sup>st</sup> day of May by the following vote:

AYES:  
NOES:  
ABSENT:  
ABSTAINED:

---



Theresa Kehoe, Secretary  
North Marin Water District

(SEAL)

**14**

## MEMORANDUM

To: Board of Directors Date: April 27, 2018

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

Subject: Paradise Ranch Estates Tank 4A Replacement Project – Request for Authorization to Conduct CEQA Public Review

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**RECOMMENDED ACTION:** Staff requests authorization from the Board to initiate the CEQA 30-Day Public Review Period for the project and to schedule a public hearing for the June 26, 2018 Board meeting at which time the Board will consider adoption of the Mitigated Negative Declaration (MND).

**FINANCIAL IMPACT:** None at this time (\$15,250 for the CEQA Review Authorized on November 2, 2010; plus additional \$8,210 authorized on June 6, 2017)

Background

The FY18 and FY19 Improvement Projects budgets for West Marin includes design and construction of the Paradise Ranch Estates Tank 4A Replacement project. The Paradise Ranch Estates Tank 4A Replacement project consists of the design and construction of a 125,000 gallon concrete tank to replace the existing aging 50,000 gallon redwood tank and the 25,000 gallon redwood tank destroyed in the Mt. Vision fire in 1995. The project includes additional fire flow storage to satisfy Marin County Fire protection requirements and is consistent with the Board approved 2001 West Marin Long Range Plan. Originally implemented in 2010, the Board amended an agreement with Leonard Charles and Associates (LCA) to prepare the Paradise Ranch Estates Tank 4A Replacement Project CEQA documentation at the June 6, 2017 meeting.

CEQA Review

Staff and its consultants, LCA, have prepared the enclosed Draft Mitigated Negative Declaration and Initial Study (IS) for the Paradise Ranch Estates Tank 4A Replacement Project (Attachment 1). Upon receipt of any comments from the Board, staff is prepared to move forward with the 30-day public review period required by CEQA. The 30-day period is slated to begin no later than May 11, 2018 and end on or before June 11, 2018. The review period initiates with circulation of a Notice of Intent (Attachment 2) via advertisement in the local paper (Pt. Reyes Light) and posting at the County Clerk's office. Staff has scheduled the public hearing for the June 26, 2018 Board meeting in Point Reyes Station upon which the Board will consider adoption of the MND. The CEQA documentation schedule is shown in Attachment 3.

RECOMMENDATION

Staff requests authorization from the Board to initiate the CEQA 30-Day Public Review Period for the project and to schedule a public hearing for the June 26, 2018 Board meeting at which time the Board will consider adoption of the Mitigated Negative Declaration.

**DRAFT MITIGATED NEGATIVE DECLARATION FOR  
NORTH MARIN WATER DISTRICT'S**

**PRE TANK 4A REPLACEMENT PROJECT**

NMWD FILE 2 6263.20

**May 2018**

## North Marin Water District

### Notice of Mitigated Negative Declaration for the PRE Tank 4A Replacement Project

**Date:** May 1, 2018

**Responsible Agency:** North Marin Water District

**Project Title:** PRE Tank 4A Replacement Project

**Project Address:** Paradise Ranch Estates, Inverness, California, California

This statement and attachments constitute the **Mitigated Negative Declaration** as proposed for or adopted by the North Marin Water District Board of Directors for the PRE Tank 4A Replacement Project.

**Proposed Project.** The North Marin Water District (NMWD) proposes installing a replacement water tank at an existing tank site in order to ensure adequate water supply for the Paradise Ranch Estates neighborhood on Point Reyes Peninsula, plus provide expanded fireflow storage for properties within that subdivision.

**Schedule.** It is anticipated that construction will take up to 29 weeks.

**Environmental Study Prepared By:** Leonard Charles and Associates.

**Public Review.** The Draft Mitigated Negative Declaration for the proposed project is being circulated for public review beginning on May 11, 2018 and ending on June 11, 2018.

**Environmental Findings.** An Initial Study has been prepared to assess the proposed project's potential effects on the environment and the significance of those effects. Based on the Initial Study, it has been determined that the proposed project would not have any significant effects on the environment, after mitigation. This conclusion is supported by the following findings:

- The proposed project would not have a significant impact on agriculture and forestry resources, land use and planning, mineral resources, population and housing, and recreation.
- The proposed project would have a less-than-significant impact on aesthetic resources, greenhouse gas emissions, and utilities and service systems.
- Mitigation is required to address impacts to aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise,

public services, and transportation and traffic. A list of the mitigation measures recommended in the Initial Study Checklist to minimize environmental impacts is presented below.

**Mitigation Monitoring and Reporting Program.** This Notice also contains the CEQA-required Mitigation Monitoring and Reporting Program for the mitigations recommended in the Initial Study,

### **Aesthetics**

The following mitigation measure will reduce the visual impact of the proposed tank on residents of 420 Drakes View Drive to a less-than-significant level.

#### **Mitigation Measure A-1**

1. The new tank shall be constructed of concrete that shall be colored and patterned to mimic the boards of the existing redwood tank. Alternatively, the tank could be colored green or another color suitable to the owner of 420 Drakes View Drive.
2. A berm shall be established along the west and northwest sides of the tank. The berm will be constructed to the maximum height feasible while providing a stable slope above the maintenance access pad/path around the tank and to the residential driveway to the west.
3. NMWD will hire a landscape professional to consult with the owner of 420 Drakes View Drive to design the berm and to develop and implement a planting plan for the berm and the portion of the existing driveway right-of-way abandoned by the District. The plan shall identify the species to be planted, the size of the planting container, and irrigation and fertilization requirements. The berm shall be planted with a mix of trees and shrubs that are native to Marin County and that are appropriate to the habitat, not pyrophytic (fire-prone), and not fatally susceptible to Sudden Oak Death or pine pitch canker fungus. The planting list can includes species such as *Ceanothus thyrsiflorus*, *Arctostaphylos* sp. (e.g., *A. glandulosa* or *A. manzanita*), *Umbellularia californica*, *Baccharis pilularis*, *Vaccinium ovatum*, *Fragula californica*, *Arbutus menziesii* (the madrone cultivar planted at 420 Drakes View Drive is a hybrid that is not native, but it is less susceptible to SOD and looks like the native; it is recommended for inclusion in the planting), and *Pseudotsuga menziesii*. The plan shall have a goal to provide screening of the tank as quickly as feasible. The landscape plan shall include three to five large specimens (15-gallon containers) planted near the berm top to provide rapid screening of the tank. To the degree feasible, the landscape plan shall integrate new plantings with the existing landscaping at the adjacent residence. NMWD will ask the owner of the residence to review and provide input on the plan.
4. Trees and shrubs shall be watered and fertilized on a regular basis until they are at least 3 years old. Any tree or shrub that dies in the first 3 years shall be replaced.

### **Mitigation Monitoring and Reporting**

The plan shall be made available to the owner of 420 Drakes View Drive for comment and suggestions. The planting shall be done before the tank becomes operational. NMWD shall be responsible for maintaining the trees and shrubs for at least three years and replacing specimens that have died during that period.

### **Air Quality**

In order to reduce dust (PM10) emissions to less-than-significant amounts, the following mitigation measure shall be implemented.

#### **Mitigation Measure AQ-1**

In accordance with the BAAQMD CEQA Guidelines (BAAQMD, 2017), the project shall implement the following actions (that are pertinent to this project) to control dust from escaping from the site:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day if construction occurs during dry weather.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed by sweeping once a day.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

### **Mitigation Monitoring and Reporting**

The mitigation measures shall be implemented throughout the construction phase. NMWD shall include the requirements in the construction contract. The contractor shall be responsible for implementation.

### **Biological Resources**



## Biological Resources

The following two mitigation measures will reduce possible construction impacts on northern spotted owls and special-status species of bats to a less-than-significant level.

### Mitigation Measure BR-1

A qualified biologist will conduct a survey of the site no more than 14 days in advance of the start of construction. If evidence of special-status bats in trees on the property is observed, the following measure is required. Removal of trees or other suitable habitat showing evidence of special-status bat activity will occur during the period least likely to impact the bats as determined by a qualified bat biologist (generally between February 15 and October 15 if winter hibernacula are observed or between August 15 and April 15 if maternity roosts are present). The bat biologist will also be consulted to ensure that the landscaping plan include roost sites equivalent to any that were removed during construction. Artificial roosts may also be installed if deemed suitable by the bat biologist.

#### *Mitigation Monitoring and Reporting*

The bat survey will be conducted as stated above. If roost trees need to be removed, the bat biologist will provide input to the landscaping plan to replace roost trees.

The following mitigation measure will reduce impacts to migratory birds to a less-than-significant level.

### Mitigation Measure BR-2

Surveys for breeding birds are recommended if construction occurs during the nesting season (February 15 through June). Surveys for nesting birds should be completed by a qualified biologist within 14 days prior to the beginning of construction between February 15 and July 1.

If raptors are observed nesting within 250 feet of the construction area, the behavior of the raptors shall be observed by a qualified biologist, who shall determine the width of a suitable buffer. Typical raptor buffers are 250–300 feet wide.

If songbirds are observed nesting near the construction area, a 50-foot buffer shall be established between the nest and construction until the nest is no longer in use. Travel and other human activity should be prohibited within the nest buffers for the raptors and songbirds.

#### *Mitigation Monitoring and Reporting*

If warranted, NMWD will contract with a biologist to conduct the surveys (these can be done concurrent with the previously required NSO and bat surveys). The construction schedule will be revised as needed if active nests are identified.

## **Cultural Resources**

The following three mitigation measures will reduce possible construction impacts to any currently unidentified cultural resources and human remains to a less-than-significant level

### **Mitigation Measure CR-1**

- If cultural resources are encountered during project construction, avoid altering the materials and their context until a cultural resources consultant has evaluated the situation.
- If cultural resources are encountered during construction, NMWD shall notify the Federated Indians of Graton Rancheria.
- If applicable, a qualified archaeologist shall monitor subsequent excavations and spoils in the vicinity of the find for additional archaeological resources.
- If the archaeologist determines the discoveries are of importance, the resources shall be properly recovered and curated. The archaeologist shall prepare a report outlining the methods followed and summarizing the results of the mitigation program. The report shall outline the methods followed, list and describe the resources recovered, map their exact locations and depths, and include other pertinent information. Identified cultural resources shall be recorded on DPR 523(A-J) historic recordation forms. NMWD shall submit the report to the Northwest Information Center and the California State Historic Preservation Officer.

### **Mitigation Measure CR-2**

This mitigation incorporates the requirement established in Mitigation Measure CR-1 and adds the requirements that in the event that human remains are encountered, the contractor shall stop work in the area and the District shall contact the Marin County Coroner in accordance with Section 7050.5 of the State Health and Safety Code. This condition shall be noted on all grading and construction plans and provided to all contractors and superintendents on the job site.

### **Mitigation Monitoring and Reporting**

The mitigation will be implemented whenever warranted throughout the construction phase. The contractor will be responsible for determining the presence of the initial cultural resource find. NMWD will be responsible for engaging the cultural resource specialist. The cultural resource specialist shall be responsible for properly reporting and recording the find(s).

## **Geology and Soils**

The following mitigation measure reduces the risk of tank failure during a seismic event to a less-than-significant level.

#### Mitigation Measure GS-1

Design the improvements and structures in accordance with the seismic provisions of the most recent version of the California Building Code (CBC 2016) or the American Water Works Association (AWWA 2011). The recommended seismic design factors are presented in Section V of the appended geotechnical report. In addition, to ensure that seismic shaking does not cause damage to other proposed improvements, all design recommendations and monitoring included in the appended Miller Pacific report for settlement, erosion, and slope stability shall be incorporated into the final project design.

#### **Mitigation Monitoring and Reporting**

The recommended design factors will be included in the final construction drawings for the project. A qualified geotechnical expert shall review the plans and specifications to ensure compliance. A qualified geotechnical expert shall be intermittently present during construction to provide geotechnical observation and testing.

The following mitigation measure reduces the soil erosion impacts of the project to a less-than-significant level.

#### Mitigation Measure GS-2

Site grading should be performed in accordance with the recommendations and criteria presented in Section V of this report. Re-establishing vegetation on disturbed areas will also be required to minimize erosion. Erosion control measures during and after construction should conform to the most recent version of the Erosion and Sediment Control Field Manual (California Regional Water Quality Control Board, 2002). Erosion Control measures will also comply with Marin County Stormwater Pollution Prevention Program (MCSTOPPP) requirements.

#### **Mitigation Monitoring and Reporting**

The recommended erosion controls and drainage will be included in the final construction drawings for the project. A qualified geotechnical expert shall review the plans and specifications to ensure compliance. A qualified geotechnical expert shall be intermittently present during construction to provide geotechnical observation.

#### **Hazards and Hazardous Materials**

The following mitigation measure will reduce the risk of environmental exposure to hazardous materials during construction to a less-than-significant level.

#### Mitigation Measure HHM-1

The District will require construction contractors to implement construction best management practices including but not limited to the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction
- Avoid overtopping construction equipment fuel gas tanks
- During routine maintenance of construction equipment, properly contain and remove grease and oils
- Properly dispose of discarded containers of fuels and other chemicals
- Use personal protective equipment and clothing
- Require that the construction contractor follow the provisions of California Code of Regulations, Title 8, Sections 5163 through 5167 for General Industry Safety Orders to protect the project area from being contaminated by the accidental release of any hazardous materials and/or wastes. Disposal of all hazardous materials will be in compliance with applicable California hazardous waste disposal laws. The construction contractor will contact the local fire agency and the County of Marin for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling.

#### **Mitigation Monitoring and Reporting**

NMWD shall include these specifications in the construction contract. The contractor shall be responsible for compliance with these conditions. NMWD shall be responsible for determining final compliance.

#### **Hydrology and Water Quality**

The following mitigation measure will reduce the impacts from site runoff to a less-than-significant level.

#### Mitigation Measure HWQ-1

Site grading shall be performed in accordance with the recommendations and criteria presented in Section V of the appended Geotechnical Report. The project Civil Engineer should design tank drainage to discharge water at an appropriate location with appropriate erosion control. The contractor shall prepare an Erosion and Sediment Control Plan (SCP), following the procedures outlined by MCSTOPPP. The SCP shall include a description of post-proposed construction BMPs. The Plan shall be prepared by a registered engineer.

### **Mitigation Monitoring and Reporting**

The Erosion and Sediment Control Plan shall be required in the project contract. The contractor shall prepare it and submit it to the County. The plan shall be done before the tank becomes operational. NMWD shall be responsible for monitoring the drainage system and repairing any unforeseen erosion or other problems.

### **Noise**

The following mitigation measure will reduce potential construction noise impacts to nearby neighbors to a less-than-significant level.

#### **Mitigation Measure N-1**

NMWD will develop a construction schedule for each phase of project construction to describe when heavy equipment would be used on the site. To the maximum degree feasible, use of heavy construction equipment will be limited to the hours of 8:00 a.m. to 5:00 p.m. Monday through Thursday and 8:00 a.m. to 2:00 p.m. on Friday. The schedule will be made available to the owners of 420 Drakes View Drive and to the Inverness Ridge Association (IRA) for posting on its website.

### **Mitigation Monitoring and Reporting**

The schedule will be prepared by the District contractor and reviewed by NMWD. It will be supplied to the neighbor and IRA at least one month before each phase.

### **Utilities and Service Systems**

The following mitigation measure will reduce the risk of a fire igniting during project construction to a less-than-significant level.

#### **Mitigation Measure PS-1**

The District shall construct the project in such a fashion that it does not ignite a wildland fire. The District shall contact the Marin County Fire Department and abide by conditions set forth by the Department. If construction occurs during the dry season, these could include:

- Prohibiting vehicle access across vegetated areas;
- Ensuring that all vehicles have properly functioning mufflers;
- Ensuring that construction equipment have proper spark arrestors;
- Placing fire extinguishers in critical locations;
- Regular watering of the access road and adjacent vegetation; and
- Prohibiting work on red flag days.

### **Mitigation Monitoring and Reporting**

The District shall include the final provisions in the construction contract. The contractor shall be responsible for implementation. NMWD shall periodically monitor to ensure compliance. The provisions shall be implemented throughout the construction process.

The following mitigation measure will reduce construction traffic impacts on the roadway to a less-than-significant level.

#### **Mitigation Measure PS-2**

The District shall not cause substantial pavement damage on Drakes View Drive (DVD). To meet this standard, the District shall conduct a pre-construction road survey and video that survey. The road will be re-surveyed at the completion of construction. The District's contractor will be responsible for any structural damage to the road.

NMWD shall work with PRERAB to place 1-2 inches of rock/gravel on the recently graded section of the west end of DVD before its intersection with the private driveway to 420 DVD.

### **Mitigation Monitoring and Reporting**

The District shall work with the Paradise Ranch Estates Road Advisory Board (PRERAB) to monitor the pavement on Drakes View Drive. The monitoring will include a pre- and post-project survey of the state of the pavement. The District shall be responsible for repairing any pavement damage discovered during the post-project survey.

### **Transportation**

The following mitigation measure will reduce traffic hazard impacts during construction to a less-than-significant level.

#### **Mitigation Measure T-1**

The District shall require a pilot vehicle to accompany cement trucks and other large flatbed trucks transporting material to and from the site. A pilot vehicle with signing that a large vehicle follows will proceed up Drakes View Drive ahead of the large truck. The pilot vehicle will wait where other roads intersect DVD or where there are adequately sized turnouts to allow downhill traffic to move out of the roadway.

The District will place a conspicuous sign at the SFD/DVD intersection 48 hours prior to concrete deliveries and trips by other large delivery trucks that lists the range of time that the trucks will access the site. The District will restrict truck access during the day and time of day that garbage collection occurs along DVD.

The District will establish a liaison with PRERAB and every two weeks provide PRERAB with the forthcoming construction schedule.

**Mitigation Monitoring and Reporting**

The pilot car and signing requirements will be included in the construction contract and will be implemented by the Contractor. NMWD will establish the liaison and the contractor will provide the schedule. NMWD shall inform the PRERAB about these requirement. The District will work with the Contractor to ensure compliance. As described in the previous Mitigation Measure PS-2, the District will conduct a pre-construction video survey of the road and have the contractor repair any damage to the road caused by tank construction.

**Public Hearing:** The Initial Study will be considered for adoption at a regularly scheduled meeting of the North Marin Water District's Board of Directors at which time the Board will obtain public comment on the Initial Study and proposed Mitigated Negative Declaration.

Sincerely,

Rocky Vogler  
Chief Engineer

**INITIAL STUDY**

**PRE TANK 4A REPLACEMENT PROJECT**

**NMWD FILE 2 6263.20**

**May 2018**

**Prepared for:** North Marin Water District  
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## **1.0 INTRODUCTION AND BACKGROUND**

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code 21000 *et seq.* and the *State CEQA Guidelines*, California Code of Regulations Section 15000 *et seq.*

The proposed project includes installing a replacement water tank at an existing tank site in order to ensure adequate water supply for the Paradise Ranch Estates neighborhood on Point Reyes Peninsula, plus provide expanded fireflow storage for properties within that subdivision. Historically there were two wooden water tanks (PRE Tank 4A and 4B) on the 5,500-square-foot parcel, located at the western end of Drakes View Drive. Tank 4A was destroyed in the 1995 Mount Vision Fire. The proposed 125,000-gallon new tank would replace the destroyed tank, as well as the remaining Tank 4B, which is approaching the end of its useful life span. The current tank would remain operational until construction of the new tank is complete, and then be decommissioned and removed from the site.

## **2.0 PROJECT LOCATION AND SETTING**

As shown on Figures 1 and 2, the project would be constructed on a portion of an approximately 0.126-acre (5,500-square-foot) site owned by the North Marin Water District. The site is at the west end of Drakes View Drive in the Paradise Ranch Estates neighborhood on the Point Reyes Peninsula. There is an existing wooden tank remaining on the site (PRE Tank 4B), which will be decommissioned and removed as part of the project.

The project site is near the top of a topographic knoll at the crest of Inverness Ridge. The vegetation on this previously graded site includes scattered shrubs, herbaceous understory plants, and trees (including Douglas fir, tan oak, bishop pine, and ceanothus). The tank site (AP No. 114-120-09) is about 100 feet east of the residence at 420 Drakes View Drive. The site is about 250 feet east of the Inverness Ridge Trail on the Point Reyes National Seashore.

## **3.0 PROPOSED PROJECT DESCRIPTION**

North Marin Water District (NMWD or District) proposes to construct a 125,000-gallon above ground concrete water storage tank at the existing PRE Tank 4 site (PRE is an abbreviation for Paradise Ranch Estates). The replacement tank would be constructed in approximately the same location as the original PRE Tank 4A that was destroyed by the 1995 Mount Vision Fire. Access to the tank site will be via the driveway to 420 Drakes View Drive. This driveway provides access to the residence at that address and the tank site. The property owner has agreed to allow NMWD to use this private access rather than the steep existing driveway to the site. The area between the end of Drakes View Drive and the beginning of this private driveway (approximately 250 long and 10 feet wide) that is maintained by the Paradise Ranch Estates will be surfaced with a 2-inch layer of gravel to adequately protect it from heavy construction traffic. All improvements would occur within the currently developed tank site on District owned property.

## Tank Facilities

The pad for the tank would be developed by clearing and regrading the existing PRE Tank 4A pad. The level tank pad area would be widened several feet on all sides to accommodate the larger footprint of the replacement tank. The new tank floor would be constructed 3 feet below the elevation of the existing tank floor to reduce the height of the tank above the surrounding ground. This grading will require maximum cuts and fills of three to four feet. It is estimated that up to 170 cubic yards of material would be off-hauled from the site. The grading design will attempt to balance the amount of cut and fill to minimize the need to transport material to or from the site.

A small access pad around the tank would be provided for maintenance and operation. The access would extend approximately five feet beyond the tank wall and will slope at a rate of approximately 5% away from the tank for drainage. The access road surface improvement would be native material or aggregate.

The proposed tank will have the following dimensions:

- Capacity: 125,000 gallons
- Inside/outside diameter: 32/34 feet
- Water depth: 24 feet
- Tank height above native ground (after excavation): 22.5 feet

The tank would be constructed of reinforced concrete. It would be designed and constructed to withstand predicted seismic activity for the area. Colored concrete and an architectural treatment consisting of vertical board forms will be included to enhance the tank's visual appearance and attempt to match the visual appearance and patina of the existing redwood tank. The board forms will have an approximate 1-foot width.

The tank will include a conical sloped roof to disperse falling rain falling. An 8-inch overflow pipe would be provided. A remote telemetry unit (RTU) is already located at the tank site to relay the tank water levels and alarms to NMWD's central SCADA terminal.

The tank would be designed to be unattended. Once construction is completed, only periodic weekly routine trips would be made to the site, similar to existing maintenance requirements. No chemicals would be stored on site.



Figure 1 - PROJECT VICINITY





Figure 2 - PROJECT SITE



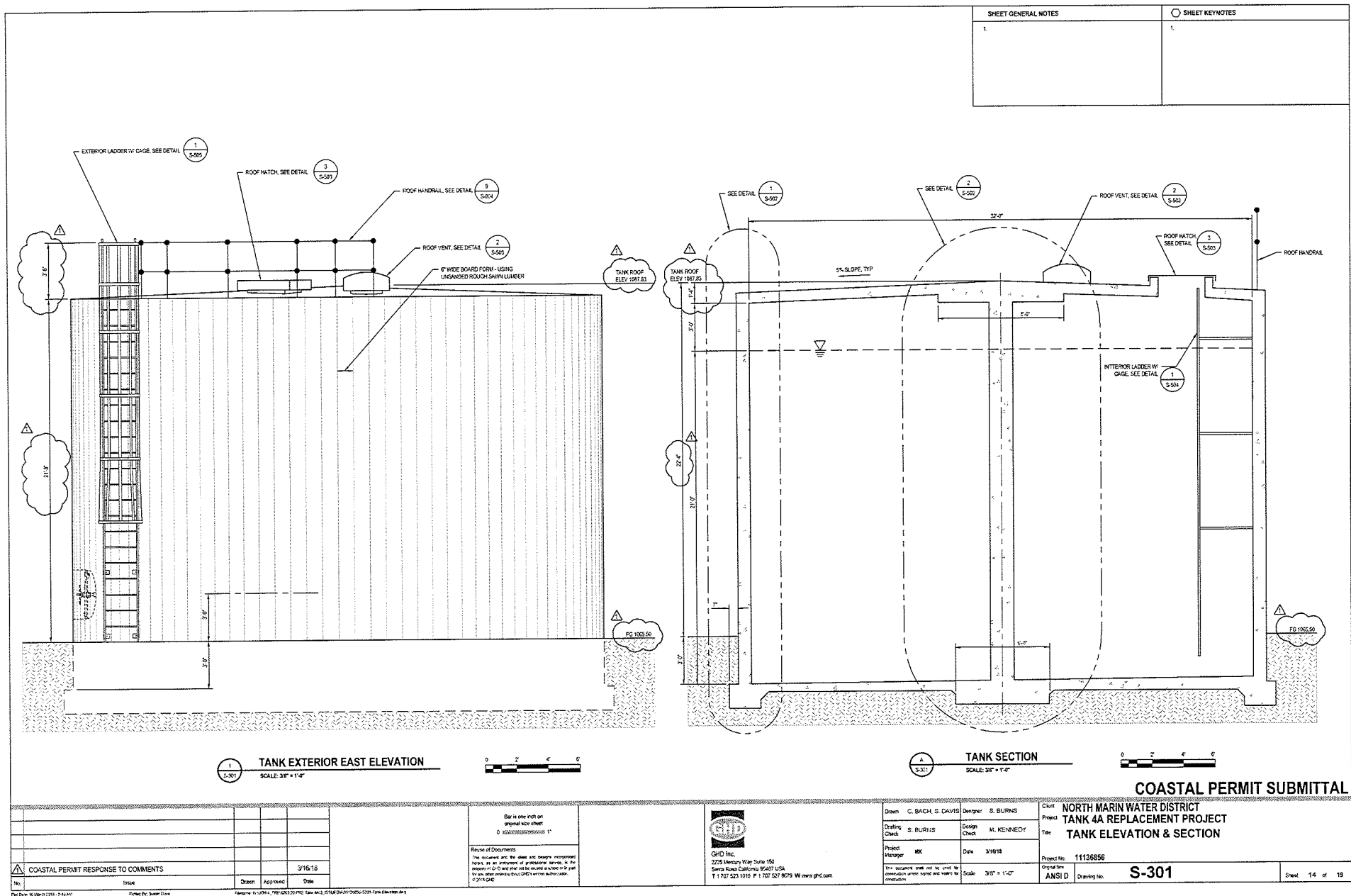


Figure 4 - TANK ELEVATION

## Construction Schedule

The anticipated construction duration for the project is shown below:

Mobilization	2 weeks duration
Submittals/ordering materials and equipment	4 weeks duration
Grade tank pad	2 weeks duration
Construct yard piping	2 weeks duration
Construct and pour footing	2 week duration
Construct and pour tank walls and roof (including accessories)	8 weeks duration
Concrete cure	3 weeks duration
Construct inlet/outlet and overflow pipeline	2 weeks duration
Perform hydrostatic and disinfection tests	2 week duration
Closeout/punchlist	<u>2 weeks duration</u>
Total:	29 weeks duration

Some tasks would be performed concurrently, and it is likely that the overall construction schedule may be reduced by 4 to 8 weeks.

## Construction-Related Activities

Grading the tank pad and excavating for the tank foundation would be done with a backhoe or excavator, and is estimated to take approximately two weeks. The excavation for the tank foundation is estimated to be approximately 38 feet in diameter, and will average 2-3 feet in depth.

Construction will require the use of various pieces of heavy equipment, which may include a backhoe, excavator, skid steer, dump truck, and flatbed truck. Construction materials would be delivered to the job site by 40-foot (or smaller) flatbed trucks and 10-cubic-yard dump trucks. It is expected that between 40 and 60 truck trips to and from the tank site would be required to deliver the major materials.

Concrete for the tank walls would be placed by standard concrete mixing trucks. Approximately 135 cubic yards of concrete are required for the tank, requiring approximately 20 concrete truck trips to and from the project site (i.e., 20 round trips).

The project would also generate trips by workers and District staff overseeing the construction. It is projected that over the 5-7 month construction period, the project would generate a combined 6 to 10 roundtrips per day.

The floor and walls would be constructed manually using wood forms, steel reinforcement and concrete. The following summarizes the equipment that would be used:



- Backhoe or excavator for earthwork
- One small crane or forklift for unloading
- Dump trucks for removal of materials
- Flatbed trucks for delivering materials
- Concrete delivery trucks
- Compactor for final grading

### **Purpose of the Project**

There were historically two redwood tanks at the PRE 4 Tank site (PRE Tanks 4A and 4B). They were constructed to serve buildout of the 270-lot Paradise Ranch Estates subdivision. PRE Tanks 4A was destroyed by the 1995 Mount Vision fire. The District's 2001 *West Marin Long Range Plan* recommended this tank be replaced with an 82,000-gallon tank to provide capacity to provide fireflow to the Paradise Ranch Estates. The subsequent 2014 West Marin Water System Plan recommended an additional 75,000 gallons of storage be added to supplement the existing 50,000-gallon tank serving Zone 4.

Because the existing PRE Tank 4B is a redwood tank, this tank also needs to be replaced in the not too distant future. In 2010, the District commenced with a design and CEQA assessment of a new 82,000-gallon tank. This project was put on hold in 2011. Subsequently, the District conducted a feasibility assessment of the cost comparison of constructing one 125,000 gallon tank compared to an 82,000 gallon tank and a second, subsequent tank to replace the wooden Tank 4A. The District decided that the option of one new tank was preferable and cost effective, and this option is the currently proposed project.

This new tank will provide the storage capacity to meet domestic needs and current fireflow storage requirements for the Paradise Ranch Estates subdivision.

### **Project Scoping Meeting**

Though not required by CEQA, the District held a public scoping meeting on preparing the Initial Study for the project. The District notified residents living within 0.5 miles of the tank site about the meeting. The meeting was also publicized on the website of the Inverness Ridge Association (PRE property owners) and in the Pt. Reyes Light newspaper. The meeting was held on November 2, 2017 and was attended by two members of the public. The chief environmental concerns expressed at the meeting were:

- The tank would potentially adversely affect views from 420 Drakes View Drive, the Inverness Ridge Trail, and more distant vantage points. The District should consider mitigations for visual impacts, including, coloring and texturing/stamping the tank (with a board or other pattern); berming; and landscaping of the berm. It was suggested that test panels showing a range of texturing and colors be provided prior to making a final decision on design elements for the new tank.

- Construction traffic could adversely affect the pavement condition of Drakes View Drive.

In December 2017, NMWD staff also met with the PRE Road Advisory Board to address questions or concerns the Board has about the project and/or the environmental review. In addition, on four occasions, District staff and its consultants also met with the owner of the neighboring house at 420 Drakes View Drive in an attempt to site and design the tank to minimize visual effects on residents of that house.

In October 2016, NMWD installed story poles demarcating the size and height of the proposed tank and sent letters about the project to all residents in the PRE. The District received one comment regarding a preference for a circular tank as opposed to a rectangular tank.

## **4.0 LEAD AGENCY**

### **1. Project Title**

PRE Tank 4A Replacement Project

### **2. Lead Agency Name and Address**

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

### **3. Contact Person and Phone Number**

Mr. Rocky Vogler  
Chief Engineer  
North Marin Water District  
P.O. Box 146  
Novato, CA 94948  
415.897.4133

## **5.0 OTHER PERMITS AND REGULATORY OVERSIGHT**

The North Marin Water District is the public agency responsible for approving and carrying out the proposed project and is considered the Lead Agency under CEQA. NMWD is responsible for preparing this Initial Study. NMWD will approve the Mitigated Negative Declaration prepared for the proposed project and either approve or reject the project after the Mitigated Negative Declaration has been circulated for public review and comment. Because the project site is within the Coastal Zone, the County of Marin is a Responsible Agency that will need to approve a Local Coastal Permit for the project.

## **6.0 RELATED PROJECTS**

To assess possible cumulative impacts associated with the proposed project, a list of other proposed projects around Tomales Bay was developed using the County's List of Projects by Geographic Area available at:

<http://www.marincounty.org/depts/cd/divisions/planning/projects>

Cumulative impacts are discussed in Section XVII of the subsequent Chapter 7 of this report.

**Table 1**  
**Approved or Proposed Development Projects near Tomales Bay**

<b>Project Name</b>	<b>Location</b>	<b>Proposed Land Use</b>	<b>Status</b>
Aghassipour Coastal Permit	103 Via Del La Vista, Inverness	Add 1,300 square feet to a residence	Initial Review
Amalfi West LLC Coastal Permit/Design Review	18135 State Rote 1, Marshall	Add 497 square feet to residence	Initial Review
Chapman Design Review/Coastal Permit Exclusion	42 Cypress Road, Pt. Reyes Station	Demolish an existing 2,864 square foot residence and construct a new 3,989 square foot residence and a carport	Application incomplete
Fruin Coastal Permit/Design Review	470 Pierce Point Way, Inverness	Add 751 square foot accessory structure	Initial Review
Gallagher Family LLC Coastal Permit/Use Permit	14500 Point Reyes/Petaluma Road, Point Reyes Station	produce up to 3,0000 aces of wine in existing structure	Application incomplete
Giacomini Trust Land Division	Vacant lot on B Street, Pt. Reyes Station	Divide 40,000 square foot lot into 2 lots	Initial Review
Shallow Beach Assn. Coastal Permit/Design Review	490 Pierce Point Road, Inverness	Tear down existing building and construct 3,387 square foot residence and 2 accessory buildings	Initial Review
Speh Community Trust Coastal Permit	49 Laurel Street, Inverness	New 660 square foot garage	Initial Review
Volich-Goodwin Trust Coastal Permit/Design Review	120 Kehoe Way, Inverness	Convert 300 square foot barn into guest cottage and add 60 square foot tool shed	Application incomplete
Walmisley-Allen Coastal Permit/Design Review	5Lorraine Avenue, Pot. Reyes Station	Add 475 square feet to residence and 476 square foot garage	Initial Review
Wilson Coastal Permit/Design Review/Use Permit	11101 State Route 1, Point Reyes Station	reinstate an expired approval to renovate the Grandi Building for a hotel (34 rooms), restaurant, retail services and three affordable residential units	Application incomplete

Project status as of 1/17/18

## **7.0 INITIAL STUDY CHECKLIST**

This section (continued on the following page) documents the anticipated environmental effects of the proposed project using an Initial Study Checklist and providing a brief explanation supporting the findings of each checklist item.

### **EVALUATION OF ENVIRONMENTAL IMPACTS**

This Initial Study is based on CEQA's Environmental Checklist Form. Each item on the checklist is answered as either "potentially significant impact," "less than significant with mitigation incorporated," "less than significant," or "no impact" depending on the anticipated level of impact. The checklist is followed by explanatory comments corresponding to each checklist item.

A "no impact" response indicates that it is clear that the project will not have any impact. In some cases, the explanation to this response may include reference to an adopted plan or map. A "less than significant impact" response indicates that there will be some impact but that the level of impact is insufficiently substantial to be deemed significant. The text explains the rationale for this conclusion. A "less than significant impact with mitigation incorporated" response indicates that there will be a potentially significant impact, but the Initial Study determines there are adequate mitigations, which are described and have been included in the project, to reduce the level of impact to an insignificant level. Finally, a "potentially significant impact" response would indicate that the Initial Study cannot identify mitigation measures to adequately reduce the impact to a level that is less than significant. In the latter case, an EIR would be required, but no "potentially significant impacts" have been identified for this proposed project.

### **Discussion of Environmental Impacts**

The proposed project will have potentially significant impacts in the areas of aesthetics, air quality, biological resources, cultural resources, geology and soils, hazardous materials, hydrology and water quality, noise, public services, traffic and transportation, and mandatory findings of significance. All potentially significant impacts identified in this Initial Study can be reduced to a level that is less than significant if mitigation measures recommended in this Initial Study are incorporated into the project.

## I. Aesthetics

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<i>a. Have a substantial adverse effect on a scenic vista?</i>			X	
<i>b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</i>			X	
<i>c. Substantially degrade the existing visual character or quality of the site and its surroundings?</i>		X		
<i>d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</i>				X

### 1. Setting

The existing tank site is situated on top of a small wooded knoll located at the west end of Drakes View Drive. The tank site is adjacent to a single-family residence located at 420 Drakes View Drive. It is approximately 200 feet east of the boundary of the Point Reyes National Seashore (PRNS), and south of the southernmost parcel of the Tomales Bay State Park. The residence is located approximately at the center of a 200-foot-diameter clearing in the woods. The tank is located on the east edge of this clearing. The Inverness Ridge Trail on PRNS runs roughly north-south just west of the western edge of the clearing.

Two tanks existed on the knoll on the site prior to the 1995 Mount Vision Fire. One of the tanks and the original residence were destroyed in that fire; the residence was later rebuilt. Vegetation around the home was cleared and is managed to create defensible space. Recently, additional thinning of the forest on PRNS adjacent to the residence and project area was done to improve fire access and reduce fuels at this wildland-urban interface.

The existing two-story residence is the primary visual element of this ridge-top clearing. The existing wood tank is visible from an approximately 250-foot section of the Inverness Ridge Trail as it travels past the site. Views from the trail include the house in the foreground, framed by the surrounding pine forest (see Photograph 2). The lower branches of several trees located immediately north of where the proposed tank would be located have been removed to provide distant views of Tomales Bay from the residence's yard.

Despite being on the ridgetop, the surrounding trees are taller than the proposed tank on three sides, shielding it from view from most public and private vantage points. The site is shielded by intervening topography and vegetation from views from the distant lower vantage points along Drakes View Drive, Sir Francis Drake Boulevard, and State Highway One. Views of the tank's western side are partially

shielded by ceanothus shrubs that are not taller than the tank. Distant views from the site and the residence are limited to a view corridor that looks to the northeast, which has been created by the clearing of trees around the residence and the limbing-up of trees just northwest of the existing tank. The views are of a portion of Tomales Bay and the ridge on the east side of the bay.

## **2. Impacts**

The District currently proposes to color the tank either green or a shade of brown similar to the color of the existing redwood tank. The tank's wall will be treated to look like it is comprised of vertical 12-inch wide boards (see the photo rendering). A berm will be constructed along the west and northwest side of the tank. Trees and shrubs will be planted on the berm to break up the tank mass and, over time, provide screening of at least part of the tank wall.

- a. *Have a substantial adverse effect on a scenic vista?* **Less than significant with mitigation incorporated.**

The tank site is not part of a County-designated scenic vista. As described in the Setting section above, the proposed tank site is visible from few public vantage points. Because of area topography and trees, the site will be visible from few public or private vantage points. A survey of site visibility was conducted. The proposed tank would be visible from four public vantage points: a distant stretch of Highway 1; the easternmost part of Tomales Bay; residential areas in northwestern Pt. Reyes Station; and a section of Inverness Ridge Trail.

### Highway One

There would be distant views possible from two sections of Highway One for about 1.5 to 2.0 miles northwest of Pt. Reyes Station. Highway One in this area is an Eligible State Scenic Highway, but it has not been officially designated as such. The section of Highway 1 lying northwest of Pt. Reyes Station is approximately two miles distant from the site. Looking from the east edge of the tank site, it is possible to see the highway. Looking from the highway to where the tank would be constructed, the site is part of the heavily wooded east side of Inverness Ridge. Even with binoculars it was not possible to see the existing tank or identify the area where the new tank would be located. It is possible that once constructed, someone who knew exactly where to look would be able to identify the tank through the trees lying east and north of the tank. The tank will be colored either green or grayish brown (similar to the color of the existing redwood tank and the bark of the surrounding pine trees). Given the surrounding woodlands, the distance from these public vantage points, the topographic change (over 900 feet elevation difference) between the tank and these vantage points, and the proposed coloring of the tank, it is expected that the tank would have inevident visual dominance (i.e., project is generally not visible from public view because of intervening natural land forms or vegetation) and would not adversely affect existing views from the highway.

Drivers on Highway One, even if they looked up out of their windows towards the top of the ridge to the west, would continue to see a heavily wooded ridge that includes almost no views of residences or other structures.





PHOTO 1: View of tank site from front entry of 420 Drakes View Drive



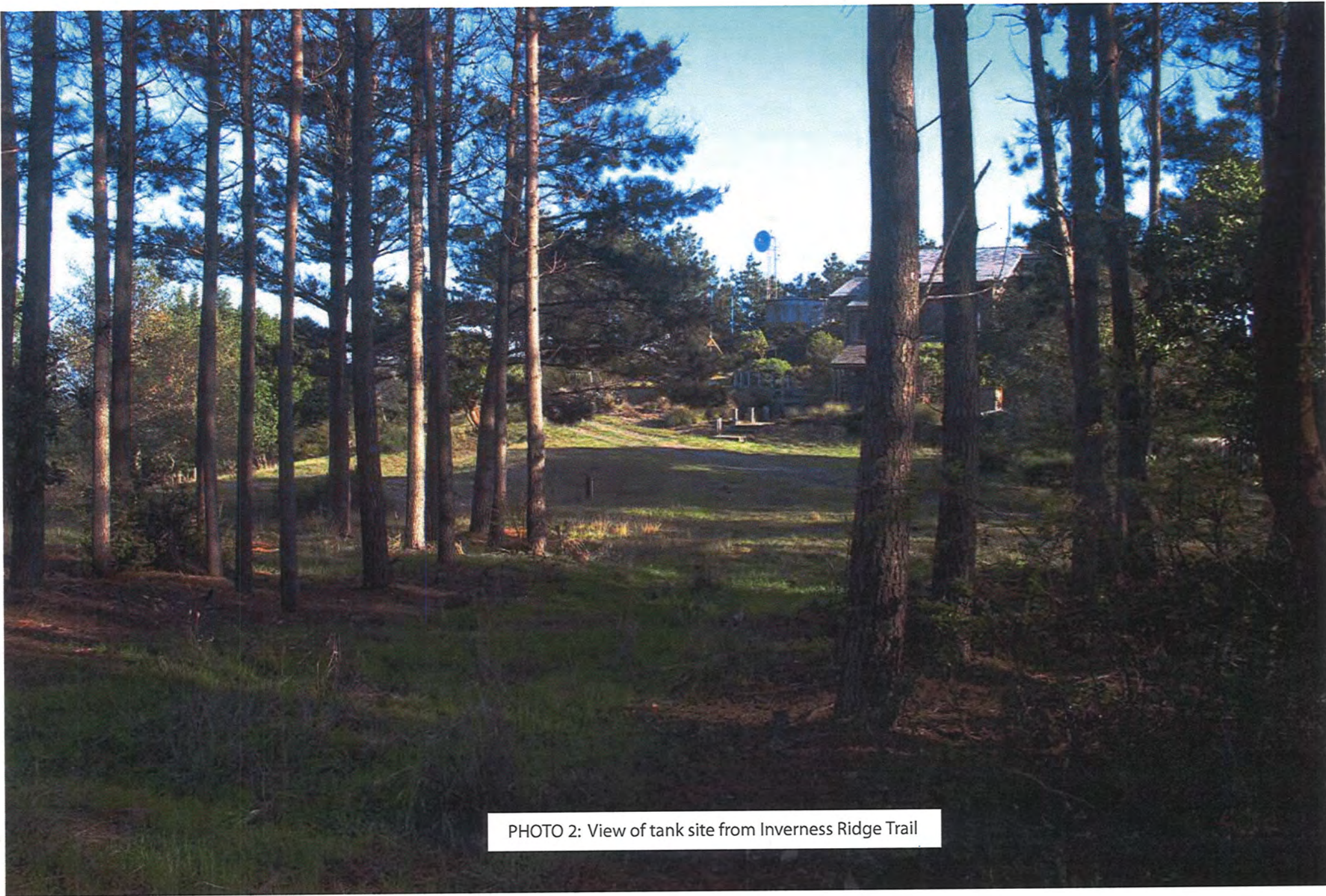
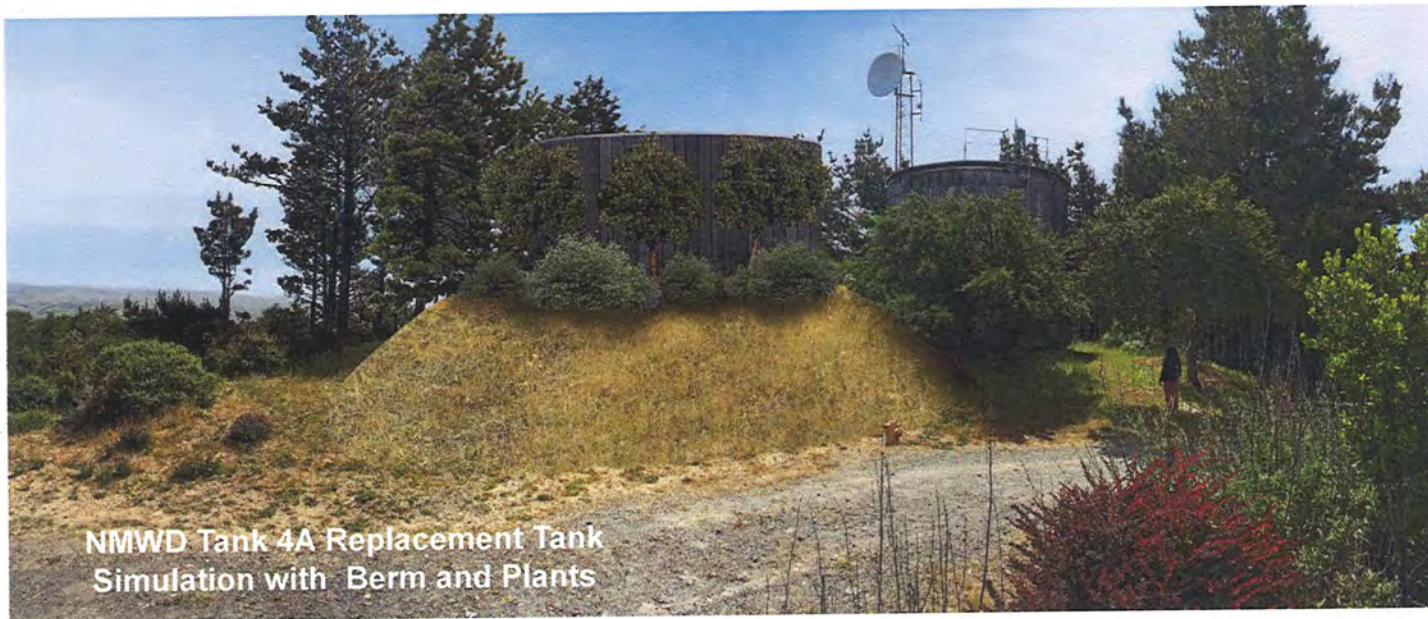


PHOTO 2: View of tank site from Inverness Ridge Trail





NMWD Tank 4A Replacement Tank  
Simulation with Berm and Plants

### Pt. Reyes Station

The site is within the viewshed of about 30+ residences at the northwest end of Pt. Reyes Station and likely from residential streets serving those homes. The tank site is about 2 miles distant and at an altitude about 900 feet higher than the homes. Views from this residential area is similar to that described above for Highway 1. Residents can look to the top of the wooded Inverness Ridge and see mainly trees with an occasional view of a part of a residence. The site is indistinguishable from the rest of the hillside. Again, it could be possible that there may be a future filtered view of a portion of the tank. However, given the distance, altitude, trees, and tank color, the tank, if visible, would be an inevident addition to the viewshed.

### Tomales Bay

The site may also be visible from boats on the eastern portion of the bay. Again, the tank, if visible at all, would be an inevident structure amidst a wooded ridge.

### Inverness Ridge Trail

As shown on Photograph 2, the existing tank and home are visible from an approximately 250-foot section of the Inverness Ridge Trail as it travels past the site on PRNS lands. Views from the trail include the residence in the foreground, framed by the surrounding pine forest. The existing tank is visible east of the house, framed and partially screened by existing vegetation. The new tank would be visible from about the same vantage points that offer views of the existing tank. The new tank would be larger and nearer the trail. However, the tank would be partially shielded by the proposed berm and landscaping. In addition, the tank will be colored and textured. The tank will not substantially affect views from the trail. The primary visual feature in the area for trail users is the large house located nearer to the trail. The tank will appear an ancillary structure in the clearing. In addition, the view of the clearing, house, and tank is fleeting as the trail users walk or horseback-ride past these improvements. The tank does not add a new type of feature to an otherwise undeveloped wooded vista.

### Summary

The new tank will not substantially alter any public scenic vista. Given the developed nature of the site, its historic use as a water tank(s) site, the relatively modest size of the tank, and its undeveloped surroundings on three sides as well as proposed design mitigations, it is doubtful, whether this change in views could be characterized as "substantially degrading" the visual character or quality of the site and its surroundings. It is concluded that the impact to scenic vistas from public vantage points would be less than significant. It will be a small, likely inevident, part of scenic vistas seen from vantage points to the east and a part of an existing vista of human development as seen from the short section of trail that passes the site. No additional mitigation is required beyond the proposed tank visual enhancements, berming, and landscaping.

Any potentially significant visual impact would be to private views from residences. This potential impact is addressed in Checklist Item 1c below.

- b. *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?* **Less than significant impact.**

The project would be constructed on a previously graded site that was used as the foundation for a water tank. Four bishop pines would be removed, which would not constitute substantial damage to the extensive surrounding bishop pine forest. No major rock outcroppings or historic buildings would be damaged or removed. The site adjoins residential development and does not contain scenic resources. The site is two miles distant from Highway One and, if visible at all from this highway, the new tank would not substantially change the views from that highway.

- c. *Substantially degrade the existing visual character or quality of the site and its surroundings?* **Less than significant with mitigation incorporated.**

The project will have an adverse effect on views from 420 Drakes View Drive. There will be a view of a larger concrete tank located nearer the residence than the existing tank. The photo rendering prepared by the District's engineers shows the proposed tank and the existing tank as seen from the front door walkway of this home. This rendering shows the tank mass with color and board texturing. It also shows a preliminary design of proposed berming and plantings on that berm. It does not show the conical roof that would extend about one foot above the mass. The exterior ladder, roof access hatch, and vents will be located on the east side of the proposed tank and not visible from the residence. As can be seen in this rendering, both the existing tank and the proposed tank are clearly visible from this vantage point. The west side of the new tank would be located approximately 40 feet northwest of the existing tank and about 8 feet farther west than the existing tank (i.e., closer to the residence).

The upstairs kitchen of the home has a window above the kitchen sink that looks north. The existing tank and the proposed tank will be visible to the right (east) from this window. Future views would be similar to that shown in the photo rendering with the difference that a person looking out this window would be at a higher vantage point. The tank is also visible from a smaller window in the stairwell. Other windows in the house are purposely oriented so that they do not have a view of the tank site. The existing foreground view from the kitchen window is primarily of the landscaped/cleared area around the north/northeast side of the house, as well as views of the tank, an antenna, other associated manmade improvements. Midground and distant views include views of the pine forest and possibly distant views to the ridge east of Tomales Bay though the view corridor developed to the northwest of the proposed tank site.

Tank construction would require removal of four pine trees (ranging from 12 inches to 14 inches in diameter). These trees are regrowth after the 1995 Mount Vision Fire. However, other pines would remain behind (north, east, and south) of the tank. These trees would continue to provide visual framing behind the tank.

The proposed tank would be larger in diameter but the same height ( about 22.5 feet above ground elevation) as the existing tank. The new tank would have more mass and be more visible from the vantage points inside and outside the residence. NMWD staff met several times with one of the owners of this residence to gather concerns about the project. One concern is the unattractiveness of unbroken mass facades. The District has addressed this concern with its proposed treatment of the concrete to enhance the tank's visual appearance and attempt to match the visual appearance and patina of the existing redwood tank. The board forms stamped on the tank wall will have a 1-foot width. However, the increased tank mass located closer to the residence would still have an adverse effect on views from the residence.

To further reduce the visual impact, the District proposes to construct an earthen berm between the tank and the house and landscape this berm (the berm is conceptually shown on Figure 3). Assuming the berm landscaping is professionally installed and maintained, the impact would be substantially reduced. The District has also agreed in principle with the property owner at 420 Drakes View Drive to exchange the District's driveway right-of-way that comes up from Drakes View Drive to the tank site for a right-of-way on the driveway for 420 Drake View Drive. This would allow additional landscaping of the current gravel-surfaced driveway that lies between the tank and the residence. It is also likely that in the future after the project becomes operational, the existing tank and foundation will be removed, which would allow additional planting or natural revegetation of the area.

The visual survey conducted for this Initial Study determined that the east edge of the tank could be visible from the three westernmost residences on Upper Robert Drive in PRE. The roofs of these three residences are visible when looking down from the edge of the tank site. These three residences are 0.3-0.4 miles distant and about 400 feet lower than the tank site. If views of the site are in fact possible from these residences, the viewer would see one corner or side of a colored tank with some screening or filtering by existing trees. The tank would not be a substantial intrusion into a view of a thickly forested hillside. The impact to residents of these homes would be less than significant.

### **Mitigation Measures**

#### **Mitigation Measure A-1**

To reduce the visual impact of the proposed tank on residents of 420 Drakes View Drive:

- The new tank shall be constructed of concrete that shall be colored and patterned to mimic the boards of the existing redwood tank. Alternatively, the tank could be colored green or another color suitable to the owner of 420 Drakes View Drive.
- A berm shall be established along the west and northwest sides of the tank. The berm will be constructed to the maximum height feasible while providing a stable slope above the maintenance access pad/path around the tank and to the residential driveway to the west.

- NMWD ~~is contractor~~ will hire a landscape professional to consult with the owner of 420 Drakes View Drive to design the berm and to develop and implement a planting plan for the berm and the portion of the existing driveway right-of-way abandoned by the District. The plan shall identify the species to be planted, the size of the planting container, and irrigation and fertilization requirements. The berm shall be planted with a mix of trees and shrubs that are native to Marin County and that are appropriate to the habitat, not pyrophytic (fire-prone), and not fatally susceptible to Sudden Oak Death or pine pitch canker fungus. The planting list can includes species such as *Ceanothus thyrsiflorus*, *Arctostaphylos* sp. (e.g., *A. glandulosa* or *A. manzanita*), *Umbellularia californica*, *Baccharis pilularis*, *Vaccinium ovatum*, *Fragula californica*, *Arbutus menziesii* (the madrone cultivar planted at 420 Drakes View Drive is a hybrid that is not native, but it is less susceptible to SOD and looks like the native; it is recommended for inclusion in the planting), and *Pseudotsuga menziesii*. The plan shall have a goal to provide screening of the tank as quickly as feasible. The landscape plan shall include three to five large specimens (15-gallon containers) planted near the berm top to provide rapid screening of the tank. To the degree feasible, the landscape plan shall integrate new plantings with the existing landscaping at the adjacent residence. NMWD will ask the owner of the residence to review and provide input on the plan.
- Trees and shrubs shall be watered and fertilized on a regular basis until they are at least 3 years old. Any tree or shrub that dies in the first 3 years shall be replaced.

#### **Mitigation Monitoring and Reporting**

The landscape plan shall be a contractual requirement for the project contractor. The plan shall be made available to the owner of 420 Drakes View Drive for comment and suggestions. The planting shall be done before the tank becomes operational. NMWD shall be responsible for maintaining the trees and shrubs for at least three years and replacing specimens that have died during that period.

#### **Impact Significance After Mitigation**

The recommended mitigations would further reduce visual impacts to residents of 420 Drakes View Drive as well as users of the Inverness Ridge Trail. These mitigations along with the following considerations would reduce the impact to the visual quality of the site to a less-than-significant level: 1) the site has been used as a water tank site for decades; 2) the site area is developed with a modern single-family residence whose windows with two exceptions do not look out at the tank site; 3) the tank will be designed and landscaped as well as landscaping of the abandoned existing driveway will be provided; and 4) there is ample natural woodland surrounding the site. In addition, this impact would be to one residence. It is noted that the State's 2017 proposed update of the CEQA Guidelines includes a revision to this Checklist item that clarifies that an impact would be significant if it adversely affected the existing visual character or quality of public views of the site or its surroundings. Changes to the visual character for private views would not be addressed under this revised impact criterion, if and when it is formally adopted later this year.

- d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? **No impact.**

The project would not include any lighting and would not create glare from any off-site vantage point.

## II. Agriculture and Forestry Resources

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				x
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				x
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				x
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				x
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				x

### 1. Setting

The site is a ridgetop parcel located in an area of bishop pine forest. There are no agricultural uses or commercial forestry operations in the project area.

### 2. Impacts

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? **No impact.**

The site is a wooded or previously developed hilltop and is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

- b. *Conflict with existing zoning for agricultural use, or a Williamson Act contract?* **No impact.**

The site is not zoned for agriculture and is not in a Williamson Act contract. It is zoned as single-family residential, and is in the coastal zone.

- c. *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?* **No impact.**

The site is not zoned as forest land or timberland.

- d. *Result in the loss of forest land or conversion of forest land to non-forest use?* **No impact.**

The site is a graded former water tank site and does not contain forest land, also it would not result in conversion of such land to other uses.

- e. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?* **No impact.**

There is no Farmland in the area, so proposed construction of the project would not result in conversion of Farmlands to other uses.



### iii. Air Quality

Where available, the significance criteria by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?		X		
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
d. Expose sensitive receptors to substantial pollutant concentrations?		X		
e. Create objectionable odors affecting a substantial number of people?				X

#### 1. Setting

The project is located within the San Francisco Bay Area (Bay Area) Air Basin. Air quality in the Bay Area Air Basin is governed by the Bay Area Air Quality Management District (BAAQMD). The Bay Area Air Basin is currently classified as non-attainment for the 1-hour State ozone standard as well as for the federal and State 8-hour standards. Additionally, the Bay Area Air Basin is classified as non-attainment for the State 24-hour and annual arithmetic mean PM10 standards as well as the State annual arithmetic mean and the federal 24-hour PM2.5 standards.

