



NORTH MARIN WATER DISTRICT
AGENDA - REGULAR MEETING
 November 15, 2016 – 6:00 p.m.
 District Headquarters
 999 Rush Creek Place
 Novato, California

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Est. Time	Item	Subject
6:00 p.m.		CALL TO ORDER
	1.	CHIEF ENGINEER CANDIDATE INTERVIEW
	2.	APPROVE MINUTES FROM REGULAR MEETING , November 1, 2016
	3.	GENERAL MANAGER'S REPORT
	4.	OPEN TIME: (Please observe a three-minute time limit) This section of the agenda is provided so that the public may express comments on any issues not listed on the agenda that are of interest to the public and within the jurisdiction of the North Marin Water District. When comments are made about matters not on the agenda, Board members can ask questions for clarification, respond to statements or questions from members of the public, refer a matter to staff, or direct staff to place a matter of business on a future agenda. The public may also express comments on agenda items at the time of Board consideration.
	5.	STAFF/DIRECTORS REPORTS
	6.	MONTHLY PROGRESS REPORT
		<p>CONSENT CALENDAR</p> <p>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.</p> <p>7. Consent – Approve: Spot Adjustment – Building & Grounds Maintenance Technician I</p> <p>8. Consent – Approve: Out-of-Country Travel for Danish Water Technology Alliance Fact Finding Trip - Robert Clark</p>
		ACTION CALENDAR
	9.	Approve: Waive Tier Charges
	10.	Consider: Request for Additional Bill Adjustment – West Marin Senior Services
	11.	Approve: Noll and Tam Consultant Services Agreement for Headquarters Upgrade Architectural Concept Plan
		INFORMATION ITEMS
	12.	Operations/Maintenance – First Quarter 2015/16 Update

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.	Draft Annual Report
	14.	WAC Meeting – November 7, 2016
	15.	MISCELLANEOUS Disbursements Water Research Foundation Letter Jerome Aparton Obituary
8:00 p.m.	16.	ADJOURNMENT

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DRAFT
NORTH MARIN WATER DISTRICT
MINUTES OF REGULAR MEETING
OF THE BOARD OF DIRECTORS
 November 1, 2016

CALL TO ORDER

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

District employees Robert Clark (Operations/Maintenance Superintendent) and Tony Arendell (Construction/Maintenance Superintendent) were in the audience.

MINUTES

Director Fraites requested the draft minutes be corrected pursuant to his request during the Directors Report item at the last meeting that: "The District document discussions with the Grossi Dairy regarding manure application on the Stafford Lake watershed."

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

AYES: Director Baker, Fraites, and Schoonover

NOES: None

ABSTAIN: Director Rodoni

ABSENT: Director Petterle

GENERAL MANAGER'S REPORT

Rainfall

Mr. DeGabriele reported that Novato rainfall in October totaled about 4" and that it typically takes about 6-7" of rainfall to saturate the Novato Creek watershed and begin collecting runoff, so no storage benefit has yet been seen at Stafford Lake. He stated that both Lake Mendocino and Lake Sonoma have seen some minor storage increase in just the past couple of days and are at 90% of the target storage curve at Lake Mendocino and 86% of capacity at Lake Sonoma. He noted that storage on the Russian River is in good shape.

1 Marin Baywave

2 Mr. DeGabriele stated that he attended the update for the County's sea level rise vulnerability
3 assessment, Marin Baywave, last week. He stated that an internal draft of the vulnerability
4 assessment is being reviewed now and a communications plan is being developed thru the end of
5 the year and the assessment will likely be released to the public in early 2017.

6 Russian River Fish Ladder Ribbon Cutting

7 Mr. DeGabriele advised the Board that tomorrow he will be attending the Russian River Fish
8 Ladder Ribbon Cutting ceremony at the Sonoma County Water Agency Mirabel location.

9 **OPEN TIME**

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

12 **STAFF / DIRECTORS' REPORTS**

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

15 Mr. McIntyre advised the Board that the County of Marin is updating their Local Hazard
16 Mitigation Plan and reaching out to cities and Special Districts to participate in a regional, county
17 wide plan. He informed the Board that he will participate in a meeting on this topic to be held this
18 Thursday in Novato.

19 Mr. McIntyre also advised that he will attend the Flood Control Zone #1 Advisory Board
20 meeting on November 10th.

21 Director Fraites inquired about the District work he observed on October 31st at Indian Valley
22 Road. Tony Arendell replied that a broken valve was being repaired downstream of the Old Ranch
23 Road pump station.