BAAQMD is the agency responsible for regulating air pollutant emissions in the San Francisco Bay Area Air Basin. BAAQMD is responsible for implementing emissions standards and other requirements of federal and state laws. The air basin, including Marin County, is considered a "nonattainment area" for the 1-hour State ozone standard as well as for the federal and State 8-hour standards and for the State 24-hour and annual arithmetic mean PM10 standards as well as the State annual arithmetic mean and the federal 24-hour PM2.5 standards. In September 2010, the BAAQMD adopted the Bay Area 2010 Clean Air Plan (CAP). In May 2017, BAAQMD adopted updated CEQA Air Quality Guidelines, including thresholds of significance and new screening criteria, which advise lead agencies on how they can evaluate potential air quality impacts using these screening criteria. In April 2017, the BAAQMD adopted the Bay Area 2017 Clean Air Plan (CAP). The 2017 Clean Air Plan, Spare the Air, Cool the Climate (2017 Plan), focuses on health and protecting the climate. Consistent with the GHG reduction targets adopted

by the state of California, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

## **2. Impacts**

### **a. Conflict with or obstruct implementation of the applicable air quality plan? Less than significant with mitigation incorporated.**

Constructing the project would result in emissions of the reactive organic gases (ROGs) carbon monoxide, nitrogen oxides, sulfur oxides, and particulates. Construction-related emissions would result from off-road, heavy equipment operating at the project site to construct the new facilities and from truck trips associated with deliveries and construction workers commuting to and from the project site. Emissions associated with project operation would include those from car trips and maintenance activities.

To determine the significance of the project impact that would be related to the potential for it to cause or contribute to an air quality standard violation, NMWD and the County of Marin utilize the screening criteria provided in BAAQMD's 2017 CEQA Air Quality Guidelines. If a proposed project exceeds the screening criteria, it is expected that its emissions would exceed the thresholds of significance included in the Guidelines, and a detailed air quality analysis would be required. The screening criteria do not specifically include a category for water tanks, or for any other uninhabited facilities or infrastructure. However, the threshold for warehouses is 259,000 square feet for construction-related emissions and 864,000 square feet for operational emissions. The proposed project (approximately 1,000 square feet of development) is substantially smaller than these screening thresholds. Therefore, it is expected that construction and operation of the project would not result in a violation of an air quality standard or contribute significantly to an existing or projected air quality violation with implementation of the standard construction air quality controls required by the BAAQMD.

To ensure that project construction does not cause significant project-level or cumulative air quality impacts, the BAAQMD has identified a set of feasible air quality control measures for construction activities (i.e., *Basic Construction Mitigation Measures Recommended for All Proposed Projects*). The project includes those controls as Mitigation Measure AQ-1 described below, to reduce the effects of construction activities.

Once construction is completed, the project would not result in emission of any air pollutants. By expanding water storage, the project enhances the ability of fire suppression agencies to limit the size and duration of future fires in the Point Reyes Estates subdivision, thereby potentially reducing emission of air pollution caused by such fires.

### **Mitigation Measures**

#### **Mitigation Measure AQ-1**

In accordance with the BAAQMD CEQA Guidelines (BAAQMD, 2017), the project shall implement the following actions (that are pertinent to this project) to control dust from escaping from the site:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day if construction occurs during dry weather.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed by sweeping once a day.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

#### **Mitigation Monitoring and Reporting**

The mitigation measures shall be implemented throughout the construction phase. NMWD shall include the requirements in the construction contract. The contractor shall be responsible for implementation.

#### **Impact Significance After Mitigation**

Implementation of these standard dust control measures will reduce dust to levels that the BAAQMD recognizes as being acceptable, and the impact would be less than significant.

- b. *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?* **Less than significant with mitigation incorporated.**

As noted above, the project will include the BAAQMD-required control measures so that the project is not expected to violate any air quality standard. According to the BAAQMD CEQA Guidelines, a project's contribution to cumulative impacts should be considered significant if the

project's impact individually would be significant (i.e., exceeds the BAAQMD's quantitative thresholds). For a project that would not result in a significant impact individually, the project's contribution to any cumulative impact would be considered less than significant if the project is consistent with the local General Plan and the local General Plan is consistent with the applicable regional air quality plan. In this case, the applicable regional air quality plan would be the Bay Area 2017 Clean Air Plan. The project is consistent with the goals and objectives related to air quality and provision of adequate fireflow to serve existing development in the Marin Countywide Plan, and this plan is consistent with the Bay Area Clean Air Plan.

- c. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? **Less than significant with mitigation incorporated.***

As noted above, the project will include the BAAQMD-required control measures so that the project is not expected to contribute a cumulatively considerable amount of any criteria pollutant.

- d. *Expose sensitive receptors to substantial pollutant concentrations? **Less than significant with mitigation incorporated.***

As described in the previous three responses, the project, with mitigation, would not result in significant construction or operational-related impacts. Accordingly, it would not expose nearby neighbors nor other sensitive receptors to substantial pollutant concentrations.

- e. *Create objectionable odors affecting a substantial number of people? **No impact.***

The project would not have the potential to generate objectionable odors.

#### IV. Biological Resources

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

## 1. *Setting*

A Biological Site Assessment (BSA) was prepared for this Initial Study and is included as Appendix A at the end of the study. The project site is located at the top of Inverness Ridge, about 200 feet east of the Point Reyes National Seashore boundary and 100 feet south of a parcel owned by Tomales Bay State Park. There is a small number of homes in the area, which otherwise remains primarily undeveloped. Terrain is steep and rugged, underlain by granitic bedrock which fosters steep ravines and drainage channels that drop off abruptly. The knoll that supports the project site drains to Tomlinson Creek to the north, and ultimately to Tomales Bay. The bay is an important and sensitive ecological system supporting significant bird and fish populations; it is recognized for protection by the California Bays and Estuaries Policy, and its southern end has been designated an ecological reserve by the State Department of Fish and Game.

The ridge is heavily wooded, primarily with bishop pine. Vegetation on the proposed project site consists of scattered shrubs, herbaceous understory plants, and trees (in addition to bishop pine there are scattered live oak, ceanothus, and Douglas fir, and tan oak; see Table 2 for a list of species observed on the site). Immediately west of the proposed project site is an area where the forest has been cleared. This area contains a residence, driveway, landscaped areas, and native shrubs—primarily huckleberry, ceanothus, and sticky monkeyflower. To the east, west, and north of the proposed project site the landscape drops off steeply. The hillside is primarily forested with bishop pine. The tree canopy cover is moderate, and the understory is not densely vegetated. The most common understory species is scattered patches of huckleberry.

The site itself has been disturbed over the years. It was graded to build two redwood water tanks – one of which was burned in the 1995 Mount Vision Fire and one of which still stands. In addition, the tank site is immediately adjacent to a driveway and residence, around which the land has been cleared. The site does not contain high-quality habitat due in large part to these factors.

Consistent with Marin County guidelines for assessing biological impacts of projects, a search of California Natural Diversity Database of special-status species known to occur in the area was conducted (see Appendix A). A list of those special-status species plant species that could potentially be found on the site, based on habitat type, elevation, and other site constraints, was compiled. Field surveys were conducted in April and June 2017. These surveys confirmed the absence of special-status plant species; Table 2 lists the species that were prevalent on the site.

**Table 2**  
**Common Vascular Plants Seen on Project Site**

<i>Anagallis arvensis</i>	Scarlet pimpernel
<i>Briza maxima</i>	Rattlesnake grass
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Ceanothus thyrsifolius</i>	Blueblossom
<i>Claytonia perfoliata</i>	Miner's lettuce
<i>Frangula californica</i>	Coffeeberry
<i>Hedera helix</i>	Ivy
<i>Hypochaeris radica</i>	Hairy cats ear
<i>Lavendula stoechas</i>	Lavender
<i>Lithocarpus densiflora</i>	Tanbark oak
<i>Mimulus aurantiacus</i>	Sticky monkeyflower
<i>Myosotis latifolia</i>	Forget me not
<i>Pinus muricata</i>	Bishop pine
<i>Plantago lanceolata</i>	English plantain
<i>Polypodium californicum</i>	California polopody
<i>Pseudotsuga menziesii</i>	Douglas fir
<i>Pteridium aquilinum</i>	Bracken fern
<i>Quercus agrifolia</i>	Coast live oak
<i>Ribes californicum</i>	California gooseberry
<i>Rubus ursinus</i>	California blackberry
<i>Rumex acetocella</i>	Sheep sorrel
<i>Toxicodendron diversilobum</i>	Poison oak
<i>Umbellularia californica</i>	Pepperwood
<i>Vaccinium ovatum</i>	Huckleberry

As the project site is adjacent to large areas of undeveloped private and public lands that provide extensive wildlife habitat, it could be utilized by a variety of wildlife species. A list of special-status wildlife species that could potentially be found on the site, based on habitat type, elevation, and other site constraints, was compiled based on queries of the CNDDDB, U.S. Fish and Wildlife Service Information, Planning, and Consultation System, and other databases and references. Based on these results combined with site surveys, it was concluded that there was potential for western red bat and hoary bat to occur on the project site. Northern spotted owls (NSO) are known to inhabit the project vicinity but are not expected to be impacted by this project (see discussion below). There is moderate potential for migratory bird habitat to occur on the project site.

### *Western Red Bat and Hoary Bat*

No regularly occurring bats in California are federally-listed species, and there are no specific laws in California protecting bats as a specific type of wildlife; however, various agencies and groups have established status designations providing guidelines for the most sensitive and threatened species without actually providing any extra legal protection. The National Forest Service, Bureau of Land Management, and the Western Bat Working Group have evaluated threats to bats of California and have rated them accordingly. Nine species are currently considered Species of Special Concern by the DFW, and three additional species are proposed for that status. Additionally, the Forest Service and the Bureau of Land Management list some species as Sensitive and the Western Bat Working Group lists some as High Priority (for consideration of conservation measures). Two bat species—western red bat (*Lasiurus blossevillei*) and hoary bat (*Lasiurus cinereus*)—have CNDDDB occurrences in the region around the study area, in addition to potentially suitable roosting habitat available on the site. The western red bat may occur in a wide variety of grasslands, shrublands, woodlands, and cropland. The hoary bat, which is included on CDFW's California State Special Animals List, is a widespread species found in a variety of habitats throughout California. Both species roost primarily in trees, up to 40 feet above the ground, with dense foliage above and open flying space below. Both are most commonly, but not exclusively, found near streams or other water sources.

Within the study area there is limited roosting habitat of the sort typically preferred by these bats, as the tree canopy is not particularly dense, nor is the site near water. However, the site is situated adjacent to both the forest and edge habitat preferred for foraging by the hoary and western red bat, respectively. Based on this information, there is a moderate potential for these species to occur within the study area.

### *Northern Spotted Owl*

NSO nest and forage in the Inverness area, with most reported sightings located on the lower, eastern flanks of the Inverness Ridge. Sightings are generally clustered in wooded canyons, away from houses and roads. A review of the CNDDDB owl database showed two clusters of activity and nest sites in the Inverness area, with the closest located 1.3 miles north of the tank site and the other located three miles north of the tank site. The nearest critical habitat designation is critical habitat unit 3 (Redwood Coast) subunit RDC-5 located in the San Geronimo valley over 9 miles southeast of the tank site.

The Project Area and its immediate vicinity do not provide suitable NSO nesting habitat elements. Most vegetation was burned in the 1995 Vision Fire, and has regrown since then. The dominant vegetation type is dense, even-aged Bishop pine stands that lack the upper arboreal structure that NSO prefer for nesting (e.g., broken redwood trees, squirrel nests, etc.). Additionally, the residential and recreational activity in the project area result in regular anthropogenic disturbances, including cars (driving, parking), hikers, and construction and maintenance sounds and activities (leaf blowers, chainsaws). Thus, while NSOs are well established in the region, they are not expected to nest on or near the project site.

The USFWS describes projects that will not impact NSO nesting habitat directly, but could potentially generate acoustic and/or visible disturbances, as "disturbance only". For such projects, a matrix of



existing versus project-generated noise is utilized to determine the size of the buffer zone within which project activities could reasonably be assumed to impact NSO (USFWS 2006). For this project, the ambient/existing conditions are conservatively considered to be in the “very low” category, defined as 50-60 dB, and generally limited to circumstances where human-generated sound would never include amplified or motorized sources. This category is conservative as such noise does regularly occur, given that residences and a road are located in the project area. Sample noise sources that fall within the “very low” category include: rapids along large streams, or wind-exposure, and may include quiet human activities such as nature trails and walk-in picnic areas.

According to USFWS guidelines, the conditions during demolition and construction would be considered “high” (81-90 dB). When these conditions are entered into the calculation matrix, the estimated NSO harassment distance would be 100 feet—the area located between the Inverness Ridge Trail and Buck Point Road. Given that the nearest documented NSO nest is a 1.3 miles from the Project Area, and observations of individual NSOs (as per available databases) are a minimum distance of 2,500 feet, no adverse impacts to nesting NSO are anticipated as a result of project construction.

### *Migratory Birds*

Under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503-3505, 3513, and 3800, migratory birds, their nests, and eggs are protected from disturbance or destruction. Removal or disturbance of active nests would be in violation of these regulations. All birds are protected under the MBTA and California Fish and Game Code except for two non-native species, the European starling (*Sturnus vulgaris*) and the house sparrow (*Passer domesticus*). Migratory bird species may nest in any habitat type except for paved road surfaces and open water. Even barren areas may be used by ground-nesting birds such as killdeer (*Charadrius vociferous*). Additionally, the Point Reyes Peninsula and its vicinity are known as being a stopover for a particularly high number of migratory bird species that are rarely seen in California. Though the project site is small and does not support high quality habitat, and no bird nests were observed during the 2017 site surveys, there is moderate potential for migratory birds to occur within the study area.

## **2. Impacts**

- a. *Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?*  
**Less than significant with mitigation incorporated.**

As described above, there is no evidence of the site supporting special-status plants, or breeding or nesting habitat for any special-status wildlife species. However, there is a moderate potential for two species of foliage-roosting bat—western red bat (*Lasiurus blossevillei*) and hoary bat (*Lasiurus cinereus*)—to be present on the site. Project-generated noise and vibration or the reconfiguration of large objects can lead to the disturbance of roosting bats, which may have a negative impact on the animals. Human disturbance can also lead to a change in humidity, temperatures, or the approach to a roost. Although temporary, such disturbance can lead to the abandonment of a maternity roost, which would be considered a potentially significant impact.

### Mitigation Measures

#### Mitigation Measure BR-1

A qualified biologist will conduct a survey of the site no more than 14 days in advance of the start of construction. If evidence of special-status bats in trees on the property is observed, the following measure is required. Removal of trees or other suitable habitat showing evidence of special-status bat activity will occur during the period least likely to impact the bats as determined by a qualified bat biologist (generally between February 15 and October 15 if winter hibernacula are observed or between August 15 and April 15 if maternity roosts are present). The bat biologist will also be consulted to ensure that the landscaping plan include roost sites equivalent to any that were removed during construction. Artificial roosts may also be installed if deemed suitable by the bat biologist.

#### Mitigation Monitoring and Reporting

The bat survey will be conducted as stated above. If roost trees need to be removed, the bat biologist will provide input to the landscaping plan to replace roost trees.

#### Impact Significance After Mitigation

The standard mitigation will ensure that roosting bat hibernacula are not impacted. The impact would be reduced to a less-than-significant level.

- b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? Less than significant impact.*

The tank site is previously disturbed, and is adjacent to a driveway and a residence. The vegetation is characteristic of a disturbed forest clearing, and is partially wooded with Douglas fir, tan oak, live oak, bishop pine, and ceanothus. The surrounding area consists of mixed forest and a landscaped clearing containing a residence and a driveway. The project site does not contain any riparian habitat or other sensitive natural community. No oak trees would be removed to construct the project, so there would be no impact to the oak woodland. Four bishop pine may need to be removed, but this would not affect the integrity of the extensive adjacent bishop pine forest.

- c. *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? Less than significant impact.*

The project site does not contain wetlands. The small amount of additional runoff created by the project would drain from the site via sheetflow, and it would not affect any off-site

wetlands. The project requires little soil disturbance and would not cause significant erosion that could affect any off-site wetlands.

- d. *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?* **Less than significant with mitigation incorporated.**

The tank would be constructed adjacent to an existing water tank, on previously graded land and with a footprint similar to that of the existing tank and the tank that burned down. Project construction would potentially affect bats as discussed under Item IV(a) above. The recommended Mitigation Measure BR-1 would reduce this impact to a less-than-significant level.

The site is adjacent to undeveloped forestlands. It is certain that local wildlife—such as deer, raccoons, foxes, coyotes, songbirds, raptors, and other species—rest on, forage on, or traverse this property as they make their way between undeveloped lands to the east, north, and east. However, the proposed project would not block or seriously impede these travel routes.

The area to be developed may include suitable nesting sites. Breeding birds are a concern if construction activity could cause the abandonment or failure of an active nest. For instance, breeding birds could abandon a nest with eggs or nestlings if construction activity was so close as to flush the birds from the nest. This would be a violation of the Migratory Bird Treaty Act and Sections 3503 & 3513 of the Fish and Game Code. This is a potentially significant impact.

#### **Mitigation Measures**

##### **Mitigation Measure BR-2**

Surveys for breeding birds are recommended if construction occurs during the nesting season (February 15 through June). Surveys for nesting birds should be completed by a qualified biologist within 14 days prior to the beginning of construction between February 15 and July 1.

If raptors are observed nesting within 250 feet of the construction area, the behavior of the raptors shall be observed by a qualified biologist, who shall determine the width of a suitable buffer. Typical raptor buffers are 250–300 feet wide.

If songbirds are observed nesting near the construction area, a 50-foot buffer shall be established between the nest and construction until the nest is no longer in use. Travel and other human activity should be prohibited within the nest buffers for the raptors and songbirds.

### Mitigation Monitoring and Reporting

If warranted, NMWD will contract with a biologist to conduct the surveys (these can be done concurrent with the previously required bat surveys). The construction schedule will be revised as needed if active roosts are identified.

### Impact Significance After Mitigation

Implementation of these protections would reduce construction impacts to nesting birds. Because the project site is adjacent to residential development and near a public trail, any nesting raptor would likely be acclimated to human activity and a buffer shorter than 250 feet may be suitable. These standard mitigations would reduce the impact to a less-than-significant level.

- e. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?* **Less than significant with mitigation incorporated.**

Project grading may require removing four bishop pine trees. These trees are just outside the toe of the proposed tank foundation fill slope, and removal may not be needed. Three have diameters of approximately 12 inches diameter at breast height (DBH,) and one has a 14-inch DBH. The Marin County Tree Ordinance states that bishop pines of this diameter are protected trees. However, the Tree Ordinance does not apply to properties within the Coastal Zone. Removal of these trees would be addressed as part of the Coastal Permit that is required for the project. Because these trees are within an area that contains substantial numbers of this species, the presence of pine canker disease on and near the site, and proposed revegetation with native trees on the berm around part of the tank, it is unlikely that the County would require any additional mitigation for removal of these four trees. Mitigation previously recommended in this Initial Study would reduce the impact on tree removal to a less-than-significant level.

- f. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?* **No impact.**

The project construction activities would not conflict with any Habitat Conservation Plans, Natural Conservation Community Plans, or any approved local, regional, or State habitat conservation plans.

## V. Cultural Resources

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		X		
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d.	Disturb any human remains, including those interred outside of formal cemeteries?		X		
e.	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is:				
1)	Listed or eligible for listing in the Caltrans Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
2)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				X

### 1. Setting

At the time of European contact, the Native Americans that lived in the project area were speakers of the Coast Miwok language. Based on a Records Search done for the project, there are no Native American resources in or adjacent to the project area referenced in the ethnographic literature.

### 2. Impacts

- a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? **Less than significant with mitigation incorporated.**

The tank site has already been graded. While the site would not be expected to contain significant cultural resources, even if they had been present they would have been removed or destroyed by the grading done to construct the existing adjacent tank and the previous tank that burned down. A Records Search prepared by the Northwest Information Center (see Appendix B) states that there is a low probability that archaeological or historical resources exist on the site and that no additional field surveying is warranted.

Nevertheless, there is always the possibility that there are remaining cultural resources beneath the ground surface that could be damaged or destroyed during construction. If this were to occur, it would be a significant impact.

#### **Mitigation Measure CR-1**

- If cultural resources are encountered during project construction, avoid altering the materials and their context until a cultural resources consultant has evaluated the situation.
- If cultural resources are encountered during construction, NMWD shall notify the Federated Indians of Graton Rancheria.
- If applicable, a qualified archaeologist shall monitor subsequent excavations and spoils in the vicinity of the find for additional archaeological resources.
- If the archaeologist determines the discoveries are of importance, the resources shall be properly recovered and curated. The archaeologist shall prepare a report outlining the methods followed and summarizing the results of the mitigation program. The report shall outline the methods followed, list and describe the resources recovered, map their exact locations and depths, and include other pertinent information. Identified cultural resources shall be recorded on DPR 523(A-J) historic recordation forms. NMWD shall submit the report to the Northwest Information Center and the California State Historic Preservation Officer.

#### **Mitigation Measure CR-2**

This mitigation incorporates the requirement established in Mitigation Measure CR-1 and adds the requirements that in the event that human remains are encountered, the contractor shall stop work in the area and the Town shall contact the Marin County Coroner in accordance with Section 7050.5 of the State Health and Safety Code. This condition shall be noted on all grading and construction plans and provided to all contractors and superintendents on the job site.

#### **Mitigation Monitoring and Reporting**

The mitigation will be implemented whenever warranted throughout the construction phase. The contractor will be responsible for determining the presence of the initial cultural resource find. NMWD will be responsible for engaging the cultural resource specialist. The cultural resource specialist shall be responsible for properly reporting and recording the find(s).

### Impact Significance After Mitigation

Assessing and curating any archaeological resources found during construction per Mitigation Measure CR-1 will reduce the impacts to potential archaeological resources to a less than significant level.

- b. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? Less than significant with mitigation incorporated.*

As described above, it is not expected that archaeological resources occur on the project site. However, it is always possible that archaeological or historical resources could be unearthed during project construction. Damaging such resources would constitute a significant adverse impact. Mitigation Measure CR-1 applies also to this impact, and this mitigation measure would reduce the impact to a less than significant level.

- c. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? No impact.*

There are no known paleontological resources in the project site area, and it is not expected that project construction would affect such resources.

- d. *Disturb any human remains, including those interred outside of formal cemeteries? Less than significant with mitigation incorporated.*

See the discussion under Impact V(a). While there is no reason to suspect the presence of human remains on the project site, it is possible that currently unknown remains may occur. Mitigation Measure CR-1 addresses this potential impact.

- e. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the Caltrans Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), No Impact.*

There is no evidence of significant tribal resources on the site. The local Native American tribe (the Federated Indians of Graton Rancheria) did not respond to a letter notifying them of the project. The project site is not listed or eligible for listing in the Caltrans Register of Historical Resources, or in a local register of historical resources.

- f. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is a resource*

determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. **No Impact.**

As noted previously, there is no evidence of significant tribal resources on the site.

## VI. Geology and Soils

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i.	Rupture of known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			x	
ii.	Strong seismic ground shaking?		x		
iii.	Seismic-related ground failure, including liquefaction?			x	
iv.	Landslides?		x		
b.	Result in substantial soil erosion or the loss of topsoil?		x		
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		x		
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				x
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative water disposal systems where sewers are not available for the disposal of waste water?				x



## 1. Setting

The site sits on gently sloping ground at the crest of Bolinas Ridge just southwest of the town of Inverness and is adjacent to an existing redwood tank and radio communications tower. The topography east of the proposed tank site slopes downward at an approximate inclination of 3:1 (horizontal:vertical). Surface conditions consist of clayey residual soils, low shrubs, and grasses. The southern side of the site is near-level with the exception of a small outcrop of weathered granite. Pines up to 20 feet tall and sparse scrub brush occupy the extreme south and southeast portions of the site. The southwest portion of the proposed tank location is occupied by a small landscape berm, roughly 3 feet tall and sloped at approximately 1:1 on both sides. The existing driveway/access road, which also serves the residence at 420 Drake's View Drive, borders the site to the northwest.

## 2. Impacts

- a. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
  - i. *Rupture of known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. Less than significant impact.*
  - ii. *Strong seismic ground shaking? Less than significant with mitigation incorporated.*
  - iii. *Seismic-related ground failure, including liquefaction? Less than significant impact.*
  - iv. *Landslides? Less than significant with mitigation incorporated (see Checklist Item VI(c)).*

A geotechnical investigation of the site and the proposed project was conducted for NMWD by Miller Pacific Engineering Group. Their complete 2017 report (*Updated Geotechnical Investigation, North Marin Water District PRE-Rank 4A Replacement, Inverness, California*) is included in Appendix C of this Initial Study. The following discussion under this criterion and the other criteria under Geology and Soils summarizes the more detailed discussion in the appended geotechnical study. The reader who requires a more thorough understanding of the geological setting and project impacts is directed to that study.

Miller Pacific found that site conditions would pose a less-than-significant impact as regards surface rupture, liquefaction, and seismic-induced ground settlement. Because the project site is near a number of active earthquake faults (including within two kilometers of the San Andreas Fault), moderate to strong seismic ground shaking can be expected from earthquakes. Such ground shaking could lead to project failure, and this would be a potentially significant impact.

### **Mitigation Measures**

#### **Mitigation Measure GS-1**

Design the improvements and structures in accordance with the seismic provisions of the most recent version of the California Building Code (CBC 2016) or the American Water Works Association (AWWA 2011). The recommended seismic design factors are presented in Section V of the appended geotechnical report. In addition, to ensure that seismic shaking does not cause damage to other proposed improvements, all design recommendations and monitoring included in the appended Miller Pacific report for settlement, erosion, and slope stability shall be incorporated into the final project design.

#### **Mitigation Monitoring and Reporting**

The recommended design factors will be included in the final construction drawings for the project. A qualified geotechnical expert shall review the plans and specifications to ensure compliance. A qualified geotechnical expert shall be intermittently present during construction to provide geotechnical observation and testing.

#### **Impact Significance After Mitigation**

It is expected that compliance with the design factors recommended by Miller Pacific would prevent substantial soil erosion. The impact would be reduced to a less than significant level.

- b. *Result in substantial soil erosion or the loss of topsoil?* **Less than significant with mitigation incorporated.**

The project would require grading and some excavation to form the foundation of the tank. Some of this excavated material will be used for the recommended berming around two sides of the tank. This grading as well as new runoff from the tank footprint could result in erosion of topsoil. This is a potentially significant impact.

### **Mitigation Measures**

#### **Mitigation Measure GS-2**

Site grading should be performed in accordance with the recommendations and criteria presented in Section V of this report. Re-establishing vegetation on disturbed areas will also be required to minimize erosion. Erosion control measures during and after construction should conform to the most recent version of the Erosion and Sediment Control Field Manual (California Regional Water Quality Control Board, 2002). Erosion Control measures will also comply with Marin County Stormwater Pollution Prevention Program (MCSTOPPP) requirements.

#### Mitigation Monitoring and Reporting

The recommended erosion controls and drainage will be included in the final construction drawings for the project. A qualified geotechnical expert shall review the plans and specifications to ensure compliance. A qualified geotechnical expert shall be intermittently present during construction to provide geotechnical observation.

#### Impact Significance After Mitigation

The recommended drainage and erosion control would reduce erosion impacts to a less-than-significant level. The impact is also addressed by the subsequent Mitigation Measure HWQ-1.

- c. *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?* **Less than significant with mitigation incorporated.**

Available published maps do not show any active or dormant landslides on or adjacent to the site, nor were any observed during our field reconnaissance in the immediate area of the proposed tank site. Site grading could result in unstable slopes at the foundation. Mitigation Measure GS-1 requires that site grading and allowable slope inclination recommendations set forth in Section V of the appended geotechnical report will be implemented for the project. This mitigation would reduce the impact of possible slope instability to a less-than-significant level.

- d. *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1974), creating substantial risks to life or property?* **No impact.**

The site does not contain expansive soils.

- e. *Have soils incapable of adequately supporting the use of septic tanks or alternative water disposal systems where sewers are not available for the disposal of waste water?* **No impact.**

The project does not require construction of waste disposal systems on the site.

## VII. Greenhouse Gas Emissions

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			x	
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			x	

### 1. Setting

Climate change is caused by greenhouse gases (GHGs) emitted into the atmosphere around the world from a variety of sources, including the combustion of fuel for energy and transportation, cement manufacturing, and refrigerant emissions. GHGs are those gases that have the ability to trap heat in the atmosphere, a process that is analogous to the way a greenhouse traps heat. GHGs may be emitted as a result of human activities, as well as through natural processes. GHGs have been accumulating in the earth's atmosphere at a faster rate over the last 150 years than has occurred historically. Increasing GHG concentrations in the atmosphere are leading to global climate change. To address this crisis, the County of Marin adopted a *Climate Action Plan* in 2015.<sup>1</sup> The plan outlines strategies that the County and the community can take to reduce GHG emissions and address climate change.

### 2. Impacts

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? **Less than significant impact.**

The use of heavy equipment to construct the proposed tank would result in the emission of greenhouse gas (GHG). However, the emissions would be minimal since construction using heavy equipment would occur for a few weeks. Once the tank is constructed, the project would generate almost no GHG emissions (only from District vehicle trips to periodically check on the tank). The BAAQMD's 2017 screening criteria for GHG emissions do not include water tanks. As was the case for the previous analysis of air quality impacts, using the criterion for warehouse (which would generate substantially more GHG than a water tank), the criterion for construction is less than 259,000 square feet of building.

<sup>1</sup> Marin County 2015 Climate Action Plan Update 2015, ICF International.

As the project will increase the amount of stored water available for fighting wildfires in the Paradise Ranch estates and adjacent public lands, it could reduce the size of future wildfires in the area. This would have a beneficial impact as regards emission of GHG.

- b. *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? Less than significant impact.*

Because the emission of GHGs would be small, the project would not conflict with the BAAQMD's Clean Air Plan or its CEQA Guidelines. The project is consistent with recommendations set forth in the County's *Climate Action Plan*. Given the limited GHG emissions, the project would not conflict with the County's goals as expressed in that plan.

## VII. Hazards and Hazardous Materials

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, would the project result in a safety hazard for people residing or working in the project area.				X
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

### 1. Setting

No hazardous materials are currently used on the existing water tank. The site and surrounding area are at risk from wildfire. There is currently less water storage available for firefighting in the Parades Ranch estates than there was prior to the 1995 Mount Vision Fire.

## 2. *Impacts*

- a. *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Less than significant with mitigation incorporated.*

During construction activities for the proposed project, limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, etc. would be used for operation of motorized equipment. Use of these types of substances would not occur in significant (that is, regulatory) amounts or frequencies to constitute a potential hazard to the public or environment. The cement tank will be treated with a sealant on the inside that is approved for potable water storage. There should not be any exposure to the environment outside the tank from use of such a sealant. Once constructed, the project would not require long-term operational use of hazardous materials. Potential impacts are restricted to the construction phase. While a potentially significant impact is not expected, the following mitigation will further ensure public safety.

### **Mitigation Measures**

#### Mitigation Measure HHM-1

The District will require construction contractors to implement construction best management practices including but not limited to the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction
- Avoid overtopping construction equipment fuel gas tanks
- During routine maintenance of construction equipment, properly contain and remove grease and oils
- Properly dispose of discarded containers of fuels and other chemicals
- Use personal protective equipment and clothing
- Require that the construction contractor follow the provisions of California Code of Regulations, Title 8, Sections 5163 through 5167 for General Industry Safety Orders to protect the project area from being contaminated by the accidental release of any hazardous materials and/or wastes. Disposal of all hazardous materials will be in compliance with applicable California hazardous waste disposal laws. The construction contractor will contact the local fire agency and the Novato Department of Public Works for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling.

#### Mitigation Monitoring and Reporting

NMWD shall include these specifications in the construction contract. The contractor shall be responsible for compliance with these conditions. NMWD shall be responsible for determining final compliance.

#### Impact Significance After Mitigation

These standard mitigation measures will ensure there is no environmental contamination of hazardous materials. Implementation of these standard mitigation measures would reduce the impact to a less-than-significant level.

- b. *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Less than significant with mitigation incorporated.*

See the discussion under Checklist Item VII(a) above. The required mitigation would reduce the potential impact to the public and the environment to a less than significant level.

- c. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? No impact.*

The project site is not within one-quarter mile of a school.

- d. *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? No impact.*

There are no known hazardous materials sites on or near the project site.

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, would the project result in a safety hazard for people residing or working in the project area. No impact.*

The site is more than two miles from the nearest airport.

- f. *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? No impact.*

The project is not within the vicinity of a private airstrip.

- g. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? Less than significant impact.*



The project would be constructed at the end of Drakes View Drive. Once constructed, it would not impair emergency response or evacuation on this road. As discussed in the subsequent section of Traffic and Transportation, the project would generate a relatively small number of trips, and these trips would not be expected to interfere with emergency response of evacuation. Mitigation measures are recommended in the Traffic section to ensure that hauling of equipment and supplies by large trucks are scheduled and overseen to minimally interfere with use of that street by existing residents and visitors.

The project will provide fireflow storage to enhance the ability of fire suppression agencies to suppress or limit the size of fires igniting in the Paradise Ranch Estates area. The project would improve future implementation of fire and emergency response plans.

- h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. No impact.*

The project will not include the construction of residences or a business where people will work. As described above the project would have a beneficial effect on fire suppression efforts in the area.

## VIII. Hydrology and Water Quality

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Violate any water quality standards or waste discharge requirements?		x		
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table ?			x	
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		x		
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			x	
e.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		x		
f.	Otherwise substantially degrade water quality?				x
g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				x
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				x
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				x
j.	Inundation by seiche, tsunami, or mudflow?				x

## **1.      *Setting***

The site currently drains via sheet flow to the surrounding hillsides. The knoll which supports the water tank mainly drains to Tomlinson Creek to the north, and ultimately to Tomales Bay.

Water quality within the area is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB), which establishes water quality objectives for the area in the San Francisco Bay Region Water Quality Control Plan (Basin Plan). The Basin Plan is the master policy document that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the San Francisco Bay Region. The Basin Plan identifies beneficial uses of surface waters and groundwater within its region and specifies water quality objectives to maintain the continued beneficial uses of these waters. The proposed project would be required to adhere to all applicable water quality objectives identified in the Basin Plan.

The Marin County Stormwater Pollution Prevention Program (MCSTOPPP), which is administered by the Marin County Department of Public Works/Flood Control District, was formed in 1993 as a joint effort of Marin's cities, towns, and unincorporated areas to prevent stormwater pollution and to enhance local waterways. In 2004, MCSTOPPP began receiving coverage under the NPDES Phase II General Permit of the SWRCB. As part of the permit requirements, MCSTOPPP developed its Action Plan 2010. The Action Plan includes a section of performance standards and pollution prevention practices that MCSTOPPP member agencies have committed to implement. MCSTOPPP "Best Management Practices" (BMPs) for storm water management and procedures for BMP maintenance and inspection are based on the recommendations of the Bay Area Stormwater Management Agencies Association (BASMAA), which are described in the BASMAA manual *Start at the Source* (1999 Edition). Both private-sponsored and public capital improvement projects in Marin County are governed by MCSTOPPP requirements. MCSTOPPP also requires Construction Erosion and Sediment Control Plans for new development resulting in grading in the county, regardless of project size.

## **2.      *Impacts***

- a.      *Violate any water quality standards or waste discharge requirements? Less than significant with mitigation incorporated.*

The geotechnical report prepared for the project states that project erosion could have a significant impact to steep slopes to the north and east. Sandy soils on moderate slopes or clayey soils on steep slopes are susceptible to erosion when exposed to concentrated surface water flows. The potential for erosion on the tank pad is low, but the potential for minor erosion of the slope below the tank site is moderate. If such erosion were to occur, it could have adverse water quality impacts on Tomlinson Creek and Tomales Bay.

### **Mitigation Measures**

#### **Mitigation Measure HWQ-1**

Site grading shall be performed in accordance with the recommendations and criteria presented in Section V of the appended Geotechnical Report. The project Civil Engineer should design tank drainage to discharge water at an appropriate location with appropriate erosion control. The contractor shall prepare an Erosion and Sediment Control Plan (SCP), following the procedures outlined by MCSTOPPP. The SCP shall include a description of post-proposed construction BMPs. The Plan shall be prepared by a registered engineer.

#### **Mitigation Monitoring and Reporting**

The Erosion and Sediment Control Plan shall be required in the project contract. The contractor shall prepare it and submit it to the County. The plan shall be done before the tank becomes operational. NMWD shall be responsible for monitoring the drainage system and repairing any unforeseen erosion or other problems.

#### **Impact Significance After Mitigation**

The mitigation will ensure that the site drainage system operates acceptably, which will reduce the water quality impact to a less-than-significant level. The new tank would not have a substantively larger footprint than the existing tank that would be subsequently removed. As such, the overall amount of new runoff would be small. As there is not a drainage system for the existing tank, the new tank plus the required drainage and erosion control plan would be expected to improve erosion control and water quality from runoff leaving the site.

- b. *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? **Less than significant impact.***

The tank site is on the top of a ridge. It is not expected that rain falling directly on the site recharges any aquifer. Runoff from the site would be directed to the adjacent hillside and may continue to recharge aquifers at lower elevations.

- c. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? **Less than significant with mitigation incorporated.***

The project would not significantly alter the drainage pattern of the area. The site has been impacted by past grading, construction, and access. Runoff from the site is currently directed to the hillside north of the tank. It is expected that the required drainage plan would similarly

direct site runoff to this hillside. The slight increase in runoff from the site would not measurably affect the area drainage pattern. Mitigation Measure HWQ-1 would reduce the erosion potential from runoff leaving the site. The impact from erosion on streams would be less than significant.

- d. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? **Less than significant impact.***

The project would not alter the existing drainage pattern of the area as described above under Impact VIII(c). Because the site is already quite impermeable and the project footprint is small (especially when considering future removal of the existing tank and future revegetation of that site), the installation of the tank should not measurably affect runoff from the site.

- e. *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? **Less than significant with mitigation incorporated.***

As discussed in Checklist Item VIII(a), the project would not substantially increase impervious surface in the watershed. Per Mitigation Measure HWQ-1, the new drainage system would be designed and operated to control pollution from site erosion.

- f. *Otherwise substantially degrade water quality? **No impact.***

The proposed project would not result in additional surface water pollution above that discussed in Item VIII(a), above, resulting in a less than significant impact after mitigation.

- g. *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? **No impact.***

The project does not include the construction of housing.

- h. *Place within a 100-year flood hazard area structures which would impede or redirect flood flows? **No impact.***

The proposed project is located on a hilltop and is not within a 100-year flood zone.

- i. *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? **No impact.***

The project does not include the construction of residences or businesses and would not subject people to the risk of flooding. The site is not downstream of a levee or dam.

- j. *Inundation by seiche, tsunami, or mudflow?* **No impact.**

The project area is on a hilltop in an area that would not be affected by tsunami or seiche. The site would not be expected to be affected by a substantive mudflow. See Checklist Item VI(c) regarding potential landsliding impacts.

## IX. Land Use and Planning

<i>Would the project:</i>		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	<i>Physically divide an established community?</i>				x
b.	<i>Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</i>				x
c.	<i>Conflict with any applicable habitat conservation plan or natural community conservation plan?</i>				x

### 1. Setting

The project site is on District-owned land that currently includes a water tank. The site is at the top (west end) of the Paradise Ranch Estates (PRE) subdivision. To the north and west is land that is part of the Point Reyes National Seashore or Tomales Bay State Park. To the east and south are developed and undeveloped parcels in the PRE.

Land use at the project site is under the jurisdiction of the County of Marin. The County provides land use guidance its 2007 Countywide Plan, Local Coastal Program Unit 2 (1981), the Inverness Ridge Communities Plan (1983), and the County Municipal Code. The County is completing an Update to the LCP, but this update has yet to be certified by the State Coastal Commission.

The project parcel (AP No. 114-120-09) is designated (as is the entire PRE) in the Countywide Plan as C-SF3 (Rural/Residential Coastal Zone) and zoned as C-RSP-0.25 (Residential, Single-Family Planned Coastal Zone).

2. *impacts*

a. *Physically divide an established community?* **No impact.**

The project is on a parcel owned by the District. A replacement tank constructed on this site would not divide any portion of the Paradise Ranch Estates community.

b. *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?* **No impact.**

Public water tanks on this parcel are an allowed use under the Countywide Plan and zoning. By providing potable water and additional fireflow to the County-approved PRE subdivision, the project is consistent with County policies aimed at providing its citizens with adequate potable water and policies aimed at reducing the risk of wildland and residential fires)the Countywide Plan Policies under Goal EH-4).

Mitigation measure recommended in this Initial Study will reduce project impacts to natural resources to a less-than-significant level. In so doing, the project will be consistent with the various County policies and regulations aimed at protecting and preserving the County's natural resources.

The Initial Study preparers also reviewed the policies and recommendations regarding provision of water and fire hazard reduction in the adopted LCP and the Inverness Ridge Communities Plan and found no inconsistencies between the project and these policies. Again, the project with recommended mitigations would reduce all impacts on the natural and man-made environment to a less-than-significant level. Accordingly, the project would not be inconsistent with policies of these two plans.

By replacing a water storage tank destroyed in the 1995 Mount Vision Fire plus upgrading that storage to meet current minimum fireflow storage requirements, the project will further County goals of providing adequate water and fireflow storage to the local community.

c. *Conflict with any applicable habitat conservation plan or natural community conservation plan?* **No impact.**

There is no adopted habitat conservation plan or natural community conservation plan for the area that would be affected by the project.

## X. Mineral Resources

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

### 1. Setting

The site does not contain commercially valuable mineral resources.

### 2. Impacts

- a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? **No impact.**

Neither the Marin Countywide Plan nor any other plan identifies mineral resources within the project area. The project will not directly or indirectly affect any known mineral resources.

- b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? **No impact.**

The Marin Countywide Plan does not identify a mineral resource recovery site near the project site.



## XI. Noise

Would the project result in:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b.	Exposure of persons to or generation of excessive groundborne vibration of groundborne noise levels?			X	
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

### 1. Setting

The site is located at the end of Drakes View Drive. It is adjacent to one residence and there are additional residences along Drakes View Drive and other streets in the Paradise Ranch Estates subdivision to the east. Otherwise land uses in the area are recreation (PRNS) or undeveloped land. Noise measurements were not done for this Initial Study, as they were not warranted due to the obvious quiet nature of the site. Site surveys confirmed that there is very little noise in the area around the tank site.

Chapter 6.70 of the Marin County Code limits construction from Monday through Friday: seven a.m. to six p.m. and Saturday: 9 a.m. to 5 p.m. Loud noise-generating construction-related equipment (e.g., backhoes, generators, jackhammers) can be maintained, operated, or serviced at a construction site for permits administered by the community development agency from eight a.m. to five p.m. Monday through Friday only. However, public utility projects are exempt from these limitations

2. **Impacts**

- a. *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? **Less than significant impact.***

Construction of the project will generate noise due to the use of heavy construction equipment. However, the Marin Countywide Plan does not contain noise standards for short-term construction projects. As noted above, the County Code Chapter 6.70 provides the County's adopted requirements for controlling construction-generated noise. Though the District is not required to comply with these standards (because public agency projects are exempted), the District has stated that it will comply with the standards as well as not allow construction on weekends. Compliance with County-required noise restrictions would reduce construction noise to levels acceptable by the County. See the subsequent discussion of the short-term noise impacts on nearby residents under Checklist Item Xid below.

The project will not generate noise once construction is completed. The project does not include construction of residences or places of employment. As such, it will not place people in locations where they would be exposed to excessive noise levels.

- b. *Exposure of persons to or generation of excessive groundborne vibration of groundborne noise levels? **Less than significant impact.***

The use of blasting and/or pile drivers would not be included as part of the project. The project would involve temporary sources of groundborne vibration and groundborne noise during operation of heavy equipment for site grading. This groundborne vibration and groundborne noise could be perceptible at the adjacent residence at 420 Drakes View Drive. However, since the impact from heavy equipment would occur during less sensitive daytime hours and for only two weeks, the impact from construction-related groundborne vibration and groundborne noise would be less than significant.

- c. *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? **No impact.***

Once project construction is completed, the project will not generate noise with the exception of occasional traffic from maintenance vehicles.

- d. *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? **Less than significant impact.***

Construction of the entire project will take about 29 weeks, though the active noise-generating phases will take about 20 weeks

The nearest residence to the project site is located at 420 Drakes View Drive. This residence is located approximately 100 feet from the nearest part of the proposed tank. Residents and

visitors to this residence will be the people mainly impacted by construction noise. The next nearest residence is located approximately 240 feet from the proposed tank site. It is at a lower elevation, and there are intervening trees. The following describes the equipment that would be used for constructing the project:

- Backhoe or excavator or earthwork
- One small crane for unloading
- Dump truck for removal of materials
- Flatbed trucks for delivering materials
- Concrete delivery trucks
- Air compressors and pneumatic equipment to apply tank coatings
- Compactor for final grading

The maximum noise generated by this construction equipment is shown on Table 3. Maximum noise levels at 420 Drakes View Drive during construction are expected to generally be about 80-85 decibels (dBA) at 50 feet when equipment is operating at the nearest point to the residence. Noise levels decrease by about 6 dBA for each doubling of the distance between the fixed noise source and the receptor. Accordingly, the maximum noise levels at the residence would be expected to be approximately 74-80 dBA when the loudest equipment (the backhoe or excavator) is operating. The grading of the site by this equipment would be done in two weeks. Pumping the concrete would take approximately two weeks. Otherwise construction would mainly entail building footings and forms and installation of piping and other utilities. It is expected that the loudest noise would occur over about four weeks.

Given the proximity of the tank and this residence, the project would generate a substantial amount of noise during tank grading and construction.

This construction noise would also be audible to other residences to the north and east. Other residences within 1,000 feet of the site are shown on Table 4. Table 4 also estimates maximum expected noise levels at these residences

**Table 3**  
**Noise Emissions Limits at 50 feet from Construction Equipment**

Equipment Category	L <sub>max</sub> Level (dBA) <sup>1,2</sup>
Auger Drill Rig	85
Backhoe	80
Bar Bender	80
Boring Jack Power Unit	80
Chain Saw	85
Compressor	70
Compressor (other)	80
Concrete Mixer	85
Concrete Pump	82
Concrete Saw	90
Concrete Vibrator	80
Crane	85
Dozer	85
Excavator	85
Front End Loader	80
Generator	82
Generator (25 KVA or less)	70
Gradall	85
Grader	85
Grinder Saw	85
Pneumatic Tools	85
Pumps	77
Rock Drill	85
Scraper	85
Slurry Trenching Machine	82
Soil Mix Drill Rig	80
Tractor	84
Truck (dump, delivery)	84

<sup>1</sup> Measured at 50 feet from the construction equipment, with a "slow" (1 sec.) time constant.

<sup>2</sup> Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

**Table 4**  
**Worst-Case Construction Noise Estimates at Nearby Residences**

Residence Location	Approximate Distance from Tank Site (in feet)	Elevation below Tank Site (in feet)	Expected Maximum Noise Level at Residence (in dBA)
420 Drakes View Drive	110	5	74
26 Buck Point Road	240	70	67
30 Buck Point Road	400	115	62
415 Drakes View Drive	300	20	65
390 Drakes View Drive	600	100	59
379 Drakes View Drive	800	100	56
15 Elizabeth Place	700	100	58
20 Elizabeth Place	750	50	58

Notes: Assume maximum noise of 80 dBA at 50 feet from tank site. Noise attenuates at 6 dBA for each doubling of distance. No noise reduction estimated for changes in elevation or intervening vegetation.

Actual maximum noise would be expected to be less than listed in Table 4 due to intervening topography, elevations, and trees. These construction noise levels are similar to maximum noise levels that would be generated by the construction of a new single-family residence, though typically such residences have a longer construction schedule than the proposed water tank. More distant residents would also likely occasionally hear project construction noise, though it would be less noisy due to increased distance as well as topographical and vegetation barriers. These short-term construction noise levels, though possibly bothersome to residents of these homes, are considered acceptable noise impacts by the County, assuming compliance with County Code Chapter 6.70.

As flatbed trucks and cement delivery trucks pass by residences on Drakes View Drive, residents will briefly hear noise as loud as 85 dBA. However, there would be few delivery trips (estimated to be 60-80 roundtrips), and the noise impact from these deliveries would be very short-term.

Travelers on the Inverness Ridge Trail will also be exposed to construction noise. Because they will quickly pass the site, the noise impact would be very short-term and considered less than significant.

While technically mitigation beyond compliance with County Code requirements is not required for the construction noise impacts, additional mitigation is warranted in this case given the close proximity of the proposed tank and the residence at 420 Drake View Drive and the consequent noise exposure of residents and visitors of that home.

#### **Mitigation Measures**

The residence at 420 Drakes View Drive is used as a vacation rental much of the year as well as use by the owner's family and friends. The following mitigation is intended to further control when construction noise would occur so as to minimize effects on vacation renters as well as the owners.

#### Mitigation Measure N-1

NMWD will develop a construction schedule for each phase of project construction to describe when heavy equipment would be used on the site. To the maximum degree feasible, use of heavy construction equipment will be limited to the hours of 8:00 a.m. to 5:00 p.m. Monday through Thursday and 9:00 a.m. to 2:00 p.m. on Friday. The schedule will be made available to the owners of 420 Drakes View Drive and to the Inverness Ridge Association (IRA) for posting on its website.

#### Mitigation Monitoring and Reporting

The schedule will be prepared by the District contractor and reviewed by NMWD. It will be supplied to the neighbor and IRA at least one month before each phase.

#### Impact Significance After Mitigation

The recommended mitigation will allow the owners of the residence to schedule their home rentals to avoid the noisier periods, and it will ensure that weekend renters (Friday afternoon to Monday morning) as well as the owners are not exposed to construction noise. The mitigation would further reduce the impact to this residence as well as residents of more distant homes. The impact would be less than significant.

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? **No impact.***

The project does not include housing or jobs. People would not be exposed to aircraft noise.

- f. *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? **No impact.***

The project is not near a private airstrip, and the project does not include housing or employment where people would be susceptible to noise.

## XII. Population and Housing

Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

- a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? **No impact.**

The project would provide water storage needed to meet an existing water storage deficiency needed to provide adequate fireflow to serve the Paradise Ranch Estates in the Inverness Park community. NMWD states that the new replacement tank would not allow or induce any additional development in PRE beyond that allowed under current planning and environmental conditions.

- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? **No impact.**

The project site does not contain housing, and the project will not require that residences be demolished or removed.

- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? **No impact.**

The project site does not contain housing, and no people will be displaced during project construction or operation.

### XIII. Public Services

<i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<i>Fire protection?</i>		X		
<i>Police protection?</i>				X
<i>Schools?</i>				X
<i>Parks?</i>				X
<i>Other public facilities?</i>		X		

#### 1. Setting

Public service providers serving the Paradise Ranch Estates subdivision including the project site include:

Fire and Emergency Medical Response: Marin County Fire Department is the lead agency, providing initial response from its station in Point Reyes Station. Units from Pt. Reyes Fire Station respond to emergencies in other jurisdictions, and have developed a close working relationship with these other agencies. These allied agencies include the Bolinas Fire Department, Inverness Fire Department, Stinson Beach Fire Department, and the Tomales Fire Department. Additional partners include United States Park Service rangers and firefighters from the Point Reyes National Seashore and Golden Gate National Recreation Area; and State Park rangers in Tomales Bay State Park.

Police Response. Police response is provided by the Marin County Sheriff's Department with initial response from its station in Pt. Reyes Station.

Schools: Public education is provided by the Shoreline Unified School District at Inverness Elementary School (K-1) West Marin Elementary School in Pt. Reyes Station (K-8), and Tomales High School (9-12).

Parks: The project site abuts Point Reyes National Seashore. Parcels that are part of Tomales Bay State Park is nearby. Marin County Parks operates Point Reyes Playground in Pt. Reyes Station and Chicken Ranch Beach on Tomales Bay north of Inverness.

#### 2. Impacts

- a. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered*



*governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

***Fire protection? Less than significant with mitigation incorporated.***

A primary project objective is to replace an existing tank destroyed in the 1995 Mount Vision Fire and to provide the fireflow storage lost when that tank burned as well as to meet current fireflow standards. The new tank will be concrete and not susceptible to future wildfires that might occur in the area. It will provide increased fireflow to the Paradise Ranch Estates subdivision, a subdivision that lost 46 homes in the 1995 Mount Vision Fire.

If construction were to occur in the dry season, then it is possible that vehicles accessing the site and/or construction work at the site could ignite a fire. The site contains fire susceptible pine woodland habitat. Sparks escaping from vehicles or construction equipment could easily ignite a wildfire in the area. This is a potentially significant impact.

#### **Mitigation Measures**

##### **Mitigation Measure PS-1**

The District shall construct the project in such a fashion that it does not ignite a wildland fire. The District shall contact the Marin County Fire Department and abide by conditions set forth by the Department. If construction occurs during the dry season, these could include:

- Prohibiting vehicle access across vegetated areas;
- Ensuring that all vehicles have properly functioning mufflers;
- Ensuring that construction equipment have proper spark arrestors;
- Placing fire extinguishers in critical locations;
- Regular watering of the access road and adjacent vegetation; and
- Prohibiting work on red flag days.

#### **Mitigation Monitoring and Reporting**

The District shall include the final provisions in the construction contract. The contractor shall be responsible for implementation. NMWD shall periodically monitor to ensure compliance. The provisions shall be implemented throughout the construction process.

#### **Impact Significance After Mitigation**

Implementing the provisions will reduce the risk of a wildfire igniting to a less-than-significant level.

*Police protection?* **No impact.**

Water tanks are typically not targets of criminal activity. The project would not increase the need for police response to the area.

*Schools?* **No impact.**

The project does not include the construction of housing or new employment opportunities. There will be no direct impact on schools.

*Parks?* **No impact.**

The project will not expand the population of the area. It will not require new or physically altered parks.

*Other public facilities?* **Less than significant with mitigation incorporated.**

The project would not affect other publicly-owned facilities. However, it is possible that transporting materials and concrete with large trucks could cause pavement damage to Drakes View Drive (DVD). The pavement of much of DVD has reached the end of its planned 25-year life. DVD and other roads on the Paradise Ranch Estates subdivision are maintained by the Paradise Ranch Estates Permanent Road Division (PREPRD), a Marin County administrative agency. PREPRD was formed by the Marin County Board of Supervisors in 1974. The County Supervisors are the administrators of PREPRD. In late 2006, the Supervisors delegated responsibility for road maintenance and repair in PRE to the County Administrator, who works with the County Department of Public Works (DPW). Since the delegation, PRERAB has worked directly with DPW on road matters.

Paradise Ranch Estates Road Advisory Board (PRERAB) is a group of PRE residents and property owners who advise DPW on road maintenance matters. PRERAB members volunteer their time to monitor road maintenance needs, supervise contractors working on the roads, and plan for the long-term maintenance of the road system in PRE.

Money for road maintenance comes from property taxes collected from lot owners in PRE. A portion of regular parcel taxes are allocated to road maintenance.

The 1993 Drakes View repaving was paid for by a ten-year parcel tax that was approved by the voters in PRE in 1992. In 1993, the paving and related work cost about \$182,000. A supplementary parcel tax was used because the regular property tax funds are just sufficient to pay for annual maintenance. Major projects, such as paving of Drake's View Drive, require a separate source of funding.

The PRERAB reported in its January 2017 to the Inverness Ridge Association (IRA) that it anticipates repaving Drake's View Drive in the next two years, and therefore will be asking

residents to vote to renew and replace the previous parcel tax with a new one to cover the cost of paving plus maintenance.

In the summer of 2016, PRERAB members inspected Drakes View Drive with the head of the Marin County Road Department (Craig Parmley) and a former road department head (Dick Daly). Their evaluation was that the paving has reached the end of its expected life (25 years) and will deteriorate at a more rapid rate from now on.<sup>2</sup>

NMWD staff met with some members of the PRERAB on December 18, 2017 to review the proposed project and to receive any PRERAB concerns. At this meeting, PRERAB stated that they expect the road to be repaved in about 1.5 years. They described the poor condition of the road and how large trucks often get too near the road edge, causing damage at the edge.

The proposed tank project would be completed prior to this proposed repaving. Therefore, any damage that might be caused by heavy trucks would be short-term. Nevertheless, the damage could be severe enough that some patching of the asphalt may be warranted until such time as IRA finances repaving of the road. The pilot vehicle that would lead large trucks up the hill to the site (required in subsequent Mitigation Measure T-1) will help reduce road damage.

### **Mitigation Measures**

#### **Mitigation Measure PS-2**

The District shall not cause substantial pavement damage on Drakes View Drive. To meet this standard, the District shall conduct a pre-construction road survey and video that survey. The road will be re-surveyed at the completion of construction. The District's contractor will be responsible for any structural damage to the road.

NMWD shall work with PRERAB to place 1-2 inches of rock/gravel on the recently graded section of the west end of DVD before its intersection with the private driveway to 420 DVD.

#### **Mitigation Monitoring and Reporting**

The District shall work with the Paradise Ranch Estates Road Advisory Board to monitor the pavement on Drakes View Drive. The monitoring will include a pre- and post-project survey of the state of the pavement. The District shall be responsible for repairing any pavement damage discovered during the post-project survey.

#### **Impact Significance After Mitigation**

The mitigation would reduce the impact to road pavement to a less-than-significant level.

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<sup>2</sup> Data on PRERAB taken from the IRA website at

<http://www.invernessridgeassoc.com/>

#### XIV. Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. <i>Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</i>				X
b. <i>Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</i>				X

##### 1. Setting

The area abounds in recreational opportunities, including Point Reyes National Seashore, Golden Gate National Recreation Area, Tomales Bay State Park, Chicken Ranch Beach Park as well as playgrounds in Pt. Reyes Station.