24 Mr. Baker advised he will attend the NBWA meeting on Friday, 11/4 and hopes to have a
25 conversation with Bruce Wolfe, Executive Officer of the San Francisco Bay Area Regional Water
26 Quality Control Board on water quality issues.

1 **CONSENT CALENDAR**

2 On the motion of Director Baker, seconded by Director Fraites the Board approved the
3 following items on the consent calendar by the following vote:

4 AYES: Director Baker, Fraites, Rodoni and Schoonover

5 NOES: None

6 ABSENT: Director Petterle

7 **FALL 2016 WATERLINE, VOLUME 17, ISSUE 37**

8 The Board approved the text and design for the Fall 2016 *WaterLine*. This version updates
9 customers on the Novato drought, thanking them for their efforts last year as Novato water
10 production was down 33% community wide compared to 2013. So far in FY2016, water production is
11 down 11% compared to June, July, August 2013. Customers are also being informed about the
12 Advanced Meter Information Pilot Project and the Recycled Water Expansion in Central Novato.
13 Finally, customers are again reminded about the water waste and essential prohibitions which
14 remain in effect and asked to turn off their irrigation system as the rainy season is upon us, and
15 overhead sprinkler irrigation is prohibited within 48 hours of measured rainfall events.

16 **CIVIL GRAND JURY RESPONSE**

17 The Board approved a response to the Marin County Civil Grand Jury on pension related
18 questions. To date, North Marin's net pension liability is at \$8.6M and our projected pension
19 contribution this fiscal year is \$829K.

20 **EXTENSION OF HORIZON CATV LICENSE AGREEMENT**

21 The Board approved a renewed license agreement with Horizon Cable TV at the PRE Tank
22 Site 4 for their antenna, equipment shed, propane tank and emergency generator. The extended
23 license agreement term is only for one year, as future relocation of Horizon facilities may be needed
24 to accommodate the replacement Tank 4A.

25 **ACTION CALENDAR**

26 **AMI PROJECT PUBLIC MEETING**

27 Mr. Bentley requested that the Board approve holding a public meeting on December 13th to
28 obtain community input on the Advanced Meter Information system radio antenna sites. He stated
29 that 26 new antenna sites are identified, mostly on existing District tanks with heights ranging from
30 10' to 26' above the tank. He advised the Board that a letter will be sent to all residents within 300
31 feet of each antenna site inviting them to the meeting to and learn more about the project.

1 Director Rodoni inquired whether the District should consider public outreach support. Mr.
2 Bentley replied that consultants from Utiliworks will be in attendance. Mr. DeGabriele added that
3 staff will ask the District CEQA consultant for guidance on whether the additional support may be
4 needed.

5 On motion of Director Fraites, seconded by Director Baker, the Board approved mailing the
6 public meeting AMI letter to customers by the following vote:

7 AYES: Director Baker, Fraites, Rodoni and Schoonover

8 NOES: None

9 ABSENT: Director Petterle

10 **CUSTOMER BILLING RECORDS REQUEST**

11 Mr. Bentley advised the Board that the Marin County Fire Department is requesting customer
12 billing records for dedicated fires services only in order to help in pre-planning their response in the
13 event of structure fires and/or wild land fires which may impact the structures. Mr. McIntyre
14 indicated his belief is the request applies to West Marin only. Mr. DeGabriele indicated that the
15 District could provide address only and exclude the property owner information.

16 On motion of Director Baker, seconded by Director Fraites, the Board approved the request
17 by Marin County Fire Department to provide a list of District accounts with a dedicated sprinkler
18 service by the following vote:

19 AYES: Director Baker, Fraites, Rodoni and Schoonover

20 NOES: None

21 ABSENT: Director Petterle

22 **SET MEETING FOR CHIEF ENGINEER INTERVIEW**

23 Mr. DeGabriele briefed the Board on the history of the Chief Engineer recruitment. He
24 stated that advertisement was placed on several sites and that only 4 applications were received.
25 He noted that the top two were interviewed by two panels. Mr. DeGabriele advised the Board that
26 one candidate overwhelmingly was chosen to be top the candidate. He informed the Board that
27 staff's recommendation is to only bring in the one candidate for the Board to interview.

28 Director Baker asked if staff knew as to why only a few applied, but no real was apparent.
29 Director Baker had some reservation on only interviewing one person but other Board members
30 decided it would be acceptable.

1 Director Rodoni asked that the 11/15 meeting start early rather than a special meeting on
2 11/10 of which he will be unable to attend.