##### 2. Impacts

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* **No impact.**

The project does not include the construction of new housing nor employment opportunities. The project will not create any direct demand for recreational facilities.

- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* **No impact.**

The project does not include recreational facilities nor require the construction or expansion of such facilities.

## XV. Transportation/Traffic

Would the project result in:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections?			X	
b.	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		X		
e.	Result in inadequate emergency access?		X		
f.	Result in inadequate parking capacity?				X
g.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

### 1. Setting

Access to the tank site is provided by Drakes View Drive (DVD). This 1.8-mile-long road is the principal access road for the Paradise Ranch Estates (PRE). The road is steep, narrow with few turnouts, and curvy. This and the other roads in PRE are collectively owned by the PRE property owners.

DVD intersects Sir Francis Drake Boulevard (SFD) at the bottom of the ridge. SFD is a major County arterial that extends from Interstate 580 near the San Rafael Bridge to its northern terminus at the trailhead to the Point Reyes Lighthouse.

The 2015 Marin County Congestion Management Program (CMP) Update is a document of the Transportation Authority of Marin (TAM), the designated Congestion Management Agency (CMA) for Marin County. The Plan describes the County's designated road system and the levels of service the County identifies as acceptable for those roads. The Plan summarizes the performance of the roadway

system, travel demand management in the county, the correlation of land use and the roadway system, the County's travel demand model, and the capital improvement program for roadways. The County identifies LOS D as the lowest acceptable level of service for arterial roadways. However, certain arterial roadway segments operated below LOS D in 1991 when the first CMP was adopted. Arterial segments that operated at LOS E or F in the 1991 CMP qualify as "grandfathered" segments which do not require action if they operated at these levels during the 2014 Monitoring done for the most recent CMP. Much of the urban part of SFD operates below LOS D but because this was true when the original CMP was developed, the LOS on SFD is considered to be consistent with the CMP.

## **2. Impacts**

- a. *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?* **Less than significant impact.**

Project construction would generate traffic, including heavy trucks transporting construction equipment, cement, and other supplies. The project would also generate trips by workers and District overseers. It is projected that over the 7 to 8 month construction period, the project would generate approximately 6 to 10 worker roundtrips per day. It is estimated that 60-80 heavy truck round trips would be required over the estimated 29 week construction period.

According to the CEQA Guidelines, a project would normally result in an impact to transportation and traffic if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Direct impacts of construction of the project would not be long-term, on-going effects. Accordingly, the project would have a less-than-significant impact per this traffic congestion criterion. Occasional post-construction monitoring and maintenance activities would have a less-than-significant effect on traffic.

- b. *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?* **Less than significant impact.**

See the discussion under Impact XV(a) above. Construction-generated traffic will consist of an average of about 6-10 round trips per day by workers and staff plus 60-80 truck roundtrips when materials and concrete are brought to the site. Access to DVD would be from Sir Francis Drake Boulevard. As the project-generated traffic would be short-term, it would not affect the level of service of SFD. The project would be consistent with the Transportation Authority of Marin's 2015 Congestion Management Plan Update.<sup>3</sup> This would not result in any permanent change in the level of service on any public streets providing access to the project site.

- c. *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?* **No impact.**

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<sup>3</sup> Final Report 2015 CMP Update – Marin County, September 2015m TJKM and TAM

The project will not cause any change in air traffic patterns.

- d. *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?* **Less than significant with mitigation incorporated.**

Drakes View Drive is a steep, curvy, and narrow road. Accessing the tank site can be challenging, especially for large trucks transporting materials and concrete to the site. Use of this road to construct the project could increase the chance of accidents on the street. This impact is not unusual for this subdivision, witness the many large residences that have been constructed since the 1995 Mount Vision Fire. Nevertheless, the safety impact is potentially significant. PRERAB members identified these risks during their meeting with NMWD staff and asked for mitigation to reduce the potential safety impact. In addition, the use of large trucks plus possible accidents could impede emergency response and evacuation on this road.

#### **Mitigation Measures**

##### **Mitigation Measure T-1**

The District shall require a pilot vehicle to accompany cement trucks and other large flatbed trucks transporting material to and from the site. A pilot vehicle with signing that a large vehicle follows will proceed up Drakes View Drive ahead of the large truck. The pilot vehicle will wait where other roads intersect DVD or where there are adequately sized turnouts to allow downhill traffic to move out of the roadway.

The District will place a conspicuous sign at the SFD/DVD intersection 48 hours prior to concrete deliveries and trips by other large delivery trucks that lists the range of time that the trucks will access the site. The District will restrict truck access during the day and time of day that garbage collection occurs along DVD.

The District will establish a liaison with PRERAB and every two weeks provide PRERAB with the forthcoming construction schedule.

#### **Mitigation Monitoring and Reporting**

The pilot car and signing requirements will be included in the construction contract and will be implemented by the Contractor. NMWD will establish the liaison and the contractor will provide the schedule. NMWD shall inform the PRERAB about these requirement. The District will work with the Contractor to ensure compliance. As described in the previous Mitigation Measure PS-2, the District will conduct a pre-construction video survey of the road and have the contractor repair any damage to the road caused by tank construction.

**Impact Significance After Mitigation**

The mitigation should reduce the chance of accident and disruption of traffic on DVD to a less-than-significant level.

- e. *Result in inadequate emergency access?* **Less than significant with mitigation incorporated.**

The project has adequate emergency access to the east and west. Any potential blockage of DVD during construction would be mitigated to a less-than-significant level by implementation of the previously described Mitigation Measure T-1.

- f. *Result in inadequate parking capacity?* **No impact.**

The project does not require permanent parking.

- g. *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?* **No impact.**

The project would not conflict with any plans or policies adopted by the County to encourage alternative means of transportation such as bicycles. Drakes View Drive is not a designated bicycle route and given its steep and narrow conditions, it is unlikely it will see much bicycle traffic.



## XVI. Utilities and Service Systems

<i>Would the project:</i>		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	<i>Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</i>				X
b.	<i>Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</i>			X	
c.	<i>Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</i>			X	
d.	<i>Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</i>				X
e.	<i>Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</i>				X
f.	<i>Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</i>			X	
g.	<i>Comply with federal, state, and local statutes and regulations related to solid waste?</i>			X	

### 1. Setting

Wastewater collection, treatment, and disposal in the PRE is done by on-site sewage disposal systems (mainly septic tank systems) on each individual property. Operation of these systems is maintained by each property owner.

Solid waste is collected by Redwood Empire Disposal. The State requires that that at least 65% of construction-generate waste be diverted for reuse. The County of Marin recommends additional diversion of waste using a Certified Facility to ensure proper recycling.

Potable water for PRE and the site is provided by NMWD.

Stormwater drains are provided by each property owner or maintained by the Inverness Ridge Association along roads.

**2. Impacts**

- a. *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? **No impact.***

The project will not generate wastewater and thus not exceed wastewater treatment requirements of the Regional Water Quality Control Board.

- b. *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? **Less than significant impact.***

The project will not require water or wastewater services after construction is completed. During construction, water will be supplied by NMWD (if needed for dust control). A porta-potty(ies) will supply wastewater services.

- c. *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? **Less than significant impact.***

The project will not substantially increase the amount of impervious surface. Mitigation Measure GS-2 requires that a drainage plan be developed. It is expected that stormwater will be directed to the slope immediately north or east of the site, as is currently the case. It is not expected that the site drainage would cause any substantive off-site grading or damage.

- d. *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? **No impact.***

The project is a water storage facility. NMWD has adequate entitlements to use the tank.

- e. *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? **No impact.***

After construction, the project would not generate wastewater, and thus would not use any capacity in any wastewater treatment and disposal facility.

- f. *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? **Less than significant impact.***

The project will dispose of all construction wastes using a Certified Facility for disposal, such as the Marin Resource Recovery Center in San Rafael or the Redwood Landfill and Recycling Center

in Novato. Redwood boards from future removal of the existing tank will be provided to individuals or businesses seeking to recycle the boards. Any excess soil from site grading would be disposed of at an approved location for receiving clean fill.

- g. Comply with federal, state, and local statutes and regulations related to solid waste?* **Less than significant impact.**

Excess excavated materials and any other waste will be disposed of in compliance with applicable regulations related to solid waste recycling.

## XVII. Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. <i>Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</i>		X		
b. <i>Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</i>			X	
c. <i>Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</i>		X		

- a. *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? **Less than significant with mitigation incorporated.***

The project would not significantly affect vegetation, terrestrial wildlife, fish, the climate, or cultural resources. This report requires mitigation to ensure that nesting birds and roosting bats are not affected and to protect cultural resources in case they are uncovered during construction.

Other project components that could be expected to cause some degradation of the environment include short-term air quality, traffic and noise impacts. These impacts can be reduced to a less-than-significant level by implementing the mitigation measures recommended in this report. It is concluded that by implementing the mitigation measures recommended in this Initial Study, the project would not significantly degrade the environment.

By increasing the amount of water stored for fighting fires, the project could reduce the environmental effects from future fire ignitions that could become major wildfires.

The project will change the visual environment. However, due to existing development at the site, the changes would not substantially degrade the visual environment. In addition, mitigation measures have been recommended to further reduce the visual effects, and the impact would be reduced to a less-than-significant level.

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?* **Less than significant impact.**

None of the proposed projects listed in Section 6 of this report are near the proposed tank site. As such, they would not combine with the project to have a cumulative impact on biological resources, cultural resources, geology and soils, hazards, noise, or visual resources. In addition, mitigations required for the project would reduce the project's increment to any area-wide cumulative impact to a level where the contribution would be considered to be less than "cumulatively considerable."

The one area of impact where there could be a possible cumulative impact would be water quality. These other projects could cause erosion that could combine with erosion at the project site to adversely affect water quality in Tomales Bay. However, this Initial Study requires mitigations to control erosion and site runoff to meet all MCSTOPPP requirements. The project's impact would be less than significant, and it is assumed that these other building projects will similarly be constructed to comply with MCSTOPPP requirements. Accordingly, the cumulative water quality impact would be less than significant. Even if there were a significant cumulative impact, the project's contribution would be characterized and not "cumulatively considerable."

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?* **Less than significant with mitigation incorporated.**

As discussed in previous sections of this Initial Study, project construction could generate noise, traffic, and air pollution that could adversely affect nearby residents. The mitigation measures recommended to control air pollution, traffic, noise and visual impacts would reduce all these impacts to a less-than-significant level, and the project would not cause substantial adverse effects on human beings.

## 8.0 DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project **could not** have a significant effect on the environment and a **Negative Declaration** will be prepared. \_\_\_\_\_

I find that although the proposed project **could** have a significant effect on the environment, there **will not** be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A **Mitigated Negative Declaration** will be prepared.   X  \_\_\_\_\_

I find that the proposed project **may** have a significant effect on the environment, and an **Environmental Impact Report** is required. \_\_\_\_\_

I find that the proposed project **may** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **Environmental Impact Report** is required, but it must analyze only the effects that remain to be addressed. \_\_\_\_\_

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or Negative Declaration pursuant to applicable standards and (b) have been avoided or mitigated pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Mr. Rocky Vogler, Chief Engineer  
North Marin Water District

## 9.0 BIBLIOGRAPHY AND PERSONS CONTACTED

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## 10.0

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## **Appendix A**

### **Biological Site Assessment**

**BIOLOGICAL SITE ASSESSMENT**

**PRE TANK 4**

**NORTH MARIN WATER DISTRICT**

**MARIN COUNTY, CA**

**April 2018**



**Prepared for:**  
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## SUMMARY

This Biological Site Assessment (BSA) summarizes the results of a review of those areas that are within or near the proposed PRE Tank 4 project. This review will assess whether any aspect of the replacement of an NMWD water tank within the Paradise Ranch Estates (Inverness, CA) may reasonably be expected to have an effect on biological resources. This report has been prepared in accordance with the County of Marin Planning Division's guidelines for the preparation of a Biological Site Assessment and is also intended to provide a sufficient level of environmental analysis to permit review by the lead and responsible agencies pursuant to the California Environmental Quality Act (CEQA). The general objectives of a BSA are to (1) determine whether any sensitive biological resources such as wetlands, streams, or habitats for special status species exist in proximity to a proposed project; (2) to accurately map any biological constraints on a site plan for the project; and (3) to determine whether a project would result in potentially significant adverse biological impacts, pursuant to the California Environmental Quality Act (CEQA). The conclusions contained in this BSA are based on database searches and multiple reconnaissance-level site visits performed by staff of Leonard Charles and Associates. The construction site and surrounding area were surveyed for special-status plant species and wildlife habitat.

The study area consisted of a small, partially developed lot owned by NMWD that is located at the crest of the Inverness Ridge, adjacent to public lands, a private residence, and both paved and dirt roads. The lot contains a radio tower, a redwood water tank, and a graded pad where a second tank stood before it was burned in the Vision fire of 1995. The portions of the lot and surrounding area that have not been cleared/developed support shrubs and small to medium-sized mixed species forest, dominated by bishop pine, which appears likely to have regenerated after the 1995 fire. The study area is contiguous with large areas of undeveloped wildlands, much of which also burned in the 1995 fire.

Database queries returned a total of 51 special-status plant species that were initially considered for occurrence in the study area (Table 1). However, based on habitat constraints only six species have a reasonable potential to occur (Table 2). A total of 37 special-status wildlife species were initially considered for occurrence in the study area. However, based on habitat constraints only three of those have a reasonable potential to occur (Table 2). After site surveys were conducted, it was concluded that the proposed project could result in potentially significant biological effects to the following:

- Impacts to special-status wildlife species
- Impacts to breeding migratory birds

Potentially affected species are described in this report.

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### **APPENDIX LIST:**

- Appendix A: Area Maps
- Appendix B: Species Tables
- Appendix C: Site Photos
- Appendix D: USFWS Official Species List

## SECTION I. SITE DESCRIPTION

The project site is on a small 5500 square foot (0.126-acre) parcel owned by NMWD that is located at the end of Drakes View Drive, in the northwestern portion of the Paradise Ranch Estates (PRE) development located in the community of Inverness on the Point Reyes Peninsula (see Figure 1). The site is on a knoll at the crest of the Inverness Ridge, about 200 feet east of the boundary of the Point Reyes National Seashore (PRNS) and south of the southernmost parcel of the Tomales Bay State Park. A private residence that is part of the PRE development lies between the NMWD parcel and the public lands (see Figure 2). The project site can be seen from a short section of the Inverness Ridge Trail.

Seen from the air, the landscape around the project site is primarily undeveloped. To the south and east, the small number of residences located in the PRE subdivision are interspersed within a mosaic of undeveloped, mainly forested land. The public lands to the north and west are also undeveloped, and support a mosaic of primarily bishop pine and Douglas-fir/mixed evergreen habitat types that transitions farther downslope and to the west into primarily coastal scrub and grassland (PRNS 2015). This area was burned in the 1995 Vision Fire. Consequently the forest in this area is just over 20 years old. The stands of regenerated bishop pine are dense in many places, and also are infected and dying from the pine canker fungus.

The project site is on a small knoll located at the top of the Inverness Ridge. Elevation of the NMWD parcel ranges from 1059 to 1067 feet (322 to 325 meters). The land falls away steeply on three sides of the parcel; only the side that faces approximately north-northwest is fairly flat as it adjoins the parcel containing the private residence. Overall terrain in the vicinity of the project site is steep and rugged, underlain by granitic bedrock which fosters steep ravines and drainage channels which drop off abruptly. The knoll which supports the project site drains to Tomlinson Creek to the north, and ultimately to Tomales Bay. The Bay is an important and sensitive ecological system supporting significant populations of birds, fish, and other species such as sea turtles (see Table 1); it is recognized for protection by the California Bays and Estuaries Policy, and its southern end has been designated an ecological reserve by the State Department of Fish and Wildlife.

The ridge is heavily wooded, primarily with bishop pine, Douglas fir, California bay, tan oak, and live oak. Vegetation on the project site consists of scattered shrubs, herbaceous understory plants, and trees (see Table 1 for a list of common species, and Figures 4 – 9 for photos). The site itself has been disturbed over the years. It was graded to build two redwood water tanks—one of which was burned in the Vision Fire and one of which still stands. In addition, the tank site is immediately adjacent to a driveway and residence, around which the land has been cleared.

The site does not contain high-quality habitat due in large part to these factors. However, it is a contiguous element of a larger functioning ecosystem, and is undoubtedly traversed and foraged upon by myriad wildlife. The project site is adjacent to designated critical habitat for marbled murrelet (IPaC 2017). However, there is no suitable habitat

(shorelines, redwood forest, and Douglas fir forest) present on or near the proposed project site. The project is also crossed by the boundary of the designated critical red-legged frog that covers much of the Point Reyes Peninsula. However, the lack of wetlands or riparian areas on the site or in the vicinity precludes the possibility of this species occurring here.

## SECTION II. METHODS

A list of special-status plant and wildlife species with potential to occur was compiled from record searches of the following database sources: the California Department of Fish and Wildlife's California Natural Diversity Database (CNDDDB) (CDFW 2017); CalFlora (2017); the California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2017); and the U.S. Fish and Wildlife Service Information, Planning, and Consultation System (IPaC 2017).

Using the CNDDDB database we performed a 9-quad search centered on the Inverness quad; however, due to the location of the project site, only 8 quads contained CNDDDB data (Tomales, Point Reyes NE, Petaluma, Drake's Bay, Inverness, San Geronimo, Double Point, and Bolinas); the 9th quad contained no landmasses. A 9-quad search is performed because the CNDDDB is a positive sighting database; it does not predict where something may be found. Occurrences are only mapped when there is documentation that the species was found at the site. Although there are many areas where no surveys have been conducted, that does not mean that there are no special status species present. By looking at what has been documented on both the quad of interest and on the eight surrounding quads, a better estimate is provided for what might be found in similar habitats to those within the area of interest (CDFW 2011).

In addition, we performed the following work:

- Reviewed relevant biological protection policies contained in the 2007 Marin Countywide Plan, as well as the biological protection policies of the Inverness Ridge Communities Plan (1983), the Local Coastal Program, Unit 2 (1981), and the as yet unadopted Marin County Local Coastal Plan (2016).
- Reviewed the Marin Flora (Howell et. al., 2007) for information on the location of special status plant species.
- Reviewed the 1983 and the 2016 Local Coastal Program Natural Resources Maps.
- Reviewed geotechnical report recently prepared and available for the project, the site, and the surrounding area.
- Confirmed that no sensitive biological resources including wetland indicators, streams, riparian areas, or the buffers for such areas, are found within or adjacent to the study area.

- Determined whether any other biological studies should be conducted evaluating the potential impacts of the project.

Two ground surveys to check for potentially occurring special status species were conducted on 14 April 2017 and 10 June 2017 by biologist Jacoba Charles.

### SECTION III. RESULTS: SPECIAL STATUS RESOURCES

#### 1. Special-Status Natural Communities

These communities are of limited distribution, either statewide or within a county or region, and are often vulnerable to environmental effects of projects. Examples of special-status natural communities include wetlands, riparian forest, and northern coastal salt marsh. These communities may or may not contain special status species or their habitat. However, the communities are also considered to be of special concern because there are federal, state, or local laws regulating their development.

A CNDDDB database search indicated that nine special-status natural communities could be present on the site. It was considered possible that one of those, northern maritime chaparral (Holland type 37C10) could be present on site; however, a site survey revealed the presence of only the three most common species out of the 15 characteristic plant species listed in Holland (1986), including none of the manzanita or ceanothus species mentioned in the definition. Consequently it was concluded that northern maritime is not present on the site. There are no other special status plant communities present on the site, including no riparian, dune, marsh, prairie, bunchgrass, chaparral, or vernal pool habitat.

There is no evidence of wetlands on the site. Given that the project site is within the coastal zone, all three categories of wetland indicators were checked for. There are no indicators of surface water and no hydric soils. Observed plants are upland species, with the exceptions of three facultative species: miner's lettuce (*Claytonia perfoliata*), poison oak (*Toxicodendron diversilobum*), and pepperwood (*Umbellularia californica*) (see Table 1). These species, which compose a small overall percentage of the vegetation on the site, occur in commonly throughout the region in wetland and non-wetland habitats. No wetland or fac-wet vegetation was present, nor were any of the five classes of wetland indicator species, as listed in the National Wetland Plan List, observed on the site.

#### 2. Special-Status Plants

A review of database, as well as the report preparer's familiarity with the area, initially yielded a total of 84 special-status plant species that occur in the region. However, based on habitat constraints, only seven of those had a reasonable potential to occur (see Table 4). Reconnaissance-level surveys were conducted on

14 April 2017 and 10 June 2017. No special status species were identified. See Table 1 for a list of species observed on the site. As described above this site has been highly impacted and disturbed. It supports primarily common native species.

### 3. Special-Status Animals

Special-status wildlife species include state and/or federal listed as Threatened or Endangered, state and federal species proposed or candidates for listing, and state Species of Special Concern. Additionally, wildlife species that may qualify as “Rare” under Section 15380 of the CEQA Guidelines, based on limited area of occurrence, were considered. A review of databases and biologists’ familiarity with the area yielded a preliminary list of 62 special-status wildlife species that occur in the region. Two surveys of the study area were conducted (on 14 April 2017 and 10 June 2017) to evaluate the potential for these special-status wildlife species to occur. After the surveys, three wildlife species are considered to have a reasonable potential to occur, and are discussed in detail below.

#### *Northern Spotted Owl*

Northern spotted owl was listed as a federally threatened species in 1990 (USFWS 1990) and listed by the state of California as threatened in 2016. This species inhabits forested regions from southern British Columbia through Washington, Oregon, and northwestern California. Marin County is the southern limit of their range (Ellis et al. 2013). In the majority of their range, they are found in mature coniferous forest, but inhabit second growth and old growth Douglas fir, coast redwood, bishop pine, mixed conifer-hardwood, and evergreen hardwood forests in Marin County (Ellis et al. 2013). Most spotted owls in Marin County nest in platform structures such as tree forks, large limbs, broken top trees with lateral branches, old raptor, corvid, squirrel, and woodrat nests, debris piles, poison oak tangles and dwarf mistletoe infestations. Dusky-footed woodrats are a major prey item for owls in Marin County as woodrats do well in a wide range of forest structures (i.e., younger forest stands; USFWS 2011). This dependence on woodrats is thought to explain the high densities and fecundity rates found in the Marin owl population. More than 80 pairs have been found in Marin County at over 100 different locations. Other prey species in Marin County include deer mice, California meadow vole, brush rabbit and a variety of forest-dwelling birds (Fehring 2003 as cited in Ellis et al. 2013). No woodrat nests were observed on the project site or in its immediate surroundings.

The CDFW maintains a separate database from the CNDDDB for spotted owls, referred to as the Spotted Owl Observations Database. This database differs slightly from the CNDDDB in that it tracks owl activity centers and observations associated with activity centers. Spotted owls have been characterized as central-place foragers, where individuals forage over a wide area and subsequently return to a nest or roost location that is often centrally-located within the home range



(Rosenberg and McKelvey 1999). Activity centers are a location or point within the core use area that represent this central location. Nest sites are typically used to identify activity centers, or in cases where nests have not been identified, breeding season roost sites or areas of concentrated nighttime detections may be used to identify activity centers (USFWS 2011).

Northern spotted owls nest and forage in the Inverness area. NSO are primarily located on the lower, eastern flanks of the Inverness Ridge. Most reported sightings occur in wooded canyons, away from houses and roads. A review of the CNDDDB owl database showed two clusters of activity and nest sites in the Inverness area, with the closest located 1.3 miles north of the tank site and the other located three miles north of the tank site. The nearest critical habitat designation is critical habitat unit 3 (Redwood Coast) subunit RDC-5 (USFWS 2012) located in the San Geronimo valley (IPaC 2017) over 9 miles southeast of the tank site.

The Project Area and its immediate vicinity do not provide suitable NSO nesting habitat elements. Most vegetation was burned in the 1995 Vision Fire, and has regrown since then. The dominant vegetation type is dense, even-aged Bishop pine stands that lack the upper arboreal structure that NSO prefer for nesting (e.g., broken redwood trees, squirrel nests, etc.). Additionally, the residential and recreational activity in the project area result in regular anthropogenic disturbances, including cars (driving, parking), hikers, and construction and maintenance sounds and activities (leaf blowers, chainsaws). Thus, while NSOs are well established in the region, they are not expected to nest on or near the project site.

The USFWS describes projects that will not impact NSO nesting habitat directly, but could potentially generate acoustic and/or visible disturbances, as “disturbance only”. For such projects, a matrix of existing versus project-generated noise is utilized to determine the size of the buffer zone within which project activities could reasonably be assumed to impact NSO (USFW 2006). For this project, the ambient/existing conditions are conservatively considered to be in the “very low” category, defined as 50-60 dB, and generally limited to circumstances where human-generated sound would never include amplified or motorized sources. This category is conservative as such noise does regularly occur, given that residences roads and a road are located in the project area (see Figure 2). Sample noise sources that fall within the “very low” category include: rapids along large streams, or wind-exposure, and may include quiet human activities such as nature trails and walk-in picnic areas.

According to USFWS guidelines, the conditions during demolition and construction would be considered “high” (81-90 dB). When these conditions are entered into the calculation matrix the estimated NSO harassment distance would be 100 feet—the area roughly delineated by the Inverness Ridge Trail and Buck Point Road. Given that the nearest documented NSO nest is a 1.3 miles from the

Project Area, and observations of individual NSOs (as per available databases) are a minimum distance of 2500 feet, no adverse impacts to nesting NSO are anticipated as a result of project implementation.

#### *Western Red Bat*

No regularly occurring bats in the State of California are federally-listed species, and there are no specific laws in California protecting bats as a specific type of wildlife; however, various agencies and groups have established status designations providing guidelines for the most sensitive and threatened species without actually providing any extra legal protection (CalTrans 2004). The National Forest Service, Bureau of Land Management, and the Western Bat Working Group have evaluated threats to bats of California and have rated them accordingly. Nine species are currently considered Species of Special Concern by the DFW, and three additional species are proposed for that status. Additionally, the Forest Service and the Bureau of Land Management list some species as Sensitive and the Western Bat Working Group lists some as High Priority (for consideration of conservation measures).

Two bat species—western red bat (*Lasiurus blossevillii*) and hoary bat (*Lasiurus cinereus*)—have CNDDDB occurrences in the region around the study area, and suitable roosting habitat available on the site. Different bat species have different roosting requirements, and as such roosts can be found in a variety of habitats and locations. During the day, bats may use three types of roosts: crevices, cavities, and foliage. Crevice and cavity roosts may be found in natural and human-made features such as caves, cliffs, rock outcrops, trees, mines, buildings, bridges, and tunnels. Night roosts are often located in more open but protected areas such as overhangs on buildings and recessed areas on the undersides of bridges where warm air is trapped. During the breeding season (April through September), crevice and cavity roosting species typically gather in groups of mothers and young (maternity colonies) that may number in the thousands or even tens of thousands. In contrast, foliage-roosting bats may be solitary or occur in small groups while breeding. Roosts used during the day and as maternity roosts tend to be well-hidden and require precise temperature and humidity conditions that favor the growth of the young.

The western red bat (*Lasiurus blossevillii*) is a California Species of Special Concern. It is a medium-sized bat with distinctive reddish coloring that occurs throughout much of the western portion of California, as well as in other states. They may occur in a wide variety of grasslands, shrublands, woodlands, and cropland (CWHR 2017). Preferred roosting sites are from 2-40 feet above the ground, primarily in trees but also in shrubs. Roost sites often are in edge habitats adjacent to streams, fields, or urban areas. Preferred roost sites are protected from above, open below, and located above dark ground-cover. Preferred roost trees may have a spreading canopy and be relatively dark, well sheltered from above, with open exposure for free flight below (Bolster 1998). Western red bats often

forage in large concentrations, and prey on a wide variety of insects (primarily on moths, crickets, beetles, and cicadas) (CWHR 2017). Foraging flight elevation may be from high above treetops to nearly ground level, with slow and erratic flight patterns. These bats begin foraging 1-2 hours after sunset, and may forage throughout the night, with a second peak before sunrise. Although generally solitary, red bats seem to migrate in groups and forage in close association with one another in summer (Shump and Shump 1982). Young are born and roost in sites with the characteristics described above. Family groups roost together; nursery colonies are found with many females and their young (CWHR 2017). Males and females seem to migrate at different times and to have different summer ranges (Shump and Shump 1982). A single CNDDDB occurrence (#1) is reported from the Inverness quadrant, near the intersection of Sir Francis Drake Blvd and Bear Valley Road in Olema. Within the study area there is limited roosting habitat of the sort typically preferred by the western red bat, as the tree canopy is not particularly dense, nor is the site near water, as some sources indicate this species prefers. However the site is situated adjacent to edge habitat for foraging. Based on this information, there is a moderate potential for this species to occur within the study area.

The hoary bat is included on CDFW's California State Special Animals List. It is a widespread species found in a variety of habitats throughout California. This solitary bat is most commonly found in association with forested habitats near water (CDFW 2016a). Roosting sites are generally in dense foliage of both coniferous and deciduous trees, at the ends of branches 10-40 feet above the ground, and with open flying space below (Bolster 1998). Moths are the primary food source for hoary bats (Black 1974). Females give birth to young in mid-May through early July. The closest CNDDDB occurrence (#79) is from 1949 and of an unknown location other than "1 mile SE of Inverness". Hoary bats have a moderate potential to forage and possibly roost throughout the study area. Based on this information, there is a moderate potential for this species to occur within the study area.

### *Migratory Birds*

Under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503-3505, 3513, and 3800, migratory birds, their nests, and eggs are protected from disturbance or destruction. Removal or disturbance of active nests would be in violation of these regulations. All birds are protected under the MBTA and California Fish and Game Code except for two non-native species, the European starling (*Sturnus vulgaris*) and the house sparrow (*Passer domesticus*). Migratory bird species may nest in any habitat type except for paved road surfaces and open water. Even barren areas may be used by ground-nesting birds such as killdeer (*Charadrius vociferous*). Additionally, the Point Reyes Peninsula and its vicinity are known as being a stopover for a particularly high number of migratory bird species that are rarely seen in California. Though the project site is small and does not support high quality habitat, and no bird nests

were observed during the 2017 site surveys, there is potential for migratory birds to occur within the study area.

#### **SECTION IV. CONCLUSIONS**

In compliance with the Marin County guidelines for preparation of biological site assessments, this report has consulted relevant policy documents and regulations, including the CEQA Guidelines, Appendix G, Section IV. In addition, per the Marin County EIR Guidelines, Appendix N, Criteria For Significance, we address the following questions:

1. Would the project substantially reduce the number or restrict the range of a rare, endangered or threatened plant or animal?
2. Would the project cause a fish or wildlife population to drop below self-sustaining levels?
3. Would the project adversely affect significant riparian lands, wetlands, marshes, and other significant wildlife habitats?

It is the conclusion of this report that due to the location, land use history, and scale of the project it would not substantially reduce the number or restrict the range of any rare, endangered, or threatened plant or animal species, or cause a fish or wildlife population to drop below self-sustaining levels. There are no special status plant species located on the project site. No significant wildlife habitats such as riparian lands, wetlands, marshes, or special status natural communities are located on or near the proposed project site and as such they would not be affected.

However, there is a possibility that the site could be utilized as a roost for western red bat or hoary bat, or for migratory bird nesting.

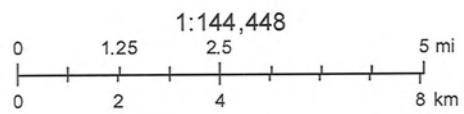
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## **APPENDIX A**

### **Area Maps**

Figure 1: Aerial View of Project Location



1:144,448  
April 10, 2018

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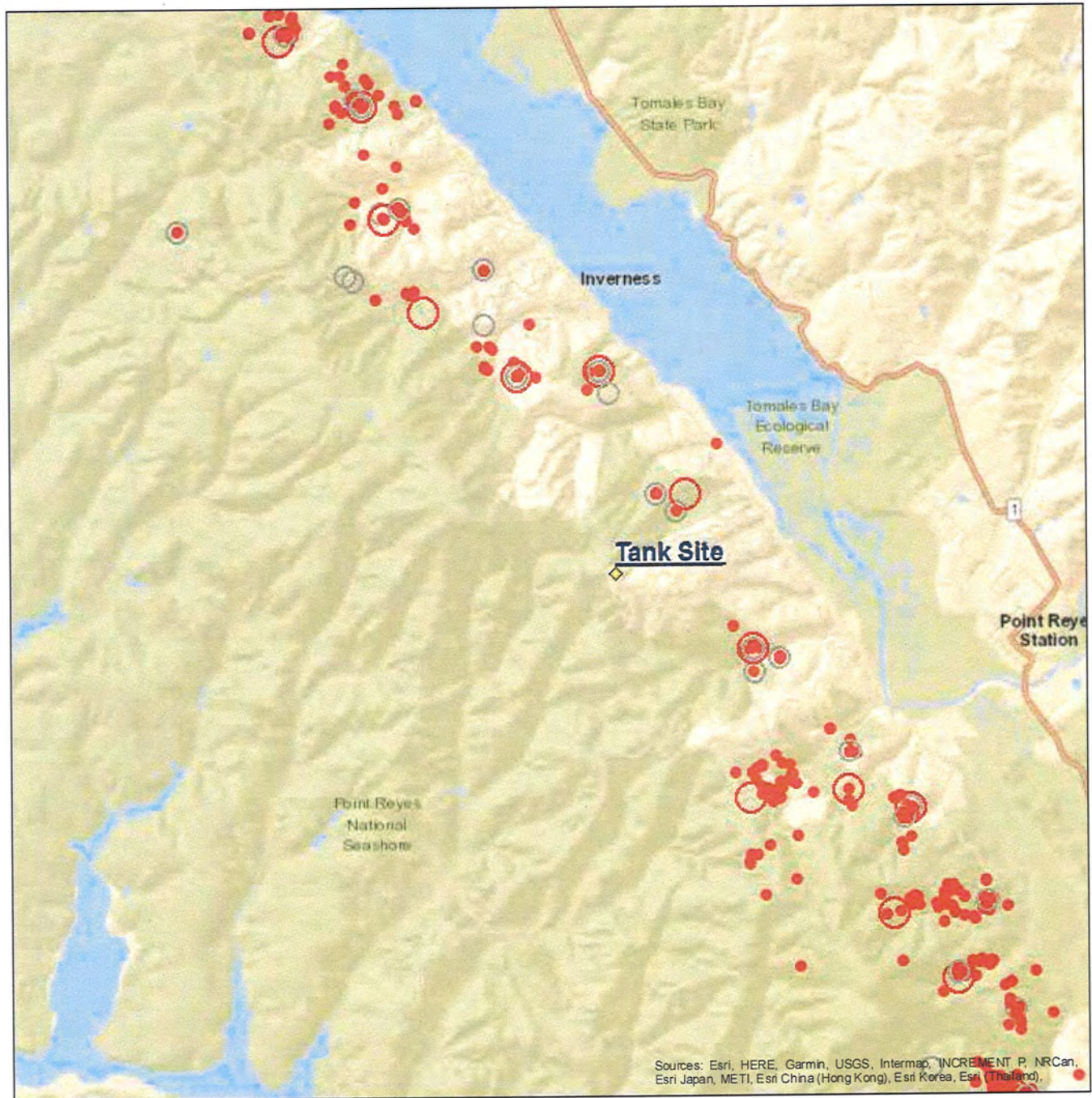
Figure 2. Project site with existing (gray) and proposed (green) tanks.



# Figure 3: Mapped NSO Observations

## Spotted Owl Observations [ds704]

- Positive Observation
- Negative Observation
- Activity Center
- Not Valid Activity Center
- ◇ Abandoned



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

**APPENDIX B**  
**Species Tables**

Figure 1. Plant species observed on the site during 2017 surveys.

<i>Anagallis arvensis</i>	Scarlet pimpernel
<i>Briza maxima</i>	Rattlesnake grass
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Ceanothus thyrsifolius</i>	Blueblossom
<i>Claytonia perfoliata</i>	Miner's lettuce
<i>Frangula californica</i>	Coffeeberry
<i>Hedera helix</i>	Ivy
<i>Hypochaeris radica</i>	Hairy cats ear
<i>Lavendula stoechas</i>	Lavender
<i>Lithocarpus densiflora</i>	Tanbark oak
<i>Mimulus aurantiacus</i>	Sticky monkeyflower
<i>Myosotis latifolia</i>	Forget me not
<i>Pinus muricata</i>	Bishop pine
<i>Plantago lanceolata</i>	English plantain
<i>Polypodium californicum</i>	California polopody
<i>Pseudotsuga menziesii</i>	Douglas fir
<i>Pteridium aquilinum</i>	Bracken fern
<i>Quercus agrifolia</i>	Coast live oak
<i>Ribes californicum</i>	California gooseberry
<i>Rubus ursinus</i>	California blackberry
<i>Rumex acetocella</i>	Sheep sorrel
<i>Toxicodendron diversilobum</i>	Poison oak
<i>Umbellularia californica</i>	Pepperwood
<i>Vaccinium ovatum</i>	Huckleberry

Table 2: Full database results including 9-quadrant search of special-status plant species with potential to occur. When the list source is other than the CNDDB database, it is listed in brackets after the common name.

Plants						
Scientific Name	Common Name	Taxon	Federal Status	State Status	Other Status	Habitat Requirements
<i>Abronia umbellata</i> var. <i>breviflora</i>	pink sand-verbena	Dicots	None	None	BLM_S-Sensitive	Suitable habitat includes foredunes and interdunes with sparse cover. <i>A. umbellata</i> var. <i>breviflora</i> is usually the plant closest to the ocean. 0-25 m.
<i>Agrostis blaspalei</i>	Blaspale's bent grass	Monocots	None	None	BLM_S-Sensitive	Coastal bluff (scrub; prairie) and dune. Sandy or gravelly soil close to rocks; often in nutrient-poor soil with sparse vegetation. 5-365 m.
<i>Allium peninsulare</i> var. <i>franciscanum</i>	Franciscan onion	Monocots	None	None		Clay soils; often on serpentine; sometimes on volcanics. Dry hillsides. 5-350 m.
<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	Sonoma alopecurus	Monocots	Endangered	None		Freshwater wet areas, marshes, and riparian banks, with other wetland species. 5-360 m.
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo/mock locust	Dicots	None	None		Openings in forest or woodland or in chaparral. 30-735 m.
<i>Arabis blepharophylla</i>	coast rock cress					coastal bluff/grassland
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	Dicots	None	None	BLM_S-Sensitive	Well drained slopes (Howell 2007). Cismontane woodland, valley and foothill grassland, coastal bluff scrub. 3-795 m.
<i>Arctostaphylos montana</i> ssp. <i>montana</i>	Mt. Tamalpais manzanita	Dicots	None	None		Serpentine slopes in chaparral and grassland. 150-680 m.
<i>Arctostaphylos virgata</i>	Marin manzanita(CNPS)	Dicots	None	None		On sandstone or granitic 1-800 m. Broadleaved upland forest, chaparral, closed-cone coniferous forest, north coast coniferous forest
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>	coastal marsh milk-vetch	Dicots	None	None	BLM_S-Sensitive SB_SDBG-Santa Barbara Botanic Garden	Coastal dunes, marshes and swamps, coastal scrub. Mesic sites in dunes or along streams or coastal salt marshes. 0-155 m.
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	Dicots	None	None		Low ground, alkali playa, and flooded lands; in annual grassland or in playas or vernal pools. 0-168 m.
<i>Blennosperma nanum</i> var. <i>robustum</i>	Point Reyes blennosperma	Dicots	None	Rare		Coastal prairie, coastal scrub. Found on open coastal hills in sandy soil. 5-125 m.
<i>Calamagrostis crassiglumis</i>	Thurber's reed grass	Monocots	None	None		Usually in marshy swales surrounded by grassland or coastal scrub. 5-50 m.
<i>Campanula californica</i>	swamp harebell	Dicots	None	None	BLM_S-Sensitive	Bogs and marshes in a variety of habitats; uncommon where it occurs. 1-405 m.
<i>Cardamine angulata</i>	seaside bittercress	Dicots	None	None		Wet areas, streambanks in north coast coniferous forest, lower montane coniferous forest. 5-515 m. Occurs usually in wetlands, occasionally in non-wetlands.
<i>Carex leptolea</i>	bristle-stalked sedge	Monocots	None	None		Mostly known from bogs and wet meadows. 3-1395 m.
<i>Carex lyngbyei</i>	Lyngbye's sedge	Monocots	None	None		Marshes and swamps (brackish or freshwater) 0-200 m.
<i>Castilleja affinis</i> var. <i>neglecta</i>	Tiburon paintbrush	Dicots	Endangered	Threatened		Rocky serpentine sites. 120-400 m.
<i>Castilleja ambigua</i> var. <i>humboldtensis</i>	Humboldt Bay owl's-clover	Dicots	None	None	BLM_S-Sensitive	In coastal saltmarsh with <i>Spartina</i> , <i>Distichlis</i> , <i>Salicornia</i> , <i>Jaumea</i> . 0-20 m.
<i>Castilleja lescheana</i>	Point Reyes paintbrush	Dicots	None	None		Marshes and swamps (coastal). 0-25 m.
<i>Ceanothus decornutus</i>	Nicasio ceanothus	Dicots	None	None		Maritime chaparral; serpentinite, rocky, sometimes clay. 235-290 m.
<i>Ceanothus gloriosus</i> var. <i>parreetus</i>	Mt. Vision ceanothus	Dicots	None	None		Low shrub in a variety of habitats on Pt. Reyes; sandy soils. Closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. 10-335 m.
<i>Ceanothus masonii</i>	Mason's ceanothus	Dicots	None	Rare		Serpentine ridges or slopes in chaparral or transition zone. 180-460 m.
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	Dicots	None	None	BLM_S-Sensitive	Usually in coastal salt marsh with <i>Salicornia</i> , <i>Distichlis</i> , <i>Jaumea</i> , <i>Spartina</i> , etc. 0-115 m.
<i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>	San Francisco Bay spineflower	Dicots	None	None		Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub. Sandy soil on terraces and slopes within the previous habitats. 2-215 m.
<i>Chorizanthe cuspidata</i> var. <i>villosa</i>	woolly-headed spineflower	Dicots	None	None		Sandy places near the beach. Coastal scrub, coastal dunes, coastal prairie. 5-60 m.
<i>Chorizanthe valida</i>	Sonoma spineflower	Dicots	Endangered	Endangered		Coastal dunes, scrub, and prairie. Sandy soil. 5-50 m.
<i>Cicuta maculata</i> var. <i>bolanderi</i>	Bolander's water-hemlock	Dicots	None	None		Marshes and swamps, fresh or brackish water. 0-200 m.

<i>Cirsium andrewsii</i>	Franciscan thistle	Dicots	None	None		Coastal bluff scrub, broadleaved upland forest, coastal scrub, coastal prairie. Sometimes serpentine seeps. 0-295 m.	No
<i>Cirsium hydrophilum</i> var. <i>vaseyi</i>	Mt. Tamalpais thistle	Dicots	None	None		Serpentine seeps and streams in chaparral and woodland. 180-610 m.	No
<i>Clarkia concinna</i> ssp. <i>raichei</i>	Raiche's red ribbons	Dicots	None	None		Highly exposed rocky bluffs with a near-vertical slope. 0-100 m.	No
<i>Collinsia corymbosa</i>	round-headed Chinese-houses	Dicots	None	None		Coastal dunes 0-30 m.	No
<i>Delphinium bakeri</i>	Baker's larkspur	Dicots	Endangered	Endangered		Only site occurs on NW-facing slope, on decomposed shale. Historically known from grassy areas along fencelines too. 105-205 m.	No
<i>Delphinium luteum</i>	golden larkspur	Dicots	Endangered	Rare		Chaparral, coastal prairie, coastal scrub. North-facing rocky slopes. 5-100 m.	No
<i>Dirca occidentalis</i>	western leatherwood	Dicots	None	None		On brushy slopes, mesic sites; mostly in mixed evergreen & foothill woodland communities. 25-425 m.	Yes
<i>Entosthodon kochii</i>	Koch's cord moss	Bryophytes	None	None		Moss growing on soil on river banks. 185-365 m. Cismontane woodland.	No
<i>Erigeron supplex</i>	supple daisy	Dicots	None	None	CNPS 4.3	Coastal bluff scrub, coastal prairie. Usually in grassy sites. 5-185 m.	No
<i>Elymus californicus</i>	California bottle brush (CNPS)	Monocots	None	None		Suitable habitat includes moist wooded slopes and flats, occasionally in coniferous forests or brushy coastal slopes. Possibly threatened by fire suppression (Howell; CNPS Rare Plant Inventory).	Yes
<i>Eriogonum luteolum</i> var. <i>caninum</i>	Tiburon buckwheat	Dicots	None	None		Serpentine soils; sandy to gravelly sites in Chaparral, valley and foothill grassland, cismontane woodland, coastal prairie. 0-700 m.	No
<i>Erysimum concinnum</i>	bluff wallflower	Dicots	None	None		Coastal dunes, coastal bluff scrub, coastal prairie. More or less a coastal generalist within coastal habitat types. 3-60 m.	No
<i>Fritillaria lanceolata</i> var. <i>tristulis</i>	Marin checker lily	Monocots	None	None		Coastal bluff scrub, coastal scrub, coastal prairie. Occurrences reported from canyons and riparian areas as well as rock outcrops; often on serpentine. 15-150 m.	No
<i>Fritillaria liliacea</i>	fragrant fritillary	Monocots	None	None	USFS_S-Sensitive	Grassy hills, mostly near the coast (Howell 2007). Often on serpentine; various soils reported though usually on clay, in grassland. 3-400 m.	No
<i>Gilia capitata</i> ssp. <i>chamissonis</i>	blue coast gilia	Dicots	None	None		Coastal dunes, coastal scrub. 3-700 m.	No
<i>Gilia capitata</i> ssp. <i>tomentosa</i>	woolly-headed gilia	Dicots	None	None		Rocky outcrops on the coast, serpentine. 20-125 m.	No
<i>Gilia millefoliata</i>	dark-eyed gilia	Dicots	None	None	BLM_S-Sensitive	Coastal dunes. 1-60 m.	No
<i>Hemizonia congesta</i> ssp. <i>congesta</i>	congested-headed hayfield tarplant	Dicots	None	None		Grassland. Grassy valleys and hills, often in fallow fields; sometimes along roadsides. 20-560 m.	No
<i>Hesperovax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	Dicots	None	None	BLM_S-Sensitive	Sandy bluffs and flats. 0-215 m.	No
<i>Hesperaloe congestum</i>	Marin western flax	Dicots	Threatened	Threatened		In serpentine barrens and in serpentine grassland and chaparral. 60-370 m.	No
<i>Heteranthera dubia</i>	water star-grass	Monocots	None	None		Marshes and swamps. Alkaline, still or slow-moving water. Requires a pH of 7 or higher, usually in slightly eutrophic waters. 15-1510 m.	No
<i>Horkelia cuneata</i> var. <i>sericea</i>	Kellogg's horkelia	Dicots	None	None	USFS_S-Sensitive	Appears on CNDDB due to historic Drakes Bay population, which is now presumed extirpated. Occurrence from the Crocker Hills probably last remaining location in S.F. Bay; remaining plants less distinct from ssp. <i>cuneata</i> than those formerly occurring near San Francisco. Habitat is closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m.	No
<i>Horkelia marinensis</i>	Point Reyes horkelia	Dicots	None	None		Sandy flats and dunes near coast; in grassland or scrub plant communities. 2-775 m.	No
<i>Horkelia tenuiloba</i>	thin-lobed horkelia	Dicots	None	None	BLM_S-Sensitive	Broadleaved upland forest, chaparral, valley and foothill grassland. Sandy soils; mesic openings. 45-640 m.	No

<i>Lasthenia californica</i> ssp. <i>bakeri</i>	Baker's goldfields	Dicots	None	None	Most recent sighting in Marin was 1918 at Pierce Point. Closed-cone coniferous forest, coastal scrub, meadows and seeps, marshes and swamps. Openings. 60-520 m.	No
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	Dicots	None	None	Coastal bluff scrub, coastal dunes, coastal scrub. 5-185 m.	No
<i>Layia carnosa</i>	beach layia	Dicots	Endangered	Endangered	On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. 0-30 m.	No
<i>Leptosiphon rosaceus</i>	rose leptosiphon	Dicots	None	None	Coastal bluff scrub. 10-140 m.	No
<i>Lessingia micradenia</i> var. <i>micradenia</i>	Tamalpais lessingia	Dicots	None	None	Usually on serpentine, in serpentine grassland or serpentine chaparral. Often on roadsides. 60-305 m.	No
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	Dicots	None	Rare	Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. In brackish or freshwater. 0-10 m.	No
<i>Lilium maritimum</i>	coast lily	Monocots	None	None	Usually in wetlands. Historically in sandy soil, often on raised hummocks or bogs; today mostly in roadside ditches. Closed-cone coniferous forest, coastal prairie, coastal scrub, broadleaved upland forest, north coast coniferous forest, marshes and swamps. 4-475 m.	No
<i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	Pitkin Marsh lily	Monocots	Endangered	Endangered	Saturated, sandy soils with grasses and shrubs. Cismontane woodland, meadows and seeps, marshes and swamps. 45-65 m.	No
<i>Limnanthes douglasii</i> ssp. <i>sulphurea</i>	Point Reyes meadowfoam	Dicots	None	Endangered	Cismontane woodland   Coastal prairie   Freshwater marsh   Marsh & swamp   Vernal pool   Wetland. Vernal wet depressions in open rolling, coastal prairies and meadows; typically in dark clay soil. 10-125 m.	No
<i>Lupinus tidestromii</i>	Tidestrom's lupine	Dicots	Endangered	Endangered	Partially stabilized dunes, immediately near the ocean. 4-25 m.	No
<i>Microseris paludosa</i>	marsh microseris	Dicots	None	None	Open grassy slopes or on the edge of brush; not common (Howell 2007). Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland 3-610 m.	Yes
					USFS_S-Sensitive Moss growing on very acidic, metamorphic rock or substrate; usually in higher portions in fens.	
<i>Mielichhoferia elongata</i>	elongate copper moss	Bryophytes	None	None	Often on substrates naturally enriched with heavy metals (e.g. copper). 500-1300 m. Cismontane woodland.	No
<i>Monardella sinuata</i> ssp. <i>nigrescens</i>	northern curly-leaved monardella	Dicots	None	None	Dunes, openings in coastal scrub. Sandy soils. 10-245 m.	No
<i>Navarretia rosulata</i>	Marin County navarretia	Dicots	None	None	Dry, open rocky places of closed-cone coniferous forest, chaparral; can occur on serpentine. 185-640 m.	No
<i>Phacelia insularis</i> var. <i>continentis</i>	North Coast phacelia	Dicots	None	None	Coastal bluff scrub, coastal dunes. Open maritime bluffs, sandy soil, sometimes rocky habitats. 0-155 m.	No
<i>Piperia elegans</i> ssp. <i>decurtata</i>	Point Reyes rein orchid	Monocots	None	None	Coastal bluff scrub, coastal prairie. 15-155 m.	No
<i>Plagiobothrys mollis</i> var. <i>vestitus</i>	Petaluma popcornflower	Dicots	None	None	Wet sites (marsh, swamp, wetland) in valley and foothill grassland, possibly coastal salt marsh margins. 10-50 m.	No
					BLM_S-Sensitive Wet grassy, usually shady areas, sometimes freshwater marsh; associated with forest environments. 45-1160 m.	
<i>Pleuropogon hooverianus</i>	North Coast semaphore grass	Monocots	None	Threatened	Coastal salt marshes and brackish marshes. 0-10 m.	No
<i>Polygonum marinense</i>	Marin knotweed	Dicots	None	None	Lower montane coniferous forest. Known only from Mt. Tamalpais. 150-610 m.	No
<i>Quercus parvula</i> var. <i>tamalpaisensis</i>	Tamalpais oak	Dicots	None	None	Freshwater seeps and open marshy areas. 45-270 m.	No
<i>Rhynchospora californica</i>	California beaked-rush	Monocots	None	None	In standing or slow-moving freshwater ponds, marshes, and ditches. 0-605 m.	No
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	Monocots	None	None	Freshwater marshes near the coast. 5-95 m.	No
<i>Sidalcea calycosa</i> ssp. <i>rhizonata</i>	Point Reyes checkerbloom	Dicots	None	None	Chaparral. Serpentine or volcanic soils; sometimes appears after burns. 1-425 m.	No
<i>Sidalcea hickmanii</i> ssp. <i>viridis</i>	Marin checkerbloom	Dicots	None	None	Broadleaved upland forest, coastal prairie. 15-85 m.	No
<i>Sidalcea malviflora</i> ssp. <i>purpurea</i>	purple-stemmed checkerbloom	Dicots	None	None		No

<i>Stebbinsoseris decipiens</i>	Santa Cruz microseris	Dicots	None	None	Coastal, usually serpentine grassland (Howell 2007). Population centered on the Santa Cruz area. Open areas in loose or disturbed soil, usually derived from sandstone, shale or serpentine, on seaward slopes. 90-750 m. Broadleaved upland/closed-cone coniferous forest, chaparral; coastal prairie/scrub; Valley & foothill grassland.	No
<i>Streptanthus batrachopus</i>	Tamalpais Jewelflower	Dicots	None	None	Talus serpentine outcrops in closed-cone coniferous forest, chaparral. 335-670 m.	No
<i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i>	Mt. Tamalpais bristly Jewelflower	Dicots	None	None	Serpentine slopes in chaparral, valley and foothill grassland. 125-670 m.	No
<i>Thamnia vermicularis</i>	whiteworm lichen	Lichens	None	None	On rocks derived from Wilson Ranch formation sandstone. Located in chaparral, valley & foothill grassland.	No
<i>Trifolium omaenum</i>	two-fork clover	Dicots	Endangered	None	Valley and foothill grassland, coastal bluff scrub. Sometimes on serpentine soil, open sunny sites, swales. Most recently cited on roadside and eroding cliff face. 5-310 m.	No
<i>Triphysaria floribunda</i>	San Francisco owl's-clover	Dicots	None	None	Coastal prairie   Coastal scrub   Ultramafic   Valley & foothill grassland. Locally common on open slopes and flats near the coast on the Point Reyes Peninsula. On serpentine and non-serpentine substrate (such as at Pt. Reyes). 1-150 m.	No
<i>Triquetrella californica</i>	coastal triquetrella	Bryophytes	None	None	USFS_S-Sensitive Grows within 30m from the coast in coastal scrub, grasslands and in open gravels on roadsides, hillsides, rocky slopes, and fields. On gravel or thin soil over outcrops. 10-100 m.	No

Table 3: Full database results including 9-quad search of special-status wildlife species with potential to occur (source: CNDDB, IPaC)

Amphibians						
Scientific Name	Common Name	Federal Status	State Status	Other Status	Habitat Requirements	Potential to Occur in the Study Area
<i>Ambystoma californiense</i>	California tiger salamander	Threatened	Threatened	CDFW_WL-Watch List   IUCN_VU-Vulnerable	Prime habitat in California is annual grassland, but restricted to areas where seasonal ponds or vernal pools are available for breeding. Permanent ponds or reservoirs are sometimes used as well. Need underground refuges, especially ground squirrel burrows.	Not expected. No annual grassland habitat, or seasonal or permanent water sources, in project area. No ground squirrels or burrows observed in project area.
<i>Dicamptodon ensatus</i>	California giant salamander	None	None	CDFW_SSC-Species of Special Concern   IUCN_NT-Near Threatened	Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County, and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	Not expected. No stream or lake habitat, with adjacent wet forests, in project area.
<i>Rana boylei</i>	foothill yellow-legged frog	None	Candidate Threatener	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_NT-Near Threatened   USFS_S-Sensitive	Breeds and forages in rocky or cobble-bottomed streams. Found in a variety of forest, woodland, scrub, riparian, and meadow habitats where suitable streams are present	Not expected. No suitable aquatic habitat on or adjacent to the project site.
<i>Rana draytonii</i>	California red-legged frog	Threatened	None	CDFW_SSC-Species of Special Concern   IUCN_VU-Vulnerable	Not expected. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not expected. No suitable aquatic or riparian habitat on or adjacent to the project site.
<i>Taricha rivularis</i>	red-bellied newt	None	None	CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern	Coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Found in streams and rivers in coastal woodlands and redwood forest. When inactive, occurs under rocks, logs, other forest debris, and in rodent burrows and subterranean crevices. Usually breeds in flowing water. Lays eggs on undersides or rocks in foothill/mountain streams. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	Not expected. No suitable aquatic habitat in project area. Project area is devoid of rocks, logs, and forest debris.
Birds						
Scientific Name	Common Name	Federal Status	State Status	Other Status	Habitat Requirements	Potential to Occur in the Study Area
<i>Agelaius tricolor</i>	tricolored blackbird	None	Candidate Endangered	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_EN-Endangered   NABCI_RWL-Red Watch List   USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, swamp, wetland. Highly colonial species, most numerous in Central Valley project area. & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not expected. No suitable marsh, swamp, or wetland habitat in project area.
<i>Ardea alba</i>	great egret	None	None	CDF_S-Sensitive   IUCN_LC-Least Concern	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes. Marsh, estuary, swamp, riparian forest, wetland.	Not expected. No suitable rookery trees in project area. Nearest suitable wetland habitat (Tomas Bay) is ~1 mile distant.
<i>Ardea herodias</i>	great blue heron	None	None	CDF_S-Sensitive   IUCN_LC-Least Concern	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows. Marsh, estuary, swamp, riparian forest, wetland.	Not expected. No suitable cliffside habitat in project area. Nearest suitable wetland habitat (Tomas Bay) is ~1 mile distant.



<i>Athene cunicularia</i>	burrowing owl	None	None	BLM_S- Sensitive   CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern   USFWS_BCC- Birds of Conservation Concern	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not expected. No suitable dry grassland, desert or scrubland habitat in project area.
<i>Brachyramphus marmoratus</i>	Marbled Murrelet	Threatened			When not feeding, probably spends day on surface of shallow coastal waters close to shore. Apparently roosts in redwood and Douglas-fir forests. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Breeds in   USFWS_BCC- grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Not Expected. No suitable aquatic habitat on site. No redwood or Douglas-fir forest habitat within the study area (CWiHR 2017). No recent occurrence records from Marin County. Not expected. No suitable open grassland or grain field habitat in project area.
<i>Buteo swainsoni</i>	Swainson's hawk	None	Threatened	BLM_S- Sensitive   IUCN_LC- Least Concern   USFWS_BCC- Birds of Conservation Concern	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Not expected. No suitable sandy beach, pond levee or alkali lake habitat in project area.
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	Threatened	None	CDFW_SSC- Species of Special Concern   NABCI_RWL- Red Watch List   USFWS_BCC- Birds of Conservation Concern	Coastal salt & freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain clearings. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas. Coastal scrub   Great Basin grassland   Marsh & swamp   Riparian scrub   Valley & foothill grassland   Wetland	Not expected. No suitable marsh habitat in project area.
<i>Circus cyaneus</i>	northern harrier	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern	Freshwater marsh   Meadow & seep	Not expected. No suitable marsh habitat in project area.
<i>Coturnicops noveboracensis</i>	yellow rail	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern + more	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	Not expected. No suitable cliff, waterfall, or canyon habitat in project area.
<i>Cypseloides niger</i>	black swift	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern   NABCI_YWL- Yellow Watch List   USFWS_BCC- Birds of Conservation Concern	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not expected. No suitable wetland, lake, river or other aquatic habitat in project area.
<i>Falco peregrinus anatum</i>	American peregrine falcon	Delisted	Delisted	CDF_S- Sensitive   CDFW_FP- Fully Protected   USFWS_BCC- Birds of Conservation Concern	Open-ocean bird; nests along the coast on islands, islets, or (rarely) mainland cliffs. Requires sod or earth into which the birds can burrow, on island cliffs or grassy island slopes.	Not expected. No suitable open ocean habitat in project area.
<i>Fratercula cirrhata</i>	tufted puffin	None	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern	Marsh & swamp of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	Not expected. No suitable marsh habitat in project area.
<i>Geothlypis trichas sinuosa</i>	saltmarsh common yellowthroat	None	None	CDFW_SSC- Species of Special Concern   USFWS_BCC- Birds of Conservation Concern		

<i>Lateralus jamaicensis caturiculus</i>	California black rail	None	Threatened	BLM_S- Sensitive   CDFW_FP- Fully Protected   IUCN_NT- Near Threatened   NABCI_RWL- Red Watch List   USFWS_BCC- Birds of Conservation Concern CDFW_SSC- Species of Special Concern   USFWS_BCC- Birds of Conservation Concern	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Not expected. No suitable marsh habitat in project area.
<i>Melospiza melodia samuelis</i>	San Pablo song sparrow	None	None	BLM_S- Sensitive   CDFW_SSC- Species of Special Concern   USFWS_BCC- Birds of Conservation Concern	Resident of salt marshes along the north side of San Francisco and San Pablo bays. Inhabits tidal sloughs in the Salicornia marshes; nests in Grindelia bordering slough channels.	Not expected. No suitable salt marsh habitat in project area.
<i>Oceanodroma homochraa</i>	ashy storm-petrel	None	None	BLM_S- Sensitive   CDFW_SSC- Species of Special Concern   IUCN_EN- Endangered   NABCI_RWL- Red Watch List   USFWS_BCC- Birds of Conservation Concern	Protected deepwater coastal communities. Colonial nester on off-shore islands. Usually nests on driest part of islands. Forages over open ocean. Nest sites on islands are in crevices beneath loosely piled rocks or driftwood, or in caves.	Not expected. No deepwater ocean or off-shore island habitat in project area.
<i>Pandion haliaetus</i>	osprey	None	None	CDF_S- Sensitive   CDFW_WL- Watch List   IUCN_LC- Least Concern	Nests on large platform of sticks at the top of large snags, dead-topped trees, on cliffs, or on human made structures. Nest usually within 400 m (1312 ft) of fish-producing water, but may nest up to 1.6 km (1 mi) from water. Needs tall, open-branched "pilot trees" nearby for landing before approaching the nest, and for use by young for flight practice. Nest tree averaged 172 cm dbh in northern California (CDFW 2017).	Not expected. No suitable large-tree nesting habitat in project area. Project area is over 1 mile from fish-producing water.
<i>Phoebastria (=Diomedea) albatrus</i>	Short-tailed Albatross	Endangered			This is a pelagic bird that often occurs in regions of high marine productivity. It nests on the ground on small oceanic islands; on volcanic ash slopes with sparse vegetation.	Not expected. No suitable marine habitat or oceanic island habitat in project area.
<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	Endangered	Endangered	CDFW_FP- Fully Protected   NABCI_RWL- Red Watch List	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	Not expected. No suitable marsh habitat in project area.
<i>Setophaga petechia</i>	yellow warbler	None	None	CDFW_SSC- Species of Special Concern   USFWS_BCC- Birds of Conservation Concern	Suitable habitat includes riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Not expected. No suitable riparian habitat or adjacent water sources in project area.
<i>Sterna antillarum browni</i>	California least tern				Seacoasts, beaches, bays, estuaries, lagoons, lakes and rivers, breeding on sandy or gravelly beaches and banks of rivers or lakes	Not expected. No suitable beach, coast, lake, or river habitat in project area.
<i>Strix occidentalis</i>	Northern Spotted Owl				Old-growth forests or mixed stands of old-growth and mature trees, occasionally in younger forests with patches of big trees.	Possible. No suitable nesting habitat in project area but multiple reports of activity and nesting to the north.

Reptiles						
Scientific Name	Common Name	Federal Status	State Status	Other Status	Habitat Requirements	Potential to Occur in the Study Area
<i>Chelonia mydas</i>	Green Sea Turtle (IPaC)				Aquatic	Not expected. Project site and adjacent areas lack suitable aquatic habitat.

<i>Emys marmorata</i>	Western pond turtle	None	BLM_S- Sensitive   CDFW_SSC- Species of Special Concern   IUCN_VU- Vulnerable   USFS_S- Sensitive	Aquatic. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not expected. Project site and adjacent areas lack suitable aquatic habitat.
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Fish						
Scientific Name	Common Name	Federal Status	State Status	Other Status	Habitat Requirements	Potential to Occur in the Study Area
<i>Eucyclogobius newberryi</i>	tidewater goby		None	AFS_EN- Endangered   CDFW_SSC- Species of Special Concern   IUCN_VU- Vulnerable   CDFW_SSC- Species of Special Concern	Aquatic. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not expected. Project site and adjacent areas lack suitable aquatic habitat.
<i>Lavinia symmetricus ssp. 2</i>	Tomales roach		None		Aquatic. Tributaries to Tomales Bay.	Not expected. Project site and adjacent areas lack suitable aquatic habitat.
<i>Oncorhynchus kisutch pop. 4</i>	coho salmon - central California coast ESU		Endangered	AFS_EN- Endangered	Aquatic. Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water & sufficient dissolved oxygen.	Not expected. Project site and adjacent areas lack suitable aquatic habitat.
<i>Oncorhynchus mykiss irideus pop. 8</i>	steelhead - central California coast DPS		None	AFS_TH- Threatened	Aquatic   Sacramento/San Joaquin flowing waters	Not expected. Project site and adjacent areas lack suitable aquatic habitat.
<i>Pogonichthys macrolepidotus</i>	Sacramento splittail		None	AFS_VU- Vulnerable + more	Aquatic. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	Not expected. Project site and adjacent areas lack suitable aquatic habitat.
<i>Spirinchus thaleichthys</i>	longfin smelt		Threatened	CDFW_SSC- Species of Special Concern	Aquatic; estuary. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Not expected. Project site and adjacent areas lack suitable aquatic habitat.

Invertebrates						
Scientific Name	Common Name	Federal Status	State Status	Other Status	Habitat Requirements	Potential to Occur in the Study Area
<i>Adela oplerella</i>	Opler's longhorn moth		None		Valley & foothill grassland. All but Santa Cruz site are on serpentine grassland. Larvae feed on <i>Platystemon californicus</i> (cream cups). Inhabits open grassy coastal prairies and Coast Range meadows. Nesting occurs underground as well as above ground in abandoned bird nests. Food plant genera include <i>Baccharis</i> , <i>Cirsium</i> , <i>Lupinus</i> , <i>Lotus</i> , <i>Grindelia</i> and <i>Phacelia</i> .	Not expected. No suitable serpentine grassland habitat in project area. No <i>Platystemon californicus</i> populations observed in project area.
<i>Bombus caliginosus</i>	obscure bumble bee		None	IUCN_VU- Vulnerable	Suitable nesting sites for the colonies are primarily in underground cavities such as old squirrel or other animal nests and in open west-southwest slopes bordered by trees; requires nectar and pollen from floral resources available throughout the duration of the colony period (spring, summer and fall); and suitable overwintering sites for the queens.	Low. No open grassy coastal prairies in project area. No <i>Cirsium</i> , <i>Lupinus</i> , <i>Lotus</i> , <i>Grindelia</i> or <i>Phacelia</i> populations observed in project area.
<i>Bombus occidentalis</i>	western bumble bee		None	USFS_S- Sensitive   XERCES_IM- Imperiled	Inhabits localized freshwater ponds or streams with still or near-still water from San Mateo to Del Norte County.	Low. No underground burrows observed on project site. No open slope habitat located on project site.
<i>Caecidotea tomalensis</i>	Tomales isopod		None		Inhabits rocky outcrops and cliffs within coastal scrub of the San Francisco peninsula.	Not expected. No suitable aquatic habitat located in the project area.
<i>Callophrys mossii bayensis</i>	San Bruno elfin butterfly		None	XERCES_CI- Critically Imperiled	Colonies are located on steep, north-facing slopes within the fog belt. Larval host plant is <i>Sedum spathulifolium</i> .	Not expected. Project site is not on the San Francisco peninsula. No suitable rocky outcrop, cliff, or coastal scrub habitat in the project area.
<i>Callophrys mossii marinensis</i>	Marin elfin butterfly		None		Found only in the redwood forest areas of Marin County. Larvae collected and reared on <i>Sedum spathulifolium</i> .	Not expected. No redwood forest areas in the study area. Host plant not observed in study area.
<i>Cicindela hirticollis gravido</i>	sandy beach tiger beetle		None		Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	Not expected. No suitable aquatic habitat located in the project area.

<i>Coelus globosus</i>	globose dune beetle	None	IUCN_VU-Vulnerable	Inhabitant of coastal sand dune habitat; erratically distributed from Ten Mile Creek in Mendocino County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	Not expected. No suitable dune habitat located in the project area.
<i>Danaus plexippus pop. J</i>	monarch - California overwintering population	None	USFS_S-Sensitive	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Not expected. No suitable eucalyptus, Monterey pine, or cypress grove habitat located in the project area.
<i>Hydrocharta rickseckeri</i>	Ricksecker's water scavenger beetle	None		Aquatic   Sacramento/San Joaquin flowing waters   Sacramento/San Joaquin standing waters	Not expected. No suitable aquatic habitat located in the project area.
<i>Ischnura gemina</i>	San Francisco forktail damselfly	None	IUCN_VU-Vulnerable	Small, marshy ponds and ditches with emergent and floating aquatic vegetation.	Not expected. No suitable aquatic habitat located in the project area.
<i>Lichnanthe ursina</i>	bumblebee scarab beetle	None		Inhabits coastal sand dunes from Sonoma County south to San Mateo County. Usually flies close to sand surface near the crest of the dunes.	Not expected. No coastal dune habitat in the project area.
<i>Plebejus icarioides parapheres</i>	Point Reyes blue butterfly	None		Stabilized sand dunes with the common bush <i>Lupinus arboreus</i> & <i>L. varicolor</i> . <i>L. varicolor</i> is the likely foodplant. Confined to the Pt. Reyes peninsula, from Pt. Reyes proper north to Tomales Pt.	Not expected. No coastal dune habitat in the project area.
<i>Speyeria zerene myrtilene</i>	Myrtle's silverspot butterfly	None	XERCES_Ci-Critically Imperiled	Restricted to the foggy, coastal dunes/hills of the Point Reyes peninsula. Larval foodplant thought to be <i>Viola adunca</i> .	Not expected. No coastal dune habitat in the project area.
<i>Syncaris pacifica</i>	California freshwater shrimp	Endangered	IUCN_EN-Endangered	Aquatic. Shallow pools away from main streamflow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	Not expected. No suitable aquatic habitat located in the project area.

Mammals					
Scientific Name	Common Name	Federal Status	State Status	Other Status	Habitat Requirements
					Potential to Occur in the Study Area
<i>Antrozous pallidus</i>	pallid bat		None	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern   USFS_S-Sensitive   WBGW_H-High Priority	This species is found at low elevations in CA. Occurs throughout California and most abundant in grasslands, shrublands, and woodlands. Requires crevices and cavities of buildings, bridges, tunnels, rocks, cliffs, and trees to roost. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Most common in open, dry habitats with rocky areas for roosting.
<i>Aplodontia rufa phaea</i>	Point Reyes mountain beaver		None	CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern	Coastal area of Point Reyes in areas of springs or seepages. North-facing slopes of hills and gullies in areas overgrown with sword ferns and thimbleberries.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat		None	BLM_S-Sensitive   CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern   USFS_S-Sensitive   WBGW_H-High Priority	Usually roosts in caves, mines, bridges, trees, and structures in or near woodlands and forests, often near water. Extremely sensitive to human disturbance. Found throughout California in a wide variety of habitats; most commonly associated with mesic sites.
<i>Lasionycteris noctivagans</i>	silver-haired bat		None	IUCN_LC-Least Concern   WBGW_M-Medium Priority	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs proximity to drinking water.
<i>Lasiurus blossevillii</i>	western red bat		None	CDFW_SSC-Species of Special Concern   IUCN_LC-Least Concern   WBGW_H-High Priority	Roosts primarily in trees 2-40 ft above the ground, from sea level up through mixed conifer forests. Occurs in a wide variety of grasslands, shrublands, and woodlands, though they are generally found in dry, open areas at lower elevations. Prefers habitat edges and mosaics that are protected from above and open below, with open areas for foraging.

<i>Lasiurus cinereus</i>	hoary bat	None	IUCN_LC- Least Concern   WBWG_M- Medium Priority	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. This solitary bat is most commonly found in association with forested habitats near water (CDFW 2016a).	Low. No water sources in project area. Tree foliage in project area is sparse to moderate.
<i>Taxidea taxus</i>	American badger	None	CDFW_SSC- Species of Special Concern   IUCN_LC- Least Concern	Prefers open areas and may also frequent brushlands with little groundcover (NatureServe). Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not expected. No suitable open grassland, pasture, or brushland habitat in project area.
<i>Zapus trinotatus orarius</i>	Point Reyes jumping mouse	None	CDFW_SSC- Species of Special Concern	In California, <i>Z. trinotatus</i> occur in wet, marshy coastal meadows; loose, humus-filled dark soils associated with coast redwood forests; thickets along streams and seepage areas; and, less frequently, in grassy areas beneath open-canopied coniferous forests (Bolster 1998).	Not expected. No suitable wet coastal meadow, redwood forest, riparian thicket, or grassy forest understory habitat in project area.

Mollusks					
Scientific Name	Common Name	State Status	Other Status	Habitat Requirements	Potential to Occur In the Study Area
<i>Helminthoglypta nickliniana awania</i>	Peninsula coast range shoulderband	None	IUCN_DD- Data Deficient	Known only from exposed granitic headlands of the Point Reyes Peninsula, Marin County. Inhabits coastal scrub habitat and weedy pastures; uniquely adapted to high winds, salt fogs, and variable precipitation.	Not expected. No suitable coastal prairie or coastal scrub habitat in the project area.
<i>Helminthoglypta stiversiana williamsi</i>	Williams' bronze shoulderband	None		Known only from Hog Island and Duck Island, two small, tree-covered islands in Tomales Bay, Marin County.	Not expected. No tree-covered islands in project area.
<i>Pomatopsis binneyi</i>	robust walker	None		Specialized riparian/freshwater habitat. Found in perennial seeps and rivulets, where it is protected from seasonal flushing in the rainy season (Taylor 1981); also on shallow mud banks and marsh seepages leading into shallow streams (Davis 1967).	Not expected. No suitable riparian/freshwater habitat in the project area.
<i>Vespericola marinensis</i>	Marin hesperian	None		Found in moist spots in coastal brushfield and chaparral vegetation in Marin County. Under leaves of cow-parsnip, around spring seeps, in leafmold along streams, in alder woods and mixed evergreen forest.	Not expected. No suitable chaparral or riparian brush habitat in the project area.

Table 4: Special status natural communities potential to occur in the study area.

Special Status Natural Communities				
Scientific Name	Federal Status	State Status	Other Status	Observed on Site?
Central Dune Scrub		None		No
Coastal and Valley Freshwater Marsh		None		No
Coastal Terrace Prairie		None		No
Northern Coastal Salt Marsh		None		No
Northern Maritime Chaparral		None		No
Northern Vernal Pool		None		No
Serpentine Bunchgrass		None		No

Table 5: Observations of special status species with potential to occur on the site based on habitat constraints

Plants				
Scientific Name	Common Name	Habitat Requirements	Bloom Period	Observed on site?
<i>Amorpha californica</i> var. <i>napensis</i>	Napa false indigo/mock locust	Openings in forest or woodland or in chaparral. 30-735 m. Well drained slopes (Howell 2007).	April - July	No
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	Cismontane woodland, valley and foothill grassland, coastal bluff scrub. 3-795 m. On sandstone or granitic 1-800 m.	March - June	No
<i>Arctostaphylos virgata</i>	Marin manzanita	Broadleaved upland forest, chaparral, closed-cone coniferous forest, north coast coniferous forest Low shrub in a variety of habitats on Pt. Reyes; sandy soils. Closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. 10-335 m.	Jan - March	No
<i>Ceanothus gloriosus</i> var. <i>porrectus</i>	Mt. Vision ceanothus	On brushy slopes, mesic sites; mostly in mixed evergreen & foothill woodland communities. 25-425 m. Open grassy slopes or on the edge of brush; not common (Howell 2007). Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland 3-610 m.	Feb - May	No
<i>Dirca occidentalis</i>	western leatherwood	Open grassy slopes or on the edge of brush; not common (Howell 2007). Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland 3-610 m.	Jan - March	No
<i>Elymus californicus</i>	California bottle brush (CNPS)	Open grassy slopes or on the edge of brush; not common (Howell 2007). Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland 3-610 m.	May - Aug	No
<i>Microseris paludosa</i>	marsh microseris	Open grassy slopes or on the edge of brush; not common (Howell 2007). Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland 3-610 m.	April - June	No

**APPENDIX C**  
**Site Photos**





Figure 3. View of proposed project site from adjacent driveway.



Figure 4. View of proposed project site including adjacent residence.





Figure 5. Representative vegetation on proposed project site.



Figure 6. Existing tank and surrounding vegetation; proposed tank site in the background.





Figure 7. Understory in along the NMWD access road downhill from the proposed project site.



Figure 8. Open understory is dominated by scattered huckleberry.

**APPENDIX D**  
**USFWS Official Species List**



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

Consultation Code: 08ESMF00-2018-SLI-1778

Event Code: 08ESMF00-2018-E-05160

Project Name: NMWD PRE Tank 4

April 06, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600



## Project Summary

Consultation Code: 08ESMF00-2018-SLI-1778

Event Code: 08ESMF00-2018-E-05160

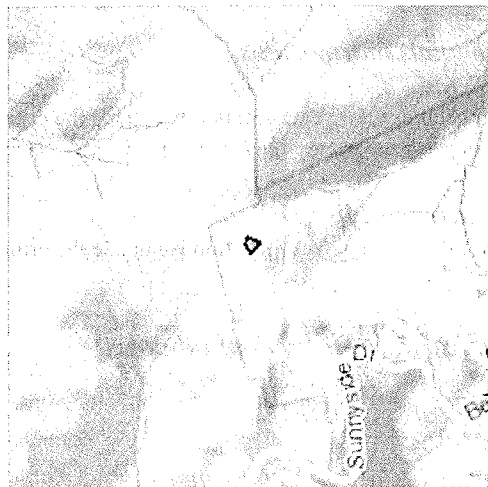
Project Name: NMWD PRE Tank 4

Project Type: DEVELOPMENT

**Project Description:** The proposed project includes installing a replacement water tank at an existing tank site. The project site is on a small 5,500 square foot (0.126-acre) parcel owned by the North Marin Water District (NMWD) that is located at the end of Drakes View Drive, in the northwestern portion of the Paradise Ranch Estates (PRE) development located in the community of Inverness on the Point Reyes Peninsula (see Figure 1). The site is on a knoll at the crest of the Inverness Ridge, about 200 feet east of the boundary of the Point Reyes National Seashore (PRNS). Elevation of the NMWD parcel ranges from 1059 to 1067 feet (322 to 325 meters). Historically there were two wooden water tanks (PRE Tank 4A and 4B) on the 5,500-square-foot parcel; Tank 4A was destroyed in the 1995 Mount Vision fire.

**Project Location:**

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.07465906277746N122.85059099851907W>



Counties: Marin, CA

## Endangered Species Act Species

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Birds

NAME	STATUS
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4467">https://ecos.fws.gov/ecp/species/4467</a>	Threatened
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1123">https://ecos.fws.gov/ecp/species/1123</a>	Threatened
Short-tailed Albatross <i>Phoebastria (=Diomedea) albatrus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/433">https://ecos.fws.gov/ecp/species/433</a>	Endangered
Western Snowy Plover <i>Charadrius alexandrinus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8035">https://ecos.fws.gov/ecp/species/8035</a>	Threatened

## Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a>	Threatened

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened

## Fishes

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a>	Endangered

## Insects

NAME	STATUS
Myrtle's Silverspot Butterfly <i>Speyeria zerene myrtleae</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6929">https://ecos.fws.gov/ecp/species/6929</a>	Endangered
San Bruno Elfin Butterfly <i>Callophrys mossii bayensis</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/3394">https://ecos.fws.gov/ecp/species/3394</a>	Endangered

## Crustaceans

NAME	STATUS
California Freshwater Shrimp <i>Syncaris pacifica</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7903">https://ecos.fws.gov/ecp/species/7903</a>	Endangered

## Flowering Plants

NAME	STATUS
Beach Layia <i>Layia carnosa</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6728">https://ecos.fws.gov/ecp/species/6728</a>	Endangered
Showy Indian Clover <i>Trifolium amoenum</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6459">https://ecos.fws.gov/ecp/species/6459</a>	Endangered
Sonoma Alopecurus <i>Alopecurus aequalis</i> var. <i>sonomensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/557">https://ecos.fws.gov/ecp/species/557</a>	Endangered

## Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> <a href="https://ecos.fws.gov/ecp/species/2891#crithab">https://ecos.fws.gov/ecp/species/2891#crithab</a>	Final

## **Appendix B**

### **Cultural Resources Data**

October 25, 2017

Buffy McQuillen  
Tribal Heritage Preservation Officer (THPO)  
Federated Indians of Graton Rancheria  
6400 Redwood Drive  
Rohnert Park, CA 94928

Dear Ms. McQuillen,

The North Marin Water District (NMWD or District) is proposing to construct an 125,000-gallon above ground concrete water storage tank at the existing Paradise Ranch Estates Tank 4 site (see attached Site LOCATION Location Map). The replacement tank would be constructed in approximately the same location as the original PRE Tank 4A that was destroyed by the 1995 Vision Fire. The site has been previously graded and disturbed.

We are currently preparing an Initial Study for the project. We would appreciate any comments, questions, or recommendations FIGR has about the proposal.

The project would be constructed on a portion of an approximately 0.126-acre (5,500-square-foot) site owned by the North Marin Water District. The site is at the west end of Drakes View Drive in the Paradise Ranch Estates neighborhood on the Pt. Reyes Peninsula. There is an existing wooden tank remaining on the site (PRE Tank 4B), which will be decommissioned and removed as part of the project, as it is approaching the end of its limited life span. This tank would remain operational until construction of the new 125,000-gallon tank is complete..

The project site is near the top of a topographic knoll at the crest of Inverness Ridge. The vegetation on this previously graded site is sparse, and includes scattered shrubs, herbaceous understory plants, and trees (including Douglas fir, tan oak, Bishop pine, and ceanothus). . The tank site (AP No. 114-120-09) is about 100 feet east of the residence at 420 Drakes View Drive. The site is about 250 feet east of the Inverness Ridge Trail on the Point Reyes National Seashore.

We have attached the Records Search prepared by NWIC for the proposed project. It concludes there is a low probability of archeological resources on the site. Nevertheless, we have incorporated the following mitigations in the Initial Study:

**Mitigation Measure CR-1**

- If cultural resources are encountered during project construction, avoid altering the materials and their context until a cultural resources consultant has evaluated the situation.
- If cultural resources are encountered during construction, NMWD shall notify the Federated Indians of Graton Rancheria.
- If applicable, a qualified archaeologist shall monitor subsequent excavations and spoils in the vicinity of the find for additional archaeological resources.

- If the archaeologist determines the discoveries are of importance, the resources shall be properly recovered and curated. The archaeologist shall prepare a report outlining the methods followed and summarizing the results of the mitigation program. The report shall outline the methods followed, list and describe the resources recovered, map their exact locations and depths, and include other pertinent information. Identified cultural resources shall be recorded on DPR 523(A-J) historic recordation forms. NMWD shall submit the report to the Northwest Information Center and the California State Historic Preservation Officer.

**Mitigation Measure CR-2**

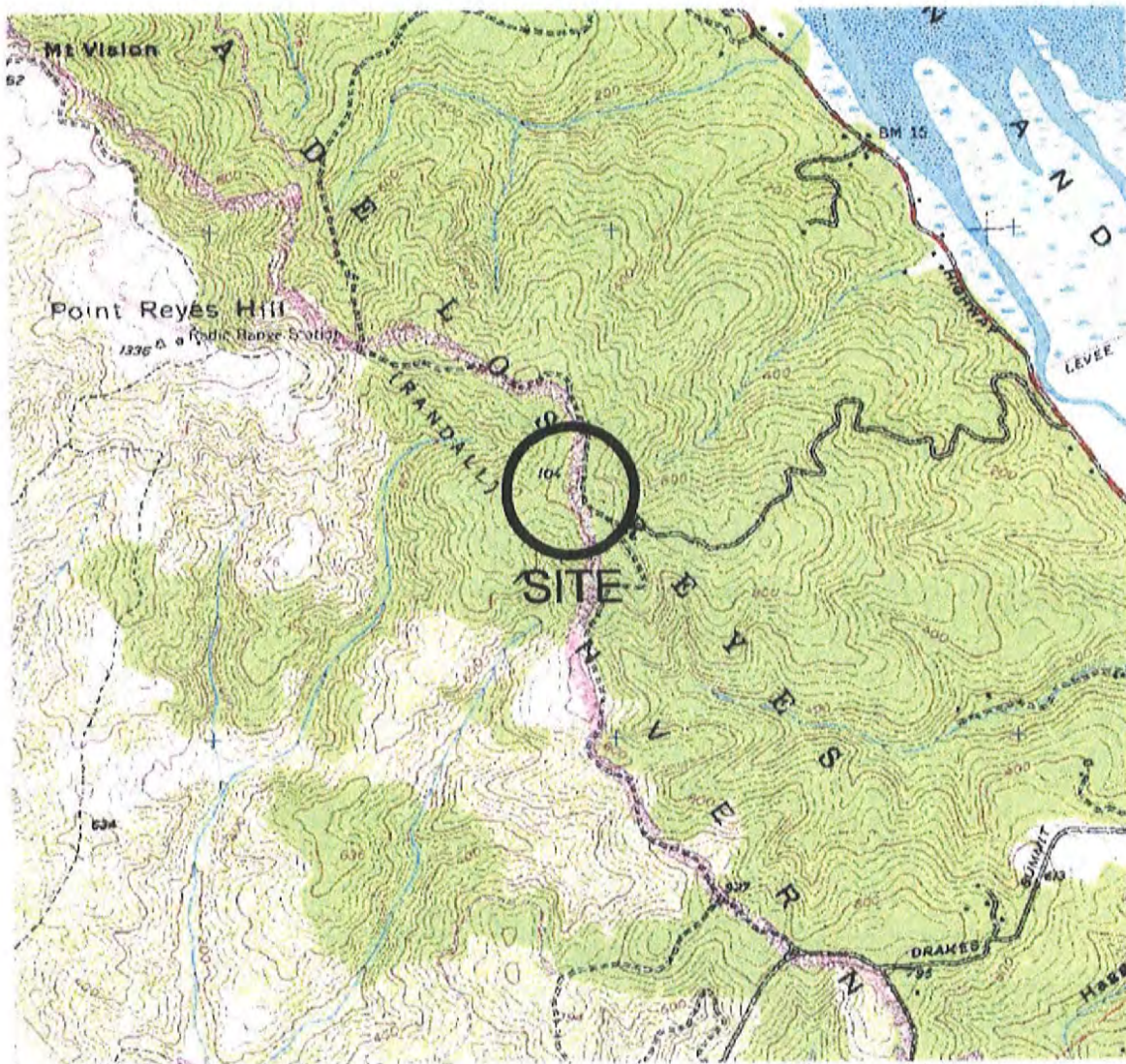
This mitigation incorporates the requirement established in Mitigation Measure CR-1 and adds the requirements that in the event that human remains are encountered, the contractor shall stop work in the area and the Town shall contact the Marin County Coroner in accordance with Section 7050.5 of the State Health and Safety Code. This condition shall be noted on all grading and construction plans and provided to all contractors and superintendents on the job site.

Thank you for considering our request.



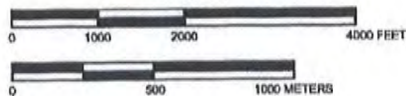
Leonard Charles  
LCA  
7 Roble Court  
San Anselmo, CA 94960\  
415.454.4575 (Phone)  
415,454.2585 (Fax)





## SITE LOCATION

### SCALE



REFERENCE: DeLorme 3D TopoQuads, 1999

**Miller Pacific**  
ENGINEERING GROUP

A CALIFORNIA CORPORATION, © 2010, ALL RIGHTS RESERVED  
FILE: 231.33SLM.dwg

504 Redwood Blvd.  
Suite 220  
Novato, CA 94947  
T 415 / 382-3444  
F 415 / 382-3450  
www.millerpac.com

### SITE LOCATION MAP

North Marin Water District  
PRE Tank 4A Replacement  
Inverness, California

Project No. 231.33

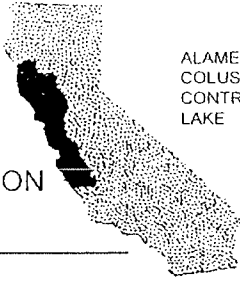
Date: 08-26-10

Drawn MFJ  
Checked

**1**  
FIGURE



CALIFORNIA  
HISTORICAL  
RESOURCES  
INFORMATION  
SYSTEM



ALAMEDA  
COLUSA  
CONTRA COSTA  
LAKE

MARIN  
MENDOCINO  
MONTEREY  
NAPA  
SAN BENITO  
SAN FRANCISCO

SAN MATEO  
SANTA CLARA  
SANTA CRUZ  
SOLANO  
SONOMA  
YOLO

**Northwest Information Center**  
Sonoma State University  
150 Professional Center Drive, Suite E  
Rohnert Park, California 94928-3609  
Tel: 707.588.8455  
Email: leigh.jordan@sonoma.edu  
<http://www.sonoma.edu/nwic>

February 16, 2011

NWIC File No.: 10-0664

Jacoba Charles  
Leonard Charles & Associates  
7 Roble Court  
San Anselmo, CA 94960

Re: Record search results for the proposed PRE Tank 4A Replacement Project

Dear Jacoba Charles:

Per your request received by our office on 19 January 2011, a records search was conducted for the above referenced project by reviewing pertinent Northwest Information Center (NWIC) base maps that reference cultural resources records and reports, historic-period maps, and literature for Marin County. Please note that use of the term cultural resources includes both archaeological resources and historical buildings and/or structures.

Review of this information indicates that there is record of one archaeological study that covers 100% of the PRE Tank 4A Replacement project area: S-17841 (Gary 1996). This proposed project area contains no recorded archaeological resources. Local, state and federal inventories include no recorded buildings or structures within the proposed project area. In addition to these inventories, the NWIC base maps show no recorded buildings or structures within the proposed project area.

At the time of Euroamerican contact the Native Americans that lived in the area were speakers of the Coast Miwok language, part of the Utian language family (Kelly 1978:414). There are no Native American resources in or adjacent to the proposed project area referenced in the ethnographic literature.

Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of Marin County have been found in close proximity to the bay and associated wetland resource areas, near sources of fresh water (including perennial and intermittent streams and springs), and near ecotones. The PRE Tank 4A Replacement project area is located in a relatively steep, hillside location, and is a considerable distance from sources of water or other productive resource areas. Given the dissimilarity of these environmental factors, coupled with the negative results

from the previous study (Gary 1996), there is a low potential of identifying unrecorded Native American resources in the proposed PRE Tank 4A Replacement project area.

Review of historical literature and maps gave no indication of the possibility of historic-period archaeological resources within the PRE Tank 4A Replacement project area. With this in mind, there is a low potential of identifying unrecorded historic-period archaeological resources in the proposed PRE Tank 4A Replacement project area.

The 1918 Point Reyes USGS 15-minute topographic quadrangle fails to depict any buildings or structures within the PRE Tank 4A Replacement project area; therefore, there is a low possibility of identifying any buildings or structures 45 years or older within the project area.

## RECOMMENDATIONS:

1) Based on the existing conditions and the negative results of the previous study (Gary 1996), there is a low possibility of identifying Native American and historic-period archaeological resources in the PRE Tank 4A Replacement project area and further study is not recommended at this time.

2) If the proposed project area contains buildings or structures that meet the minimum age requirement, prior to commencement of project activities, it is recommended that this resource be assessed by a professional familiar with the architecture and history of Marin County. Please refer to the list of consultants who meet the Secretary of Interior's Standards at <http://www.chrisinfo.org>.

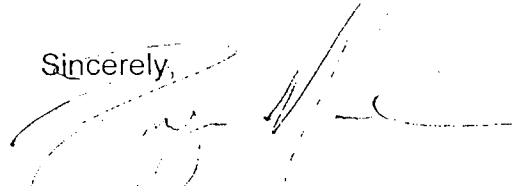
3) Review for possible historic-period buildings or structures has included only those sources listed in the attached bibliography and should not be considered comprehensive.

4) If archaeological resources are encountered during construction, work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

5) It is recommended that any identified cultural resources be recorded on DPR 523 historic resource recordation forms, available online from the Office of Historic Preservation's website: [http://ohp.parks.ca.gov/default.asp?page\\_id=1069](http://ohp.parks.ca.gov/default.asp?page_id=1069)

Thank you for using our services. Please contact this office if you have any questions, (707) 588-8455.

Sincerely,



Bryan Much  
Assistant Coordinator

## LITERATURE REVIEWED

In addition to archaeological maps and site records on file at the Northwest Information Center of the Historical Resources File System, the following literature was reviewed:

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\*\*Note that the Office of Historic Preservation's *Historic Properties Directory* includes National Register, State Registered Landmarks, California Points of Historical Interest, and the California Register of Historical Resources as well as Certified Local Government surveys that have undergone Section 106 review.

## **Appendix C**

### **Geotechnical Report**



**MILLER PACIFIC  
ENGINEERING GROUP**

**UPDATED GEOTECHNICAL INVESTIGATION  
NORTH MARIN WATER DISTRICT  
PRE-TANK 4A REPLACEMENT  
INVERNESS, CALIFORNIA**

November 17, 2017

Project 231.33

Prepared For:  
North Marin Water District  
999 Rush Creek Place  
P.O. Box 146  
Novato, CA 94948

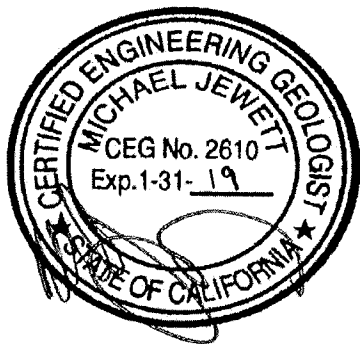
Attn: Mr. Rocky Vogler

**CERTIFICATION**

This document is an instrument of service, prepared by or under the direction of the undersigned professionals, in accordance with the current ordinary standard of care. The service specifically excludes the investigation of radon, asbestos or other hazardous materials. The document is for the sole use of the client and consultants on this project. No other use is authorized. If the project changes, or more than two years have passed since issuance of this report, the findings and recommendations must be reviewed by the undersigned.

**MILLER PACIFIC ENGINEERING GROUP**  
(a California corporation)

**REVIEWED BY:**



Mike Jewett  
Engineering Geologist No. 2610  
(Expires 1/31/19)



Scott Stephens  
Geotechnical Engineer No. 2398  
(Expires 6/30/17)



GEOTECHNICAL INVESTIGATION  
NORTH MARIN WATER DISTRICT  
PRE-TANK 4A REPLACEMENT  
INVERNESS, CALIFORNIA

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**APPENDIX A** Boring Log by R.C. Harlan and Associates, 1980

GEOTECHNICAL INVESTIGATION  
PRE-TANK 4A REPLACEMENT  
INVERNESS, CALIFORNIA

## **1.0 INTRODUCTION**

This report presents the results of our updated geotechnical investigation for the proposed water storage tank located adjacent to an existing tank near 420 Drake's View Drive in Inverness, California. The site location is shown on Figure 1. This report is intended for the exclusive use of the North Marin Water District. No other use is authorized without the express written consent of Miller Pacific Engineering Group.

We previously performed a Geotechnical Investigation for the project which is summarized in our report dated September 9, 2010. The purpose of our current services is to review our prior report and provide updated recommendations and design criteria in accordance with the latest edition (2016) of the California Building Code. The scope of our previous investigation is described in our proposal dated August 2, 2010 and includes the following geotechnical services:

- Summary of the geologic setting and seismicity;
- Exploration of site conditions with visual reconnaissance and 2 shallow hand auger borings;
- Geologic hazards evaluation;
- Geotechnical recommendations and design criteria for the project; and,
- Preparation of this report.

Supplemental services are expected to include consultation during design, geotechnical plan review, and construction inspection and testing.

## **2.0 PROJECT DESCRIPTION**

The proposed project involves construction of a 32-foot diameter concrete water tank immediately north of an existing redwood water tank measuring approximately 20 feet in diameter. The tank is being constructed as a replacement for a tank destroyed in the Mount Vision fire of 1995. The locations of the existing and proposed tank are shown on Figure 2. The existing tank is founded on a graded pad near the top of a topographic knoll at the crest of Inverness Ridge. We understand this graded pad will effectively be enlarged to the north and west to accommodate a new tank with a finished floor elevation equal to that of the existing tank. Grading for the project is anticipated to include maximum cuts of approximately 3 feet and minimal fill, if any, depending on the desired setback from the existing tank.

The project owner is North Marin Water District. Other project team members are unknown at this time.

### 3.0 SITE CONDITIONS

#### 3.1 Regional Geology

The project site is located within the Coast Range Geomorphic Province of California. The regional topography of this province is characterized by northwest-southeast trending mountain ridges and intervening valleys formed by tectonic activity between the Pacific and the North American Plates. Extensive faulting during the Pliocene Age (1.8 to 7 million years ago) formed the inland depression that is now San Francisco Bay. More recent tectonic activity is concentrated along the San Andreas Fault Zone, a complex group of generally parallel northwesterly trending faults.

The San Andreas Fault, located just northeast of the site, marks the boundary between Franciscan Assemblage rocks to the east and Salinian Block granitic rocks to the west. Regional geologic mapping by Clark and Brabb (1997) indicates the site is underlain by Cretaceous granite and granodiorite of Inverness Ridge, as shown on Figure 3.

#### 3.2 Seismicity

The project site is located within a seismically active area and will therefore experience the effects of future earthquakes. Earthquakes are the product of the build-up and sudden release of strain along a "fault" or zone of weakness in the earth's crust. Stored energy may be released as soon as it is generated or it may be accumulated and stored for long periods of time. Individual releases may be so small that they are detected only by sensitive instruments, or they may be violent enough to cause destruction over vast areas.

Faults are seldom single cracks in the earth's crust but typically are braids of breaks that comprise shatter zones which link to form networks of major and minor faults. Within the Bay Area, faults are concentrated along the San Andreas Fault zone. The movement between rock formations along either side of a fault may be horizontal, vertical, or a combination and is radiated outward in the form of energy waves. The amplitude and frequency of earthquake ground motions partially depends on the material through which it is moving. The earthquake force is transmitted through hard rock in short, rapid vibrations, while this energy movement becomes a long, high-amplitude motion when moving through soft ground materials, such as Bay Mud.

##### 3.2.1 Active Faults in the Region

The project site is located within a seismically active San Francisco Bay region and will therefore experience the effects of future earthquakes. Such earthquakes could occur on any of several active faults within the region. An "active" fault is one that shows displacement within the last 11,000 years (i.e., Holocene) and has a reported average slip rate greater than 0.1 mm per year. The California Division of Mines and Geology (1998) has mapped various active and inactive faults in the region. These faults, defined as either California Building Code Source Type "A" or "B," are shown in relation to the project site on the attached Active Fault Map, Figure 4.

### 3.2.2 Historic Fault Activity

Numerous earthquakes have occurred in the region within historic times. The results of our computer database search indicate that 29 earthquakes (Richter Magnitude 5.0 or larger) have occurred within 100 kilometers (62 miles) of the site area between 1735 and 2017. The six most significant historical earthquakes to affect the project site are summarized in Table A.

TABLE A  
SIGNIFICANT EARTHQUAKE ACTIVITY  
PRE-Tank 4A Replacement  
Inverness, California

<u>Epicenter (Latitude, Longitude)</u>	<u>Richter Magnitude</u>	<u>Year</u>	<u>Distance</u>
37.80, -122.20	6.8	1836	64 km
37.60, -122.40	7.0	1838	65 km
37.70, -122.10	6.8	1868	77 km
38.20, -122.40	6.2	1898	41 km
37.70, -122.50	8.2	1906	51 km
38.21, -122.31	6.1	2014	50 km

References: Sources: USGS (2010)

### 3.2.3 Probability of Future Earthquakes

The site will likely experience moderate to strong ground shaking from future earthquakes originating on any of several active faults in the San Francisco Bay region. The historical records do not directly indicate either the maximum credible earthquake or the probability of such a future event. To evaluate earthquake probabilities in California, the USGS has assembled a group of researchers into the "Working Group on California Earthquake Probabilities" (USGS 2003, 2008; Field, et al, 2015) to estimate the probabilities of earthquakes on active faults. These studies have been published cooperatively by the USGS, CGS, and Southern California Earthquake Center (SCEC) as the Uniform California Earthquake Rupture Forecast, Versions 1, 2, and 3 (aka UCERF, UCERF2, and UCERF3, respectively). In these studies, potential seismic sources were analyzed considering fault geometry, geologic slip rates, geodetic strain rates, historic activity, micro-seismicity, and other factors to arrive at estimates of earthquakes of various magnitudes on a variety of faults in California.

The 2003 study UCERF specifically analyzed fault sources and earthquake probabilities for the seven major regional fault systems in the Bay Area region of northern California. The 2008 study UCERF2 applied many of the analyses used in the 2003 study to the entire state of California and updated some of the analytical methods and models. The

most recent 2013 study UCERF3 further expanded the database of faults considered and allowed for consideration of multi-fault ruptures, among other improvements.

Conclusions from the most recent UCERF3 and USGS' 2016 Fact Sheet indicate there is a 72% chance of an  $M > 6.7$  earthquake in the San Francisco Bay Region between 2014 and 2043. The highest probability of a  $M > 6.7$  earthquake on any of the active faults in the region is assigned to the Hayward and Rodgers Creek Faults at 33%. The nearest known active fault, the San Andreas Fault, about 1.7-km to the east, is assigned a 22% probability of a  $M > 6.7$  earthquake by 2043. Additional studies regarding earthquake probabilities in the Bay Area are ongoing.

### 3.3 Site Reconnaissance

A site reconnaissance was performed on August 25, 2010, by our Field Geologist, to observe existing conditions. The site sits on gently sloping ground at the crest of Bolinas Ridge just southwest of the town of Inverness and is adjacent to an existing redwood tank and radio communications tower. The topography east of the proposed tank site slopes downward at an approximate inclination of 3:1 (horizontal:vertical). Surface conditions consist of clayey residual soils, low shrubs, and grasses. The southern side of the site is near-level with the exception of a small outcrop of weathered granite. Pines up to 20 feet tall and sparse scrub brush and broom occupy the extreme south and southeast portions of the site. The southwest portion of the proposed tank location is occupied by a small landscape berm, roughly 3 feet tall and sloped at approximately 1:1 on both sides. The existing driveway/access road, which also serves the residence at 420 Drake's View Drive, borders the site to the northwest.

### 3.4 Anticipated Subsurface Conditions

Based on the results of our site reconnaissance and previous exploration by R.C. Harlan and Associates (1980), we expect much of the site to be underlain by weathered granitic rock within 3 feet of the ground surface. Locally, granite may be exposed at the surface, and the degree of weathering likely decreases with depth. It is our opinion that most of the planned excavation can be accomplished with conventional grading equipment (i.e., dozer and excavator).

During the reconnaissance, we excavated two shallow borings with hand-operated equipment at the locations shown on the Site Plan, Figure 2. Boring 1 encountered 16 inches of medium dense clayey sand with gravel over moderately weathered, moderately hard, weak granitic rock. Boring 2 encountered less than 3 inches of clayey residual soil over similarly weathered granite.

The site was previously investigated by R.C. Harlan and Associates, who drilled a boring on the northwest side of the existing tank prior to its construction in 1980. The approximate boring location is shown on Figure 2. The legend and boring log from this exploration is included for reference as Appendix A.

## **4.0 GEOLOGIC HAZARDS**

### **4.1 General**

This section identifies potential geologic hazards at the project site, their significant adverse impacts, and recommended mitigation measures. The significant geologic hazard at the project site is strong seismic ground shaking.

### **4.2 Fault Surface Rupture**

Under the Alquist-Priolo Special Studies Zone Act, the California Geological Survey (CGS) produced 1:24,000 scale maps showing all active faults. The project site is about 1.7 kilometers from the San Andreas Fault. However, the site is not located within an Alquist-Priolo Special Studies Zone. The potential for fault surface rupture at the site is low.

*Evaluation: No significant impact*

*Mitigation: No mitigation measures are required*

### **4.3 Seismic Shaking**

The site will likely experience seismic ground shaking similar to other areas in the seismically active San Francisco Bay Area. Earthquakes along several active faults in the region, as shown on Figure 4, could cause moderate to strong ground shaking at the site. Estimates of peak bedrock accelerations are based on either deterministic or probabilistic methods.

#### **4.3.1 Deterministic Methods**

Deterministic methods use empirical relations developed from data collected during previous earthquakes to provide estimates of median peak ground accelerations. A summary of the active faults that could most significantly affect the site, their maximum credible magnitude, closest distance to the project area, and probable peak accelerations is provided in Table B.

TABLE B  
ESTIMATED SEISMIC GROUND MOTIONS  
PRE-Tank 4A Replacement  
Inverness, California

<u>Deterministic Hazard Analysis Fault</u>	<u>Moment Magnitude for Characteristic Earthquake</u>	<u>Closest Estimated Distance (kilometers)<sup>1</sup></u>	<u>Median Peak Ground Acceleration (g)<sup>1,2</sup></u>
San Andreas	8.0	1.7	0.53
San Gregorio	7.4	24.5	0.14
Rodgers Creek	7.3	34.2	0.11
Hayward	7.3	40.4	0.09

- 1) California Department of Transportation (Caltrans) (2017), "Caltrans ARS Online", <http://dap3.dot.ca.gov/ARS Online/>, accessed April 11, 2017.
- 2) Values calculated using  $V_{s30} = 760$  m/s for Site Class B ("Rock" Conditions) per 2016 CBC and ASCE 7-10.

#### 4.3.2 Probabilistic Methods

Probabilistic methods for determining peak bedrock accelerations estimate the probability of exceeding various levels of peak horizontal acceleration (i.e., earthquake ground motion) within a specified time period. The methodology has been developed in recent years by recognized seismologists, earthquake engineers, and scientists. The seismic hazard evaluation involves combining the following: the probability that an earthquake will occur within a specified time period (commonly termed recurrence relationship); the probability that a given earthquake rupture surface is within a specified distance from the site; and, the probability that the peak horizontal acceleration at the project site will exceed a specified level.

In evaluating the seismic hazards associated with the subject site, we have considered both a PGA that has a 2 percent probability of being exceeded in 50 years (maximum credible earthquake  $PGA_{MCE}$ ) a PGA that has a 10 percent probability of being exceeded in 50 years (design basis earthquake  $PGA_{DBE}$ ). For this analysis, we used the USGS Seismic Hazard Curves and Uniform Hazard Response Spectra, Version 5.0.9a. The estimated PGA for the site was calculated as 1.1 g for a 2 percent probability of exceedance ( $PGA_{MCE}$ ).

The potential for strong seismic shaking at the project site is high. The San Andreas Fault is the closest source for future earthquakes, and an earthquake in the area would most likely originate from the Rodgers Creek or the Hayward Fault. The most significant



adverse impact associated with strong seismic shaking is potential damage to structures and improvements.

*Evaluation: Less than significant with mitigation*

*Mitigation: Mitigation for seismic shaking includes designing the structures in accordance with the most recent version of the California Building Code (CBC, 2016) or the American Water Works Association (AWWA, 2011). Recommended seismic coefficients are provided in Section V of this report.*

#### 4.4 Liquefaction Potential

Liquefaction refers to the sudden, temporary loss of soil strength during strong ground shaking. This phenomenon can occur where there are saturated, loose, granular deposits subjected to seismic shaking. Liquefaction-related phenomena include settlement, flow failure, and lateral spreading. We did not observe evidence for liquefiable soils at the site; therefore, we judge the risk of liquefaction to be low.

*Evaluation: No significant impact*

*Mitigation: No mitigation measures are required*

#### 4.5 Seismic Induced Ground Settlement

Ground shaking can induce settlement of loose granular soils above the water table. Considering the relatively shallow bedrock at the project site, the probability of seismic induced settlement is low.

*Evaluation: No significant impact*

*Mitigation: No mitigation measures are required*

#### 4.6 Lurching and Ground Cracking

Lurching and associated ground cracking can occur during strong ground shaking. The ground cracking generally occurs along the tops of slopes where stiff soils are underlain by soft deposits or along steep channel banks. Since these conditions do not exist at the site, the probability of lurching and ground cracking is low.

*Evaluation: No significant impact*

*Mitigation: No mitigation measures are required*

#### 4.7 Settlement

New surface loads can cause consolidation of soft clays or compression of loose soils. The foundation of the new tank will bear on dense granite bedrock; hence the probability of damage due to significant settlement of the ground surface is low.

Evaluation: No significant impact  
Mitigation: No mitigation measures are required

#### 4.8 Erosion

Sandy soils on moderate slopes or clayey soils on steep slopes are susceptible to erosion when exposed to concentrated surface water flows. The potential for erosion on the tank pad is low, but the potential for minor erosion of the slope below the tank site is moderate.

Evaluation: Less than significant with mitigation  
Mitigation: Site grading should be performed in accordance with the recommendations and criteria presented in Section V of this report. The project Civil Engineer will design site drainage improvements. Re-establishing vegetation on disturbed areas will also be required to minimize erosion. Erosion control measures during and after construction should conform to the most recent version of the Erosion and Sediment Control Field Manual (California Regional Water Quality Control Board, 2002).

#### 4.9 Seiche and Tsunami

Seiche and tsunamis are short duration earthquake-generated water waves in enclosed bodies of water and the open ocean, respectively. The extent and severity of a seiche would be dependent upon ground motions and fault offset in the San Pablo and San Francisco Bays. Considering the elevation of the project site, the likelihood of inundation or damage from a seiche or tsunami wave is remote.

Evaluation: No significant impact  
Mitigation: No mitigation measures are required

#### 4.10 Flooding

The adverse impact from flooding is water damage to structures. The site is located on a knoll ridge more than 1000 feet above sea level, thus the probability of damage due to large-scale flooding is remote.

Evaluation: No significant impact  
Mitigation: No mitigation measures are required

#### 4.11 Expansive Soil

Expansive soil occurs when clay particles interact with water causing volume changes in the clay soil. The clay soil may swell when saturated and shrink when dried. This phenomenon generally decreases in magnitude with increasing confinement pressure at depth. These volume changes may damage lightly loaded foundations, flatwork, and pavement. Expansive soil also causes soil

creep on sloping ground. We did not observe expansive soil conditions during our subsurface exploration; therefore, the potential for expansive soil damage is low.

*Evaluation: No significant impact*

*Mitigation: No mitigation measures are required*

#### 4.12 Slope Stability

Available published maps do not show any active or dormant landslides on the site, nor were any observed during our field reconnaissance in the immediate area of the proposed tank site. We judge the probability of damage due to slope instability is low.

*Evaluation: Less than significant with mitigation*

*Mitigation: Site grading and allowable slope inclination recommendations presented in Section V of this report should be incorporated into the project planning and design.*

### 5.0 CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 General

Based on the results of our investigation, we conclude that the project is feasible and the site is suitable for the planned water storage tank. The primary geotechnical issues are strong seismic ground shaking and providing uniform support for the tank foundation. Recommendations to address these and other geotechnical issues are presented in the subsequent sections of this report.

#### 5.2 Site Grading

Site grading is expected to consist primarily of cuts up to 3 feet tall. Site preparation and grading to protect the tank pad should conform to the following recommendations and criteria.

##### 5.2.1 Surface Preparation

Clear all trees, brush, roots, over-sized debris, and organic material from areas to be graded. Any root balls, loose soil or rock exposed at subgrade will need to be excavated to expose firm natural soils or bedrock. For the tank pad, the exposed subgrade surface should be moisture conditioned to near the optimum moisture content and compacted to at least 90 percent relative compaction (ASTM D-1557) to produce a firm and unyielding surface. Subgrade areas exposing bedrock need not be recompacted.

##### 5.2.2 Excavation

Most of the excavation for the tank pad will be in weathered granite bedrock or residual soils. It is our opinion that most of this bedrock can be excavated with conventional equipment (large dozer or excavator). It is possible that locally hard rock will be encountered and the use of hard rock excavation equipment or methods may be required.

### 5.2.3 Slopes

Cut and fill slope inclinations should not be steeper than 2:1 (horizontal:vertical). The project does not currently include any fill slopes. All graded slope surfaces should be trimmed to remove loose soil, covered with straw mats or similar erosion-resistant material and planted as soon as possible upon completion of grading and prior to the start of rains.

For temporary slopes, the Federal Occupational Safety and Health Administration (OSHA) has promulgated rules for Excavations, 29 CFR Part 1926, October 31, 1989. OSHA dictates allowable slope configurations and minimum shoring requirements based on categorized soil types. In conformance with OSHA's categorization, the residual soils (potentially up to 3 feet thick) are "Type C" and the bedrock below is characterized as "Type A." The Contractor may elect to use a variety of shoring and temporary slope configurations, but his operations must conform to Federal and State OSHA regulations. Additionally, it should be made clear that the safety of excavations, slopes, construction operations, and personnel are the sole responsibility of the Contractor.

Performance of temporary cut slopes will be influenced by the length of time the cut is unsupported, seepage and surface runoff over the cut face, bedding planes of rock and soil materials and other factors. Temporary unsupported vertical cuts shall not exceed 5 feet and may experience sloughing, especially during wet weather conditions, and cleanup of debris at the base of the cut may be required. Permanent and temporary cut slopes should be inspected by a Geotechnical Engineer during construction.

### 5.2.4 Compacted Fill

Fill, backfill, and scarified subgrades should be conditioned to a moisture content within 3 percent of the optimum moisture content. Properly moisture-conditioned soils should be placed in loose horizontal lifts of 8 inches thick or less and uniformly compacted to at least 90 percent relative compaction.

The fill material shall consist of soil and rock mixtures that: (1) are free of organic material, (2) have a Liquid Limit less than 40, (3) have a Plasticity Index less than 20, and (4) have a maximum particle size of 6 inches. We judge that most of the soil and rock mixtures generated from on-site excavations are suitable for use as fill provided the maximum particle sizes are less than 6 inches. Any imported fill material needs to be tested to determine its suitability for use as fill material.

## 5.3 Seismic Design and Site Specific Response Spectrum

Minimum mitigation of ground shaking includes seismic design of the structure in conformance with the provisions of the most recent version (2016) of the California Building Code (CBC) and/or the current AWWA Standard for Welded Carbon Steel Tanks for Water Storage (2011). However, since the goal of the building code is protection of life safety, some tank damage may still occur during strong ground shaking.

The magnitude and character of future earthquake ground motions will depend on the particular earthquake and project site subsurface conditions. Based on the interpreted subsurface conditions and close proximity to the San Andreas Fault (1.3 miles), we recommend the CBC / AWWA coefficients and site values shown in Table C below to calculate the design base shear of the planned water tank. To determine site seismic coefficients, we utilized the USGS Seismic Hazard Curves and Uniform Hazard Response Spectra, Version 5.0.9a, using the latitude and longitude shown on Figure 4.