3 On motion of Director Rodoni, seconded by Director Fraites, the Board set November 15th at
4 6pm to conduct the Chief Engineer Interview by the following vote:

5 AYES: Director Baker, Fraites, Rodoni and Schoonover

6 NOES: None

7 ABSENT: Director Petterle

8 **INFORMATION ITEMS**

9 **WATER CONSERVATION QUARTERLY UPDATE (JULY-SEPTEMBER 2016)**

10 Mr. McIntyre provided the Board with the Water Conservation Quarterly Update. He stated
11 that Water Smart Home Surveys were up this quarter and toilet rebates have remained consistent.
12 He noted that the number of Cash for Grass rebates has declined. Mr. McIntyre stated that rounds 1
13 and 2 of the Proposition 84 grant funds have been depleted and Sonoma County Water Agency and
14 the District are now focusing on round 3 funds.

15 **QUARTERLY PROGRESS REPORT – ENGINEERING DEPARTMENT**

16 Mr. McIntyre provided with Board with the Quarterly Progress Report for the Engineering
17 Department. He stated that the first quarter has been on track in the planning progress and that 6
18 projects have been added, 3 deferred and one has been carried over. Mr. McIntyre provided the
19 Board a brief summary of these projects.

20 **WAC/TAC MEETING – NOVEMBER 7, 2016**

21 Mr. DeGabriele provided the Board with the agenda for the Water Advisory/Technical
22 Advisory Committee Meeting to be held on November 7th. He stated that the Saving Water
23 Partnership won two national awards which he will bring in for the Board to see.

24 **NBWA MEETING UPDATE – NOVEMBER 4, 2016**

25 Director Baker advised he would be attending the North Bay Watershed Association
26 Meeting on November 4, 2016.

27 **MISCELLANEOUS**

28 The Board received the following miscellaneous information: Disbursements and Summary
29 of FY16 Inventory Adjustment.

1 **ADJOURNMENT**

2 President Schoonover adjourned the meeting at 7:41 p.m.

3 Submitted by

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Eileen Mulliner
Acting District Secretary

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NORTH MARIN WATER DISTRICT
MONTHLY PROGRESS REPORT FOR October 2016
 November 15, 2016

1.

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

Month	FY16/17	FY15/16	FY14/15	FY13/14	FY12/13	17 vs 16 %
July	345	227	319	385	389	52%
August	330	235	301	360	396	40%
September	315	210	276	332	346	50%
October	222	299	221	313	283	-26%
FYTD Total	1,212	971	1,116	1,389	1,414	25%

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

Month	FY16/17	FY15/16	FY14/15	FY13/14	FY12/13	17 vs 16 %
July	7.9	6.6	8.6	9.3	9.8	20%
August	7.4	7.0	8.5	9.3	9.7	6%
September	6.4	6.4	7.8	8.5	8.3	-1%
October	5.2	6.5	5.4	8.0	7.4	-21%
FYTD Total	26.9	26.5	30.3	35.1	35.3	1%

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

Month	FY16/17	FY15/16	FY14/15	FY13/14	FY12/13	17 vs 16 %
July	70	108	83	98	49	-35%
August	90	79	61	83	83	14%
September	97	38	26	56	72	153%
October	94	50	0	82	88	90%
FYTD Total	351	275	170	319	291	28%

Recycled Water Production* - in Million Gallons - FY to Date

Month	FY16/17	FY15/16	FY14/15	FY13/14	FY12/13	16 vs 15 %
July	27.1	21.3	21.8	27.6	11.2	27%
August	26.0	26.2	26.0	26.2	10.5	-1%
September	23.5	15.7	19.2	18.6	8.5	50%
October	8.3	15.8	9.4	15.8	0.0	-47%
FYTD Total*	85.0	79.1	76.3	88.2	30.2	7%

*Excludes potable water input to the RW system: FYTD17=0.0MG; FYTD16=5.1MG; FYTD15=5.8MG; FYTD14=3.9MG.