TABLE C  
2016 CBC SEISMIC FACTORS  
PRE-Tank 4A Replacement  
Inverness, California

<u>Factor Name</u>	<u>Coefficient</u>	<u>Site Specific Value</u>
Site Class <sup>1</sup>	S <sub>A,B,C,D,E, or F</sub>	S <sub>B</sub>
Site Coefficient	F <sub>a</sub>	1.00
Site Coefficient	F <sub>v</sub>	1.00
Spectral Acc. (short)	S <sub>s</sub>	2.355 g
Spectral Acc. (1-sec)	S <sub>1</sub>	1.130 g

(1) Soil Profile Type S<sub>B</sub> Description: Rock with a shear wave velocity greater than 2,500 ft/s and less than 5,000 ft/s

#### Site Specific Response Spectrum

As previously discussed, the site is located approximately 1.3 miles (2.0 km) from the San Andreas Fault. Per the 2016 CBC, a site-specific response ground motion analysis shall be performed per Chapter 21 of ASCE 7 (2010) if the project site is located within 6.2 miles (10 km) of an active fault. Therefore, a Site-Specific Response Spectrum was developed per ASCE 7 as outlined below:

1. We developed a Probabilistic Maximum Credible Earthquake (MCE) Spectral Response Spectrum utilizing the USGS Earthquake Ground Motion Parameters program (2008, Ver 5.0.9). The results of the Probabilistic MCE are shown on Figure 5.
2. The MCE<sub>R</sub> was calculated as the lesser of the spectra developed utilizing the 84<sup>th</sup> percentile 2008 NGA attenuation relationships (Campbell & Borzognia, Chiou & Youngs) and the maximum rotated component of the 2% in 50-year probabilistic analysis. Per ASCE-7, the MCE<sub>R</sub> shall not be less than the minimum deterministic spectra. Both of the aforementioned spectra are shown on Figure 5.

3. The design response spectra is taken as  $2/3$  of the site-specific  $MCE_R$  spectrum; however, the design response spectra shall not be less than the 80% general response spectra, per ASCE 7-10, Section 21.3. The site-specific response spectrum is shown on Figure 6.

Based on discussions with the project Structural Engineer, we understand that the governing design code for the tank will be ACI 350-06. Therefore, as requested, we recalculated a design seismic response spectrum based on the procedures outlined in ACI 350-06 Section 4.2. This spectrum is also shown on Figure 7.

#### 5.4 Foundation Design

The results of our site reconnaissance suggest that the tank will be founded almost entirely on weathered granite bedrock. Due to slightly deeper bedrock along the northern and eastern portions of the tank, differential settlement of the tank could occur if uniform bedrock support is not provided. Therefore, we recommend the tank foundations bear on bedrock and recommend a deepened ring footing for this purpose. Drilled, cast-in-place piers could be utilized if bedrock is not encountered at foundation subgrade or to improve overturning resistance. Rock anchors could also be used with a shallow foundation system for uplift resistance. Geotechnical design criteria for the tank foundation are presented in Table D.

TABLE D  
FOUNDATION DESIGN CRITERIA  
PRE-Tank 4A Replacement  
Inverness, California

Shallow Spread Footings

Minimum depth:	18 inches
Allowable bearing capacity: <sup>1,2</sup>	
Residual Soils:	2,000 psf
Bedrock:	4,000 psf
Base friction coefficient:	0.35
Lateral passive resistance: <sup>3</sup>	
Residual Soils/Fill	350 pcf
Bedrock	450 pcf

Drilled Piers

Minimum embedment in weathered bedrock:	3 feet
Skin Friction: <sup>3,4</sup>	
Residual Soils (up to 3 feet):	1,000 psf
Weathered Bedrock:	2,500 psf
Lateral Passive Resistance: <sup>3</sup>	
Residual Soils (up to 3 feet):	350 psf
Weathered Bedrock:	450 psf

Rock Anchors

Minimum diameter:	5 inches
Skin Friction <sup>5</sup> :	2,000 psf

Notes:

- (1) Foundation to bear on competent bedrock.
- (2) Dead plus live loads. Can increase values by 1/3 for total loads including seismic.
- (3) Equivalent fluid pressure. Ignore upper 12 inches unless confined by concrete or asphalt pavements. For piers, apply values over effective width of two pier diameters.
- (4) Uniform pressure distribution. Uplift resistance equals 80% of the skin friction.
- (5) Anchors should be specified with a minimum bonded length and minimum capacity. All rock anchors shall be double corrosion-protected anchors and should be tested to at least 1.33 times the design load per the "Recommendations for Prestressed Rock and Soil Anchors" by the Post-Tensioning Institute, Phoenix, Arizona.

5.5 Pipeline

Excavations for utilities will be in hard, fractured granite bedrock and stiff clayey fill. Trench excavations having a depth of 5 feet or more must be excavated and shored in accordance with CAL/OSHA regulations. Pursuant to OSHA classifications, on-site fill or residual soils Type C, while the bedrock is a Type A.

A minimum of 4 inches of bedding material shall be placed in the bottom of the trench excavation for pipe bedding. The bedding material shall be continuous around the pipe and extend at least 6 inches above the top of pipe. The bedding material shall be compacted to at least 90 percent relative compaction (R.C.). The bedding material and compaction requirements shall meet the criteria presented in the North Marin Water District standard specifications.

#### 5.6 Access Road Design

Site grading for any paved areas that will be located around the tank should be performed as described in Section V.B., including over-excavation of loose soils. Given that the tank site traffic will consist of infrequent light to moderately heavy trucks we recommend the following light pavement sections. The following pavement section is based on a Traffic Index of 3.0, and a minimum subgrade R-Value of 20. The assumed subgrade soil conditions should be confirmed during construction when the subgrade is exposed in the pavement areas.

TABLE E  
RECOMMENDED PAVEMENT  
SECTION  
PRE-Tank 4A  
Replacement Inverness,  
California

<u>T.I.</u>	<u>Subgrade Conditions</u>	<u>Asphalt Concrete (inches)</u>	<u>Class 2 Aggregate Base (inches)</u>
3	Soil (R-value = 20)	2.0	6.0

The upper 6-inches of subgrade in pavement areas must be scarified, moisture conditioned to near the optimum water content, and then compacted to a minimum 95 percent relative compaction. The compacted surface must also be non-yielding when proof-rolled with heavy construction equipment.

The base rock should consist of compacted Class 2 Aggregate Base (Caltrans 2000) compacted to achieve at least 95 percent relative compaction and a non-yielding surface when proof-rolled with heavy construction equipment.

#### 5.7 Site Drainage

Storm water runoff should be carefully controlled to reduce erosion of the slopes below the tank. We understand that the current surface drainage pattern will not be significantly modified. To prevent water ponding near the tank, slope the adjacent paved areas downward at least 0.1 feet for 5 feet (2 percent). Unpaved areas should be sloped downward at least 0.25 feet for 5 feet (5 percent) from the tank. The project Civil Engineer will design site drainage improvements.



## **6.0 SUPPLEMENTAL SERVICES**

We should review the plans and specifications when they near completion to confirm that the intent of our geotechnical recommendations has been incorporated and provide supplemental recommendations, if needed.

During construction, we must observe and test the site grading, compaction of fill material, and foundation excavations to confirm that subsurface conditions are as expected and adjust foundation depths and other elements of the design, if warranted.

## **7.0 LIST OF REFERENCES**

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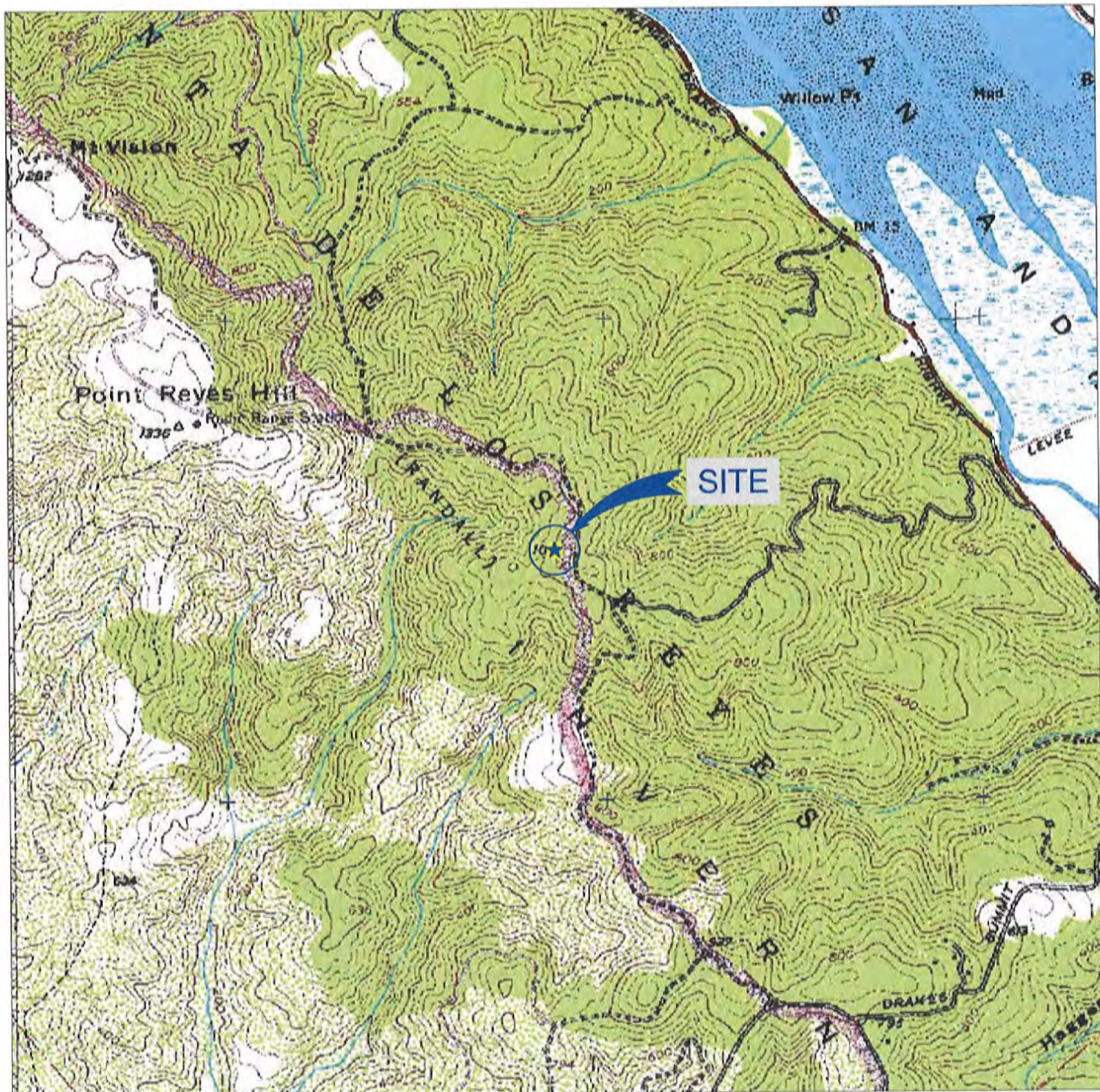
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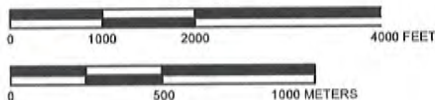




## SITE LOCATION MAP



### SCALE



REFERENCE: DeLorme 3D TopoQuads, 1999



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### SITE LOCATION MAP

North Marin Water District  
PRE Tank 4A Replacement  
Point Reyes, California

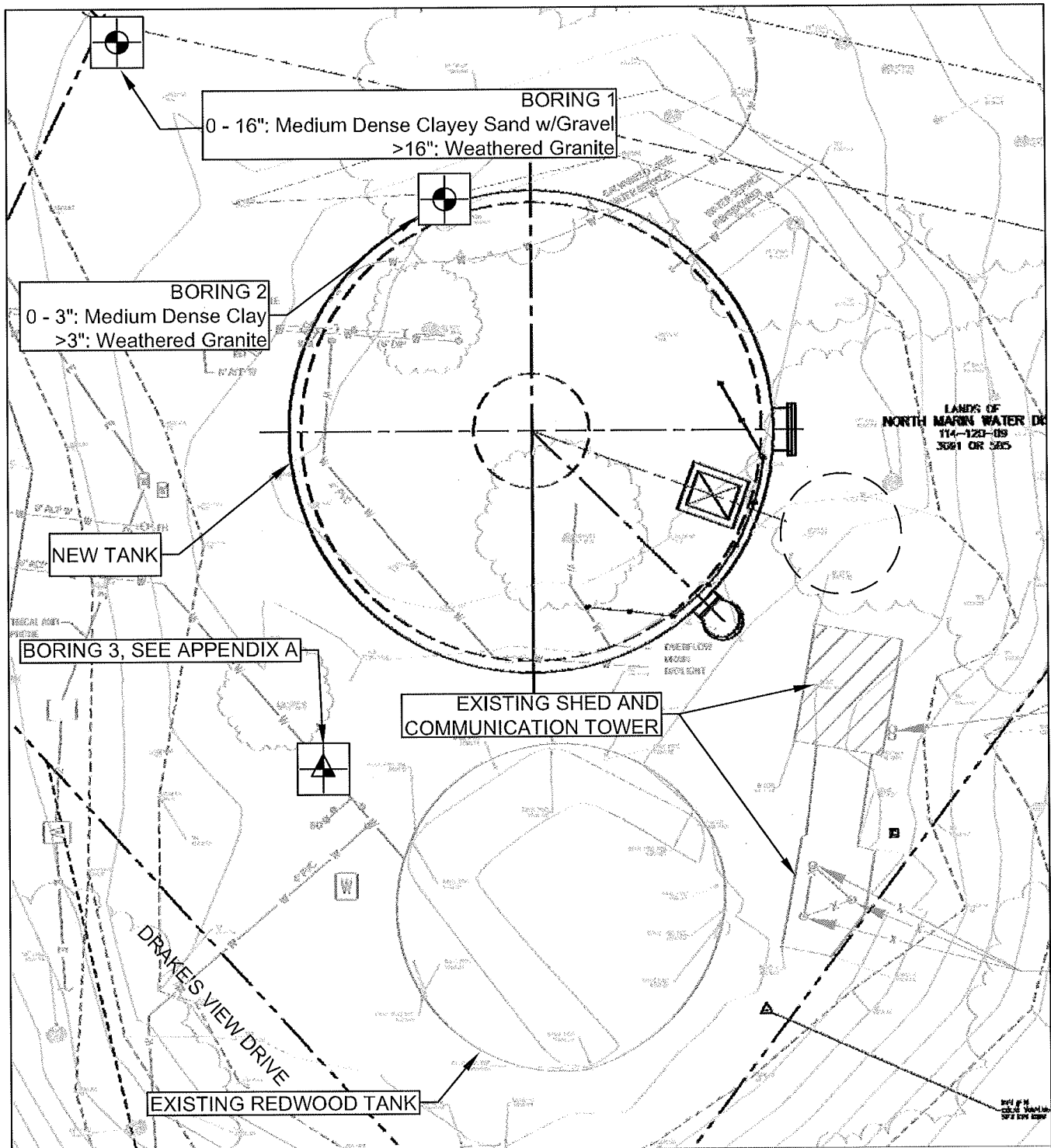
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Date: 4/21/17

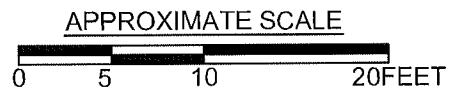
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1  
FIGURE

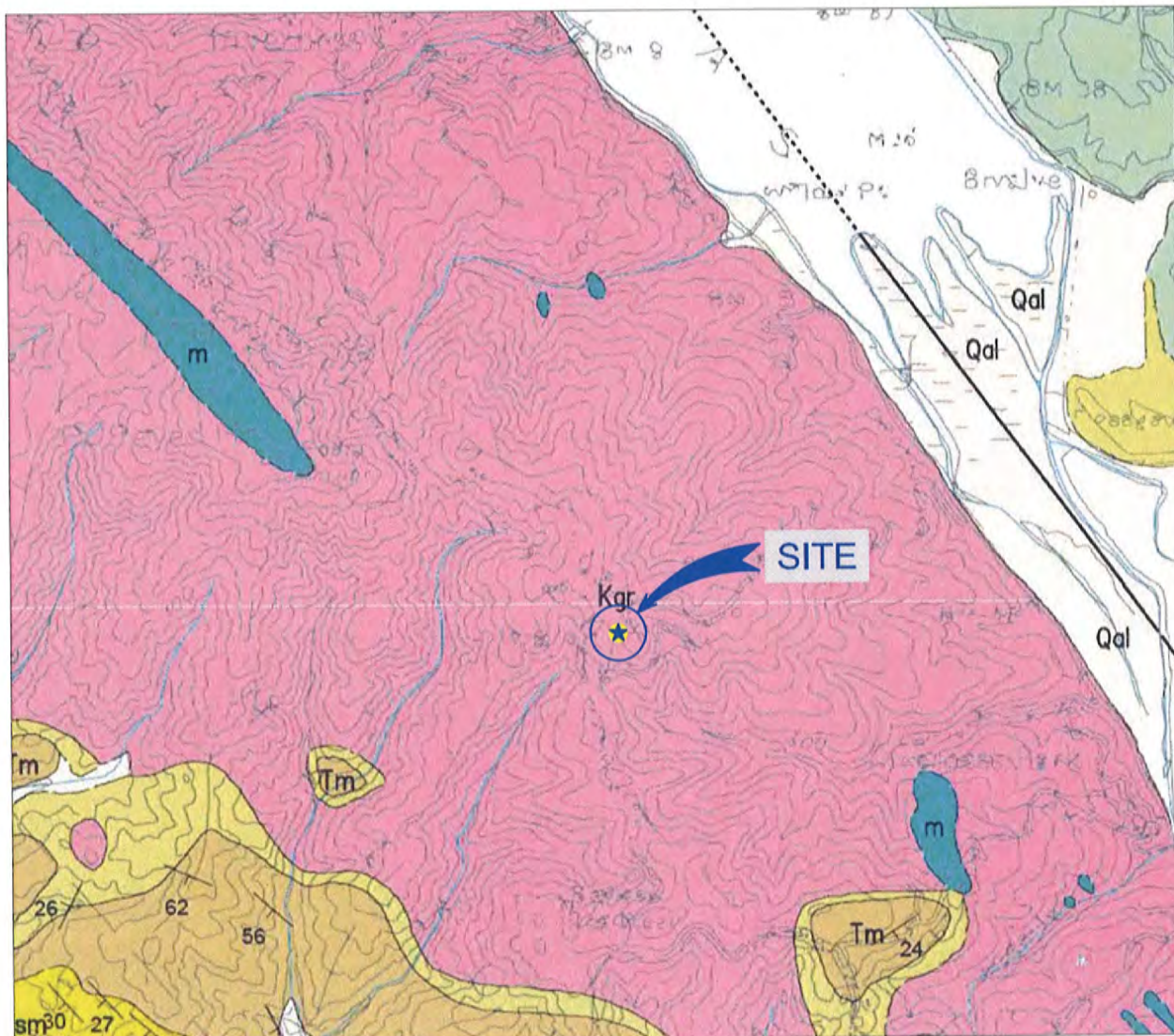




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<div>Miller Pacific</div> <div>ENGINEERING GROUP</div>	504 Redwood Blvd.	SITE PLAN		
	Suite 220	<div>North Marin Water District</div> <div>PRE Tank 4A Replacement</div> <div>Inverness, California</div> <div>Project No. 231.33      Date: 09-02-10</div>		
	Novato, CA 94947			
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F 415 / 382-3450		Drawn <u>MFJ</u>	<div>2</div> <div>FIGURE</div>	
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## LEGEND

Tm - Monterey Formation (Tertiary)

Chiefly porcelanite with interbedded siliceous shale and chert

Kgr - Granite and Granodiorite of Inverness Ridge (Cretaceous)

Granite and granodiorite exposed along Inverness Ridge, locally contains abundant dikes and masses of aplite and alaskite

m - Metamorphic Rocks

Mica schist, impure quartzite, calc-hornfels, and graphitic marble occur as inclusions and small roof pendants in the granite and granodiorite of Inverness Ridge



REFERENCE: Clark, Joseph C., and Brabb, Earl E., 1997, Geology of Point Reyes National Seashore and Vicinity, California: A Digital Database: U.S. Geological Survey Open-File Report 97-456.



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## REGIONAL GEOLOGIC MAP

North Marin Water District  
PRE Tank 4A Replacement  
Point Reyes, California

Project No. 231.33

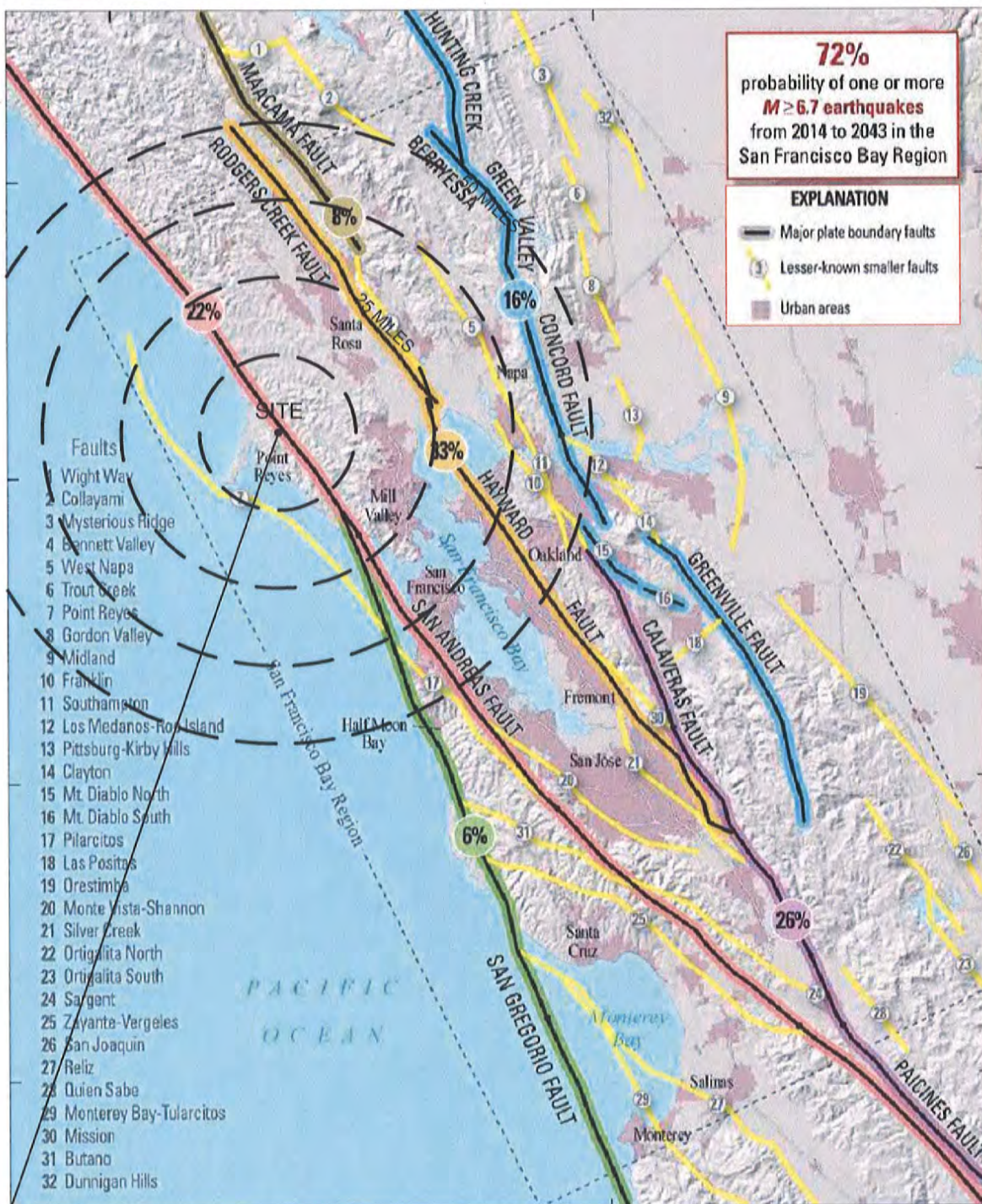
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**3**

FIGURE





**DATA SOURCE:**

1) U.S. Geological Survey, U.S. Department of the Interior, "Earthquake Outlook for the San Francisco Bay Region 2014-2043", Map of Known Active Faults in the San Francisco Bay Region, Fact Sheet 2016-3020, Revised August 2016 (ver. 1.1).



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**ACTIVE FAULT MAP**

North Marin Water District  
PRE Tank 4A Replacement  
Point Reyes, California

Project No. 231.33

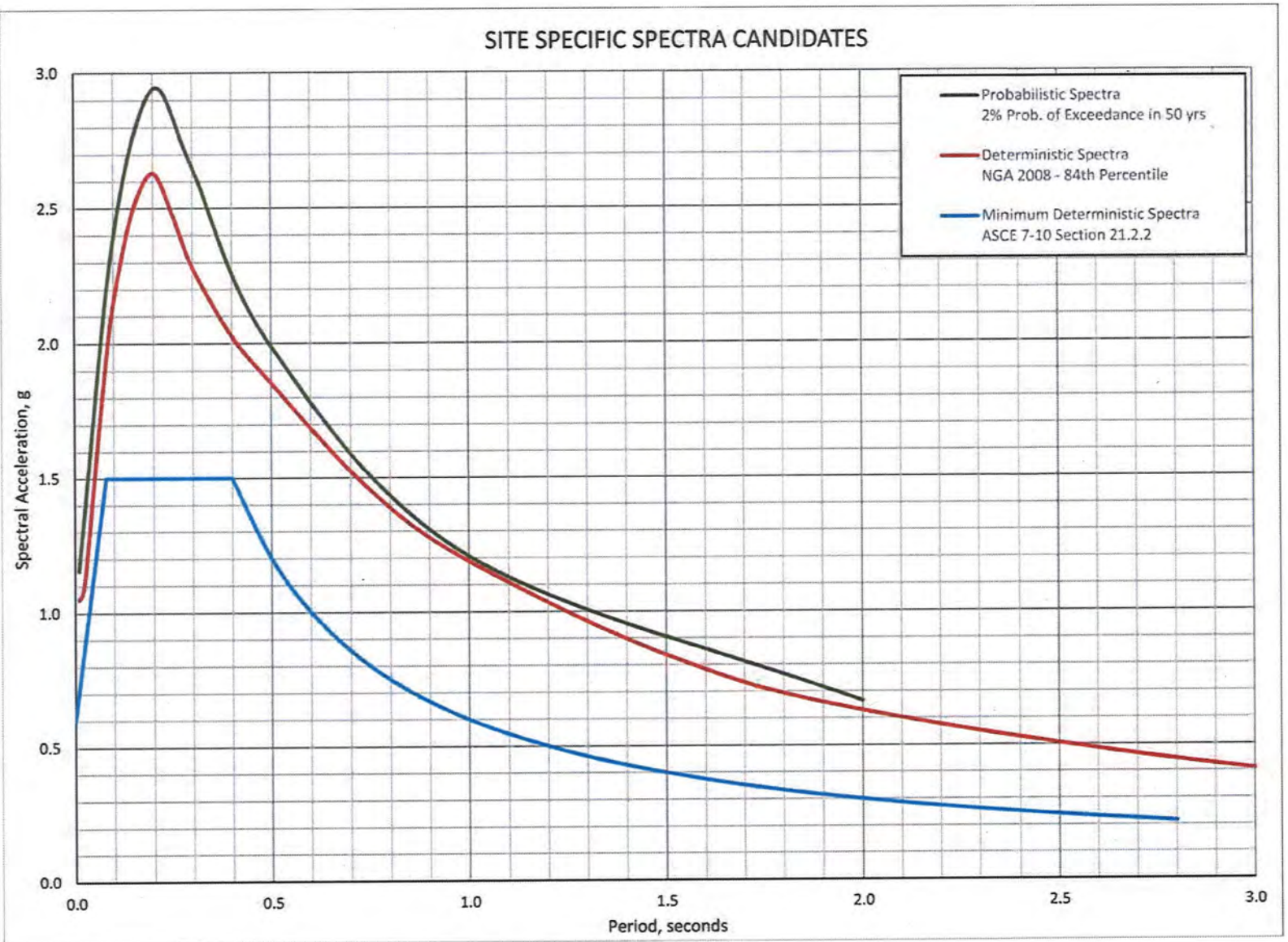
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FIGURE





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**SITE SPECIFIC SPECTRA**

North Marin Water District  
PRE Tank 4A Replacement  
Point Reyes, California

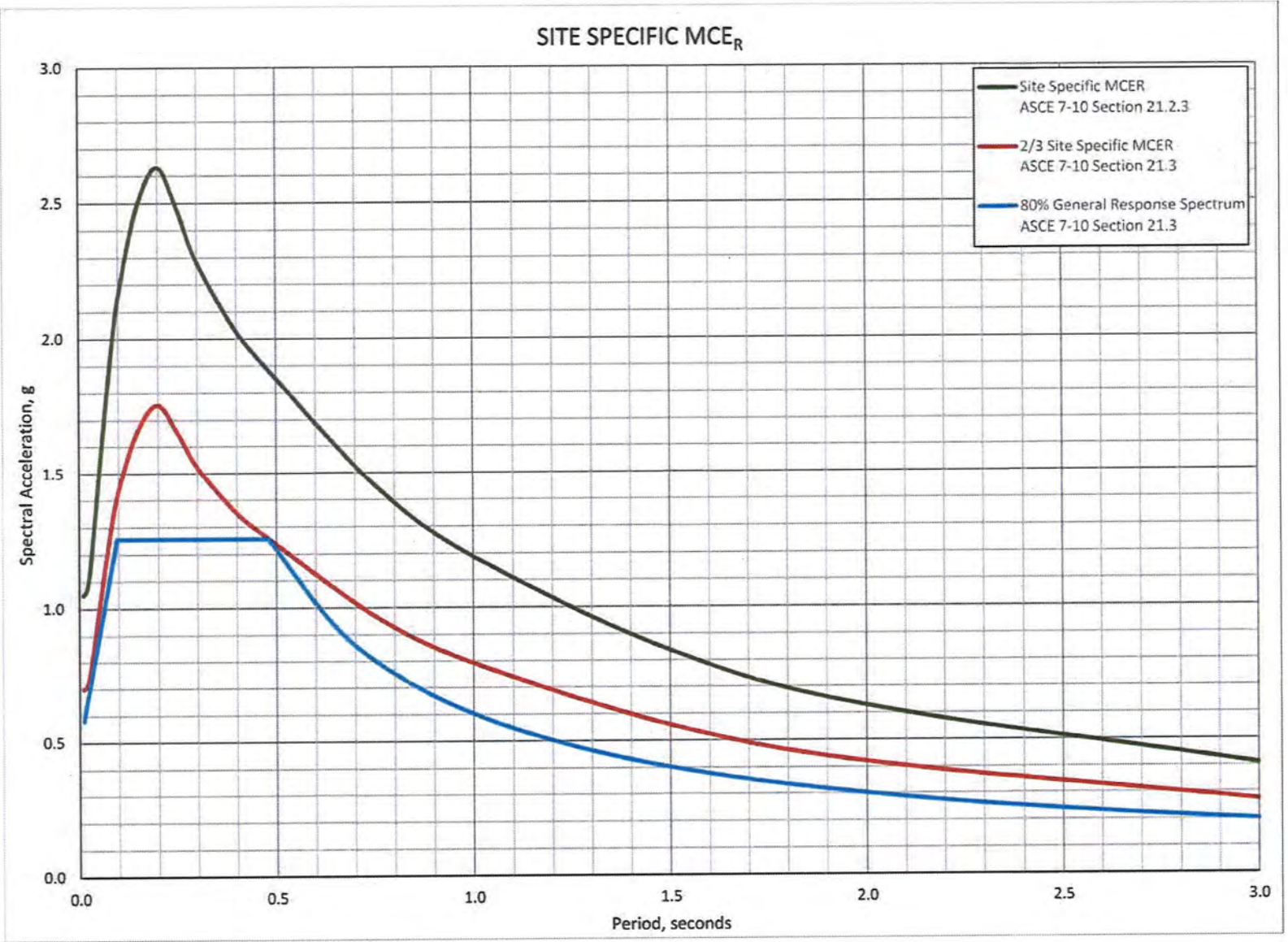
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FIGURE







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**SITE SPECIFIC DESIGN SPECTRA**

North Marin Water District  
PRE Tank 4A Replacement  
Point Reyes, California

Project No. 231.33      Date: 4/21/17

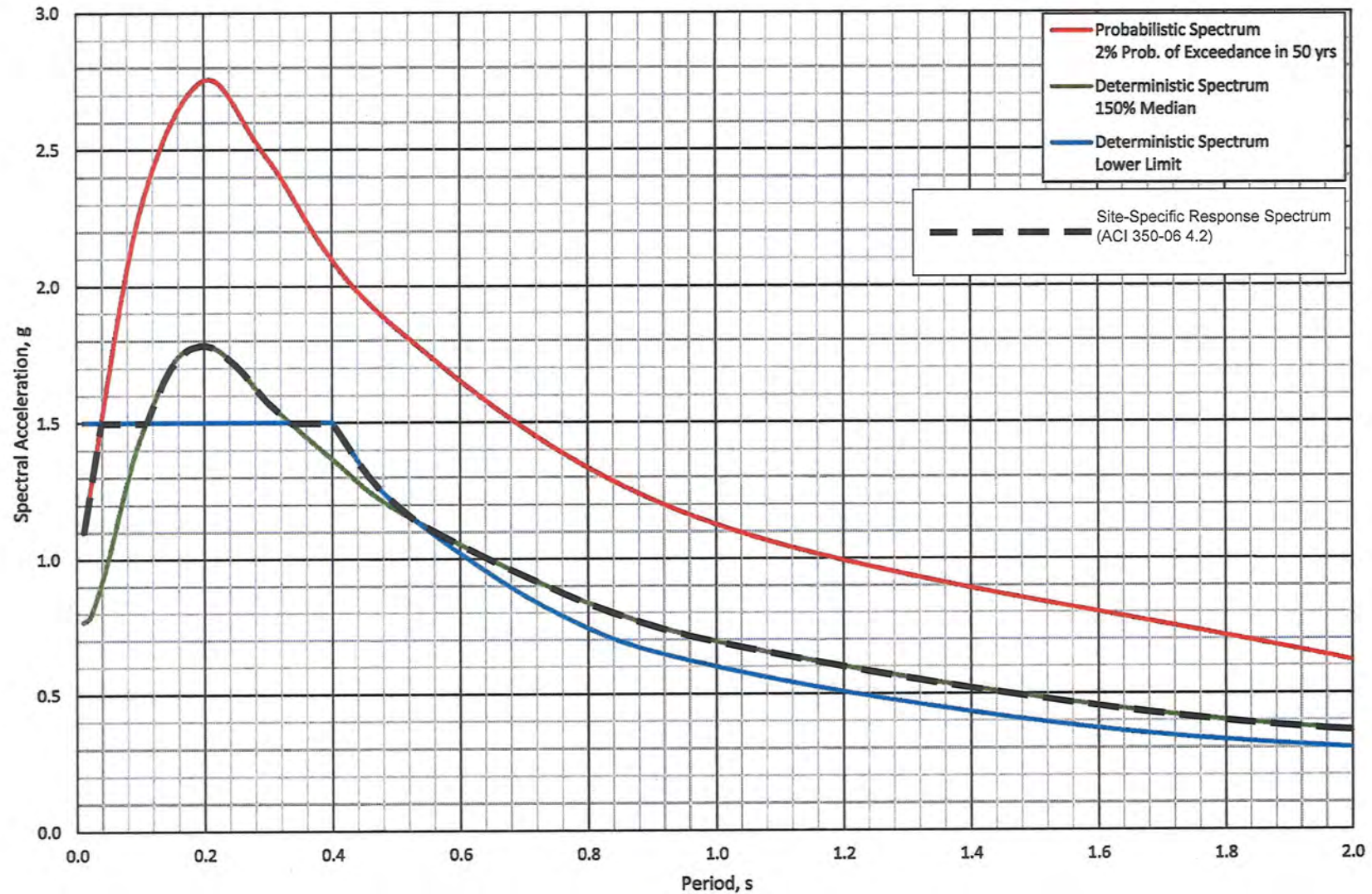
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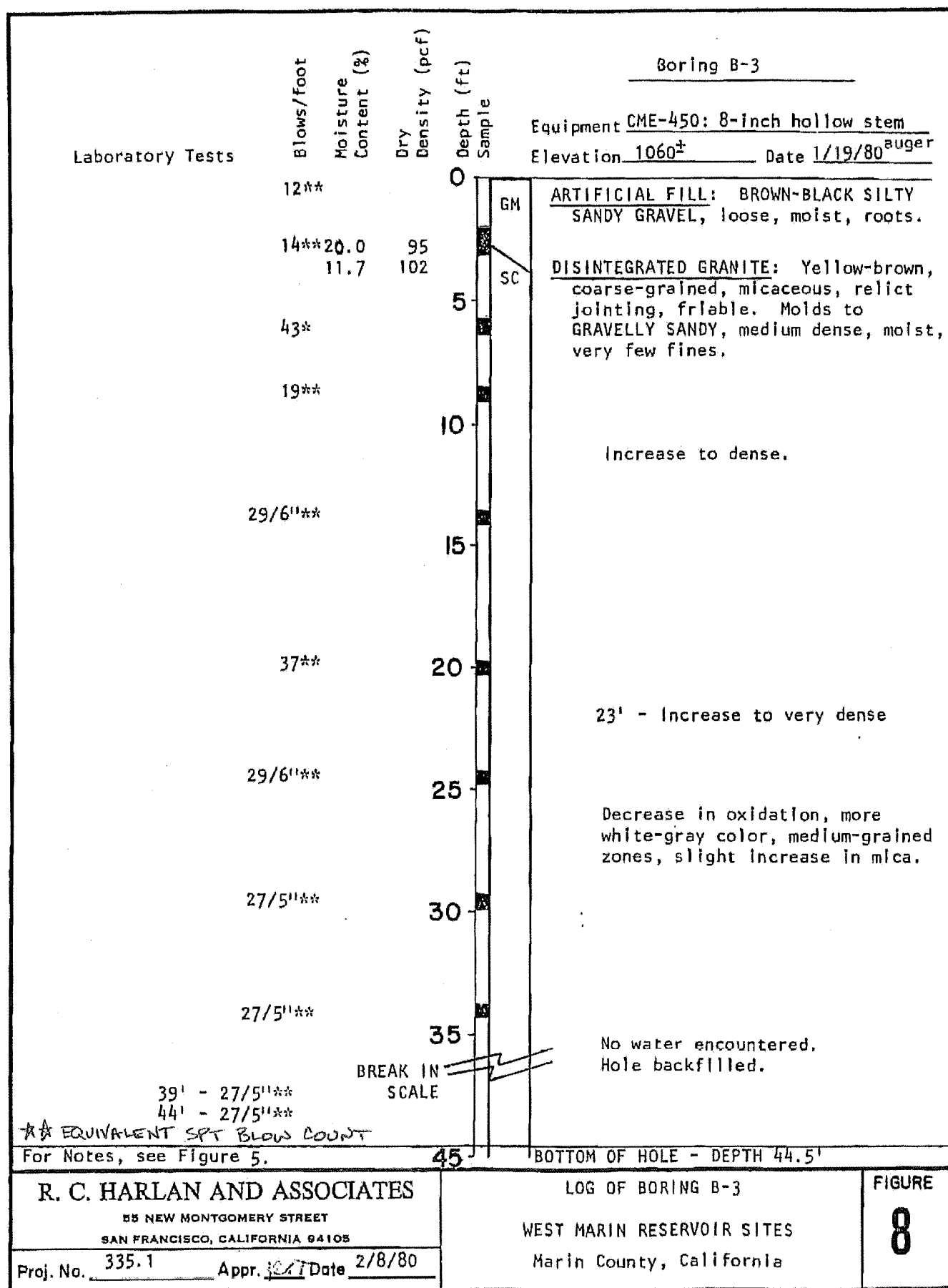
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# **Candidate ACI Site-Specific Response Spectra ACI 4.2**



APPENDIX A

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## **NOTICE OF PUBLIC HEARING AND INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACT**

**PROJECT NAME:** PRE Tank 4A Replacement Project

**PROJECT SPONSOR:** North Marin Water District

**LEAD AGENCY:** North Marin Water District

**PROJECT ADDRESS:** Paradise Ranch Estates, Inverness, California

**SUMMARY:** Notice is hereby given that the North Marin Water District Board of Directors will hold a public hearing to consider the PRE Tank 4A Replacement Project. The Board of Directors will consider the grant of the Mitigated Negative Declaration prior to considering approval of the project.

### **PROJECT LOCATION AND DESCRIPTION:**

The North Marin Water District (NMWD) proposes installing a replacement water tank at an existing tank site in order to ensure adequate water supply for the Paradise Ranch Estates neighborhood on Point Reyes Peninsula, plus provide expanded fireflow storage for properties within that subdivision.

The PRE Tank 4A site is located at the western end of Drakes View Drive on the Paradise Ranch Estates subdivision (APN 114-120-09). The location of the tank site is at 38°4'29"N 122°51' 2.14"W. As shown on the attached figures, the tank site is located on a topographic knoll at the crest of Inverness Ridge. There is an unpaved access road to the tank site that extends west from Drakes View Drive.

The project site is not a site on the "Cortese list" of hazardous sites nor sites enumerated under Section 65902.5 of the State Government Code.

**PUBLIC REVIEW PERIOD:** A Mitigated Negative Declaration of Environmental Impact has been prepared for the project pursuant to the requirements of the California Environmental Quality Act. The public review and comment period for the Mitigated Negative Declaration commences on May 11, 2018. Written comments will be accepted at the North Marin Water District mailing address (North Marin Water District, P.O. Box 146, Novato, CA 94948; attention: Rocky Vogler) until the close of the public review period, June 11, 2018.

The Mitigated Negative Declaration found that there would be significant or potentially significant environmental effects in the areas of aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation and traffic, and mandatory findings of significance.

The Mitigated Negative Declaration includes mitigation measures that will reduce all significant or potentially significant impacts to a less-than-significant level.

Copies of the completed Mitigated Negative Declaration and documents referenced in the Mitigated Negative Declaration are available for review at, and may be obtained from, the North Marin Water District, 999 Rush Creek Place, Novato, CA 94948.

**PUBLIC HEARING:** The North Marin Water District Board of Directors will hold a public hearing to consider the grant of a Mitigated Negative Declaration for the project and approval of the project. The public hearing will be held at the Dance Palace, 503 B Street, Point Reyes Station, CA 94956 on June 26, 2018 at 6:00 p.m. at which time any and all persons interested in this matter may appear and be heard.

If you challenge the decision of this project in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the North Marin Water District at or prior to the public hearing. (Government Code Section 65009(b)(2)).

If you have any questions regarding the proposed project, or want to be notified of the decision, please contact Rocky Vogler, Chief Engineer, at (415) 897-4133.

Rocky Vogler  
Chief Engineer, North Marin Water District

May 2, 2018  
Date

**ATTACHMENT 3**  
**PRE TANK 4A PROJECT**  
**CEQA REVIEW PROCESS TIMELINE**

<b>Description</b>	<b>Date</b>	<b>Current Status / Comments</b>
Administrative Draft Submitted to District	April 11, 2018	Complete
Board Meeting – Request Approval to Initiate CEQA Public Review	May 1, 2018	
30-day Public Review Period Begins	May 11, 2018	
30-day Public Review Period Ends	June 11, 2018	
Board Meeting – Public Hearing/Certify CEQA	June 26, 2018	

Updated: April 19, 2018

15



## MEMORANDUM

To: Board of Directors  
 From: David L. Bentley, Auditor-Controller  
 Subj: Revision of Board Policy 45 - Financial Reserves  
f:\aclword\financial stmts\reserves.docx

April 27, 2018

**RECOMMENDED ACTION: Provide Direction to Staff**

**FINANCIAL IMPACT: None**

District reserves serve two purposes:

1. To comply with legal requirements;
2. To provide for extraordinary expenses such as disaster response, drought, or a major liability claim.

Accounting standards divide reserves into two categories, Legally Restricted Reserves and Board Designated Reserves.

**Legally Restricted Reserves** are funds held to satisfy limitations set by external requirements and restraints of creditors, grantors, contributors or law.

**Board Designated Reserves** are comprised of funds set aside for specific purposes as determined by the District Board of Directors, which include, but are not limited to, funding for capital facility construction, replacement and refurbishment, rate stabilization, and operating reserves. The Board has the authority to redirect the use of Board Designated Reserves as the needs of the District change.

The District's Financial Reserve Policy, adopted in 2009, identified 12 reserves established for various purposes, with any remaining cash going into an "Unrestricted/Undesignated" account. Since that time, 6 additional reserves have been established, bringing the total to 18. Staff recommends eliminating 4 of the 18 identified reserve accounts and updating several of other reserves, as indicated in Attachment A.

**Discussion regarding Reserves Recommended for Elimination**

1. Consolidate the Wohler Pipeline and Collector #6 Financing Reserves back into the Connection Fee Reserve. The Wohler Pipeline and Collector #6 Pipeline Reserves were established in FY03 when the Sonoma County Water Agency (SCWA) issued 4.48% 30-year Revenue Bonds (NMWD's share was \$844,000) and received a 2.8% 20-year SRF Loan (NMWD's Share was \$1,950,000) to finance the Wohler Pipeline and Collector #6 projects respectively. The District elected to participate in the debt issues rather than opt-out by paying cash for its proportionate share of the projects as permitted under the

Restructured Agreement, assuming that the District would earn a higher rate of interest on the cash held in the District's treasury and would thereby be dollars ahead when the SCWA loans were fully repaid. After 15 years we see that the decision to participate in the 2.8% SRF loan for Collector #6 was cost effective, while participation in the 4.48% Revenue Bond was not. Since 70% of the debt was for Collector #6, when combined the decision has proven cost-effective. The 2003 SCWA Revenue Bond was refinanced in 2012, with additional money borrowed to fund additional projects, and then subsequently refinanced again, with even more projects added, so we have effectively lost track of the original debt issue amount. It is therefore appropriate the \$2.02 million remaining in the Wohler and Collector#6 reserves be restored back into the Connection Fee Reserve from which they were originally derived.

2. Eliminate the West Marin Water General Obligation Bond Redemption Reserve, as it pertained to an Olema GO Bond that has been fully repaid.
3. Eliminate the Conservation Incentive Rate Reserve Fund. In 2004 and 2005, a Conservation Incentive Rate (a tier rate applicable to the top 2-3% of high-use residential customers) was enacted in Novato and West Marin respectively. Monies derived from the tier-rate charge were placed into the Conservation Incentive Rate Reserve to be used to fund the District's conservation programs. The Conservation Incentive Rate nets about \$60,000 in revenue annually, yet the District typically expends between \$350,000 and \$400,000 each year on its conservation programs. Over the years we have come to accept that water conservation is an ongoing operational expense legitimately funded from basic water revenues, and without need for special funding. Accounting for the CIR revenue has become simply a bookkeeping exercise with a reserve fund that has an ongoing zero balance.

Following is a table showing the District's total cash reserve balances at March 31, 2018, the proposed reserve balances at March 31, 2018 given staff's recommendations herein, and a future goal for each reserve balance.

	3/31/18 Cash Reserve Balance	3/31/18 Proposed Reserve Balance <sup>1</sup>	Cash Reserve Balance Goal
<b>Legally Restricted Reserves</b>			
1 Connection Fee Reserve	\$96,560	\$2,119,132	Expended
2 Wohler Pipeline Financing Reserve	410,531	Eliminated	0
3 Collector #6 Financing Reserve	1,612,021	Eliminated	0
4 Bank of Marin Projects Reserve <sup>2</sup>	633,594	633,594	Expended
5 Deer Island RWF Replacement Reserve	1,322,394	1,322,394	Expended
6 RW Cap Replacement & Expansion Reserve <sup>2</sup>	1,198,480	1,198,480	Expended
7 STP SRF Loan Reserve <sup>2,4</sup>	900,215	900,215	1,044,000 <sup>3</sup>
8 RW Expansion SRF Loan Reserve <sup>2</sup>	869,672	869,672	870,000 <sup>3</sup>
9 WM Water Revenue Bond Redemption Reserve	30,000	30,000	30,000 <sup>3</sup>
10 WM Water G.O. Bond Redemption Reserve <sup>4</sup>	536	Eliminated	0
11 JPMorgan/Chase AMI Project Loan <sup>3</sup>	4,461,661	4,461,661	Expended
<b>Total Legally Restricted Reserves</b>	<b>\$11,535,664</b>	<b>\$11,535,148</b>	<b>\$1,944,000</b>
<b>Board Designated Reserves</b>			
12 Liability Contingency Reserve	\$98,885	\$98,885	\$2,500,000 <sup>5</sup>
13 Drought Contingency (Rate Stabilization) Reserve	0	0	3,000,000 <sup>6</sup>
14 Maintenance Accrual Reserve	0	0	2,500,000 <sup>7</sup>
15 Conservation Incentive Rate Reserve	42,711	Eliminated	0
16 Self-Insured Workers' Compensation Reserve <sup>2</sup>	161,469	161,469	750,000 <sup>8</sup>
17 Retiree Medical Benefits Reserve	4,061,581	4,061,581	4,100,000 <sup>9</sup>
18 Operating Reserve	385,000	385,000	5,200,000 <sup>10</sup>
<b>Total Board Designated Reserves</b>	<b>\$4,749,646</b>	<b>\$4,706,935</b>	<b>\$18,050,000</b>
19 Unrestricted/Undesignated Cash	\$1,460,333	\$1,503,560	N/A
<b>Total Reserves</b>	<b>\$17,745,643</b>	<b>\$17,745,643</b>	<b>\$19,994,000</b>

In 2009 the District set a goal of building a cash reserve balance equal to 90% of annual operating expense before depreciation. At March 31, 2018, the District's total cash balance was \$17.7 million. However, \$5.1 million of the balance is comprised of borrowed monies that will be expended by December 31, 2018. Absent the \$5.1 million, the District's reserve balance currently totals 81% of annual operating expense.

### **Staff Recommendation:**

Approve the recommended revisions to Board Policy 45 – Financial Reserves.

<sup>1</sup> The Proposed Reserve Balance is the amount, given the existing cash available, that staff recommends should be on-hand in each of the reserve accounts at 3/31/18.

<sup>2</sup> Reserve added since 2009 adoption of the District's Financial Reserve Policy.

<sup>3</sup> One year of debt service.

<sup>4</sup> Held in the Marin County Treasury

<sup>5</sup> \$1.5 million of the \$2.5 million reserve is available to fund Employer Assisted Housing Loans

<sup>6</sup> \$3 Million is 20% of annual commodity revenue.

<sup>7</sup> \$2.5 million is one-year of Novato potable water service area pay-go expenditures.

<sup>8</sup> The District carries a workers' compensation excess policy for claims that exceed \$750,000.

<sup>9</sup> \$4.1 million is the District's OPEB accrued liability per the 2018 actuarial valuation.

<sup>10</sup> \$5.2 million is 4 months of budgeted operating expenditures as recommended by the District's financial advisors.



**NORTH MARIN WATER DISTRICT**

**POLICY: RESERVE POLICY**  
**POLICY NUMBER: 45**

Original Date: March 2, 2009  
Last Revised: March 2, 2009  
Last Reviewed: 06/18/13

**RESERVE FUND TYPES**

NMWD has two types of reserve funds: Legally Restricted Reserves and Board Designated Reserves. Legally Restricted Reserves are funds held to satisfy limitations set by external requirements and restraints of creditors, grantors, contributors or law. Board Designated Reserves are comprised of funds set aside for specific purposes as determined by the District Board of Directors, which include but are not limited to funding for capital facility construction, replacement and refurbishment, rate stabilization, and operating reserves. The Board has the authority to redirect the use of ~~these reserves~~ the Board Designated Reserves as the needs of the District change.

**LEGALLY RESTRICTED RESERVES**

**Facility Reserve Charge (Connection Fee) Reserves:**

1. **Connection Fee Reserve:** Cash available from collection of Connection Fees. The fee is charged to developers based upon the estimate of cost necessary to construct capacity to serve the new development. These funds are restricted by law for expansion of the water or sewer facilities within the service area where the development occurs. Funds are disbursed from the Connection Fee Reserve as expenditures are incurred to increase system capacity to serve new development. The fund balance accrues interest monthly.
2. ~~**Wohler Pipeline Financing Reserve:** In December 2002 the Sonoma County Water Agency sold \$6.8 million (par) of 30-year revenue bonds to finance the Wohler to Forestville Pipeline. NMWD's share of the debt is \$844,050 (\$6,800,000 X 11.2 / 90.4). In January 2003 the District established this reserve account and transferred \$844,050 of Connection Fee money into the fund. The Wohler Pipeline Financing Reserve is used to pay the revenue bond debt component of the monthly SCWA invoice for water delivery. The fund balance accrues interest monthly.~~
3. ~~**Collector #6 Financing Reserve:** The Sonoma County Water Agency received a \$15.8 million State Revolving Fund loan commitment at an interest rate of 2.8% repayable over 20 years for construction of Collector #6. NMWD's share of Collector #6 is \$1,950,000 (\$15,800,000 X 11.2 / 90.4). In January 2003 the District established this reserve account and transferred \$1,950,000 of Connection Fee money into the fund. The Collector #6 Financing Fund is used to pay the revenue bond debt component of the monthly SCWA invoice for water delivery. The fund balance accrues interest monthly.~~

**Bank of Marin Project Fund:** The District received an \$8 million loan from the Bank of Marin in October 2011 to fund the Aqueduct Energy Efficiency Project. The 20-year, 3.54% annual percentage rate loan requires monthly payments of \$46,067 and will be fully amortized on 10/27/2031. In June 2012 the Board authorized reallocating \$1 million of this loan to West Marin Water to repay Novato Water \$223,000 owed for previous loans to fund Long Range Improvement Projects and the remainder to fund major West Marin Water Capital Improvement Projects. The fund balance accrues interest monthly.

**Deer Island Recycled Water Facility (RWF) Replacement Reserve:** The State Revolving Fund construction loan agreement required the District to establish and maintain a Water Recycling Capital Reserve Fund for the expansion, major repair, or replacement of the water recycling facilities, in compliance with its *Policy for Implementing the State Revolving Fund for Construction of Wastewater Treatment Facilities*. The September 2003 Recycled Water Master Plan prepared by Nute Engineering



recommended limiting the reserve to fund replacement of the RWF electrical and mechanical equipment (including transmission pumps) as they wear out. The cost of said equipment was \$1,483,000 which, at Nute's recommended 6% interest rate factor and 25-year life, renders an annual funding requirement \$115,000. The fund balance accrues interest monthly.

**Recycled Water Capital Replacement and Expansion Fund:** The 2011 Interagency Agreements for Recycled Water between NSD, LGVSD & NMWD require that any payments to the Distributor (NMWD) by the End User (Consumers) in excess of actual costs (marginal payments) shall be deposited in this fund. Operation and Maintenance Costs are defined as the actual cost of: labor (including general and administrative overhead plus tools and supplies normally applied), equipment and vehicle charges, consumables (such as chemicals and electrical power), and spare parts and/or replaced components necessary to reliably treat and deliver recycled water to the End Users. Operation and Maintenance Costs do not include costs for major capital replacement or process changes. The fund balance does not accrue interest.

**STP SRF Reserve Fund – Marin County Treasury:** The 2004 Stafford Treatment Plant State Revolving Fund (SRF) loan agreement requires the District to build a Reserve Fund equal to one year of payments (\$1,044,474) in the Marin County Treasury during the first ten years of the 20-year repayment period. Every January 1 and July 1, commencing January 1, 2010, the District deposits with the County 10% of the semi-annual SRF payment. The County credits the fund with interest quarterly, and will use the Reserve to pay the last 2 semi-annual SRF loan payments.

**Recycled Water System (North, South and Central) Expansion SRF Reserve Fund:** The State Water Resource Control Board Agreements for the Clean Water State Revolving Fund Loans made for expansion of the Recycled Water System distribution system require that the District establish a reserve fund equal to one year's debt service (\$869,672). The fund balance does not accrue interest.

**West Marin Water Revenue Bond Redemption Reserve:** Comprised of one year of debt service as required by West Marin revenue bond covenants. These funds are restricted for payment of bond principal, interest and administration fees. The fund balance does not accrue interest.

**West Marin Water Tax Proceeds – County Treasury:** Balance of tax proceeds collected and disbursed by the County of Marin for repayment of the Olema (OL-2) and Point Reyes (PR-3) general obligation bond debt. The County credits interest to these funds quarterly.

**JPMorgan/Chase AMI Project Loan:** In March 2018 the District borrowed \$4.6 million at 2.69% annual percentage rate for 15 years from JPMorgan Chase to fund the AMI Project. Semi-annual payments will fully amortize the loan in 2033.

## **BOARD DESIGNATED RESERVES**

**Liability Contingency Reserve:** Established in 1986 when the District first elected to self-insure its general liability risk. This reserve was funded with \$1 million initially and \$200,000 annually thereafter until it reached a balance of \$2 million. Commencing FY93, \$1 million of the reserve was made available to fund loans to eligible employees under the District's Employer Assisted Housing Program. In FY98 the West Marin Water System was included in the fund and built-up a proportional reserve of \$74,000 over several years. In March 2005, \$652,400 was expended from the fund to purchase a home at 25 Giacomini Road in Point Reyes Station. ~~The home is rented to an employee who provides after-hours presence in the community to respond to emergencies.~~ In 2006, \$8,885 was added from the sale of surplus property in West Marin. In August 2008 \$500,000 was transferred to this reserve from the Self-Insured Workers' Compensation Fund and made available to fund Employer Assisted Housing Program loans. The fund balance does not accrue interest.