2. Stafford Lake Data

	October Average	October 2015	October 2016
Rainfall this month	1.39 Inches	0.02 Inches	4.12 Inches
Rainfall this FY to date	1.70 Inches	0.06 Inches	4.12 Inches
Lake elevation*	181.1 Feet	181.0 Feet	182.2 Feet
Lake storage**	4,794 MG	4,772 MG	5,236 MG

* Spillway elevation is 196.0 feet

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

Temperature (in degrees)

	Minimum	Maximum	Average
October 2015 (Novato)	53	100	71
October 2016 (Novato)	49	93	64

3. Number of Services

October 31	Novato Water			Recycled Water			West Marin Water			Oceana Marin Swr		
	FY17	FY16	Incr %	FY17	FY16	Incr %	FY17	FY16	Incr %	FY17	FY16	Incr %
Total meters	20,781	20,756	0.1%	48	48	0.0%	787	785	0.3%	-	-	-
Total meters active	20,530	20,519	0.1%	44	44	0.0%	781	777	0.5%	-	-	-
Active dwelling units	23,975	23,981	0.0%	0	0	-	827	823	0.5%	231	229	0.9%

4. Oceana Marin Monthly Status Report (October)

Description	October 2015	October 2016
Effluent Flow Volume (MG)	0.360	0.433
Irrigation Field Discharge (MG)	0	0.284
Treatment Pond Freeboard (ft)	8.0	5.0
Storage Pond Freeboard (ft)	4.6	7.4

5. Developer Projects Status Report (October)

Job No.	Project	% Complete	% This month
1.2792.00	Mendocino Lane	95	15
1.2798.00	Shell Station Remodel	5	5

Employee Hours to Date, FY 16/17

As of Pay Period Ending October 31, 2016
 Percent of Fiscal Year Passed = 33%

Developer Projects	Actual	Budget	% YTD Budget	District Projects	Actual	Budget	% YTD Budget
Construction	508	1,400	36%	Construction	757	4,658	16%
Engineering	262	1,480	18%	Engineering	1,344	4,032	33%

6. Safety/Liability

	Industrial Injury with Lost Time			Liability Claims Paid		
	Lost Days	OH Cost of Lost Days (\$)	No. of Emp. Involved	No. of Incidents	Incurred (FYTD)	Paid (FYTD) (\$)
FY 17 through October	26	\$14,144	1	1	2	3,909
FY 16 through October	0	0	0	0	2	28,348

Days without a lost time accident through October 31, 2016 = 88 days

7. Energy Cost

FYE		October			Fiscal Year-to-Date thru October		
		Kwh	¢/Kwh	Cost/Day	Kwh	¢/Kwh	Cost/Day
2017	Stafford TP	49,208	19.2¢	\$305	262,036	18.9¢	\$402
	Pumping	124,263	20.4¢	\$791	587,483	20.3¢	\$969
	Other*	43,524	26.1¢	\$354	184,830	26.1¢	\$393
		<u>216,995</u>	<u>21.2¢</u>	<u>\$1,487</u>	<u>1,034,349</u>	<u>21.0¢</u>	<u>\$1,779</u>
2016	Stafford TP	51,666	18.6¢	\$311	245,065	18.3¢	\$364
	Pumping	117,059	17.5¢	\$706	493,591	17.8¢	\$734
	Other*	38,793	26.0¢	\$360	165,839	25.5¢	\$358
		<u>207,517</u>	<u>19.4¢</u>	<u>\$1,386</u>	<u>904,494</u>	<u>19.4¢</u>	<u>\$1,459</u>
2015	Stafford TP	55,940	18.1¢	\$326	269,162	17.7¢	\$387
	Pumping	119,110	17.2¢	\$707	591,195	16.8¢	\$823
	Other*	36,130	24.3¢	\$303	172,356	23.5¢	\$335
		<u>211,180</u>	<u>18.6¢</u>	<u>\$1,313</u>	<u>1,032,713</u>	<u>18.2¢</u>	<u>\$1,538</u>

*Other includes West Marin Facilities

8. Water Conservation Update

	Month of October 2016	Fiscal Year to Date	Program Total to Date
High Efficiency Toilet (HET) Rebate (\$100 each)	11	89	3,626
Retrofit Certificates Filed	26	92	5,645
Cash for Grass Rebates Paid Out	8	31	857
Washing Machine Rebates	4	26	6,728
Water Smart Home Survey	46	176	2,520

9. Utility Performance Metric

SERVICE DISRUPTIONS (No. of Customers Impacted)	October 2016	October 2015	Fiscal Year to Date 2017	Fiscal Year to Date 2016
PLANNED				
Duration Between 0.5 and 4 hours	6	16	55	58
Duration Between 4 and 12 hours			3	6
Duration Greater than 12 hours				
UNPLANNED				
Duration Between 0.5 and 4 hours		14	28	48
Duration Between 4 and 12 hours			1	57
Duration Greater than 12 hours			1	
SERVICE LINES REPLACED				
Polybutylene	5	16	42	60
Copper (Replaced or Repaired)	1	0	11	5