**Drought Contingency (Rate Stabilization) Reserve:** In August 2008, the Board directed staff to establish this reserve with \$135,000 from the Self-Insured Workers' Compensation Fund for the Novato



district to draw upon during dry years. ~~A threshold of 3.2 billion gallons of potable consumption was established as a benchmark for 'normal' years.~~ During any fiscal year that water sales volume exceeds ~~3.2BG 2.7BG~~, the incremental revenue generated is deposited into the Drought Contingency Reserve. In those years when sales volume falls below the benchmark, funds are withdrawn from the reserve to maintain the budgeted revenue forecast. The goal is to build a reserve equal to 20% (currently ~~\$2,000,000\$3,000,000~~) of budgeted annual water commodity sales. The fund balance accrues interest monthly.

**Maintenance Accrual Reserve:** Established in FY91 to provide a source of funds for replacement of treatment, storage, transmission and distribution facilities as they wear out. The annual contribution from operating reserves was initially \$200,000. Net polybutylene claim settlement proceeds of \$671,060 were closed into the fund in FY93. In FY94 the annual contribution was reduced to \$100,000. The goal is to build a reserve equal to ~~10% (currently \$6.7 million) of the net book value of Novato's existing plant.~~ \$2.5 million, the Novato Potable Water System's annual Capital Improvement Project "pay-go" budget. The fund balance does not accrue interest.

~~**Conservation Incentive Rate Reserve:** in 2004 and 2005, a Conservation Incentive Tier Rate was enacted in Novato and West Marin respectively. Monies derived from this tier rate charge are set aside in the Conservation Incentive Rate Reserve, and used for conservation programs designated by the Board. The fund balance accrues interest monthly.~~

**Self-Insured Workers' Compensation Reserve:** Commencing July 2011, the District began self-insuring its workers' compensation liability. The savings accrued through self-insuring the liability is reserved in this fund for possible future claims expense. The District carries a workers' compensation excess policy for claims that exceed \$750,000. The goal is to build a reserve equal to \$750,000. The fund balance accrues interest monthly.

**Retiree Medical Benefits (OPEB) Reserve Fund:** NMWD pays the cost of health insurance for retirees between the ages of 55 and 65 and spouse under any group plan offered by CalPERS. The retiree must be at least 55 and have a minimum of 12 years of NMWD service at the date of retirement. NMWD's contribution toward the chosen plan is capped in the same manner as all other NMWD employees in the same class. Coverage terminates for the spouse when the spouse becomes eligible for Medicare, or for both the retiree and spouse when the retiree becomes eligible for Medicare. When the retiree or spouse becomes eligible for Medicare, NMWD pays up to the couple annuitant rate, which is capped at \$3,830 per year (\$319/month). In August 2003, NMWD transferred \$2.55 million (\$2.3 million for current retirees plus \$250,000 for future retirees) from unrestricted cash into a reserve to fund this obligation. In 2010 the Board directed staff to add \$1,500 per employee annually as a payroll overhead to accrue and accelerate amortization of this liability. The accrual is maintained as a Long-Term Liability entitled Retiree Health Benefits Payable. In 2018 an Actuarial Analysis calculated NMWD's total Other Post Employment Benefit (OPEB) accrued liability at \$4.1 million. The Retiree Medical Benefits cash fund earns interest monthly.

**Operating Reserve:** This reserve, comprised of a minimum of four months of budgeted operating expenditures as recommended by the District's financial advisors, serves to ensure adequate working capital for operating, capital, and unanticipated cash flow needs that arise during the year. The fund balance does not accrue interest.


Revisions: 04/0905/18,

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## MEMORANDUM

To: Board of Directors

April 27, 2018

From: Julie Blue, Auditor-Controller Subj: AMI Opt-Out Policy  
t:\aclword\ami\opt-out policy 2.docx**RECOMMENDED ACTION: Approve****FINANCIAL IMPACT: No Financial Impact**

The AMI meter installation project is underway with 3% of meters installed as of April 13, 2018. There are currently 25 customers that have requested to opt-out of installing AMI meters. Based on the rate of 2% of PG&E opt-out Smart-Meter customers in the Novato area there could be up to 400 customers electing to opt-out of the program. These customers have expressed concerns primarily revolved around health issues pertaining to radio frequency (RF) emissions from the antenna on the meter. Further information regarding customer concerns and RF data impacts was discussed at the March 20 board meeting.

A survey was conducted by staff to establish how other agencies are addressing similar customer concerns. Although the agencies are in different stages of implementation the majority did not allow customers to opt-out of AMI meter installation. The seven agencies that responded were Carpinteria Valley Water District, East Valley Water District, Valley of the Moon Water District, and the Cities of Buena Park, Cotati, Roseville, and Santa Rosa. The results of the survey indicated that one had an established opt-out policy, one was considering a policy, and five did not allow opting out.

As this project continues through the implementation phase various options have been considered. Staff recommends the District establish an opt-out policy to accommodate those customers that have concerns with digital AMI meters. This policy will provide guidelines for meter-reading, billing, and move-out procedures for opt-out customers.

Those customers that wish to opt-out of the installation of an AMI meter must submit an application. These customers will continue to have their meters manually read by NMWD's Field Service Representatives. The cost of reading the meters, and the subsequent administrative duties, has been calculated at \$10<sup>1</sup> per customer for each billing cycle and will be added to the opt-out customer's bill.

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<sup>1</sup> Per customer bi-monthly charge of \$10 = Meter Reading and System Data Entry, \$7.50 (\$60/hour for 7 minutes/meter + 0.50 vehicle time) + Administration, \$2.50 (\$76/hr for 2 minutes/meter). Note: Hourly rates represent an average of the job classification and include all employer paid benefits.



Staff recommends that once a meter is installed there be no opt-out option. The customer is notified approximately 10 days prior to the meter installation. This allows for sufficient time for the customer to call in with questions or opt-out requests. Additionally, when an opt-out customer calls to discontinue service (move out), a Field Service Rep will be dispatched to install an AMI meter. As tenant occupancy turnover occurs the number of opt-out customers will decrease.

This memo and policy have been reviewed by legal counsel and their input has been incorporated.

**Staff Recommendation:**

Staff recommends the Board approve the AMI opt-out policy detailed below.

**DRAFT**

**NORTH MARIN WATER DISTRICT**

**POLICY: AMI Opt-Out Policy**  
**POLICY NUMBER: 48**

Original Date: April 27, 2018  
Last Reviewed: 04/27/18  
Last Revised:

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A residential customer may opt-out of the installation of an Advanced Metering Information (AMI) meter. The request must be made in writing by the NMWD customer of record (family members, neighbors, or landlords cannot act on behalf of another unless there is a power of attorney duly executed by the customer then in effect, in which case the attorney in fact can act for the customer) prior to the installation. To opt-out, the customer must complete and submit an opt-out application to NMWD.

There will be a bi-monthly meter reading fee of \$10 per opt-out customer. This fee is assessed based on the time it will take to read the meter and the administrative time to enter and process the data.

When water service is discontinued by a customer who has opted-out, the District will install an AMI meter on the account. If a customer who has opted-out subsequently requests the installation of an AMI meter, an AMI meter will be installed at no charge and that customer's participation in the opt-out program will be terminated. Once an AMI meter has been installed, there is no option to opt-out.

04/27

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## MEMORANDUM

To: Board of Directors  
From: Drew McIntyre, General Manager  
Subject: Exception to CalPERS 180-Day Wait Period Requirement for Retiring Employee  
t:\gm\agreements\consultants\bod bentley consulting service memo 2018\_04-25\_rvv.docx

April 27, 2018

**RECOMMENDED ACTION:** Approve Exception to CalPERS 180-Day Wait Period Requirement for Retiring Auditor-Controller

**FINANCIAL IMPACT:** Not-to-Exceed \$21,000

Retiring Auditor-Controller David Bentley possesses critically needed skills pertaining to performing a Cost of Service Study to ensure continued compliance of the District's water rates with California Constitution Article XIII D, Section 6 (commonly referred to as Proposition 218"). Historically, David has been the primary developer of the District's water rate setting practices. During this fiscal year the District budgeted funds to have an outside consultant perform a peer review of an updated Cost of Service Study that is in the process of being performed by David. Time commitments have prevented David from completing the Cost of Service Study this Fiscal Year and we are now budgeting the Peer Review task for FY19. Time is of the essence and it is in the District's favor to utilize David's expertise to complete the Draft Cost of Service Study.

An additional task includes support work related to negotiation of a new MOU with the Employee's Association. The current MOU expires September 30, 2018. Only David has the background necessary to efficiently and effectively perform the above mentioned support work.

CalPERS has multiple restrictions pertaining to employment of a retired annuitant. One such restriction is that there be a 180-day separation in service" after retirement before employment with a CalPERS employer. There is an exception, which reads:

Before you begin work, your employer must certify the nature of the employment and that the appointment is necessary to fill a critically needed position sooner than 180 days. The appointment must be approved by the employer's governing body, in a public meeting, and must be approved as an action item, rather than on a consent calendar.

**RECOMMENDATION:**

- 1) Approve the attached resolution for exception to the 180-day wait period for hiring a retiree; and,
- 2) Authorize the General Manager to utilize the expertise of David Bentley on an as-needed basis, not to exceed 250 hours, at an hourly rate of \$84, which is David's existing monthly base salary equivalent hourly rate.

**RESOLUTION NO. 18-XX**

**A RESOLUTION OF THE NORTH MARIN WATER DISTRICT  
FOR EXCEPTION TO THE 180-DAY WAIT PERIOD FOR HIRING RETIREE  
(Government Code Sections 7522.56 & 21224)**

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**WHEREAS**, in compliance with Government Code Section 7522.56, the Board must provide CalPERS with this certification resolution when hiring a retiree before 180 days has passed since his retirement date; and

**WHEREAS**, David Bentley (*CalPERS ID #6347122559*) will be retired from the North Marin Water District in the position of Auditor-Controller effective May 2, 2018; and

**WHEREAS**, Government Code Section 7522.56 requires that post-retirement employment commence no earlier than 180 days after the retirement date, which is October 29, 2018, without this certification resolution; and

**WHEREAS**, Government Code Section 7522.56 provides that this exception to the 180-day wait period shall not apply if the retiree accepts any retirement-related incentive; and

**WHEREAS**, the North Marin Water District, and David Bentley certify that David Bentley has not and will not receive a Golden Handshake or any other retirement-related incentive; and

**WHEREAS**, the Board hereby appoints David Bentley as an extra help retired annuitant to perform the duties of Special Advisor to the General Manager for the North Marin Water District under Government Code Section 21224 effective June 15, 2018; and

**WHEREAS**, the entire employment agreement/contract/appointment document between David Bentley and the North Marin Water District has been reviewed by this body and is attached herein; and

**WHEREAS**, no matters, issues, terms, or conditions related to this employment and appointment have been or will be placed on a consent calendar; and

**WHEREAS**, the employment shall be limited to a maximum of 960 hours per fiscal year; and

**WHEREAS**, the compensation paid to retirees cannot be less than the minimum nor exceed the maximum monthly base salary paid to other employees performing comparable duties, divided by 173.333 to equal the hourly rate; and

**WHEREAS**, the maximum base salary for this position is \$14,594 per month, and the hourly equivalent is \$84 per hour, and the minimum base salary for this position is \$12,007 per month, and the hourly equivalent is \$69 per hour; and

**WHEREAS**, the hourly rate paid to David Bentley will be \$84 per hour; and

**WHEREAS**, David Bentley has not and will not receive any other benefit, incentive, compensation in lieu of benefits, or other form of compensation in addition to this hourly pay rate; and

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Directors of the North Marin Water District hereby certifies the nature of the employment of David Bentley as described herein and detailed in the attached employment agreement/contract/appointment document and that

this appointment is necessary to fill the critically needed position of Special Advisor to the General Manager for the North Marin Water District by June 15, 2018 because of the District's pending Cost of Service Study.

**PASSED AND ADOPTED** at a regular meeting of the Board of Directors of the North Marin Water District, California, held on May 1, 2018, by the following vote:

\* \* \* \* \*

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 1<sup>st</sup> day of May, 2018, by the following vote:

AYES:  
NOES:  
ABSENT:  
ABSTAINED:

---

Theresa Kehoe, District Secretary  
North Marin Water District

(SEAL)



**NORTH MARIN  
WATER DISTRICT**

999 Rush Creek Place  
P.O. Box 146  
Novato, CA 94948-0146

**PHONE**

415.897.4133

**EMAIL**

info@nmwd.com

**WEB**

www.nmwd.com

April 24, 2018

David Bentley  
1159 Santolina  
Novato, CA 94945

Dear David:

I am very pleased to receive your verbal acceptance of employment with North Marin Water District as the Special Advisor to the General Manager. Terms and conditions of the job offer follow:

- Salary \$84.00 per hour
- Benefits No benefits
- Work Hours As needed up to 250 hours
- Date of Hire June 15, 2018

Please review this letter and acknowledge with your signature below confirming the terms and conditions. Please return a signed copy of this letter by April 27, 2018 for inclusion in your personnel file.

Sincerely,

Drew McIntyre  
General Manager

DM: tk

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**ACKNOWLEDGEMENT**

I acknowledge and affirm the above noted hiring arrangements and conditions.

David L. Bentley

4/24/18  
Date

DIRECTORS: JACK BAKER • RICK FRAITES • MICHAEL JOLY • STEPHEN PETTERLE • JOHN SCHOONOVER

OFFICERS: DREW MCINTYRE, General Manager • KATIE YOUNG, District Secretary • DAVID L. BENTLEY, Auditor-Controller • ROCKY VOGLER, Chief Engineer

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## MEMORANDUM

To: Board of Directors

From: Drew McIntyre, General Manager 

Subject: Draft 2018 Strategic Plan – Presentation by Rauch Communications  
t:\gm\strategic plan\draft strategic plan memo 4\_27\_18.doc

April 27, 2018

**Recommended Action:** Provide comments by May 15

**Financial Impact:** None at this time

Background

The District has a long history with using Rauch Communication Consultants (RCC), a full service strategic planning and public outreach firm located in Campbell (near San Jose). In late 1999, Robert Rauch with RCC was solicited to facilitate long-range planning workshops to develop a strategic long-range planning document looking out over the next five to ten years to determine what the overall directions of the District should be. After the initial 2000 facilitation effort, RCC was retained by the District to facilitate long-range planning updates in 2004, 2006 and 2008. Since 2008, internal long-range planning workshops have been scheduled every two years under the lead of the prior General Manager. The last long-range planning workshop was held in February 2016.

2018 Strategic Plan Development

A contract with Martin Rauch of RCC to prepare the 2018 Strategic Plan was approved by the Board at the November 21<sup>st</sup> meeting. Mr. Rauch assisted with the District's 2004, 2006 and 2008 plan and is recognized as one of the leading experts in strategic planning for Special Districts. The work plan included the following activities:

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

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<sup>1</sup> Revised from April 3, 2018



The Strategic Planning Workshops were completed in February and staff subsequently worked with Mr. Rauch on preparation of the draft 2018 Strategic Plan based on input received from the two workshops. The draft 2018 Strategic Plan (attached) is now ready for presentation to the Board. Please provide any comments you may have to me by May 15. We will then prepare a final version for review and approval at the June 5 meeting.

RECOMMENDATION:

Review the information and provide any comments by May 15.





**NORTH MARIN  
WATER DISTRICT**

# **DRAFT North Marin County Water District 2018 Strategic Plan**

NMWD Job No. 1.4069.00

Prepared by: Rauch Communication Consultants, Inc.



## **BOARD OF DIRECTORS**

**Rick Fraites (President)**  
**Jack Baker (Vice-President)**  
**James Grossi**  
**Michael Joly**  
**Stephen Petterle**

## **DISTRICT MANAGEMENT STAFF**

**Drew McIntyre - General Manager**  
**David L. Bentley and Julie Blue**  
Administration / Finance  
**Rocky Vogler, Engineering**  
**Tony Arendell, Construction / Maintenance**  
**Robert Clark, Operations / Maintenance**



## **PARTICIPANTS:**

### **BOARD OF DIRECTORS**

Rick Fraites (President)

Jack Baker (Vice-President)

James Grossi

Michael Joly

Stephen Petterle

### **DISTRICT MANAGEMENT STAFF**

Drew McIntyre, General Manager

David L. Bentley and Julie Blue, Administration / Finance

Rocky Vogler, Engineering

Tony Arendell, Construction/Maintenance

Robert Clark, Operations / Maintenance

### **CONSULTANT**

Martin Rauch, Managing Consultant

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## 1. Introduction

- Purpose of the Plan
- Strategic Plan Process
- Strategic Framework

## 2. Plan Development

- Rating the District Today
- Challenges and Opportunities
- Priority Issues

## 3. The Strategic Plan

- Mission
- Vision for the Future
- Values
- Strategic Goals and Objectives

## 4. Staff Implementation Plan

## 5. Monitoring, Implementation and Oversight

## 6. APPENDIX

## 1. INTRODUCTION: Purpose of the Plan

**Planning is strategic when it helps move an organization forward from its current situation to its desired future.**

This Strategic Plan is the District's highest-level planning document, and represents the Board's direction for the future, and the staff's work plan for implementing it.

It was developed through a step-by-step process that included recognizing the District's operating environment, the strengths and weaknesses of the organization, and anticipated opportunities and challenges.

It identifies the agency's mission, vision, and values, while providing a set of goals and objectives that becomes a framework for all decision-making.

The Plan is also a practical working tool that provides clear direction to the staff about the Board's goals and objectives, and includes a work plan developed by the staff to meet those goals and objectives. As such, it is referred to regularly as a guide to District actions during the period covered.

To keep it fresh, it must be updated every two years and rolled forward so that there is always a five-year guide to the future.

## 1. INTRODUCTION: Strategic Planning Process

The strategic planning process was carried out in the series of steps outlined below.

**Background Research.** The consultant began by holding discussions with the General Manager.

**Confidential Interviews.** Next, the consultant carried out a series of confidential interviews. The goal was for the interviewees to candidly express their interests and perspectives on the District and its priorities.

The interviewees included the entire Board of Directors as well as the senior management team, consisting of the General Manager, Auditor-Controller, Chief Engineer, Construction/Maintenance Superintendent, and Operations/Maintenance Superintendent.

**Two Board Planning Workshops.** The Board of Directors and senior management staff participated in two strategic planning workshops (February 13<sup>th</sup> and 27<sup>th</sup>). At these workshops, the group reviewed the results of the interviews, undertook a number of exercises to examine the current state of the District, and identified critical issues and opportunities expected to confront the District in the future. Ultimately a plan was developed from this work that included an updated mission statement, vision, values, and strategic goals and objectives.

**Staff Implementation Plan.** Once the policy level portions of the plan were completed in the Board workshops, the management team worked with the consultant to develop a staff implementation plan designed to meet the mission of the District and strategic goals and objectives.



# 1. INTRODUCTION: Strategic Framework

The Strategic Plan is built from a series of logical components, described below and shown in the graphic.

**Mission.** The mission statement explains why the organization exists. It articulates the organization's essential work in a brief sentence or two.

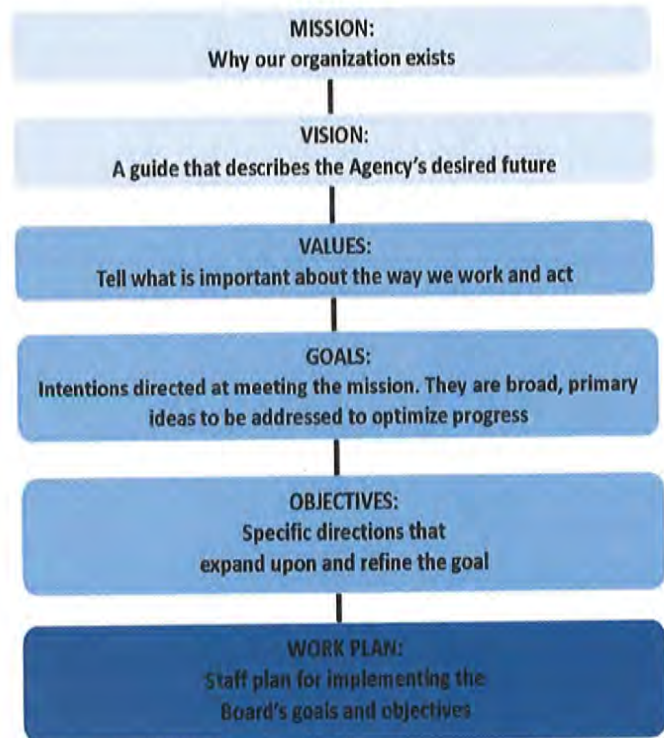
**Vision.** The vision articulates what the agency will become at a given time in the future. It is the strategic target which, when achieved, is the fulfillment of the agency's mission. As such, it is at the heart of the strategic planning process.

**Values** provide guidance when an agency is faced with challenging decisions that require tradeoffs, options, and alternatives. Values are set by the Board, govern attitudes and behaviors, and generally remain constant over time.

**Goals** describe broad, primary areas of management, operations, and planning that need to be addressed in accomplishing the mission. Goals are not connected to timelines.

**Objectives** are more specific directions that expand upon the goals. They are set by the Board. There may be multiple objectives for each goal. Objectives are SMART: Specific, Measurable, Attainable, Related to Goals, Time Certain.

**Strategic Work Plan** contains measurable, precise timetables and actions to accomplish the mission, goals, and objectives. They are assigned to individuals or departments. There may be multiple tasks for each objective that can be crossed off as finished.



## 2: PLAN DEVELOPMENT: Rating the District Today

Before considering where the District wants to go in the future, it is important to understand where it is today. Each participant selected aspects of the District to rate, graded them on a scale of 1 to 10 (10 being excellent), and included words to explain the reason for the rating. The results were averaged and summarized.

### BELOW ARE SUMMARIES OF THE CATEGORIES AND RATINGS FROM THE PARTICIPANTS

Avg. 9 9	<b>Water Quality</b> is excellent and is well supported by the District lab.
Avg. 8 7, 9	<b>Customer Service and Satisfaction.</b> The district has a dedicated Board and Staff who are responsive to customers. While service is limited to the district side of the meter, the District does assist in identifying problems on the customer side of the meter.
Avg. 7.5 5, 7, 8, 10	<b>Finance.</b> The district has excellent financial reporting and planning procedures. The rates – near the median – are reasonable, which may be a proxy for overall efficiency. Future financial sustainability with respect to employee pensions and retirement is an ongoing concern.
Avg. 6 6	<b>Improve Staff Benefits and Conditions.</b> The district has excellent staff, but has limited time to address the ever-increasing number of responsibilities. The district needs to focus more on succession for an aging workforce and employee retention. Getting feedback from staff, such as from exit interviews, could provide insight into how to maintain employee satisfaction. Worker safety must remain a priority.
Avg. 5 5	<b>Water Supply Resiliency.</b> Long-term resiliency is potentially an existential threat to the District's core mission. Cutbacks in availability of adequate water could come about due to climate change, extreme drought, dependence on SCWA, a large earthquake, etc. The question is: How can the District increase long-term supply and reliability?
Avg. 4.8 3, 4, 5, 5, 6, 6	<b>Asset Management: Infrastructure, Operations and Technology.</b> Staff needs better technological tools to increase productivity and to cost-effectively respond to challenges of an aging system, limited staff, increased regulations, etc. It can also help reduce travel time and help retain institutional knowledge. Advance Metering Infrastructure (AMI) is a good example of needed technology. The District will require a more robust advanced asset management system to cost effectively assess and determine what infrastructure to repair, replace, upgrade and when.
Avg. 4 3, 3, 6	<b>Stakeholder Understanding &amp; Customer Outreach.</b> There is a need to increase the frequency of communication with customers and the channels (e.g. social media) used to share our positive story and obtain greater input from customers. AMI is an opportunity for outreach. Some people may only see our bills – how do they look? Clear answers from the lab help customer service.
Avg. None	<b>Emergency Response.</b> Does the District have adequate plans in place to deal with high potential for fire, earthquakes, and other emergencies?
Avg. None	<b>Focus on Core Skills.</b> Do we need to be in sewer business? Should a sanitary district take over sanitary services to free NMWD staff to focus on our core water supply skills?



## 2.2 PLAN DEVELOPMENT: Challenges & Opportunities Facing the District

Below is a list of key issues and challenges identified in the process which the District is expected to face. Each participant was asked to predict what challenges and opportunities the District would confront in the future. That list follows:

### **WATER SUPPLY RESILIENCE**

#### **Opportunities**

- Evaluate all supplies, potable reuse, interconnections with MMWD (Soulajule)
- Recycled water is drought proof and expanding to car washes. Equals 20% of peak demand.

#### **Challenges**

- Need more redundancy of supply – 80% dependent on SCWA.
- Climate change effects on supply and infrastructure stability.
- Drought impacts – need to continue to expand water supply resiliency. We are at the end of the SCWA aqueduct pipeline and could be restricted during a critical shortage.

### **EMERGENCY RESILIENCE**

#### **Challenges**

- Prepare for aging district, changing politics, seismic and drought impacts, and competition for limited water

### **CUSTOMER SERVICE**

#### **Opportunities**

- AMI can help customers.
- Full service to tap? (this has liabilities)
- Some customers concerned about AMI meter radio radiation – allow opt-outs and install when a new customer moves in.

### **ASSET MANAGEMENT – TECHNOLOGY**

#### **Opportunities**

- Look into Staff productivity tools (e.g. AMI).
- Make real time information available in the field (forms, mapping).

#### **Challenges**

- Need innovative technology to improve efficiency.
- Need up-to-date technology to support mission.

### **ASSET MANAGEMENT – INFRASTRUCTURE**

#### **Challenges**

- Create asset management plan, identify priorities, cost-effectively replace aging infrastructure.

- Repair and replacement costs are becoming more significant.

#### **Opportunities**

- Continue to implement on-call contractor program to support staff.

### **WATER RATES AND CHARGES**

#### **Opportunities**

- Compare district rates with peer agencies.
- Study Rates and charges; they are proxy for the effectiveness & efficiency in fulfilling our mission.

### **STAFF**

#### **Opportunities**

- Better analyze exit interviews to understand staff and improve environment to retain employees.

#### **Challenges**

- Need to recruit and retain to address aging workforce.
- Compare compensations/benefits. May need to increase salary for those job classifications that are below comparable agencies.
- Ensure funding for retirement; funding of post-employment benefits.

### **FINANCE**

#### **Opportunities**

- Can we derive revenue for meeting fire department requirements?
- Interest rates may rise, consider borrowing now.
- Consider having a financial plan beyond 5-years
- Find new revenue sources: fees for service, transfer fire services for cost savings.
- Seek more grant funding opportunities, develop joint projects with others to spread funding.

#### **Challenges**

- How to fund future CIP projects identified in the Master Plan update.
- Need clear understanding of needs and 5-year plan: capital expenditures, old pipes, regulatory
- Prepare public for future rate increases – build trust. Identify how much revenue goes to the

community. Consider disparity in economic class and affordability to raise rates.

- May need more money and more people in the future to update infrastructure.
- Continued concern regarding cost of recycled water.

## **REGULATORY**

### **Challenges**

- Regulations and fees keep increasing at the State and Federal level putting increased strain on District staffing and finances. May be forced to eliminate chlorine gas at a significant capital cost.
- Continued pressure to limit accessory dwelling unit connection fees.
- Potential for a statewide water tax.
- State mandate increase housing density and associated impacts to water supply.

## 2. PLAN DEVELOPMENT: Priority Issues

The group was asked to identify the most important issues that NMWD must resolve in the coming years. The participants then voted on them, as shown in the results below. Priorities are important since it is not possible to accomplish everything at once due to constraints on time, money and personnel. As a result, while all issues contained in the Goals and Objectives are important, a few are identified as being especially important and will take precedence.

<b>8 high votes</b> 1, 1, 2, 2, 2, 2, 2, 2	<b>New Technology for Cost Efficiency and Staff Productivity</b> (1, 1, 2, 2). <i>Ensure all assets are managed proactively and cost effectively. (2, 2, 2, 2). These are from Goal 4.</i>
<b>6 high votes</b> 1, 2, 2, 2, 2, 2	<b>Water supply, quality and reliability.</b> <i>Planning for long-term water supplies. Investigate opportunities with MMWD to better utilize excess water storage in Soulajule reservoir. Work cooperatively with Potter Valley Project stakeholders to promote sustainability This is from Goal 1. It was noted that while water supply and quality are the District's highest overall priorities, it recently completed major recycled water projects and has adequate supplies for the foreseeable future, so it is not the highest priority in the near term.</i>
<b>3 high votes</b> 1, 1, 2	<b>Stakeholder Outreach.</b> <i>Engagement, Satisfaction of customers, staff and vendors 1, 2. Public understanding and support of District policies 1</i>
<b>2 high votes</b> 2, 2	<b>Financial Security.</b> <i>This is from Goal 5.</i>
<b>1 high vote</b> 1	<b>Plan for Climate Change.</b>



### 3. STRATEGIC PLAN: Mission

A good mission statement should accurately explain why your organization exists and what it hopes to achieve in the future. It articulates the organization's essential work. The Board drafted and approved the following mission statement:

**Below is the Existing District Mission Statement**

*We provide an adequate supply of safe, reliable and high-quality water and deliver reliable and continuous sewer service to our customers at reasonable cost consistent with good conservation practices and minimum environmental impact.*

**Below is a suggested new version**

*Our mission is to meet the expectations of our customers in providing potable and recycled water and sewer services that are reliable, high-quality, environmentally responsible, and reasonably priced.*

### 3. STRATEGIC PLAN: Vision for the Future

A critical responsibility of the Board of Directors is to identify a vision for the District's future and then set goals and objectives to achieve it. This is the heart of the governance role, and starts with creation of a vision statement.

**CURRENT VISION:** We carry out our mission with a highly motivated and competent staff empowered to conduct the District's business by placing customer needs and welfare first. We seek continual dialogue from our staff, peers, and all those we serve so that we may continually improve service to our customers.

#### **ALTERNATE VERSION**

We strive to optimize the value of services we provide to our customers and continually seek new ways to enhance efficiency and promote worker and customer engagement and satisfaction

### 3. STRATEGIC PLAN: Values

**VALUES** are what the District considers important—what we believe is right and wrong. The Board is responsible for identifying values and being the guardian of values. Effective organizations identify and develop a clear, concise and shared meaning of values/beliefs, priorities, and direction so that every employee understands and can contribute in the right way. If well-defined, disseminated, and followed, values will impact every aspect of the organization.

The following values emerged from the workshop discussion.

The values can be written as simple statements or posed as questions to help make difficult decisions.

**Accountability.** We work transparently and in full view of customers and take responsibility for our work.

**Integrity.** Customers can count on quality and fair service from our staff and the District.

**Teamwork.** We work cooperatively to accomplish our goals.

**Honesty.** We always seek the truth in what we do.

**Respect.** We value our customers and co-workers.

### 3. STRATEGIC PLAN: Strategic Goals and Objectives and Implementation Plan

The goals and objectives are presented on the following pages. They, along with the mission, vision and values, represent the core strategic direction provided in this plan.

In addition, implementation actions are incorporated along with the objectives. These are a linked series of actions developed by staff that, when accomplished, will meet the mission, vision, goals and objectives identified by the Board of Directors. The work plan is organized in a table format with the following features:

**Note on Timing.** Goals and objectives marked 'annually' or 'ongoing' will be reported on at least once each year when the General Manager will provide a report on progress of the Strategic Plan.

## **GOAL 1. Water Supply, Quality, and Reliability.** Increase local control and the long-term reliability of the water supply.

**Strategic Challenge Facing the District.** Water supply reliability and quality are threatened by climate change impacts such as variable water supplies caused by cycles of drought and flood and warmer temperatures. Additionally, a growing economy and environmental enhancement increases competition for already limited water supplies. Another issue impacting supply is the relicensing of PGE's Potter Valley Hydroelectric Project (PVP).

The objectives below must be consistently carried out into the future to achieve the goal above.

<b>1.1.0</b>	<b>Extend water supply planning and preparation to ensure reliability over the long-term. Take into account climate change, and other factors. (Timing: 2022)</b>
1.1.1	Continue involvement with SCWA's and PG&E's Potter Valley Project Relicensing process. Existing PG&E PVP license expires in 2022. (Timing: 2022)
1.1.2	Participate in SCWA's Regional Water Supply Resiliency Project to make the region more resilient to future water shortages. (Timing: 2019)
1.1.3	Consider participation in the proposed North Bay Drought Contingency Plan (Marin/Sonoma/Napa). (Timing: 2018)
1.1.4	Update the Urban Water Management Plan. (Timing: 2020)
1.1.5	Keep Water Conservation Program (including incentives/rebates) current with market and plumbing code trends. (Timing: ongoing)
<b>1.2.0</b>	<b>Maximize local control and redundancy of the water supply to ensure reliability over the long-term. (Timing: ongoing)</b>
1.2.1	Conduct a Local Water Supply Enhancement Study to identify new sources of local water supply. The timing of this Study is impacted by initial work on the SCWA Regional Water Supply Resiliency Project. (Timing: 2019)
1.2.2	Continue to work with Novato Sanitary and Las Gallinas Valley Sanitary Districts to explore additional recycled water opportunities. (ongoing)
<b>1.3.0</b>	<b>Maintain and seek to increase reductions in water demand (conservation). (Timing: ongoing)</b>
1.3.1	Complete the District's Advanced Meter Infrastructure (AMI) installation project. (2018)
1.3.3	Update the District's Water Conservation Plan. (2020)
<b>1.4.0</b>	<b>Ensure the maintenance of high-quality water. Account for both customer priorities and legal requirements. (Timing: ongoing)</b>
1.4.1	Meet or exceed all regulatory standards. (ongoing)
1.4.2	Work to control undesirable taste and odors. (ongoing)
1.4.3	Conduct all required water quality monitoring. (ongoing)
1.4.4	Monitor proposed new water quality regulations and plan in advance for necessary changes to District procedures. (Timing: ongoing)



## **Goal 2. Customer Engagement and Service.** Increase communication with customers and ensure quality service.

**Strategic Challenge.** Providing reliable and high-quality water will be more challenging and cost more over time. The public deserves an opportunity to understand the issues and provide input on water policies. Consequently, the District needs to be more effective at educating and engaging its customers.

The objectives below must be consistently carried out into the future to achieve the goal above.

<b>2.1.0</b>	<b>Conduct outreach to increase public understanding and support for District policies and to facilitate customer input and engagement.</b> Note there is a desire to communicate positive news through multiple forms of outreach, including more extensive use of social media. Consider using social media formats such as Flash Vote or NextDoor for improved engagement. (Timing: 2019)
2.1.1	Develop an annual public outreach plan and program, including a strategy for more effective social media outreach and information about how District spending supports the local community. (Timing: 2018 and beyond)
2.1.2	Continue to use third-party support for preparing public outreach materials as required. (Timing: 2018)
<b>2.2.0</b>	<b>Increase the staff's and the Board's understanding of customer needs and preferences.</b> (Timing: ongoing)
2.2.1	(Also see 2.1.1) update the outreach plan and program to provide information to the Board and staff summarizing customer needs and preferences.
<b>2.3.0</b>	<b>Continue to provide outstanding service that meets customer needs and preferences.</b> (Timing: ongoing)
2.2.1	Support customers on the new website portal for tracking water use when using AMI meters (Timing: 2018)
2.2.2	Continue to monitor and track customer feedback through ongoing survey questionnaires. (Timing ongoing)

### **Goal 3. Operations, Asset Management, and Infrastructure. Provide proactive and cost-efficient asset management and operations.**

**Strategic Challenge.** Over the years, the number of customers has increased along with regulatory and other challenges of providing District services to customers. At the same time, District infrastructure is aging, thereby increasing maintenance, upgrade, and replacement costs. Yet the staff has been kept purposely lean. Continued progress must be made to meet the growing challenges of an aging system by increasing use of technology to leverage the capabilities of the limited staff to more proactively target maintenance, upgrade, and replacement for the lowest long-term cost and reliability.

The objectives below must be consistently carried out into the future to achieve the goal above.

<b>3.1.0</b>	<b>Evaluate, plan, fund, and implement infrastructure repair, upgrade, and replacement using an extended planning horizon.</b> (Timing: every 5 or 10 years depending on service area)
3.1.1	Consider using an extended CIP planning horizon beyond 5 years after completion of the Novato Water Master Plan. Maintain cost control, avoid rate shocks, solve problems before they occur, and ensure long-term reliability and stability of service. (2018)
3.1.2	Update West Marin Master Plan every 10 years. (Timing: 2024)
3.1.3	Update the Oceana Marin Master Plan every 10 years. (Timing: 2025)
<b>3.2.0</b>	<b>Ensure all assets are managed proactively and cost effectively.</b> (Timing: ongoing)
3.2.1	Develop and implement a comprehensive Novato Asset Management Plan. (Timing: 2019)
<b>3.3.0</b>	<b>Consider all practical and cost-effective options to providing high quality and customer-focused operations, asset management, and infrastructure updates.</b> For example, this could include focusing more on core skills, or providing a more cost-effective balance of staff work and contractor support in the maintenance, upgrade, and replacement of infrastructure. (Timing: ongoing)
3.3.1	Continue to utilize On-Call Services contracts for select local contractors to improve District's ability to respond to emergencies and improve small contract efficiency. (Timing ongoing)
3.3.2	Evaluate the feasibility of implementing a Sewer Lateral Replacement program for Oceana Marin. (Timing: 2020)

**Goal 4. People, Technology and Equipment.** Retain a high quality, motivated, and efficient workforce with excellent workforce programs and investments in equipment, technology and training.

**Strategic staffing challenges facing the District.** It has become increasingly difficult to hire and retain workers. This is partly due to the high cost of living, a shortage of certified operators, and competition in general for qualified staff.

**Strategic Technology and Company Cultural Challenges Face the District.** Seek to increase use of technology to increase productivity and lower long-term costs, and retain a lean staff to minimize staffing and pension costs.

The objectives below must be consistently carried out into the future to achieve the goal above.

<b>4.1.0</b>	<b>Seek to utilize new technologies and organization wherever they can improve cost efficiency and allow the District's lean workforce to be more effective. (Timing: ongoing)</b>
4.1.1	Continue to support staff's involvement in local, regional, and national water industry organizations including payment of subscription dues and attendance at conferences. (Timing ongoing)
4.1.2	Evaluate if staff is structured correctly for future challenges, for example in technology, asset management, and emergency management. (Timing 2020)
4.1.3	Evaluate and implement replacement of proprietary software systems. (Timing 2019)
<b>4.2.0</b>	<b>Ensure that working conditions – including the office building, tools and technology – are up to date and promote efficiency and retention of employees. (Timing: ongoing)</b>
4.2.1	Move forward with the design phase of the Office Remodel Project. (Timing: late 2019)
4.2.2	Expand participation in supervisor training classes offered by Sonoma County. (Timing: 2018)
4.2.3	Conduct an Employee Engagement Survey and implement recommendations as appropriate to improve employee satisfaction. (Timing: 2019)
4.2.4	Update the District's Employee Safety Manual. (Timing: 2019)
<b>4.3.0</b>	<b>Ensure pay and benefits are competitive and support the hiring and retention of a highly qualified workforce. (Timing: ongoing)</b>
4.3.1	Conduct a Compensation Survey in advance of negotiation of a new MOU with the Employees Association. (Timing: June, 2018)

**Goal 5. Rates and Finance.** Extend budgeting and financial planning horizon to ensure long-term stability, financial security and ratepayer value.

**Strategic Challenges.** Infrastructure maintenance, upgrade, and replacement costs are expected to rise over time as the system ages. Increasing regulations, costs of technology, and other factors, such as pension and health insurance, also are pushing up costs. The District will be challenged to fund quality service over time, while maintaining affordability and value to customers.

The objectives below must be consistently carried out into the future to achieve the goal above.

<b>5.1.0</b>	<b>Maintain a multi-year budget and long-range financial plans to make it easier to provide long-term financial stability.</b> (Timing: ongoing)
5.1.1	Prepare a Cost of Service Study with peer review. (Timing: 2018)
<b>5.2.0</b>	<b>Seek ways to lower costs without compromising quality and reliability.</b> (Timing: ongoing)
5.2.1	Evaluate benefits of transferring District-owned fire services to commercial customers. (Timing: 2019)
<b>5.3.0</b>	<b>Seek new sources of revenue beyond rates and/or methods for decreasing liabilities.</b> (Timing: ongoing)
5.3.1	Increase income from lease fees. (e.g., grazing, cellular towers). (Timing ongoing)
5.3.2	Consider fee-for-service options, such as identifying and fixing leaks, promoting a third-party insurance program for water lines, and transferring commercial fire service and backflow testing to customers, etc. (Timing 2019)
5.3.3	Consider cooperative agreements for additional solar projects on District-owned land. (Timing 2019)
5.3.4	Sell District surplus property that no longer serves District needs. (Timing: 2020)
<b>5.4.0</b>	<b>Ensure that pay/go, financing, reserves, and other key financial plans and policies are reviewed at least annually.</b> (Timing: ongoing)
5.4.1	Continue to hire an outside auditor for preparing annual Comprehensive Financial Reports. (Timing: Ongoing)
5.4.2	Continue to apply for the Certificate of Achievement for Excellence in Reporting Award. (Timing: Ongoing)
<b>5.5.0</b>	<b>Maintain appropriate levels of reserves and establish rates and budgets to maintain reserves.</b> (Timing ongoing)
5.5.1	Re-evaluate, report on, and update as appropriate reserve goals for Novato, West Marin, and Oceana Marin. (Timing: yearly)

## **Goal 6. EMERGENCY PLANNING AND RESILIENCE.** Increase Preparedness for emergencies as well as long-term threats such as drought and climate change.

**Strategic Challenges Facing the District.** Fire, drought, flood, earthquake, climate change, increased regulations, statewide growth, a variety of other potential natural and man-made disasters and long-term challenges, emergencies, and crises potentially threaten all California water providers, including North Marin Water District.

The objectives below must be consistently carried out into the future to achieve the goal above.

<b>6.1.0</b>	<b>The District will periodically review and update emergency and risk management plans to ensure continuity of quality service and minimize disruption and costs following unexpected emergencies.</b> (Timing: ongoing)
6.1.1	Participate in Marin County Multi-Jurisdictional Local Hazard Mitigation Plan. (Timing: 2018-19)
6.1.2	Hire third-party consultant(s) experienced in developing and implementing Tabletop emergency training exercises. (Timing: 2019)
6.1.3	Update the District's Emergency Operations Plan. (Timing 2020)
<b>6.2.0</b>	<b>The District will undertake resiliency planning and prepare for longer-term threats such as climate change, increased regulations, etc. to ensure continuity of quality service and minimize disruption and costs resulting from evolving challenges such as regulations and climate change.</b> (Timing: 2019)
6.2.1	Participate in the North Bay Drought Contingency Plan to increase the potential to obtain grant funds for water supply resiliency projects (Timing: 2019). Also reference 1.1.2: Participate in SCWA's Regional Water Supply Resiliency Project.

## 5. MONITORING, IMPLEMENTATION AND OVERSIGHT

In order to ensure that the plan is implemented, and results are achieved, the District plans to take the following steps:

- Publish the Mission, Vision, Values Goals and Objectives on posters and handouts, and display them around the District.
- Incorporate the Mission, Vision, Values, Goals and Objectives into the employee handbook, as well as orientation and training materials for new employees.
- Present the Strategic Plan to the entire staff so they are familiar with it and can better undertake their individual roles in fulfilling it.
- Post the Strategic Plan on the website and include a brief summary that is visible without download.
- Actively implement the Work Plan by the management team.
- Evaluate the General Manager and Management Team performance in part based on their implementation of the Strategic Plan Goals and Objectives.
- Staff will provide an annual report to the entire Board on progress in implementing the Strategic Plan.
- The Board, with staff support, will review and update the Strategic Plan every five years.

# Appendix



## APPENDIX 1: Achieving Expectations

At the beginning of the first workshop, participants were each asked to share their expectations for the process—the expectations of individual participants are listed below. One goal of this process was to meet these expectations and we believe that we did.

- Clarity.
- We have a debt policy. There is a limit. Need to plan how to operate within the policy. Concerted retirement and pension issues.
- Cost for second units – affordable housing.
- Update on goals and objectives as the District matures in age and is essentially done growing due to limited growth of the community, and transitions in to more of a maintenance phase.
- Facilitate board's understanding of key issues and support for solutions. Learn more about how the District operates.
- Explore new ideas for water – understand future needs for water.
- Understand how we compare in compensation with other similar agencies.
- Capital Replacement Plan, timing and costs.
- Limited on staffing flexibility; emergencies limit planned execution. Impacts liability.
- How to maintain excellent customer service.
- How to get ahead of issues before an issue.
- Strong Public Presence (communication).
- Like to see how 2016 Plan is implemented.
- Clear delineation of Board Issues and feedback from staff.
- How to understand regionalization.
- Understand environmental and financial risk liabilities – fish, water, water, waste – people are sensitive, could take legal action; pension liability, “regulatory = 2x.



## APPENDIX 2: Original Priority Issues

Below are the initial priority issues for the coming years, identified during the first workshop of the strategic planning process. Priorities were reviewed at the second workshop and those priorities are presented above.

INITIAL PASS AT IDENTIFYING HIGHEST PRIORITY ISSUES	
<b>10 votes</b>	<b>Secure Water Supply Reliability.</b> Ensure the District has needed supplies, maximum local control (e.g. recycled), redundancy and secure water rights.
<b>10 votes</b>	<b>Competent Staff.</b> Ensure there is adequate recruitment and retention of excellent employees. Ensure they are highly trained. Adapt to changing needs and motivations of newer generations of employees. The District should have a process in place to identify when staff are not satisfied and to learn why so we can adjust.
<b>8 votes</b>	<b>Satisfied and Engaged Customers.</b> The District needs to work actively to educate and engage its customers, so they understand and can support the District, and so that the District understands their preferences and needs and can serve them well. This will be increasingly important during future long-term droughts and with pressure on rising costs.
<b>6 votes</b>	<b>Detailed 20-year CIP.</b> Improve asset management and overall infrastructure maintenance, upgrade, and replacement with a much longer and proactive view.
<b>3 votes</b>	<b>Excellent Water Quality.</b> The District has great water quality and must maintain it over time, along with customer perception of quality. If the public doesn't trust the District's water, they won't trust the District or want its product and services.
<b>3 votes</b>	<b>Reasonable Rates.</b> There are pressures pushing up costs and rates over time: increasing regulations, an aging infrastructure, competition for qualified workers, and more. The District needs to control costs as much as possible, but always provide quality service.
<b>3 votes</b>	<b>Finance-Alternative Strategies.</b> The District needs to seek ways of minimizing rates through smart revenue and financing strategies. It should look at the best balance of pay-go versus financing, develop alternative revenue streams, ensure long-range planning gives time to manage costs, etc.
<b>2 votes</b>	<b>Implement Appropriate Technology.</b> The District needs to leverage technology to maximize productivity and its ability to plan proactively.
<b>2 votes</b>	<b>Appropriate Risk Management.</b> The District needs to continue to identify and plan to mitigate risk from potential earthquakes, drought, climate change, and other factors such as chlorine gas releases at the Stafford Treatment Plant.



## APPENDIX 3: Summary and Raw Vision Statements

Below is a summary of all the vision statements made during workshop

### 1 INCREASE LOCAL CONTROL, REDUNDANCY, AND RELIABILITY OF THE WATER SUPPLY.

- 100% control of water supply. 100% control of local supply. Additional reuse. Has a reliable water supply (increase RW, increase Stafford, Lack Storage Cap.).
- Prepared for more long-term droughts. Permanent drought controls: prohibit swimming pools and mandated allocations.
- Provide top quality water. Eliminate taste and odor issues. High quality and safe.
- Reliable supply with no outages. Redundant supplies.

### INCREASE ENGAGEMENT WITH OUR CUSTOMERS AND MAINTAIN HIGH SERVICE LEVELS WITH THE GOAL OF INCREASING PUBLIC UNDERSTANDING AND SUPPORT.

- Community engagement, full communication with users. Redundant communication with users
- Public fully understands our long-term plan and programs. Community is fully vested in the District. Engaged and satisfied stakeholders – customers, staff, and contractors. Customers understand costs and are willing to pay what is needed. Customers share vision of district priorities. Stakeholder confidence.
- Good service. Great customer service

### TECHNOLOGY

- Advanced technology.

### A HIGHLY SKILLED, AND STABLE WORKFORCE IS CRITICAL TO OUR LONG-TERM SUCCESS.

- Partnership culture with staff.
- Staff has pride and respect for the organization.
- Small staff of highly compensated employees overseeing private

contractors providing quality/reliable reasonably priced water. Competitive salary and benefits.

- Local staffing.
- Good working environment (new building). Good working environment.
- Low turnover, the place to work. Stable staffing.
- District remains independent.
- Employee sense of security and value.

### EXPLICITLY BALANCE COSTS, BENEFITS, AND RISKS FOR MAXIMUM CUSTOMER VALUE.

- Stable rates and adequate reserves. Stable financial position. Affordable price
- Profitable and financially sustainable business model.
- Good value.
- Balance risk versus cost well. Solid understanding of risk of failure vs. cost of failure as related to infrastructure. Cost effective service (good balance between rate increase and infrastructure repairs/replacements).

### INFRASTRUCTURE: LONG-TERM PLANNING AND PROACTIVE ASSET MANAGEMENT.

- Planned and consistent asset replacement program.
- Automated treatment plant operating 24/7/365. Automated.

### CONSIDER INCREASED FOCUS ON CORE COMPETENCIES.

- Small staff of highly compensated (skilled and efficient) employees overseeing private contractors providing quality/reliable reasonably priced water. Competent. Well trained.
- Compensated fairly. Appreciated. Motivated.
- Recurring service managed by contractor. Focus more on core. More use of

contractors.

- Proactive

#### VISION ACHIEVED BY

- Stable financial position
- Community supported

#### BENEFITS EXPERIENCED

- Employee sense of security and value.
- Customers shared vision of district priorities.
- Stakeholder confidence.





**NORTH MARIN  
WATER DISTRICT**



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## MEMORANDUM

To: Board of Directors

April 27, 2018

From: Ryan Grisso, Water Conservation Coordinator *RG*

Subject: Quarterly Progress Report - Water Conservation (July-March 2017/2018)

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**RECOMMENDED ACTION:** Information**FINANCIAL IMPACT:** NoneWater Conservation:

This memo provides an update on water conservation and public outreach activities implemented during the first three quarters of Fiscal Year 2018. Water Conservation participation numbers for the first three quarters of the current and previous two fiscal years are summarized in Table 1 below.

**Table 1: Water Conservation Program Participation (July through March: FY 2016 - 2018)**

Program	FY16	FY17	FY18
Water Smart Home Surveys	187	312	243
Water Smart Commercial Surveys	8	3	4
High Efficiency Toilet Rebates (Residential)	217	165	100
High Efficiency Toilet Rebates (Commercial)	1	1	0
Retrofit on Resale (Dwellings Certified)	163	205	190
High Efficiency Washing Machine Rebates	82	50	19
Cash for Grass Rebates	116	49	12 <sup>1</sup>
Water Smart Landscape Rebates	6	7	3
Smart Irrigation Controller Rebates	7	9	13
New Construction Sign-offs (Residential)	25	10	18
New Construction Sign-offs (Commercial)	18	18	13

(1) Cash for Grass participants removed 10,680 square feet of turf (vs. 41,707 square feet in FY 17).

As expected, water conservation participation has trended down this fiscal year in the post drought period (consistent with other utilities throughout northern California). Cash for Grass participation levels are extraordinarily low and clothes washer rebates continue to be well below historical participation levels (with the absence of an energy provider rebate). The exceptions to the downward trend are the Water Smart Home Survey and Retrofit on Resale programs which have remained fairly consistent, and Weather Based Irrigation Controller rebates which have increased. Staff is planning on returning to the Board in the future with conservation program re-tooling and program adjustment options, notably for the Cash for Grass program and toilet and washing machine rebate programs.

### Public Outreach and Conservation Marketing

In the first three quarters of FY18, the District distributed the Fall 2017 issue of "Water Line" to Novato and participated in the Sonoma Marin Saving Water Partnership 2017 public outreach campaign. The District continues to maintain a Facebook page with regular updates on water use efficiency, construction projects and other District activities. The District has also started using "Nextdoor" to provide a more neighborhood specific level of social engagement. The District has a series of outreach events planned for the fourth quarter of the fiscal year including a booth at the Tour of Novato and Eco-Friendly Garden Tour.

### Budget

Table 2 summarizes the first three quarter expenditures for the most recent three fiscal years (July-March). FY18 expenditures have continued to decline due to lower program participation levels.

**Table 2: Water Conservation and Public Outreach Expenditures (July through March: 2016 - 2018)**

	FY16	FY17	FY18
Total Budget	\$410,000	\$460,000	\$440,000
July-March Actual	\$294,631	\$234,190	\$214,848

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## MEMORANDUM

To: Board of Directors

From: Rocky Vogler, Chief Engineer *RV*

Subject: FY17-18 Third Quarter Progress Report – Engineering Department

Date: April 27, 2018

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The purpose of this memo is to provide a third quarter status report to the Board on the District's performance in completing budgeted FY17-18 Capital Improvement Projects (CIP). The following information supplements the progress report summary provided to the Board each month.

SUMMARY

<u>Service Areas</u>	<u>Project Costs (\$)</u>		<u>% Complete</u>		<u>Earned Value (\$)</u>	
	Budget (\$)	Forecast (\$)	Planned	Actual	Planned	Actual
Novato Water	10,315,000	5,493,552	63	54	5,986,250	3,106,155
Novato Recycled	6,545,000	3,445,603	90	92	6,156,750	3,439,353
West Marin	935,000	352,242	50	37	297,500	201,522
<b>TOTAL</b>	<b>17,795,000</b>	<b>9,291,397</b>	<b>68</b>	<b>61</b>	<b>12,440,500</b>	<b>6,747,030</b>

The above table summarizes the detailed tabulation of CIPs for both Novato and West Marin (including Oceana Marin) systems provided in Attachment A. In summary, CIP expenditures for Novato, Novato Recycled Water and West Marin service areas will not exceed approved FY17-18 budget levels. For the Novato Water system, the above tabulation shows that CIP expenditures are forecast to be \$5.5M (53% of the approved budget versus a forecast of 27% at this time last year). Actual performance for the Novato Water system (54%) trails planned performance for project completion (63%). Actual performance for the Novato Recycled Water system exceeds planned performance for project completion (i.e., 92% actual vs. 90% planned). With respect to West Marin (including Oceana Marin), CIP expenditures of \$352,242 are forecast to be below (i.e., 38%) the approved FY17-18 budget value (versus a forecast of 39% at this time last year). Planned performance through the third quarter for West Marin was projected to be 50% and actual completion performance is at 37%. Overall, for the Novato Water, Novato Recycled Water and West Marin water systems, combined actual performance (i.e., 61%) is marginally less than planned performance (i.e. 68%).

Novato Service Area Project Variances

As shown in Attachment A, all FY17-18 Novato CIPs are currently projected to be completed at or below original budget (with the exception of two projects already constructed this fiscal year – Center Road Pipe Project and Dam Concrete Repair). A detailed milestone schedule update is provided in Attachment B.

During the third quarter, no projects have been added and one project has been deferred/dropped: Automate Zone Valve (Slowdown Ct.).

#### Novato Recycled Water Service Area Project Variances

As shown in Attachment A, all FY17-18 Novato Recycled Water CIPs are currently projected to be completed at or below original budget.

No recycled water projects have been added or deferred/dropped during the third quarter.

#### West Marin Service Area (including Oceana Marin) Project Costs Variances

As shown in Attachment A, all FY17-18 West Marin CIP expenditures are currently projected to be completed within the original budget. No West Marin projects have been added and one project has been deferred/dropped (Tahiti Way Power Relocation) during the third quarter.

#### Engineering Department Labor Hours

The Engineering Department provides a multitude of functions supporting overall operation, maintenance and expansion of water facilities. The major work classifications are: (1) General Engineering, (2) Developer Projects and (3) District (i.e., CIP) Projects. Out of the approximately 14,900 engineering labor hours available annually (less Conservation), the FY17-18 labor budget for Developer Projects and District Projects is 1,414 (10% of total) and 4,000 (28% of total), respectively. A chart of actual hours expended versus budgeted hours for both Developer and District projects during FY17-18 is provided in Attachment C. At the end of the third quarter, actual engineering labor hours expended for Developer work was 31% (444 hours) versus 75% (1,061 hours) budgeted. With respect to District Projects, 2,296 engineering labor hours (57% of budget) have been expended on Capital Improvement Projects.

FY 17-18  
 CAPITAL IMPROVEMENTS PROJECTS

	NOVATO SERVICE AREA	WEST MARIN/ OCEANA MARIN	TOTAL
PROJECTS BUDGETED			
Original Budget	27	8	35
Added	4	5	9
FY 16-17 Carryover	1	0	1
Deferred/Dropped	4	2	6
Adjusted Budget	28	11	39

**FY16-17 CARRYOVER**

**Date Brought to Board**

Novato  
 Country Lane Pipeline Replacement

First Quarter Report

West Marin  
 None

**DEFERRED/DROPPED**

Novato  
 Coat Concrete Clearwells  
 Electronic Document Management System  
 Office/Yard Building Renovation  
 Automate Zone Valve (Slowdown Ct.)

First Quarter Report  
 Second Quarter Report  
 Second Quarter Report  
 Third Quarter Report

West Marin  
 Design/Install 8<sup>th</sup> Disposal Trench (300')  
 Tahiti Way Power Relocation

First Quarter Report  
 Third Quarter Report

**PROJECTS ADDED**

Novato  
 Grant Ave Bridge Pipe Replacement  
 Stafford Spillway Repairs  
 Crest Rd Main Replacement  
 Watershed Erosion Control

First Quarter Report  
 First Quarter Report  
 Second Quarter Report  
 Second Quarter Report

West Marin  
 Gallagher Well Motor Operated Valve  
 OM Treatment and Storage Pond Repair – FEMA  
 OM Treatment Pond Rehab (Storm Recovery)  
 New Gallagher Well No. 2  
 P RTP Solids Handling

First Quarter Report  
 First Quarter Report  
 First Quarter Report  
 Second Quarter Report  
 Second Quarter Report

**NOVATO SYSTEM CAPITAL IMPROVEMENT PROJECTS SUMMARY FY17-18**  
**AS OF MARCH 31, 2018**

STATUS	DEPT	ITEM #	PROJECT NO.	DESCRIPTION	PROJECT COSTS		% COMPLETE		EARNED VALUE	
					Budget	Forecast	Baseline	Actual	Planned	Actual
<b>1. PIPELINE REPLACEMENTS/ADDITIONS</b>										
PC	Eng	1	1.a.1	Ridge Rd 6" ACP (8" @ 1,400')	\$325,000	\$325,000	75	40	\$243,750	\$130,000
C	Eng	2	1.a.2	Center Rd 6" CIP (8" @ 1,200')	\$175,000	\$523,471	75	100	\$131,250	\$523,471
PC	Eng	3	1.b.1	San Mateo 24" Inlet/Outlet Pipe	\$50,000	\$25,000	75	60	\$37,500	\$15,000
	Eng	4	1.c.1	Repl PB in Sync w/City Paving	\$70,000	\$10,000	75	5	\$52,500	\$500
C	Eng	5	1.c.2	Other PB Replacements	\$180,000	\$75,000	75	100	\$135,000	\$75,000
	Eng	6	1.c.3	<i>Country Lane Pipeline Replacement</i>	\$0	\$120	0	0	\$0	\$0
C	Eng	7	1.c.4	<b>Grant Ave Bridge Main Replacement</b>	\$0	\$158,500	100	100	\$0	\$158,500
	Eng	8	1.c.5	<b>Crest Rd Main Replacement</b>	\$0	\$69,000	100	100	\$0	\$69,000
	Eng	9	1.d.1	Other Relocations	\$80,000	\$0	0	0	\$0	\$0
				SubTotal	\$880,000	\$1,186,091				
<b>2. SYSTEM IMPROVEMENTS</b>										
PC	Eng	10	2.a	Flushing Taps at Dead-Ends	\$50,000	\$0	75	0	\$37,500	\$0
PC	Eng	11	2.b	DCDA Repair/Replace	\$190,000	\$120,000	75	95	\$142,500	\$114,000
PC	Eng	12	2.c	Anode Installations	\$30,000	\$0	75	0	\$22,500	\$0
PC	Maint	13	2.d	Radio Telemetry	\$25,000	\$4,200	75	25	\$18,750	\$1,050
PC	Eng		2.e	Automate Zone Valve (Slowdown Ct) - DEFERRED	\$100,000	\$0				
PC	Admin	14	2.f	AMI Retrofit	\$4,700,000	\$2,135,000	75	10	\$3,525,000	\$213,500
				SubTotal	\$5,095,000	\$2,259,200				
<b>3. BUILDINGS, YARD, &amp; S.T.P. IMPROVEMENTS</b>										
PC	Admin		3.a.1	Electronic Document Management System - DEFERRED	\$150,000	\$0				
PC	Admin		3.a.2	Office/Yard Building Renovation - DEFERRED	\$1,500,000	\$727				
	Maint	15	3.b.1	Other Yard Improvements	\$30,000	\$0	0	0	\$0	\$0
C	Eng	16	3.c.1	Dam Concrete Repair (Apron)	\$50,000	\$54,000	100	100	\$50,000	\$54,000
	Eng		3.c.2	Coat Concrete Clearwalls - DEFERRED	\$490,000	\$0				
	Ops	17	3.c.3	<b>Watershed Erosion Control</b>	\$0	\$3,534	0	100	\$0	\$3,534
C	Eng	18	3.c.5	<b>Stafford Spillway Repair</b>	\$0	\$82,000	0	100	\$0	\$82,000
				SubTotal	\$2,220,000	\$140,261				
<b>4. STORAGE TANKS &amp; PUMP STATIONS</b>										
PC	Eng	19	4.c.1	San Mateo Recoat (1st year)	\$1,900,000	\$1,804,000	75	90	\$1,425,000	\$1,623,600
PC	Ops	20	4.c.2	Hydropneumatic Tank Repairs	\$30,000	\$30,000	75	50	\$22,500	\$15,000
PC	Maint	21	4.d.1	Lynwood PS Motor Control Center	\$100,000	\$25,000	75	5	\$75,000	\$1,250
	Ops	22	4.d.2	Lynwood PS Can Rehab - Design	\$15,000	\$24,000	75	75	\$11,250	\$18,000
C	Ops	23	4.d.3	San Marin PS Can Rehab	\$15,000	\$0	75	100	\$11,250	\$0
PC	Eng	24	4.f	Crest PS (design/const)/Reloc School Rd PS	\$60,000	\$25,000	75	35	\$45,000	\$8,750
				SubTotal	\$2,120,000	\$1,908,000				
				Novato Water Total	10,315,000	\$5,493,552	63	54	\$5,986,250	\$3,106,155
<b>5. RECYCLED WATER FACILITY</b>										
PC	Eng	25	5.a	NBWRA Grant Program Administration	\$80,000	\$25,000	75	75	\$60,000	\$18,750
C	Eng	26	5.b-j	Recycled Water Central Service Area	\$6,365,000	\$3,418,603	95	100	\$6,046,750	\$3,418,603
C	Maint	27	5.k	Upgrade Auto-Fill Valve at Reservoir Tank	\$50,000	\$2,000	100	100	\$50,000	\$2,000
	Eng	28	5.l	Other Recycled Water Expenditures	\$50,000	\$0			\$0	\$0
				Novato Recycled Total	\$6,545,000	\$3,445,603	90	92	\$6,156,750	\$3,439,353
				Total Novato	\$16,860,000	\$8,939,155	76	73	\$12,143,000	\$6,545,508
<b>PROJECT FORECAST REVISED</b>										
1C - Completed				Baseline projects with revised forecast budget increases (indicated by shaded box)						
PC - Partially completed				Baselined projects to be deferred (indicated in strikeout)						
				New projects added (indicated in bold)						
				Prior year projects carried over indicated in italics and brackets <>						

WEST MARIN CAPITAL IMPROVEMENT PROJECT SUMMARY FY17-18 AS OF MARCH 31, 2018													
STATUS	DEPT	ITEM #	PROJECT NO.	DESCRIPTION	PROJECT COSTS		% COMPLETE		EARNED VALUE				
					Budget	Forecast	Baseline	Actual	Planned	Actual			
				<b>6. West Marin Water System System Improvements</b>									
PC	Eng	29	6.a	Replace PRE Tank #4A	\$550,000	\$150,000	25	75	\$137,500	\$112,500			
C	Ops	30	6.b	Green Sand Filter Media Replace	\$75,000	\$24,657	100	100	\$75,000	\$24,657			
	Eng	31	6.d	<b>P RTP Solids Handling</b>	<b>\$50,000</b>	<b>\$12,500</b>	75	5	\$37,500	\$625			
	Eng	32	6.c	PB Replace in Sync w/County Paving	\$50,000	\$0	0	0	\$0	\$0			
C	Ops	33	6.e	<b>Gallagher Well Motor Operated Valve</b>	<b>\$0</b>	<b>\$14,490</b>	100	100	\$0	\$14,490			
		34	6.f	<b>New Gallagher Well No. 2</b>	<b>\$0</b>	<b>\$10,000</b>	0	5	\$0	\$500			
					\$725,000	\$211,647							
				<b>7. Oceana Marin Sewer System</b>									
	Ops	35	7.a	Infiltration Repair	\$40,000	\$40,000	25	0	\$10,000	\$0			
			7.b	<del>Design/Install 8th Disposal Trench (300') - DELETED</del>	<del>\$80,000</del>	<del>\$595</del>							
C	Maint	36	7.c	Tahiti Way Lift Pumps Rebuild	\$20,000	\$0	0	0	\$0	\$0			
	Ops		7.d	<del>Tahiti Way Power Relocation DEFERRED</del>	<del>\$20,000</del>	<del>\$0</del>			<del>\$0</del>	<del>\$0</del>			
PC	Ops	37	7.e	Pond Dredging & Relining	\$50,000	\$25,000	75	5	\$37,500	\$1,250			
	Ops	38	7.f	<b>OM Treatment Pond Rehab (Storm Recovery)</b>	<b>\$0</b>	<b>\$50,000</b>	75	70	\$0	\$35,000			
C	Ops	39	7.g	<b>OM Treatment and Storage Pond Repair - FEMA (404)</b>	<b>\$0</b>	<b>\$25,000</b>	75	50	\$0	\$12,500			
				SubTotal	\$210,000	\$140,595							
				Total West Marin	\$935,000	\$352,242	50	37	\$297,500	\$201,522			
				FY17-18 TOTAL	\$17,795,000	\$9,291,397	68	61	\$12,440,500	\$6,747,030			
1C - Completed				PROJECT FORECAST REVISED									
PC - Partially completed				Baseline projects with revised forecast budget increases (indicated by shaded box)									
				Baselined projects to be deferred (indicated in strikeout)									
				New projects added (indicated in bold)									
				Prior year projects carried over indicated in italics									



# FY17\_18 CAPITAL IMPROVEMENT PROJECTS

ID	Task Name	Start	Finish	% Complete	Resp	Qtr 1, 2018			Qtr 2, 2018			Qtr 3, 2018			Qtr 4, 2018		
						Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	<b>1A PIPELINE REPLACEMENTS/ADDITIONS</b>	Sat 7/1/17	Sat 7/1/17	64%													
2	1A1 Ridge Rd 6" ACP (8"@1,400')	Sat 7/1/17	Sat 6/30/18	40%	ENG / CC												
3	1A2 Center Rd 6" CIP (8" @1,300') (NEW)	Sat 7/1/17	Wed 2/28/18	100%	ENG / DJ												
4	<b>1B MAIN/PIPELINE ADDITIONS</b>	Sat 7/1/17	Sat 6/30/18	30%													
5	1B1 San Mateo 24" Inlet/Outlet - Design	Sat 7/1/17	Sat 6/30/18	60%	ENG / DJ												
6	1C1 Repl PB in Sync w/ City Paving	Sat 7/1/17	Sat 6/30/18	5%	ENG / JK												
7	1C2 Other PB Replacements	Sat 7/1/17	Sat 7/1/17	100%	ENG / CC												
8	1C3 Country Lane 2" Plastic	Tue 5/1/18	Sat 6/30/18	0%	ENG / JK												
9	1C4 Grant Ave Bridge Pipe Repl	Sat 7/1/17	Sat 7/1/17	100%	ENG / JK												
10	1C5 Crest Rd Main Replacement	Sat 7/1/17	Sat 7/1/17	100%	ENG / DJ												
11	1D1 Other Relocations			0%													
12	<b>2 SYSTEM IMPROVEMENTS</b>	Sat 7/1/17	Sat 6/30/18	22%													
13	2A Flushing Taps at Dead-Ends	Sat 7/1/17	Sat 6/30/18	0%	ENG / CC												
14	2B DCA Repair/Replace	Sat 7/1/17	Sat 6/30/18	95%	ENG / DJ												
15	2C Anode Installations	Sat 7/1/17	Sat 6/30/18	0%	ENG / CC												
16	2D Radio Telemetry	Sat 7/1/17	Sat 6/30/18	25%	MAINT/RC												
17	2E Automate Zone Valve (Slowdown Ct) DEFERRED	Sat 7/1/17	Sat 6/30/18	0%	ENG / DJ												
18	2F AMI Retrofit	Sat 7/1/17	Sat 6/30/18	10%	ADMIN												
19	<b>3 BUILDING, YARD, STP IMPROVEMENTS</b>	Sat 7/1/17	Sat 6/30/18	27%													
20	<b>3A ADMIN BUILDING</b>	Sat 7/1/17	Sat 6/30/18	0%													
21	3A1 Electronic Document Management System	Sat 7/1/17	Sat 6/30/18	0%	ADMIN												
22	3A2 Office/Yard Building Refurbish Design DEFERRED	Sat 7/1/17	Sat 6/30/18	0%	ADMIN / DM												
23	3B1 Other Yard Improvements	Sat 7/1/17	Sat 6/30/18	0%	MAINT/RC												
24	<b>3C STAFFORD TREATMENT PLANT</b>	Sat 7/1/17	Sat 6/30/18	59%													
25	3C1 Dam Concrete Repair (Apron)	Sat 7/1/17	Fri 12/8/17	100%	ENG / RV												
26	3C2 Coat Concrete Clearwells DEFERRED	Sat 7/1/17	Sat 6/30/18	0%	OPS / RC												
27	3C3 Watershed Erosion Control	Sat 7/1/17	Sat 7/1/17	100%	OPS / RC												



Current  Baseline  Progress



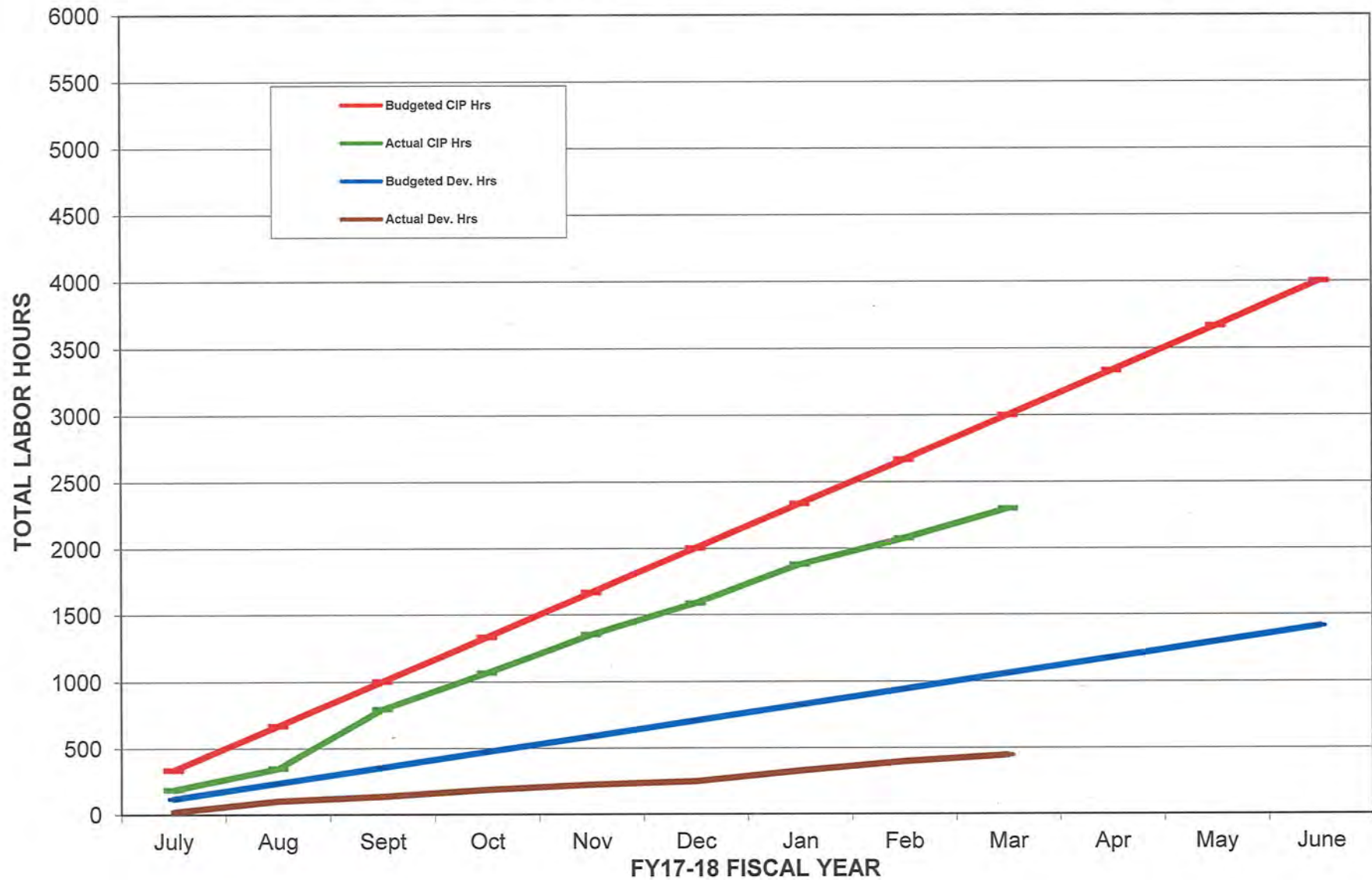
# FY17\_18 CAPITAL IMPROVEMENT PROJECTS

ID	Task Name	Start	Finish	% Complete	Resp	Qtr 1, 2018			Qtr 2, 2018			Qtr 3, 2018			Qtr 4, 2018		
						Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
28	3C5 Stafford Spillway Repairs	Sat 7/1/17	Sat 6/30/18	100%	ENG / RV												
29	<b>4 STORAGE TANKS/PUMP STATIONS</b>	Sat 7/1/17	Sat 6/30/18	59%													
30	4C1 San Mateo Tank Recoat	Sat 7/1/17	Sat 6/30/18	90%	ENG / CC												
31	4B2 Hydropneumatic Tank Repairs	Sat 7/1/17	Sat 6/30/18	50%	OPS / RC												
32	4D1 Lynwood Pump Station Motor Control Center	Sat 7/1/17	Sat 6/30/18	5%	MAINT/RC												
33	4D2 Lynwood PS Can Rehab - Design	Sat 7/1/17	Sat 6/30/18	75%	OPS / RC												
34	4D3 San Marin PS Can Rehab	Sat 7/1/17	Sat 6/30/18	100%	OPS / RC												
35	4F Crest PS (Design/Const)/Reloc School Rd PS - Design	Sat 7/1/17	Sat 6/30/18	35%	ENG / DJ												
36	<b>5 RECYCLED WATER</b>	Sat 7/1/17	Sat 6/30/18	89%													
37	5A NBWRA Grant Program Admin	Sat 7/1/17	Sat 6/30/18	75%	ENG / RV												
38	5B RW Central	Sat 7/1/17	Sat 6/30/18	100%	ENG /CC/DJ												
39	5C Upgrade Auto-Fill Valve at Reservoir Tank	Sat 7/1/17	Fri 9/1/17	100%	MAINT / RC												
40	<b>6 WEST MARIN WATER SYSTEM IMPROVEMENTS</b>	Sat 7/1/17	Sat 6/30/18	58%													
41	6A Replace PRE Tank #4A	Sat 7/1/17	Sat 6/30/18	75%	ENG / CC												
42	6B Green Sand Filter Media Replace	Sat 7/1/17	Fri 12/1/17	100%	OPS / RC												
43	6D Gallagher Well Motor Operated Valve	Sat 7/1/17	Sat 6/30/18	100%	OPS / RC												
44	6E PRTP Solids Handling - Design	Sat 7/1/17	Sat 6/30/18	50%	ENG / DJ												
45	6C PB Replace in Sync w/ County Paving	Sat 7/1/17	Sat 6/30/18	0%													
46	6E Gallagher Well MOV	Sat 7/1/17	Sat 6/30/18	100%													
47	6F New Gallagher Well #2	Sat 7/1/17	Sat 6/30/18	5%	OPS / RC												
48	<b>7 OCEANA MARIN SEWER SYSTEM</b>	Sat 7/1/17	Sat 6/30/18	12%													
49	7A Infiltration Repair	Mon 4/2/18	Fri 6/29/18	0%	OPS / RC												
50	7B Design/Install 8th Disposal Trench (300') DELETED	Sat 7/1/17	Sat 6/30/18	0%	ENG / RV												
51	7C Tahiti Way Lift Pumps Rebuild	Sat 7/1/17	Fri 6/29/18	0%	MAINT/RC												
52	7D Tahiti Way Power Relocation DEFERRED	Thu 2/1/18	Sat 6/30/18	0%	OPS / RC												
53	7E Pond Dredging & Relining	Sat 7/1/17	Sat 6/30/18	5%	OPS / RC												
54	7F OM Treatment Plond Rehab (Storm Recovery)	Sat 7/1/17	Sat 6/30/18	70%	OPS / RC												
55	7G OM Treatment and Storage Pond Repair - FEMA (404)	Sat 7/1/17	Sat 6/30/18	50%	OPS / RC												



Current  Baseline  Progress

# ENGR. DEPT DEVELOPER & DISTRICT CAPITAL IMPROVEMENT PROJECTS (CIPs)





# FY17\_18 CAPITAL IMPROVEMENT PROJECTS

ID	Task Name	Start	Finish	% Complete	Resp	Qtr 1, 2018			Qtr 2, 2018			Qtr 3, 2018			Qtr 4, 2018		
						Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	<b>1A PIPELINE REPLACEMENTS/ADDITIONS</b>	Sat 7/1/17	Sat 7/1/17	64%													
2	1A1 Ridge Rd 6" ACP (8"@1,400')	Sat 7/1/17	Sat 6/30/18	40%	ENG / CC												
3	1A2 Center Rd 6" CIP (8" @1,300') (NEW)	Sat 7/1/17	Wed 2/28/18	100%	ENG / DJ												
4	<b>1B MAIN/PIPELINE ADDITIONS</b>	Sat 7/1/17	Sat 6/30/18	30%													
5	1B1 San Mateo 24" Inlet/Outlet - Design	Sat 7/1/17	Sat 6/30/18	60%	ENG / DJ												
6	1C1 Repl PB in Sync w/ City Paving	Sat 7/1/17	Sat 6/30/18	5%	ENG / JK												
7	1C2 Other PB Replacements	Sat 7/1/17	Sat 7/1/17	100%	ENG / CC	7/1											
8	1C3 Country Lane 2" Plastic	Tue 5/1/18	Sat 6/30/18	0%	ENG / JK												
9	1C4 Grant Ave Bridge Pipe Repl	Sat 7/1/17	Sat 7/1/17	100%	ENG / JK												
10	1C5 Crest Rd Main Replacement	Sat 7/1/17	Sat 7/1/17	100%	ENG / DJ												
11	1D1 Other Relocations			0%													
12	<b>2 SYSTEM IMPROVEMENTS</b>	Sat 7/1/17	Sat 6/30/18	22%													
13	2A Flushing Taps at Dead-Ends	Sat 7/1/17	Sat 6/30/18	0%	ENG / CC												
14	2B DCA Repair/Replace	Sat 7/1/17	Sat 6/30/18	95%	ENG / DJ												
15	2C Anode Installations	Sat 7/1/17	Sat 6/30/18	0%	ENG / CC												
16	2D Radio Telemetry	Sat 7/1/17	Sat 6/30/18	25%	MAINT/RC												
17	2E Automate Zone Valve (Slowdown Ct) DEFERRED	Sat 7/1/17	Sat 6/30/18	0%	ENG / DJ												
18	2F AMI Retrofit	Sat 7/1/17	Sat 6/30/18	10%	ADMIN												
19	<b>3 BUILDING, YARD, STP IMPROVEMENTS</b>	Sat 7/1/17	Sat 6/30/18	27%													
20	<b>3A ADMIN BUILDING</b>	Sat 7/1/17	Sat 6/30/18	0%													
21	3A1 Electronic Document Management System	Sat 7/1/17	Sat 6/30/18	0%	ADMIN												
22	3A2 Office/Yard Building Refurbish Design DEFERRED	Sat 7/1/17	Sat 6/30/18	0%	ADMIN / DM												
23	3B1 Other Yard Improvements	Sat 7/1/17	Sat 6/30/18	0%	MAINT/RC												
24	<b>3C STAFFORD TREATMENT PLANT</b>	Sat 7/1/17	Sat 6/30/18	59%													
25	3C1 Dam Concrete Repair (Apron)	Sat 7/1/17	Fri 12/8/17	100%	ENG / RV												
26	3C2 Coat Concrete Clearwells DEFERRED	Sat 7/1/17	Sat 6/30/18	0%	OPS / RC												
27	3C3 Watershed Erosion Control	Sat 7/1/17	Sat 7/1/17	100%	OPS / RC												



Current Baseline Progress



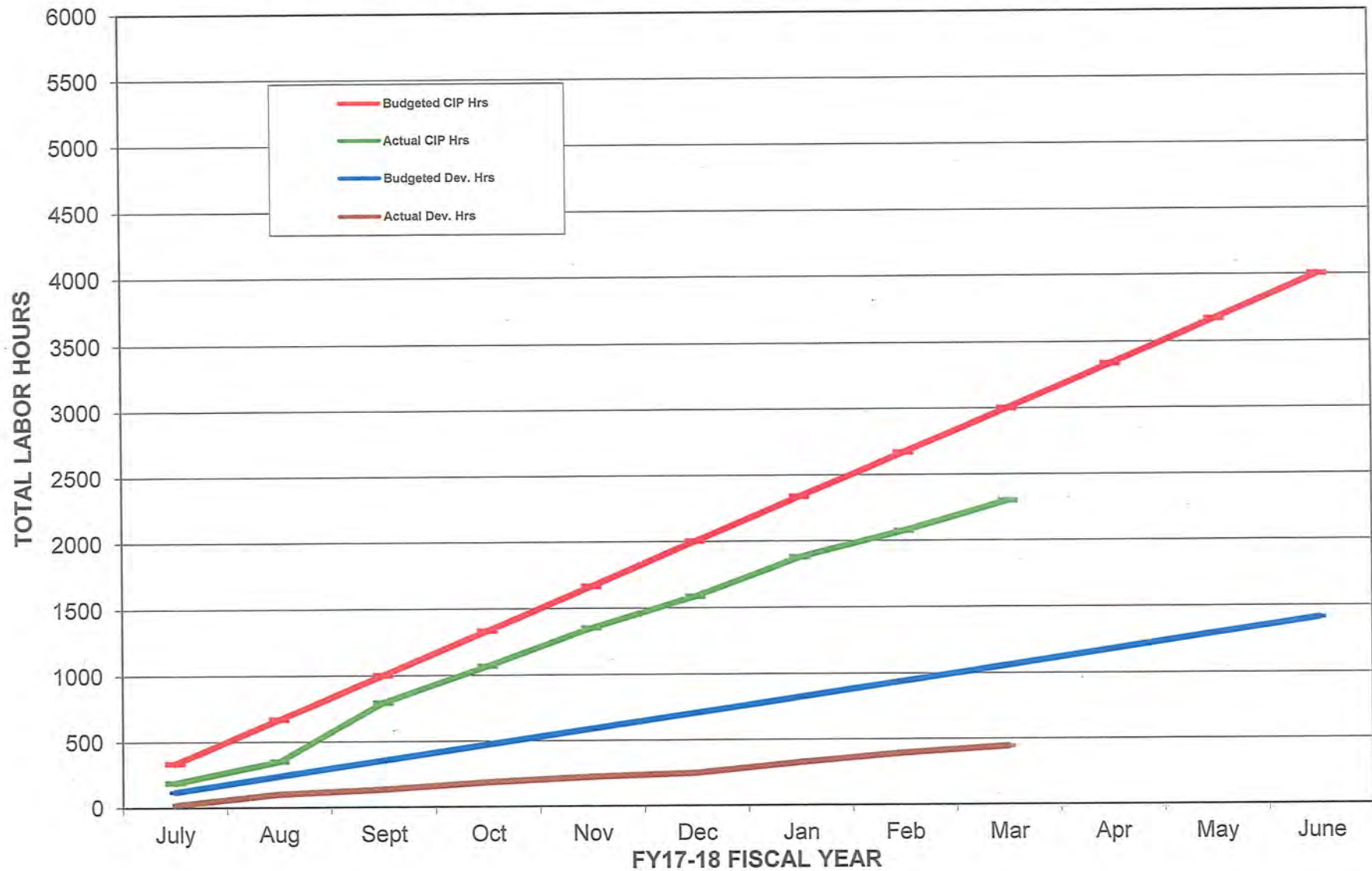
# FY17\_18 CAPITAL IMPROVEMENT PROJECTS

ID	Task Name	Start	Finish	% Complete	Resp	Qtr 1, 2018			Qtr 2, 2018			Qtr 3, 2018			Qtr 4, 2018		
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28	3C5 Stafford Spillway Repairs	Sat 7/1/17	Sat 6/30/18	100%	ENG / RV												
29	<b>4 STORAGE TANKS/PUMP STATIONS</b>	Sat 7/1/17	Sat 6/30/18	59%													
30	4C1 San Mateo Tank Recoat	Sat 7/1/17	Sat 6/30/18	90%	ENG / CC												
31	4B2 Hydropneumatic Tank Repairs	Sat 7/1/17	Sat 6/30/18	50%	OPS / RC												
32	4D1 Lynwood Pump Station Motor Control Center	Sat 7/1/17	Sat 6/30/18	5%	MAINT/RC												
33	4D2 Lynwood PS Can Rehab - Design	Sat 7/1/17	Sat 6/30/18	75%	OPS / RC												
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35	4F Crest PS (Design/Const)/Reloc School Rd PS - Design	Sat 7/1/17	Sat 6/30/18	35%	ENG / DJ												
36	<b>5 RECYCLED WATER</b>	Sat 7/1/17	Sat 6/30/18	89%													
37	5A NBWRA Grant Program Admin	Sat 7/1/17	Sat 6/30/18	75%	ENG / RV												
38	5B RW Central	Sat 7/1/17	Sat 6/30/18	100%	ENG /CC/DJ												
39	5C Upgrade Auto-Fill Valve at Reservoir Tank	Sat 7/1/17	Fri 9/1/17	100%	MAINT / RC												
40	<b>6 WEST MARIN WATER SYSTEM IMPROVEMENTS</b>	Sat 7/1/17	Sat 6/30/18	58%													
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43	6D Gallagher Well Motor Operated Valve	Sat 7/1/17	Sat 6/30/18	100%	OPS / RC												
44	6E P RTP Solids Handling - Design	Sat 7/1/17	Sat 6/30/18	50%	ENG / DJ												
45	6C PB Replace in Sync w/ County Paving	Sat 7/1/17	Sat 6/30/18	0%													
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50	7B Design/Install 8th Disposal Trench (300') DELETED	Sat 7/1/17	Sat 6/30/18	0%	ENG / RV												
51	7C Tahiti Way Lift Pumps Rebuild	Sat 7/1/17	Fri 6/29/18	0%	MAINT/RC												
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Current  Baseline  Progress

## ENGR. DEPT DEVELOPER & DISTRICT CAPITAL IMPROVEMENT PROJECTS (CIPs)





# FY17\_18 CAPITAL IMPROVEMENT PROJECTS

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Current  Baseline  Progress



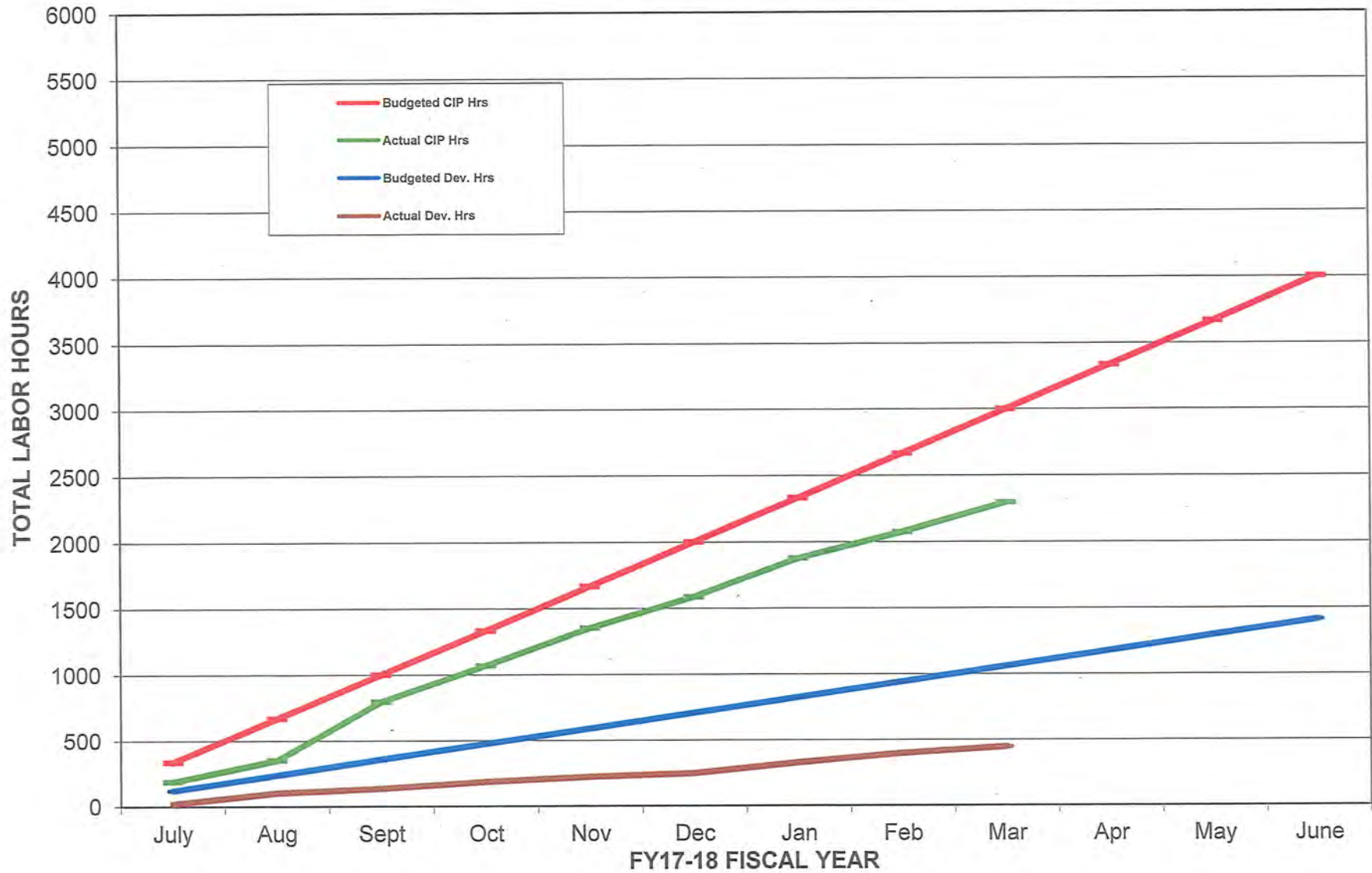
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Current  Baseline  Progress

# ENGR. DEPT DEVELOPER & DISTRICT CAPITAL IMPROVEMENT PROJECTS (CIPs)





# FY17\_18 CAPITAL IMPROVEMENT PROJECTS

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Current

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Progress



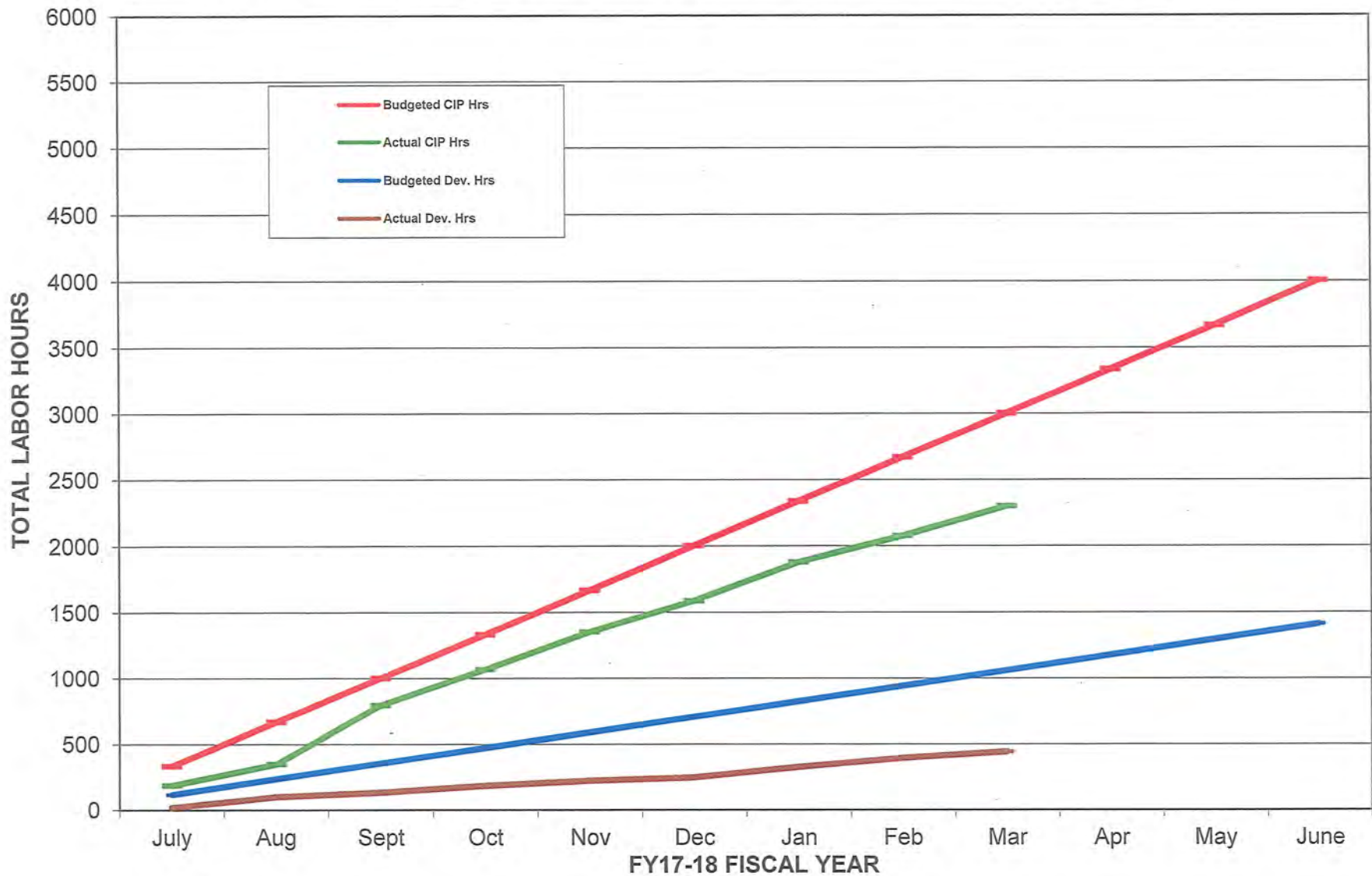
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Current  Baseline  Progress

# ENGR. DEPT DEVELOPER & DISTRICT CAPTIAL IMPROVEMENT PROJECTS (CIPs)



21



## MEMORANDUM

To: Board of Directors

April 27, 2018

From: Julie Blue, Auditor-Controller JB

Subj: Initial Review – FY 2018/19 Proposed Novato Operations Budget  
f:\acl\word\budget\19\ops review 19 i.docx**RECOMMENDED ACTION:** Information Only – Initial Review**FINANCIAL IMPACT:** None at this time - \$24.2 Million Expenditure Plan for FY19**Budget Summary**

The fiscal year 2018/19 (FY19) budget proposed herein projects a net "bottom line" cash deficit of \$1,056,000. A rate increase of 4.5% is factored into the budget effective June 1, 2018. The 4.5% increase adds \$880,000 to FY19 budgeted revenue.

FY19 water sales volume is budgeted at 2.6 BG, consistent with the FY18 projected sales volume, but higher than the 2.3 BG budgeted amount for FY18.

The operating revenue (water sales) less operating expenditures for the FY19 budget estimates a net operating income of \$1,243,000 which compares to this year's projected net operating income of \$3,269,000. Total budgeted outlay, which includes capital improvement projects and debt service, is budgeted at \$24.2 million, down 14% from the FY18 budget.

**Budget Detail**

**Water Sales** - Water sales volume is budgeted at 2.6 BG, which is in line with the current fiscal year estimated actual, and 5% below the 10-year average. The chart on page 6 of the budget document shows a 10-year history of billed consumption.

The proposed 4.5% rate increase is structured as a 4.5% increase in the commodity rate and 4.5% increase in the fixed service charge. If approved, the median residential customer would see an average monthly increase of \$2.50. The proposed rate increase would generate \$880,000 in additional revenue next fiscal year.

**Other Revenue** – Connection Fee revenue is budgeted at \$680,000 which is based on the average of the last five years of actual connection fee revenue received.

The wheeling charge to Marin Municipal Water District is budgeted at \$75,000. This is based on and equal to the projected revenue estimate to be received for the current fiscal year. In addition, MMWD will pay the annual fixed AEEP capital contribution of \$245,000 in accord with the terms of the 2014 Interconnection Agreement. Miscellaneous Revenue includes \$84,000 in combined income from the rental of the Point Reyes home, the Little Mountain cell

	<b>Project</b>	<b>Cost</b>	<b>Description</b>
1	Local Water Supply Enhancement Study	\$150,000	Increase Local Yield
2	Novato Master Plan Update	\$30,000	5-Year Update
3	Cost of Service Study Peer Review	\$30,000	Outside Review of Water Rate Structure
4	Stafford Lake Water Rights Update	\$50,000	Legal Review and Update of Entitlements
5	STP Efficiency Improvements	\$75,000	Increase Finished Water Throughput
		<u>\$335,000</u>	

**Staffing** - The proposed budget includes a staffing level of 54 full-time equivalent (FTE) employees, down 1.2 FTE (2%) from the current year budget. The decrease from the prior year is due to overlapping staff due to retirement and turnover.

<b><u>FTE Staffing</u></b>	<b><u>FY19</u></b>	<b><u>FY18</u></b>
Administration	8.0	8.0
Consumer Services	6.0	6.0
Construction/Maintenance	12.0	12.0
Engineering	8.0	8.2
Maintenance	9.0	10.0
Operations	6.0	6.0
Water Quality	<u>5.0</u>	<u>5.0</u>
	<u>54.00</u>	<u>55.2</u>

Temporary staffing budget is proposed to increase by 250 hours from the prior year's budget to 8,596 hours. The increase is due to additional administrative hours needed to complete a cost of service study and to provide assistance in completing a salary survey for union negotiations.

<b><u>Temporary Staffing Hours</u></b>	<b><u>FY19</u></b>	<b><u>FY18</u></b>
Administration	666	416
Customer Accounting	1,750	1,750
Construction/Maintenance	1,760	1,760
Engineering	1,000	1,000
Maintenance	1,220	1,220
Operations	700	700
Water Conservation	1,000	1,000
Water Quality	<u>500</u>	<u>500</u>
	<u>8,596</u>	<u>8,346</u>

For budgeting purposes, a 3% cost-of-living salary increase, based on the projected increase in the consumer price index, has been factored into the budget effective October 1, 2018, in accordance with the Memorandum of Understanding.

Proposed

# BUDGET

*Initial Review*

# Novato Potable Water Operating Budget

FISCAL YEAR

# 2018-19

**NORTH MARIN WATER DISTRICT**

999 RUSH CREEK PLACE, NOVATO, CA

TABLE OF CONTENTS  
NORTH MARIN WATER DISTRICT  
NOVATO POTABLE WATER  
PROPOSED 2018/19 OPERATING BUDGET

Budget Summary .....	1
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 <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 POTABLE WATER**  
**BUDGET SUMMARY**  
**Fiscal Year 2018/19**

	<b>Proposed Budget 2018/19</b>	<b>Estimated Actual 2017/18</b>	<b>Adopted Budget 2017/18</b>
<b>OPERATING INCOME</b>			
1 Water Sales	<b>\$20,144,000</b>	\$19,468,000	\$17,366,000
2 Wheeling & Misc Service Charges	<b>340,000</b>	386,000	352,000
3 <b>Total Operating Income</b>	<b>\$20,484,000</b>	\$19,854,000	\$17,718,000
<b>OPERATING EXPENDITURES</b>			
4 Source of Supply	<b>\$6,756,000</b>	\$5,576,000	\$4,833,000
5 Pumping	<b>343,000</b>	334,000	350,000
6 Operations	<b>580,000</b>	790,000	695,000
7 Water Treatment	<b>2,441,000</b>	2,080,000	2,169,000
8 Transmission & Distribution	<b>3,136,000</b>	2,590,000	3,061,000
9 Consumer Accounting	<b>619,000</b>	579,000	647,000
10 Water Conservation	<b>380,000</b>	268,000	440,000
11 General Administration	<b>2,166,000</b>	1,803,000	2,201,000
12 Depreciation Expense	<b>2,820,000</b>	2,565,000	2,800,000
13 <b>Total Operating Expenditures</b>	<b>\$19,241,000</b>	\$16,585,000	\$17,196,000
14 <b>NET OPERATING INCOME (LOSS)</b>	<b>\$1,243,000</b>	\$3,269,000	\$522,000
<b>NON-OPERATING INCOME/(EXPENSE)</b>			
15 Interest Revenue	<b>\$100,000</b>	132,000	100,000
16 Miscellaneous Revenue	<b>133,000</b>	149,000	133,000
17 Interest Expense	<b>(533,000)</b>	(436,000)	(452,000)
18 Debt Issuance Costs	<b>-</b>	(85,000)	-
19 Miscellaneous Expense	<b>(20,000)</b>	(\$2,000)	(20,000)
20 <b>Total Non-Operating Income/(Expense)</b>	<b>(\$320,000)</b>	(\$242,000)	(\$239,000)
21 <b>NET INCOME/(LOSS)</b>	<b>\$923,000</b>	\$3,027,000	\$283,000
<b>OTHER SOURCES/(USES) OF CASH</b>			
22 Add Depreciation Expense	<b>\$2,820,000</b>	\$2,565,000	\$2,800,000
23 Connection Fees	<b>680,000</b>	922,000	780,000
24 Caltrans AEEP Capital Contribution	<b>1,000</b>	1,000	-
25 MMWD AEEP Capital Contribution	<b>245,000</b>	245,000	245,000
26 SCWA Water Conservation Grant	<b>30,000</b>	45,000	-
27 Loans	<b>250,000</b>	4,600,000	6,200,000
28 Capital Equipment Expenditures	<b>(250,000)</b>	(172,000)	(210,000)
29 Capital Improvement Projects	<b>(5,660,000)</b>	(6,423,000)	(10,315,000)
30 Debt Principal Payments	<b>(1,350,000)</b>	(1,090,000)	(1,093,000)
31 Connection Fee Transfer from (to) RWS	<b>1,257,000</b>	(5,100,000)	(1,751,000)
32 Working Capital Increase/(Decrease)	<b>-</b>	1,129,000	2,570,000
33 <b>Total Other Sources/(Uses)</b>	<b>(\$1,977,000)</b>	(\$3,278,000)	(\$774,000)
34 <b>CASH INCREASE/(DECREASE)</b>	<b>(\$1,054,000)</b>	(\$251,000)	(\$491,000)

**NOVATO POTABLE WATER OPERATING BUDGET DETAIL****Fiscal Year 2018/19**

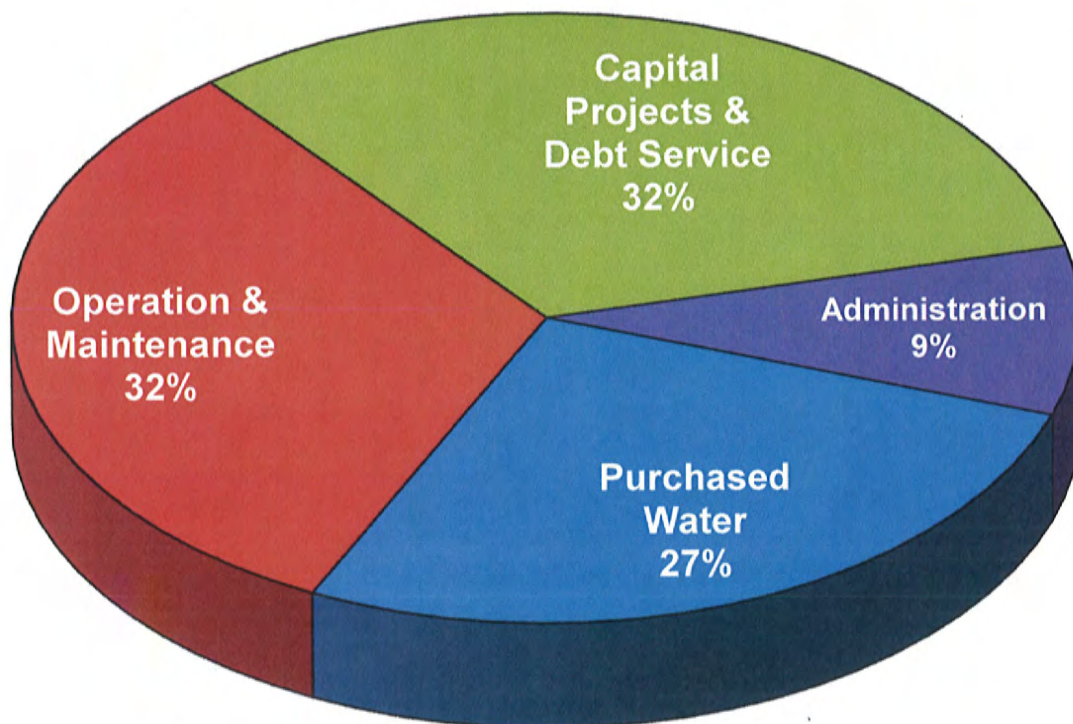
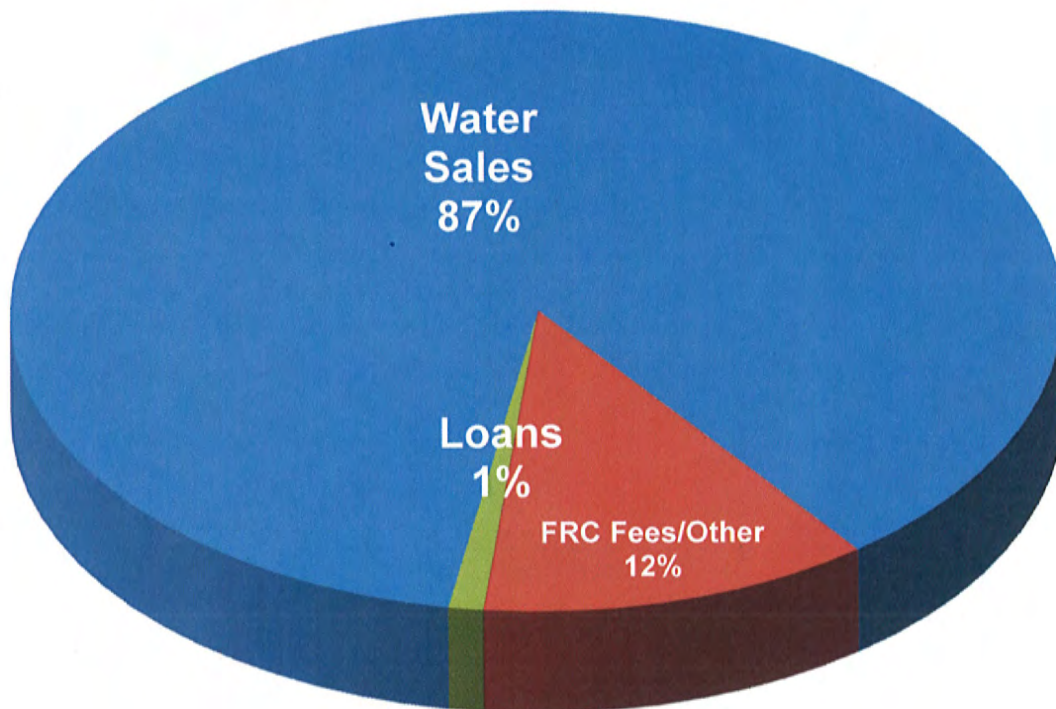
	Proposed Budget 18/19	Estimated Actual 17/18	Adopted Budget 17/18	Actual 16/17	Actual 15/16	Actual 14/15	Actual 13/14	Actual 12/13
<b>STATISTICS</b>								
1 Active Meters	20,577	20,556	20,545	20,544	20,535	20,498	20,505	20,492
2 Avg Commodity Rate/1,000 Gal (Net)	\$5.99	\$5.73	\$5.35	\$5.40	\$5.25	\$4.87	\$4.81	\$4.32
3 Potable Consumption (BG)	2.60	2.60	2.30	2.31	2.15	2.44	2.95	3.02
<b>OPERATING INCOME</b>								
4 Water Sales	\$20,300,000	\$19,628,000	\$17,280,000	\$16,772,060	\$15,489,903	\$16,101,706	\$18,385,017	\$16,626,526
5 Bill Adjustments	(156,000)	(160,000)	86,000	(130,587)	(64,461)	(82,790)	(95,470)	(104,567)
6 Sales to MMWD	-	-	-	-	-	-	432,294	0
7 Wheeling Charges-MMWD	75,000	75,000	91,000	91,374	90,217	119,144	100,527	251,980
8 Miscellaneous Service Revenue	265,000	236,000	261,000	252,038	277,479	276,388	265,496	223,619
9 <b>TOTAL OPERATING INCOME</b>	<b>\$20,484,000</b>	<b>\$19,854,000</b>	<b>\$17,718,000</b>	<b>\$16,984,885</b>	<b>\$15,793,138</b>	<b>\$16,414,448</b>	<b>\$19,087,864</b>	<b>\$16,997,558</b>
<b>OPERATING EXPENSE</b>								
<b>SOURCE OF SUPPLY</b>								
10 Supervision & Engineering	\$37,000	\$10,000	\$20,000	\$11,264	\$10,586	\$11,641	\$9,698	\$9,103
11 Operating Expense - Source	12,000	4,000	10,000	8,513	11,928	11,044	10,497	6,821
12 Maintenance/Monitoring of Dam	67,000	24,000	62,000	24,059	22,796	11,635	19,438	38,295
13 Maintenance of Lake & Intakes	18,000	3,000	17,000	7,575	6,299	511	11,701	14,481
14 Maintenance of Watershed	50,000	37,000	49,000	36,218	17,325	15,151	17,015	23,405
15 Water Purchased for Resale to MMWD	-	-	-	-	-	-	253,539	0
16 Water Quality Surveillance	22,000	8,000	25,000	3,513	3,137	7,467	13,713	12,776
17 Contract Water - SCWA	6,550,000	5,490,000	4,650,000	4,320,623	3,997,030	4,333,100	5,698,211	5,135,330
18 GASB 68 Adjustment	-	-	-	5,682	-	-	-	-
19 <b>TOTAL SOURCE OF SUPPLY</b>	<b>\$6,756,000</b>	<b>\$5,576,000</b>	<b>\$4,833,000</b>	<b>\$4,417,447</b>	<b>\$4,069,101</b>	<b>\$4,390,549</b>	<b>\$6,033,812</b>	<b>\$5,240,211</b>
<b>PUMPING</b>								
20 Operating Expense	\$3,000	\$0	\$3,000	\$0	\$0	\$237	\$0	\$0
21 Maintenance of Structures/Grounds	26,000	22,000	27,000	28,514	26,347	51,544	46,502	24,115
22 Maintenance of Pumping Equipment	62,000	35,000	68,000	30,354	13,507	51,013	27,696	35,637
23 Electric Power - Pumping	252,000	277,000	252,000	246,869	212,207	213,909	255,711	263,471
24 GASB 68 Adjustment	-	-	-	3,496	-	-	-	-
25 <b>TOTAL PUMPING</b>	<b>\$343,000</b>	<b>\$334,000</b>	<b>\$350,000</b>	<b>\$309,233</b>	<b>\$252,061</b>	<b>\$316,703</b>	<b>\$329,909</b>	<b>\$323,223</b>
<b>OPERATIONS</b>								
26 Supervision & Engineering	\$169,000	\$244,000	\$169,000	\$234,870	\$256,231	\$241,264	\$219,520	\$187,986
27 Operating Expense	252,000	393,000	358,000	343,890	304,897	244,900	274,893	264,400
28 Maintenance Expense	56,000	\$49,000	58,000	47,202	34,755	37,667	79,906	101,036
29 Telemetry Equipment/Controls Maint	86,000	\$88,000	93,000	101,568	68,674	86,544	62,223	44,349
30 Leased Line Expense	17,000	\$16,000	17,000	17,592	17,704	17,986	17,675	17,921
31 GASB 68 Adjustment	-	-	-	63,553	-	-	-	-
32 <b>TOTAL OPERATIONS</b>	<b>\$580,000</b>	<b>\$790,000</b>	<b>\$695,000</b>	<b>\$808,675</b>	<b>\$682,261</b>	<b>\$628,361</b>	<b>\$654,217</b>	<b>\$615,692</b>

**NOVATO POTABLE WATER OPERATING BUDGET DETAIL****Fiscal Year 2018/19**

	Proposed Budget 18/19	Estimated Actual 17/18	Adopted Budget 17/18	Actual 16/17	Actual 15/16	Actual 14/15	Actual 13/14	Actual 12/13
<b>WATER CONSERVATION</b>								
68 Residential	\$299,000	\$210,000	\$354,000	\$270,150	\$320,620	\$410,154	\$362,499	\$222,637
69 Commercial	19,000	6,000	19,000	1,702	3,711	5,352	2,605	1,169
70 Public Outreach/Information	39,000	23,000	40,000	30,618	32,287	34,148	51,638	28,477
71 Large Landscape	23,000	29,000	27,000	36,818	24,877	10,747	12,702	13,966
72 GASB 68 Adjustment	-	-	-	21,754	-	-	-	-
73 <b>TOTAL WATER CONSERVATION</b>	<b>\$380,000</b>	<b>\$268,000</b>	<b>\$440,000</b>	<b>\$361,042</b>	<b>\$381,495</b>	<b>\$460,401</b>	<b>\$429,444</b>	<b>\$266,249</b>
<b>GENERAL &amp; ADMINISTRATION</b>								
74 Director's Expense	\$39,000	\$34,000	\$41,000	\$34,384	\$34,222	\$30,400	\$25,300	\$14,400
75 Legal Fees	19,000	18,000	17,000	28,043	20,488	9,956	20,906	10,112
76 Human Resources	34,000	60,000	31,000	31,451	25,036	33,977	28,386	35,917
77 Auditing Services	20,000	20,000	17,000	16,220	18,770	18,380	21,050	20,600
78 Consulting Services/Studies	393,000	181,000	425,000	51,567	138,735	107,015	0	53,327
79 General Office Salaries	1,358,000	1,366,000	1,362,000	1,492,719	1,309,502	1,191,792	1,184,164	1,214,210
80 Office Supplies	47,000	23,000	47,000	35,048	37,709	36,877	46,174	37,232
81 Employee Events	12,000	13,000	12,000	9,726	10,143	7,379	7,227	6,204
82 Other Administrative Expense	16,000	11,000	17,000	13,960	10,427	13,390	13,240	18,150
83 Election Cost	-	-	-	2,077	250	0	250	0
84 Dues & Subscriptions	73,000	66,000	69,000	59,046	59,271	53,296	47,842	45,607
85 Vehicle Expense	8,000	8,000	8,000	9,325	8,112	8,112	8,112	8,112
86 Meetings, Conf & Training	230,000	148,000	237,000	186,436	139,858	136,863	117,425	112,402
87 Telephone, Water, Gas & Electricity	49,000	38,000	49,000	45,355	42,458	38,580	33,328	32,995
88 Building & Grounds Maintenance	53,000	49,000	55,000	62,856	63,344	48,891	35,642	41,194
89 Office Equipment Expense	129,000	91,000	118,000	95,465	87,141	97,868	90,231	82,349
90 Insurance Premiums & Claims	117,000	86,000	117,000	87,319	140,366	102,073	72,192	76,473
91 Retiree Medical Benefits	172,000	162,000	172,000	164,969	168,935	175,580	159,691	166,699
92 (Gain)/Loss on Overhead Charges	(39,000)	(106,000)	(39,000)	(19,931)	(89,626)	(85,682)	(222,710)	(136,354)
93 G&A Distributed to Other Operations	(144,000)	(150,000)	(169,000)	(161,036)	(126,771)	(113,218)	(76,538)	(77,443)
94 G&A Applied to Construction Projects	(420,000)	(315,000)	(385,000)	(290,813)	(359,689)	(353,998)	(389,569)	(392,205)
95 GASB45 Adjustment (OPEB)	-	-	-	120,988	-	-	-	-
96 GASB68 Adjustment (Pension Liability)	-	-	-	207,182	-	-	-	-
97 <b>TOTAL GENERAL &amp; ADMINISTRATION</b>	<b>\$2,166,000</b>	<b>\$1,803,000</b>	<b>\$2,201,000</b>	<b>\$2,282,356</b>	<b>\$1,738,681</b>	<b>\$1,557,531</b>	<b>\$1,222,343</b>	<b>\$1,369,981</b>
98 Depreciation Expense	\$2,820,000	2,565,000	\$2,800,000	\$2,710,627	\$2,577,081	\$2,507,124	\$2,445,634	\$2,417,032
99 <b>TOTAL OPERATING EXPENSE</b>	<b>\$19,241,000</b>	<b>\$16,585,000</b>	<b>\$17,196,000</b>	<b>\$16,748,582</b>	<b>\$15,001,502</b>	<b>\$14,825,093</b>	<b>\$15,688,436</b>	<b>\$14,768,252</b>
100 <b>NET OPERATING INCOME/(LOSS)</b>	<b>\$1,243,000</b>	<b>\$3,269,000</b>	<b>\$522,000</b>	<b>\$236,303</b>	<b>\$791,636</b>	<b>\$1,589,355</b>	<b>\$3,399,428</b>	<b>\$2,229,306</b>

**NOVATO POTABLE WATER  
FISCAL YEAR 2018-19**

**SOURCE OF FUNDS = \$23.2 MILLION**



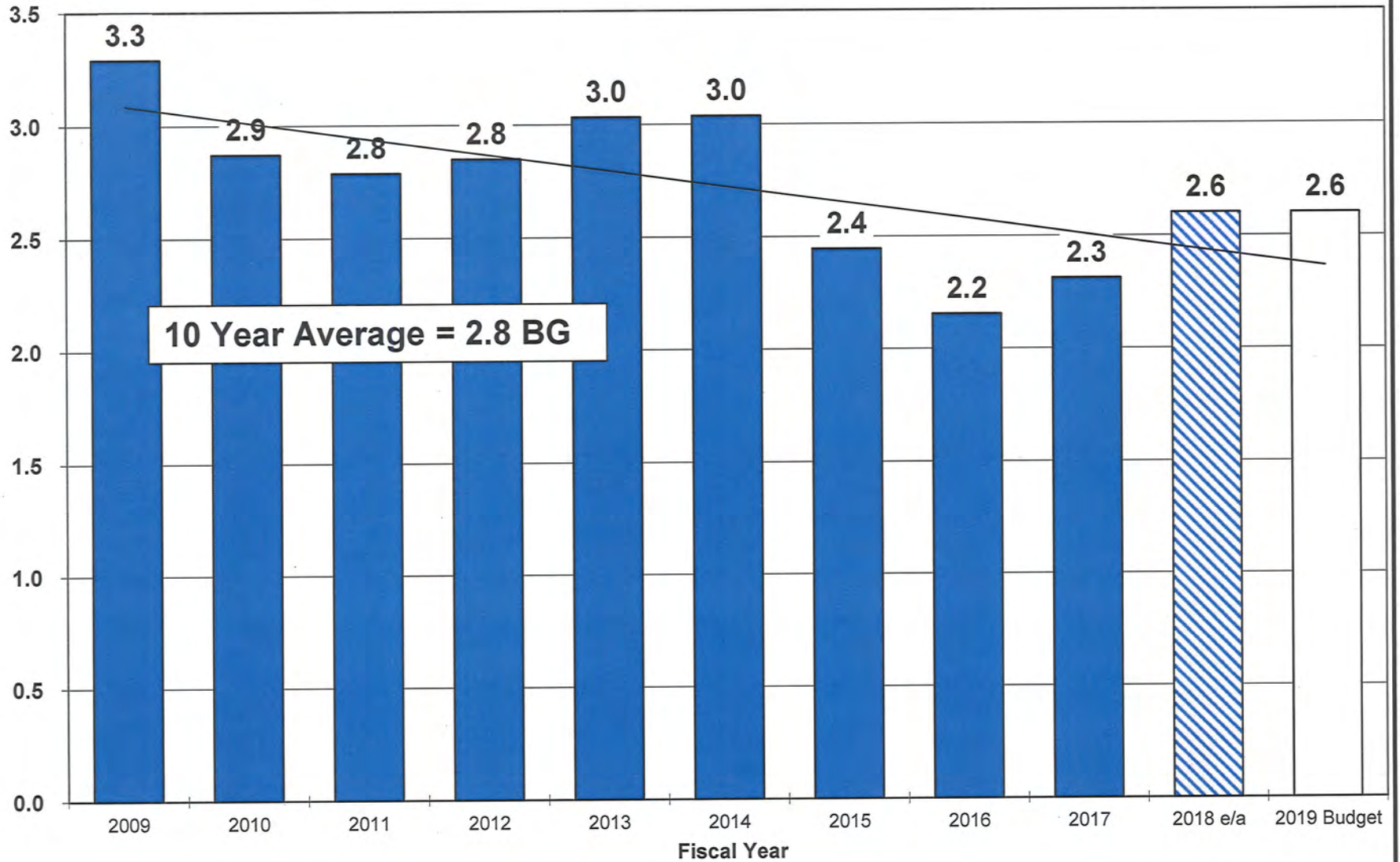
**USE OF FUNDS = \$24.2 MILLION**

4/25/2018

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### Novato Water Billed Consumption 10 Year History

Billion  
Gallons



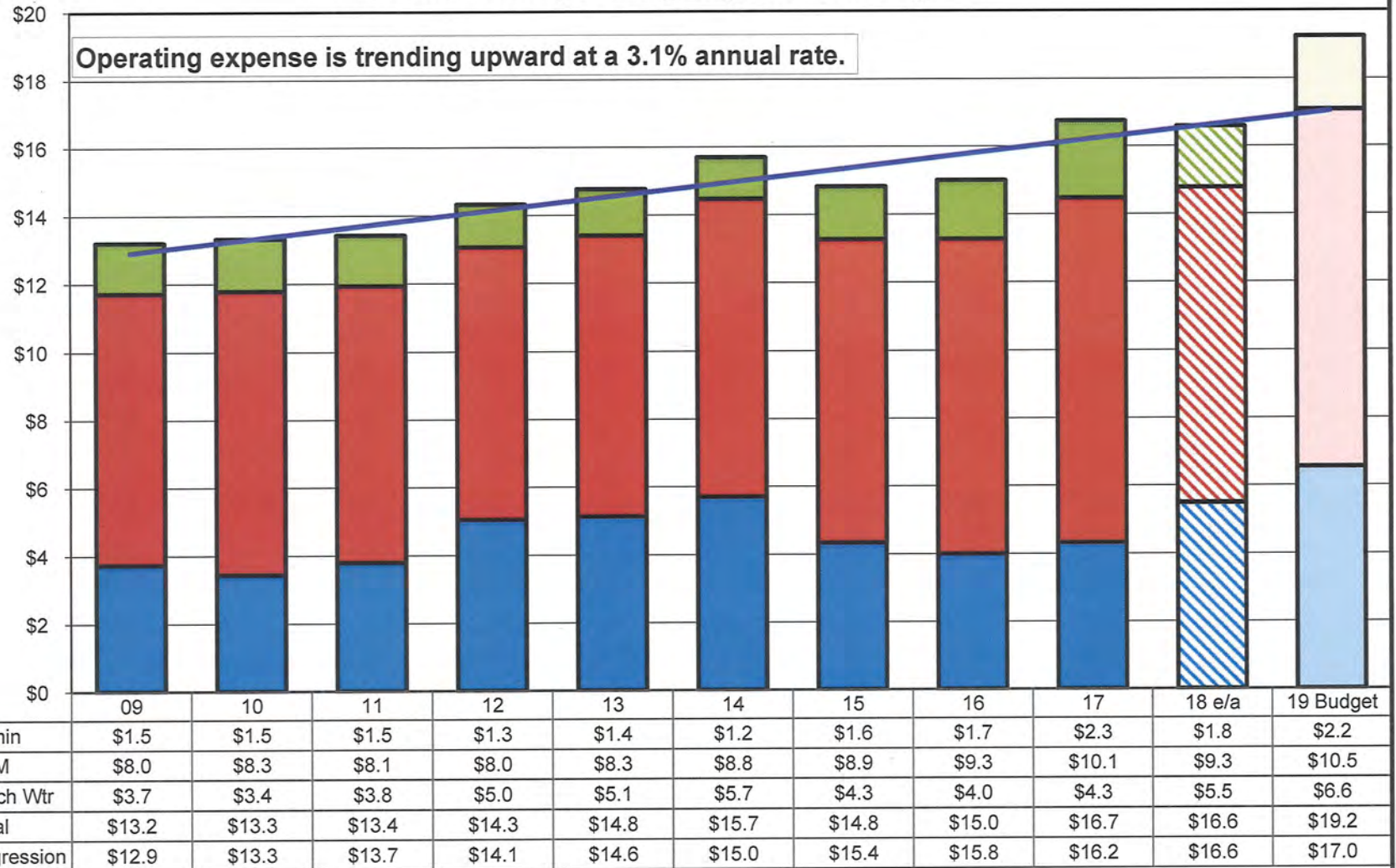


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Million \$

# Novato Water Operating Expense History



Fiscal Year

22



## MEMORANDUM

To: Board of Directors  
From: Julie Blue, Auditor-Controller *JB*  
Subj: Initial Review – FY 2018/19 Novato Recycled Water System Budget  
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April 27, 2018

**RECOMMENDED ACTION:** Information Only – Initial Review

**FINANCIAL IMPACT:** \$3.5 Million FY19 Expenditure Plan

The FY 2018/19 (FY19) Recycled Water System (RWS) budget projects demand of 200MG next fiscal year (see chart of historical water use attached), which is a 25% increase from FY18 as the Central expansion project will continue to bring new customers. Consistent with the potable water rate increase, a 4.5% commodity rate and bimonthly service charge increase is proposed to be effective June 1, 2018. The proposed increase is projected to generate \$50,000 in additional revenue next fiscal year.

Operating expenses (excluding depreciation) are budgeted to increase 11% (\$46,000) from the existing FY18 budget. This is primarily due to an estimated increase in water purchases due to projected increased sales. The FY19 budget projects the purchase of 150MG (\$210,000) 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 during the summer to keep it in good running order, and will continue to serve as a backup facility.

The projects to expand recycled water distribution facilities to Novato will be complete in FY18. The capital budget for FY19 includes \$100,000 to retrofit existing potable irrigation customers and \$20,000 for continued participation in the NBWRA administration. In FY18 Novato has advanced funds to RWS in anticipation of the receipt of loan and grant funds. The FY19 RWS budget transfers out \$1.2M in Connection Fee to the Novato potable water system to repay the advances.

As with the Novato budget, staff will continue to fine-tune the RWS budget, and return it for further review at the May 15 meeting.

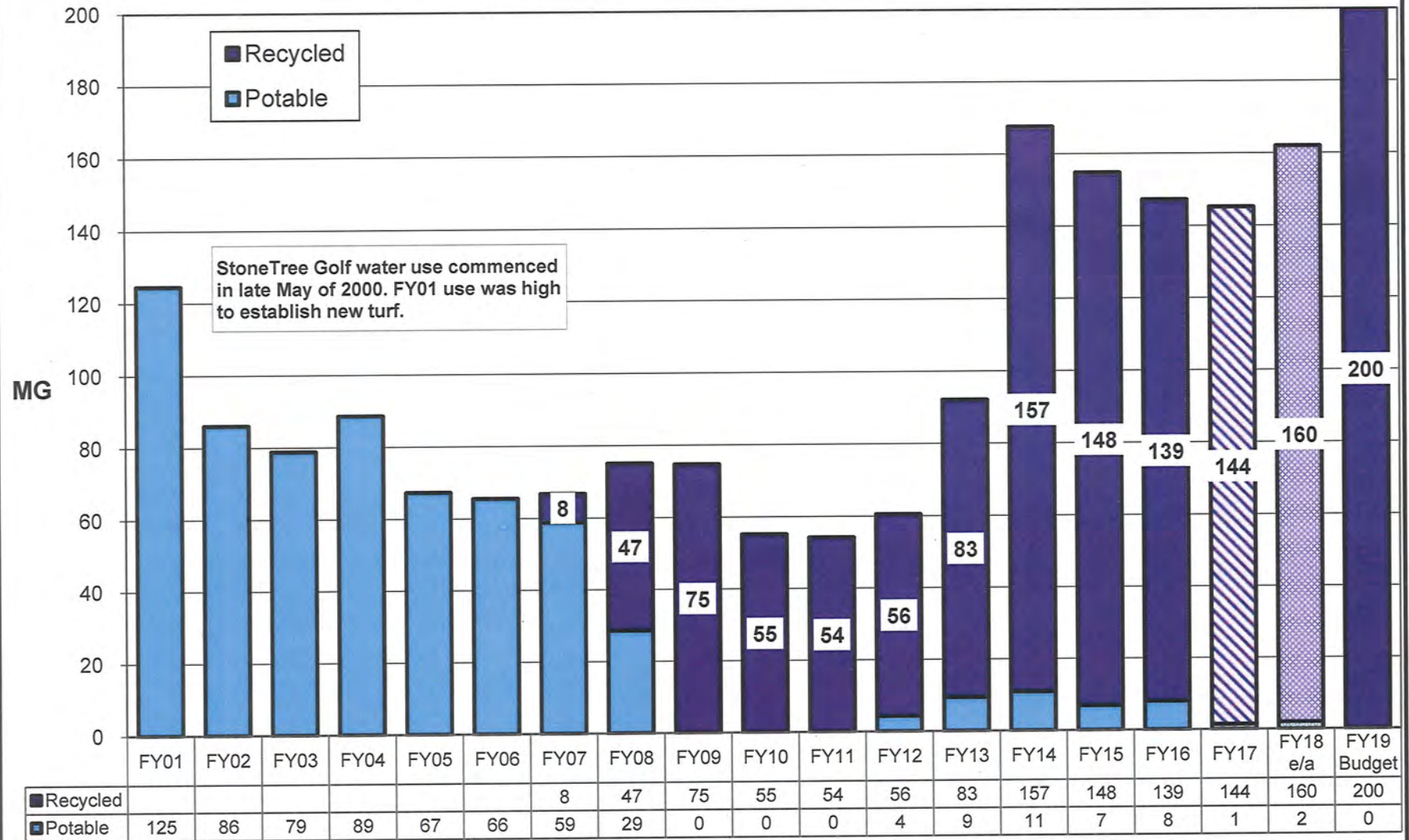
**NOVATO RECYCLED WATER**  
**BUDGET SUMMARY**  
**Fiscal Year 2018/19**

	<i>Proposed Budget 2018/19</i>	<i>Estimated Actual 2017/18</i>	<i>Adopted Budget 2017/18</i>
<b>OPERATING INCOME</b>			
1 Recycled Water Sales	\$1,154,000	\$883,000	\$884,000
2 Bimonthly Service Charge	41,000	33,000	34,000
3 <b>Total Operating Income</b>	<b>\$1,195,000</b>	<b>\$916,000</b>	<b>\$918,000</b>
<b>OPERATING EXPENDITURES</b>			
4 Purchased Water - NSD	\$210,000	\$98,000	\$154,000
5 Purchased Water - LGVSD	63,000	\$37,000	63,000
6 Pumping	6,000	\$3,000	6,000
7 Operations	64,000	\$59,000	62,000
8 Water Treatment	31,000	\$18,000	24,000
9 Transmission & Distribution	56,000	\$15,000	68,000
10 Consumer Accounting	1,000	\$1,000	1,000
11 General Administration	51,000	\$51,000	58,000
12 Depreciation	474,000	\$444,000	480,000
13 <b>Total Operating Expenditures</b>	<b>\$956,000</b>	<b>\$726,000</b>	<b>\$916,000</b>
14 <b>NET OPERATING INCOME (LOSS)</b>	<b>\$239,000</b>	<b>\$190,000</b>	<b>\$2,000</b>
<b>NON-OPERATING INCOME/(EXPENSE)</b>			
15 Interest Revenue	\$10,000	\$17,000	\$10,000
16 Stone Tree Golf Interest Payments	29,000	34,000	34,000
17 Deer Island SRF Loan Interest Expense	(53,000)	(58,000)	(58,000)
18 Distrib System SRF Loans Interest Exp	(235,000)	(187,000)	(191,000)
19 <b>Total Non-Operating Income/(Expense)</b>	<b>(\$249,000)</b>	<b>(\$194,000)</b>	<b>(\$205,000)</b>
20 <b>NET INCOME/(LOSS)</b>	<b>(\$10,000)</b>	<b>(\$4,000)</b>	<b>(\$203,000)</b>
<b>OTHER SOURCES/(USES) OF FUNDS</b>			
21 Add Depreciation Expense	\$474,000	\$444,000	\$480,000
22 Fed Grant/SRF Loan - Central Expansion	-	2,819,000	5,333,000
23 Connection Fees Transferred from (to) Novato	(1,255,000)	5,100,000	1,751,000
24 Stone Tree Golf Principal Repayment	222,000	217,000	217,000
25 Capital Improvement Projects	(120,000)	(3,365,000)	(6,545,000)
26 Deer Island SRF Loan Principal Payments	(221,000)	(215,000)	(215,000)
27 Distrib System SRF Loan Principal Pmts	(639,000)	(424,000)	(425,000)
28 <b>Total Other Sources/(Uses)</b>	<b>(\$1,539,000)</b>	<b>\$4,576,000</b>	<b>\$596,000</b>
29 <b>CASH INCREASE/(DECREASE)</b>	<b>(\$1,549,000)</b>	<b>\$4,572,000</b>	<b>\$393,000</b>

4/26/2018

## Recycled Water Production History

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23

**DISBURSEMENTS - DATED APRIL 19, 2018**

Date Prepared 4/17/18

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

Seq	Payable To	For	Amount
1	Able Fence	Parts for Lynwood Fence Repair	\$27.57
2	Alpha Analytical Labs	Lab Testing	290.00
3	Alphagraphics Marin	Mailing of AMI Installation Letters (\$477), Printing of Envelopes (1,000) (\$293) & Mailing Services (\$415)	1,184.98
4	Arrow Benefits Group	March Dental Expense	7,966.96
5	Automation Direct	PLC Parts for OM Lift Station	334.00
6	Bank of Marin	Bank of Marin Loan Principal & Interest (Pymt 78 of 240)	46,066.67
7	Bearings & Hydraulics	Oil Seal for Mixer @ STP	14.43
8	Brelje & Race	Prog Pymt#1: Engineering Services for STP Clear Well Concrete Coating (Balance Remaining on Contract \$3,639)	1,361.25
9	Brundidge, Mark	Refund Overpayment on Open Account	82.44
10	Buck's Saw Service	2-Stroke Gas for Weed Wacker (24 qts) (\$182), Gas Cut-Off Saw Pulley & Clutch Springs (\$63), Aluminum Weedhead, Collar Nut & Air Filter for Valve Turning Machine	306.19
11	Building Supply Center	42" Umbrella	9.30
12	Campways	Interior Shelving Kits for Cargo Van	2,594.25
13	Cilia, Joseph	Retiree Exp Reimb (April Health Ins)	343.66
14	Clipper Direct	Commuter Benefit Program (4)	332.00
15	Comcast	April Internet Connection	139.39
16	DeGabriele, Chris	Retiree Exp Reimb (April Health Ins)	1,006.54
17	Diggs, James	Retiree Exp Reimb (April Health Ins)	342.23


Seq	Payable To	For	Amount
18	Digital Prints & Imaging	Copies (2-24" x 36") (Crest Road Main Project)	358.46
19	Fagen, Michael	Refund Overpayment on Closed Account	72.41
20	Ferguson Waterworks	Cellular Meter Registers for 41 Services North of Novato (\$21,686), Service Saddle (\$94), 1 1/2" Meters (2), Elbows (35), Couplings (4), Adaptors (3), Nipples (21) (\$319) & Reducers	22,520.50
21		Vision Reimbursement	129.00
22	Fisher Scientific	Tip Rack (960) & Ethyl Alcohol (Lab)	139.77
23	Frontier Communications	Leased Lines	1,444.25
24	Grainger	Walkway Light bulbs (5), Pry Bar Set, Screwdriver, Knee Boots (2) (\$199), Anti-Seize Compound (15) (\$306), Sealant (10), Telescoping Inspection Mirror (Lab), Rope (600') (\$154), Battery Adapter for STP Cordless Power Tools (\$61), Round Sling (\$74), Restroom Signs (2) & Barricade Tape (6,000')	1,050.24
25	Kruger: Veolia Water	Part for STP Sand Pump	7.31
26	Larsengines	Engine Oil (48), 2.5 & 5 Gal Gas Cans	187.02
27	Latanyshyn, Roman	Retiree Exp Reimb (April Health Ins)	343.66
28	Marin Landscape Materials	Concrete (\$280), Crushed Rock (1 yd), Soil (2 cu ft) & Mason Mix	354.59
29	Moore, Doug	Retiree Exp Reimb (April Health Ins)	1,006.54
30	North Marin Auto Parts	Batteries (2) (\$209), Load Tie Down Strap (4) (\$138), Oil Filters (2), Air Filter, Cabin Filters, Motor Oil (25 qts) (\$154), Gear Oil (3 qts), Oxygen Sensor (\$73) & Shop Rags (5 lbs)	755.58
31	North Bay Gas	Carbon Dioxide Dip Tube, Acetylene (\$62), Oxygen & March Cylinder Rental	179.43
32	Northern Safety	Safety Gloves (5)	49.39
33	Northbay Nissan	Air & Oil Filters ('16 Nissan Frontier)	29.71
34	Novato Builders Supply	Metal Stakes (20) (\$132), Gorilla Glue, Hole Saws (2), Lumber, Screws, Staples & Concrete (\$194)	422.43

Seq	Payable To	For	Amount
35	OConnor, Daniel	Refund Overpayment on Closed Account	70.00
36	Olson, Elaine	Novato "Cash for Grass" Rebate Program	210.00
37	Pace Supply	Bolts (100)	106.33
38	NMWD Petty Cash	Safety Snacks (\$26), Envelopes for Birthday Lunch Invites (\$15), Parking (\$10) & Safety Bucks (\$4)	54.55
39	Pini Hardware	Paint Brush, Bucket, Trash Bags, Junction Box & Outlets (\$71), Electrical Cord End, Parking Lot Stencil Set, Hardware, Door Sweep, Pop Rivets (20), PVC Cap, Cable Ties (75), Large Hose Clamps (6), Toilet Tank Flapper Kit, End Caps, Key, Pop Rivet Tool, Light Bulbs, Junction Box, Hand Cleaner, Socket Adaptor, Drill Bit Set, Rake, Shovel, Outlet Box, Bungee Cords, Self Drilling Screws, Lysol & Hand Sanitizer	555.19
40	Point Reyes Light	Display Ad: Salinity Intrusion Into Point Reyes Well Supply	66.25
41	Point Reyes Prop Mgmt Assn	April HOA Fee (25 Giacomini Rd)	75.05
42	Polkinghorne, Gretchen	Novato "Toilet Rebate"(\$400) & "Washer Rebate" Program	450.00
43	Recology Sonoma Marin	Green Waste Dumping Fee	1,230.70
44	Red Wing Shoe Store	Safety Boots (Rodriguez)	200.00
45	Schwaab	"Approved" Stamp (Accounting)	43.14
46	Sequoia Safety Supply	Lime Green Pants (2), First Aid Kit (2) (\$58), Jacket (\$65), Overalls & Safety Gloves (400)	295.88
47	Stafford, Vernon	Retiree Exp Reimb (April Health Ins)	343.66
48	TPx Communications	March Telephone Charges	466.01
49	USA BlueBook	Safety Gloves (2,200) (STP)	463.00
50	Vela, Fred	Novato "Toilet Rebate" Program	300.00
51	VWR International	Acetone & Methanol (\$97), Fluoride & Bumper Guards (2) (Lab)	118.95



Seq	Payable To	For	Amount
52	White Cap Construction	5 Gal Bucket (20)	86.29
53	Wilson, Olin and Donna	Refund Overpayment on Open Account	132.03
<b>TOTAL DISBURSEMENTS</b>			<b><u>\$96,719.18</u></b>

The foregoing payroll and accounts payable vouchers totaling \$96,719.18 are hereby approved and authorized for payment.



Auditor-Controller

4/17/18

Date



General Manager

4/17/18

Date

## **DISBURSEMENTS - DATED APRIL 26, 2018**

Date Prepared 4/24/18

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

Seq	Payable To	For	Amount
P/R*	Employees	Net Payroll PPE 4/15/18	\$144,093.97
EFT*	US Bank	Federal & FICA Taxes PPE 4/15/18	59,956.53
EFT*	State of California	State Taxes & SDI PPE 4/15/18	12,218.86
EFT*	CalPERS	Pension Contribution PPE 4/15/18	36,004.64
EFT*	US Bank	March Bank Analysis Charge (Lockbox \$912 & Other \$353, Less Interest of \$164)	\$1,101.91
1	Alpha Analytical Labs	Lab Testing	50.00
2	Alphagraphics Marin	Postage for Rate Increase Letter (18,465)	3,105.20
3	American Family Life	April Employee Accident, Disability & Cancer Insurance	2,883.19
4	American Development	Calcium Thiosulfate (550 gals) (STP)	3,853.21
5	Athens Administrators	March Bill Review Fees (\$152) (Less Credit of \$63.30 for Replenish Checks Written)	88.68
6	AT&T	Leased Line	66.24
7	Autoworld	Parking Brake Release Handle ('03 Dodge Dakota)	46.46
8	Automation Direct	Hydropneumatic Tank Repair Parts	765.00
9	Battaglia, Maureen	Refund Overpayment on Closed Account	12.65
10	Briggs, Milton	Refund Overpayment on Open Account	164.00
11	Caltest Analytical Laboratory	Lab Testing	35.00
12	Cole-Parmer Instrument	Bottles (250) (Lab)	244.94
13	Estrada, Rudy A	Refund Overpayment on Open Account	1,000.00
14	Gaya, DB	Prog Pymt#6: Perform Tank Coating Inspection on San Marin Tank Project (Balance Remaining on Contract \$5,736)	7,391.60

Seq	Payable To	For	Amount
15	Golden Gate Petroleum	Gas (\$3.08/gal) & Diesel (\$3.15/gal)	2,330.90
16	Grainger	Wrench Set, Restroom Signs, Electrical Tape (20-3/4" x 60'), Hose Bibbs (3), Needle Nose Pliers, "No Parking" Signs for Apartment (2) (\$47) & Hard Hats (3) (\$72)	222.35
17	Hopkins, Eric	Novato "Hot Water Recirculation System" Rebate Program	75.00
18	Industrial Vacuum Equipment	Vacuum Trailer Filters (4)	520.06
19	Kehoe, Theresa	Exp Reimb: Retirement Books (2), Food & Supplies for Retirement Party (\$104)	195.36
20	Lincoln Life	Deferred Compensation PPE 4/15/18	12,349.53
21		Cafeteria Plan: Uninsured Medical Reimbursement	376.99
22	Marin Reprographics	Laser Bond (34" x 500' & 36" x 500')	84.64
23	McAghon, Andrew	Prog Pymt #6: Lawn Be Gone Sheet Mulching Program (3) (Balance Remaining on Contract \$8,438)	1,903.68
24	MSI Litho	Door Hangers for Consumers (500-Construction, 9,000-AMI Project (\$1,761)	1,929.14
25	Nationwide Retirement Solution	Deferred Compensation PPE 4/15/18	2,150.00
26	Novato Sanitary District	Jan 2018 RW Operating Expense	3,085.69
27	Office Depot	Quarterly Office Supply Order: Pens, Post-it Notes, Pocket Files (20) (\$69), Toner (11) (\$786), Banker Boxes (20) (\$76), White Board (\$57), Labels (15,000) (\$119), Magazine Boxes (\$86), Pens (12), Binder & Storage Boxes (20) (\$76)	2,088.84
28	Pace Supply	Meter Gaskets (500) (\$133), Companion Flange, Plugs (15), Bushings (4), Nipples (4), Meter Spud (25), Coupling, Corp Stop Adapters (41) (\$741) & Tees (5)	1,372.68
29	PG&E	Power: Bdgs/Yard (\$2,993), Rectifier/Controls (\$544), Pumping (\$24,013), Treatment (\$104) & Other (\$131)	27,786.47

Seq	Payable To	For	Amount
30	Silverado Contractors	Refund Security Deposit on Hyd Meter Less Final Bill	1,061.17
31	SMART Train	Annual Easement Access Fee @ GG Place Crossing	784.57
32	Sonoma County Water Agency	March Contract Water (370 AF-NMWD) (130 AF - Backfed for Stafford Lake)	439,924.67
33	Staples Advantage	Quarterly Office Supply Order: Footrest (\$39), Business Card Stock (250), Business Card Holder (10), Copy Paper (90-Letter Size Reams, 5 Tabloid Size Reams) (\$414), Correction Tape, Dish Soap, Coffee (\$130), Sponges (18), Calculator (\$44), Stapler, Post-it, Business Card Box & Keyboard Drawer (\$72)	1,103.17
34	State Water Resources Control Board	D2 Certificate Renewal (Reischmann) (Budget \$0) (11/18-11/21)	60.00
35	Stone, Janis	Novato "Toilet Rebate" Program	100.00
36	Syar Industries	Asphalt (6 tons)	960.20
37	Township Building Services	March Janitorial Service	1,877.53
38	United Parcel Service	Delivery Service: Sent Scrubber Media for Testing, Lab Samples (\$104), Chemical Pump Returned-Wrong Size, Letters & Attachment Re Inundation Maps for Stafford Dam & Weights for Calibration & STP Controller for Warranty	237.21
39	USA BlueBook	Chlorine Detector Calibration Gas (STP)	253.88
40	U.S. Bank Card	DE9 & 941 Forms (\$33), State of the City Registration (\$10) (McIntyre), "Calif Water Rate Setting Under Prop 218" Book (\$26), "A Guide to Calif Planning" Book (\$39), Hammerdrill (\$184), Adobe Acrobat (Blue) (\$299), Sympathy Flowers for Director (\$63) & Game for Water Conservation Outreach Event (\$54)	732.18
41	VWR International	Air Filter, Parafilm (\$65) & Lens Paper (12-4" x 6") (Lab)	110.91
42	Walborg, Hal	Novato "Toilet Rebate" Program	198.00
43	Weisberg, Meg & Jay	Refund Overpayment on Closed Account	61.92
44	White Cap Construction	Steel Stakes (60-36" x 3/4")	187.48

Seq	Payable To	For	Amount
45	Williamson, Nancy	Exp Reimb: Cake for Retirement Party/Clean-up Day	59.99
46	Winzer	Wire Ties (650)	226.65
<b>TOTAL DISBURSEMENTS</b>			<b><u>\$777,492.94</u></b>

The foregoing payroll and accounts payable vouchers totaling \$777,492.94 are hereby approved and authorized for payment.



Auditor-Controller

4/24/18  
Date



General Manager

4/24/18  
Date

# PROOF OF PUBLICATION (2015.5 CCP)

This space is for the County Clerk's Filing Stamp

## 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 interest in the above-entitled matter. I am the publisher of the Point Reyes Light, a newspaper of general circulation, printed and published in the town of Point Reyes Station, County of Marin and which newspaper has been adjudged a newspaper for general circulation by the Superior Court of the County of Marin, State of California, under the date April 26, 1949, Case Number 183007; that the notice of which 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:

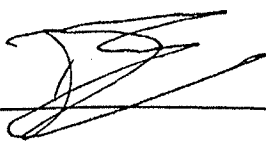
4/19/18

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

Date at Inverness, California, this

4/19/18

Signature



### Proof of Publication

#### Notice:

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

Date	Chloride	Sodium	Units
4/17/18	88	66	mg/L

\*milligrams per liter

Drew McIntyre, General Manager  
North Marin Water District

## April 19, 2018 POINT REYES LIGHT

### **Notice:**

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4/17/18	88	66	mg/L

\*milligrams per liter

Drew McIntyre, General Manager  
North Marin Water District



Novato Advance: [shermfrederick@gmail.com](mailto:shermfrederick@gmail.com)

IJ: [localnews@marinij.com](mailto:localnews@marinij.com)

Pt Reyes Light: [editor@ptreyeslight.com](mailto:editor@ptreyeslight.com)

April 25, 2018

Contact: Drew McIntyre, General Manager, (415) 897-4133

## **PRESS RELEASE**

### **North Marin Water District**

### **NMWD Water Quality Supervisor Recognized for Outstanding Service**

Pablo Ramudo, North Marin Water District Water Quality Supervisor, recently received the James E. Underwood Memorial Award for Outstanding Service from the Bay Area Water Works Association. BAWWA is a non-profit association comprised of persons in the waterworks and related industry in the San Francisco Bay Area. The award is presented annually to a BAWWA member whose contributions reflect new ideas, leadership, exceptional work and having a spirit of waterworks service. BAWWA's purpose is to provide opportunities for its members to interact with each other and exchange information and ideas as well as broaden its collective members' knowledge and experiences relative to waterworks issues and industry developments and opportunities. Mr. Ramudo served as President of BAWWA in 2015 and 2017.

Mr. Ramudo was hired in 2003 and has been Water Quality Supervisor of North Marin Water District since 2005. He holds a Bachelor's Degree in Marine Biology from the University of North Carolina-Wilmington.



## POINT REYES STATION

# Forums set on plans for housing

**By Adrian Rodriguez**

[arodriguez@marinij.com](mailto:arodriguez@marinij.com) @adrianrrodri on Twitter

Marin County officials want to hear from residents about plans to convert a former U.S. Coast Guard property in Point Reyes Station into affordable housing.

The Marin County Community Development Agency has set two public workshops at West Marin School's small gym at 11550 State Route 1. One forum will be at 6:30 p.m. April 30; another for Spanish- speakers will be at 6:30 p.m. April 18.

"Everyone has been anxious to hear an update," said Supervisor Dennis Rodoni, whose District 4 is largely made up of the West Marin community. "This is the first opportunity in quite a while for residents. It's a good time to talk about suggestions, opinions that residents have."

Rodoni said that the goal of the meeting is to help inform a future developer about what the community wants when the site is rehabilitated over the next few years.

The meeting will begin with a staff presentation. Then participants will break off into groups to brainstorm ideas for discussion.

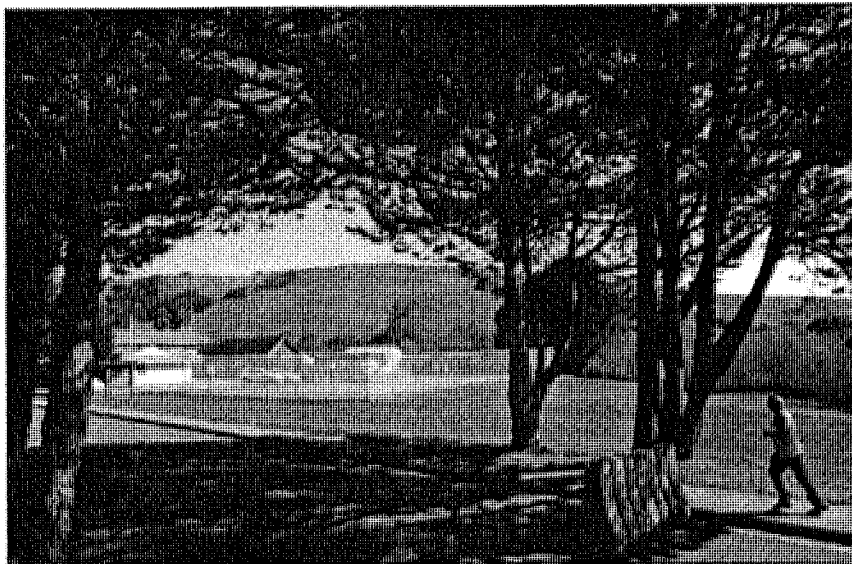
The 36-townhouse complex on 30 acres includes a dormitory, commercial kitchen, meeting room, dining hall, administrative offices and outdoor recreation facilities just beyond downtown Point Reyes Station. The property features picnic areas, a playground, pool, tennis courts, trails and creek access as well as a path leading up the hill to West Marin School.

Coast Guard employees and their families resided there for years while staffing a marine communications center.

The housing site was designated as surplus in 2014, after the West Marin community successfully rallied to get the state on board to sell the property for affordable housing.

The county continues to negotiate a purchase of the property based on a fair-market appraisal for use as permanent affordable housing. The purchase of the property is expected to be completed in late 2019 or early 2020.

The county is planning to begin



The U.S. Coast Guard housing complex in Point Reyes Station is in the process of conversion to workforce housing for local residents.

FRANKIE FROST — MARIN INDEPENDENT JOURNAL

shopping this summer for nonprofit housing developers to rehabilitate and manage the affordable homes project. It will be several years before families can move into the homes because of the environmental review.

"The housing opportunities at the Coast Guard property would come as a great benefit to West Marin communities which, with high land costs and a demanding regulatory environment, face unique and significant barriers in the development of affordable housing," said Leelee Thomas, a county housing planner.

The Community Land Trust Association of West Marin, or CLAM, will submit a proposal to rehabilitate, own and manage the property in partnership with an organization that has financial experience in projects this large, said Kim Thompson, executive director of CLAM.

"The West Marin community is truly an engaged community wanting to create solutions for its housing crisis," she said.

Light snacks and child care will be provided at both workshops. More information is available at [bit.ly/2H0KnHa](http://bit.ly/2H0KnHa).



The U.S. Coast Guard housing complex in Point Reyes Station includes 36 townhomes, a dormitory and play areas on 30 acres.

## Hayward fault big threat to Marin

### DAMAGE FORECAST

Experts call it 'tectonic time bomb' for region

By Rong-Gong Lin II

*Los Angeles Times*

The San Andreas long has been the fault many Californians feared the most, having unleashed the great 1906 earthquake that led to San Francisco's destruction 112 years ago this week.

But new research shows that a much less wellknown fault, running under the heart of the East Bay, poses a potentially greater danger to Marin and the rest of the Bay Area.

"This fault is what we sort of call a tectonic time bomb," U.S. Geological

Survey earthquake geologist emeritus David Schwartz said. "It's just waiting to go off."

A landmark report by the USGS estimates that at least 800 people could be killed and 18,000 more injured in a hypothetical magnitude 7 earthquake on the Hayward fault centered below Oakland.

Hundreds more could die from fire following an earthquake along the 52-mile fault. More than 400 blazes could ignite, burning the equivalent of 52,000 single-family homes, and a lack of water for firefighters caused by old pipes shattering underground could cause some to emerge into conflagrations, said geophysicist Ken Hudnut, the USGS' science adviser for risk reduction.

In Marin 14 large fires, 10 conflagrations — which would include multiple city blocks — could burn up to 2 million square feet and cause \$500 million in damage, according to the report.

The Hayward fault is so dangerous because it runs through some of the most heavily populated areas in the Bay Area, spanning the length of

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the East Bay from the San Pablo Bay, through Berkeley, Oakland, Hayward, Fremont and into Milpitas. Marin sits to the west of the Hayward fault, a few miles from Marin's shores across San Pablo Bay.

It is one of the most dangerous faults in the nation "because of the density of the population directly on or astride it, which would include San Francisco, and the amount of infrastructure that crosses it," Schwartz said.

Much of the region is vulnerable, experts said.

The so-called "Haywired" scenario envisions a scale of disaster not seen in modern California history — 2,500 people needing rescue from collapsed buildings and 22,000 being trapped in elevators, Hudnut said. More than 400,000 people could be displaced from their homes. In Marin, more than 500 homes could be red-tagged as uninhabitable, according to the report.

And Marin has a unique problem: landslides.

"Landslide building damage ... totals \$291 million in the nine counties in which it was modeled, and is most

liquefaction and landslides, Marin could see \$405 million in damage, according to the report.

Some residents of the East Bay may face a loss of water from six weeks to as much as six months, although in Marin 95 percent of residents would have service returned in a week or less, with full service back in 30 days.

A Hayward fault earthquake could trigger significant aftershocks on other faults, and could happen as long as half a year after the main shock. Of course, part of the notorious San Andreas fault runs through West Marin.

A major quake on the Hayward fault directly under the East Bay would be much different than other great Bay Area quakes.

The 1989 Loma Prieta earthquake was centered in the sparsely populated Santa Cruz mountains, and the shaking felt in Marin and the Bay Area nearly three decades ago was actually quite mild to what can happen when an earthquake hits closer to an urban

substantial in Alameda County and Marin County,” the report reads.

center. The 1906 earthquake was centered off the coast of San Francisco.

Roughly two-thirds of Marin County is highly susceptible to landslides, according to officials. While much of the rock in Marin is moderate to strong, the steep slopes on which some homes are built in Sausalito, Mill Valley and other communities put them more at risk, state officials have said. And areas of Marin were built on hillsides in the 1920s and 1930s before grading codes were established.

Damage from landslides in Marin would cause \$84 million, only behind Alameda County for that type of destruction. Between ground shaking,

The Haywired report has been more than four years in the making, and federal scientists say they hope spelling out the science of what could happen in a plausible earthquake will help inspire people to get prepared.

With decades passing since the Loma Prieta earthquake, “some amount of complacency is to be expected, and it’s the same in L.A. after Northridge,” Hudnut said. But earthquakes, while rare, can still happen and “can be extraordinarily high impact. So it’s not OK to forget. We have to remember.” *IJ reporter Mark Prado contributed to this report.*

## *Crucial talks set for housing in West Marin*

### **Editorial**

Public acquisition of the surplus Coast Guard housing in Point Reyes Station is a rare opportunity to help meet local need and demand for affordable housing.

On April 30, the county will hold a community forum to discuss opportunities that acquisition of the 32-acre parcel could provide.

It is just another step toward making possible use of the property, which includes 36 townhomes.

Those residences were built by the public to meet an important need. Keeping them in public hands is not only appropriate, but furthers that investment.

Marin and federal officials are negotiating transfer of the property.

Federal officials should be cognizant that in any purchase, they are asking taxpayers to pay twice, first for construction of the Coast Guard housing and then for its transfer to county ownership.

Rep. Jared Huffman has made the fair transfer of the property to meet a local community need a top priority. In 2016, Huffman's bill calling on the Coast Guard to negotiate with the county before putting the property up for auction was signed into law by President Obama.

The need for housing for those who work on West Marin ranches or in Point Reyes Station

is real and this property could help make a difference.

It would be a "wise reuse and ongoing stewardship," says the Community Land Trust Association of West Marin (CLAM), which is poised to take over rehabilitation and management of the property.

The housing was built for men and women serving at the Coast Guard communications facility in the Point Reyes National Seashore. It closed in 2015, ending 43 years of service.

Supervisor Dennis Rodoni says the April 30 forum (6:30 p.m., West Marin School) is a chance for the public to get an update on negotiations and planning and to hear suggestions from the community.

County officials hope to begin their search for a nonprofit housing developer to begin work on the necessary renovations.

Getting this rare opportunity to preserve affordable housing in the community was a big part of the job. Helping shape the details of the negotiations and the future public use of the property is another major step.

Each should lead to the day when local teachers, store clerks or farmworkers can find an affordable place to live in West Marin.

## Scientists predict greater frequency of severe weather

### CALIFORNIA CLIMATE

**By Paul Rogers**

*Bay Area News Group*

The extreme weather swings that Californians have experienced over the past six years — a historic drought followed by drenching winter storms that caused \$100 million in damage to San Jose and wrecked the spillway at Oroville Dam — will become the norm over the coming generations, a new study has found.

Those types of extremes are not new, but because of climate change, they can be expected to occur more frequently, as hotter

global temperatures and warming oceans are putting more water vapor into the air, concluded the study, which was published Monday in the scientific journal *Nature Climate Change*.

And perhaps most ominous, the odds are rising that a mega-storm — like the one that famously flooded California in 1862, forcing Leland Stanford to take a rowboat through the streets of Sacramento to his inauguration as governor — will strike again. Such a storm “is more likely than not” to hit the state at least once in the next 40 years and twice in the next 80, the study found.

The 1862 event, the largest recorded flood in California history, saw 43 days of continuous rainfall that washed whole towns away and forced the state capital to be temporarily moved to San Francisco.

“All of our wet winters and big flood events are due to atmospheric rivers,” said Daniel Swain, a climate scientist at UCLA and lead author of the study. “What are they but big plumes of water vapor moving toward the coast? As we increase the amount of water vapor, the intensity increases.”

Monday’s study is the first to estimate the number of wild drought-to-flood swings facing California in the decades ahead and to estimate the growing risks of another mega storm hitting the state. It notes that major drought-to-flood years have occurred on average four times a century in the state, but are expected to grow to eight times this century in Southern California and six times in Northern California.

An 1862-level storm today would cause more than \$725 billion in damage statewide, forcing the evacuation of 1.5 million people, according to a study by 117 scientists, insurance industry officials and disaster response experts that was published by the U.S. Geological Survey in 2011.

It would prompt hundreds of landslides and road washouts, as well as levee collapses on Delta islands,

provide 40 million residents with drinking water and irrigate millions of acres of crops were built generations ago in a different climate. By relying on huge amounts of snow to accumulate in the Sierra Nevada mountains, state water planners had a natural reservoir that would slowly melt each spring, sending water down rivers in a relatively orderly way. By damming those rivers, state, federal and local officials created reservoirs to store water for the dry summer months and years.

But that model won’t work as well in the future. As the climate continues to warm, the computer models analyzed by Swain and his colleagues found that while there won’t be much change in the amount of precipitation overall in California, it will come in more violent, and rare bursts. That means more Sierra snow will melt or fall as rain, and the state will need ways to store more water for long dry spells before the next deluge comes.

“It’s the climate that California already has had, but on steroids,” said Ellen Hanak, director of the Water Policy Center at the Public Policy Institute of California, a non-profit think tank in San Francisco.

Some new off-stream reservoirs will need to be built, said Lund. But another cheaper solution lies in better managing groundwater, he said. In wet years, Lund and Hanak said, farmers and other landowners can be paid



major floods in the Bay Area, Central Valley and Los Angeles, and damage up to quarter of the homes in the state, while turning 300 miles of the Central Valley into an inland sea 20 miles wide, the USGS study concluded.

Potentially worse than a monster earthquake, such a storm system would bring weeks of drenching rain and hurricane-force winds the likes that no living Californian has ever seen.

“Basically you just want to get out of the way in a storm like that. It’s a matter of flood warning and evacuation. That’s about all you can do,” said Jay Lund, an engineer and director of the Center for Watershed Sciences at UC Davis.

Storms of that magnitude have happened six times in California in the past 1,800 years, the 2011 USGS study noted. Scientists studying sediment layers off Santa Barbara and San Francisco Bay found evidence that such megastorms occurred in the years 212, 440, 603, 1029, 1418, and 1605.

Even if a massive storm like that doesn’t happen any time soon, the increasing swings in extreme weather — called “precipitation whiplash events” by the researchers — are already starting to pose major challenges for California, experts say.

The water systems that

to allow rivers to pour onto their fields and open spaces. That water seeps into the ground and recharges underground aquifers for use later. Reservoir owners also can retool their systems to move water out of full reservoirs and into underground water banks, Lund added.

Some areas, like the Santa Clara Valley Water District, which serves 2 million people in Silicon Valley, already do that.

Lund said that flood control projects will have to be beefed up around the state. And new techniques, like capturing storm water and recycling treated sewage, and putting it underground, also will be critical.

“Protecting groundwater is going to become more important,” said Lund. “That is by far the largest storage we have. That will always be the case no matter how many reservoirs we have.”

Swain said seeing the likely trends now can help reduce risks in the decades ahead.

“It sounds like a lot of doom and gloom,” he said. “There is some bad news here. It’s going to be a real challenge to manage these extremes of drought and flood. We can do it, but it is going to be a challenge.”

## New call for fusion of sewer agencies

### MARIN COUNTY

Grand jury reasserts push for mergers to cut expenses

**By Richard Halstead**

[shalstead@marinij.com](mailto:shalstead@marinij.com) @HalsteadRichard on Twitter

Disposal of sewage is something most people would rather not think about, but that reluctance is costing Marin residents a pretty penny, according to a new Marin County Civil Grand Jury report.

The report, released Friday, recommends immediate consolidation of three sanitary districts in central Marin — Sanitary District No. 1 (Ross Valley), Sanitary District No. 2 (Corte Madera) and the San Rafael Sanitary District.

It also suggests that six entities in Southern Marin — Almonte Sanitary District, Alto Sanitary

District, Richardson Bay Sanitary District, Homestead Valley Sanitary District, Tamalpais Community Services District and the Mill Valley Public Works Department — create just two large sanitation districts.

The grand jury makes clear that the ultimate goal should be consolidation of all Marin sanitary districts and agencies into a single Marin Municipal Utilities District.

To facilitate this goal, the grand jury recommends that Marin County allocate additional funds to Marin's Local Agency Formation Commission, or LAFCO, which oversees the formation of government agencies and special districts.

“We are open to looking into the merits of consolidation options,” said Assistant County Administrator Dan Eilerman. “On the issue of funding, the county already pays a significant portion of the LAFCO budget, and we believe that any increased funding should be spread to be consistent with the existing formula.”

In the past, the board of Sanitary District No. 1 has been resistant to the idea of consolidation. In 2005, three other sanitation districts and the Central Marin Sanitation Agency agreed to unite with Sanitary District No. 1, but Sanitary District No. 1's board nixed the idea.

Nevertheless, Doug Kelly, the current board president of Sanitary District No. 1, said, “I absolutely support consolidation. I'm willing to work with my colleagues in the other districts to get this accomplished.”

Kelly said he has not discussed the grand jury report with other board members, but he said the resignation of the district's general manager, Greg Norby, announced Monday, would make consolidation easier. “Ross Valley Sanitary District has been a poor player in the past,” Kelly said, “but we have a very fine board now, and we work well with others.”

While the general public might not be paying close attention to the issue of sanitation, this report is just the

Another rationale cited for consolidation in the 2017 Little Hoover Commission and Marin LAFCO reports was the need to prepare for the effects of climate change.

The 2017-18 grand jury writes, “Specific to sanitation, the use of gravity in wastewater systems results in sanitation facilities being located at the lowest elevation, thereby exposing them to rising sea levels.”

The grand jury notes in its report that the search for cost savings have resulted in previous successful consolidations in Marin.

“A police consolidation in central Marin has demonstrated substantial cost savings and fire districts in southern Marin are currently collaborating with the end goal of consolidation,” the grand jury wrote.

Later in the report, the grand jury states that the Southern Marin Fire Protection District is projected to save \$315,000 per year.

latest of several Marin civil grand jury reports on the topic.

In a 2014 report titled, “The Scoop on Marin County Sewer Systems,” the grand jury wrote, “In total, there are 17 special districts, 2 municipalities, 2 JPAs, the National Park Service and the California State Park Service providing wastewater services to a population of 256,000 in an area just over 100 square miles.”

To bolster its argument, the 2017-18 grand jury quotes from three studies, one commissioned in 2005 and two published last year. In 2017, a study completed by the Little Hoover Commission called for legislation to eliminate roadblocks to special district consolidations and another study by Marin LAFCO made specific recommendations for consolidations.

Both of those studies focused on similar reasons for consolidation. First of all, they pointed to the cost savings realizable due to elimination of redundancies: one board of directors and one administrative department versus many.

The 2014 grand jury report noted that the total amount spent in fiscal year 2012-2013 for district managers’ salaries and benefits (excluding pensions) in all agencies was close to \$2.4 million. That report also stated that the 109 board members serving on wastewater agencies received approximately \$250,000 in compensation during the most recent fiscal year.

The grand jury also explains, however, that police and fire agencies have a financial incentive that many sanitation districts lack. That is because if sanitation districts run short of money they can boost their sewage charge fees using Proposition 218 rules.

The grand jury notes that a difference in sewage fees is one of the prime reasons that attempts to combine sanitary districts in Marin have been unsuccessful for decades. If residents in one district are paying less than in another district, it is a hard sell to convince them that they will benefit from a merger that will result in their rates going up. Fear of losing local control and a lack of oversight have also played a role, the jury states.

Kelly said two districts that the grand jury suggests should join with Sanitary District No. 1 — Murray Park Sewer Maintenance District and San Quentin Village Sewer Maintenance District — both charge their customers substantially lower fees than Sanitary District No. 1.

“We’ll have to address that if we are to consolidate with them,” he said.

**“I absolutely support consolidation. I’m willing to work with my colleagues in the other districts to get this accomplished.”**

— Doug Kelly, board president of Sanitary District No. 1

# Notice of Availability of Draft EIR/EIS

## North Bay Water Reuse Authority to Host Public Meetings to Review Phase 2 Recycled Water Projects

The North Bay Water Reuse Authority (NBWRA) is a cooperative program in the San Pablo Bay region that supports sustainability and environmental enhancement by expanding the use of recycled water. The NBWRA is proposing Phase 2 of the North Bay Water Reuse Program to continue increasing the beneficial use of recycled water. Sonoma County Water Agency (Water Agency) will act as Lead Agency under the California Environmental Quality Act (CEQA) for preparing an Environmental Impact Report (EIR). The Department of Interior, Bureau of Reclamation, will be the federal Lead Agency under the National Environmental Policy Act (NEPA) for preparing an Environmental Impact Statement (EIS). The 45-day review period begins on April 4, 2018 and closes on May 18, 2018.

The Draft EIR/EIS will consider two alternatives, as well as the No Action and No Project Alternatives. The Action Alternatives consist of treatment, transmission, and storage facilities necessary to meet a range of recycled water demand scenarios within the NBWRA service area through 2025. Each Action Alternative considers varying levels of recycled water use and corresponding levels of regional facility integration. These facilities (pump stations and pipelines) would be constructed within or along public roadways within Marin, Sonoma, and Napa counties.

In keeping with the Water Agency's Sustainability Program, the Draft EIR/EIS is available to the public at [www.nbwra.org](http://www.nbwra.org); hard copies of the Draft EIR/EIS are also available for review only at libraries; or are available upon request by emailing [Phase2EIR@nbwra.org](mailto:Phase2EIR@nbwra.org). For more information, as well as a list of libraries, please visit [www.nbwra.org](http://www.nbwra.org).

A series of four public hearings will be held within the collective NBWRA service area during the 45-day review period. (The same content will be presented at each meeting.) The hearings will be held on the following dates:

**May 7, 2018 (Monday)**  
**6:30 PM – 8:00 PM**  
American Canyon City Hall  
Council Chambers  
4381 Broadway, Suite 201  
American Canyon

**May 10, 2018 (Thursday)**  
**6:30 PM – 8:00 PM**  
Petaluma Community Center  
Craft Room 1  
320 North McDowell Boulevard  
Petaluma

**May 9, 2018 (Wednesday)**  
**6:30 PM – 8:00 PM**  
San Rafael Community Center Auditorium  
618 B Street, San Rafael

**May 14, 2018 (Monday)**  
**6:30 PM – 8:00 PM**  
Sonoma Community Center, Room 110  
276 East Napa Street, Sonoma

If you have a disability, which requires an accommodation, an alternative format, or requires another person to assist you while attending these meetings or reviewing associated materials, please contact the Water Agency at 707-524-8378, as soon as possible to ensure arrangements for accommodation.

The public comment period will close at 5:00 PM on May 18, 2018. Before including your name, address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. Your written comments may be submitted via postal mail to the address provided below, via e-mail at [Phase2EIR@nbwra.org](mailto:Phase2EIR@nbwra.org), or at the NBWRA website: [www.nbwra.org](http://www.nbwra.org)

Please include a name, address, and telephone number of a contact person in your agency for all future correspondence on this subject. Please send your comments to:



**NORTH BAY WATER  
REUSE PROGRAM**  
*Water Supply Reliability  
through Regional Reuse*

Anne Crealock  
Sonoma County Water Agency  
404 Aviation Boulevard  
Santa Rosa, CA 95403

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