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders October 2016

11/10/2016

<u>Type</u>	<u>Oct-16</u>	<u>Oct-15</u>	<u>Action Taken October 2016</u>
<u>Consumers' System Problem</u>			
Service Line Leaks	19	31	Notified Consumer
Meter Leak Consumer's Side	0	0	~
House Plumbing	0	0	~
Noisy Plumbing	0	0	~
Seepage or Other	0	0	~
House Valve / Meter Off	4	7	Notified Consumer
Nothing Found	5	8	Notified Consumer
Low Pressure	0	0	~
High Pressure	0	1	~
Water Waster Complaints	0	0	~
Total	28	47	
<u>Service Repair Reports</u>			
Register Replacements	0	0	~
Meter Replacement	3	2	Notified Consumer
Meter Box Alignment	0	0	~
Meter Noise	0	0	~
Dual Service Noise	0	0	~
Box and Lids	0	1	~
Water Off/On Due To Repairs	9	7	Notified Consumer
Misc. Field Investigation	0	1	~
Total	12	11	
<u>Leak NMWD Facilities</u>			
Main-Leak	0	0	~
Mains-Nothing Found	0	0	~
Mains-Damage	0	1	~
Service- Leak	4	11	Repaired
Services-Nothing Found	1	4	Notified Consumer
Service-Damaged	0	0	~
Fire Hydrant-Leak	1	3	Repaired
Fire Hydrants-Nothing Found	0	0	~
Fire Hydrants-Damaged	0	1	~
Meter Replacement	0	0	~
Meters-Nothing Found	0	0	~
Meters Damaged	0	0	~
Washer Leaks	4	6	Replaced
Total	10	26	
<u>High Bill Complaints</u>			
Consumer Leaks	21	6	Notified Consumer
Meter Testing	0	0	~
Meter Misread	9	4	Notified Consumer
Nothing Found	42	13	Notified Consumer
Projected Consumption	0	0	~
Excessive Irrigation	0	0	~
Total	72	23	

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders October 2016

11/10/2016

Type	Oct-16	Oct-15	Action Taken October 2016
<u>Low Bill Reports</u>			
Meter Misread	0	0	~
Stuck Meter	0	0	~
Nothing Found	0	0	~
Projected Consumption	0	0	~
Minimum Charge Only	0	0	~
Total	0	0	
<u>Water Quality Complaints</u>			
Taste and Odor	1	0	<p>Customer concerned about chlorine taste. (Lark Ct) Measured chlorine was normal for STP supply. Customer was notified of results.</p>
Color	0	0	~
Turbidity	0	0	~
Suspended Solids	0	1	~
Other	4	1	<p>Customer requested HPC analysis for source water and DI system. (Hill Rd) NMWD water supply was normal. Customer was notified of results.</p> <p>Customer requested lead testing. (Michelle Cir) Lead and copper were not detected. Customer was notified of results.</p> <p>Customer requested water tested for coliforms. (Redwood Blvd) Samples were absent for coliforms. Customer was notified of results.</p> <p>Customer reported illness and off-tasting water. (Hatch Rd) Samples were absent for coliforms. Customer was notified of results.</p>
Total	5	2	
TOTAL FOR MONTH:	127	109	17%
<u>Fiscal YTD Summary</u>			
Consumer's System Problems	168	189	-11%
Service Repair Report	53	44	20%
Leak NMWD Facilities	83	104	-20%
High Bill Complaints	234	101	132%
Low Bills	1	1	0%
Water Quality Complaints	15	13	15%
Total	554	452	23%
			<u>Change Primarily Due To</u>
			Decrease In House Valve/Meter Off
			Increase In Water Off/On For Repairs
			Decrease In Service Lks-Nothing Found
			Increase In Nothing Found
			~
			Decrease In Taste and Odor

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders October 2016

11/10/2016

Type	Oct-16	Oct-15	Action Taken October 2016
<u>"In House" Generated and Completed Work Orders</u>			
<u>Check Meter:</u> possible consumer/District leak, high bill, flooded, need read, etc.	334	181	
<u>Change Meter:</u> leaks, hard to read	6	11	
<u>Possible Stuck Meter</u>	0	0	
<u>Repair Meter:</u> registers, shut offs	0	0	
<u>Replace Boxes/Lids</u>	0	12	
<u>Hydrant Leaks</u>	0	0	
<u>Trims</u>	27	56	
<u>Dig Outs</u>	36	107	
<u>Letters to Consumer:</u> meter obstruction, trims, bees, gate access, etc. get meter number, kill service, etc.	0	0	
	403	367	

Bill Adjustments Under Board Policy:

October 16 vs. October 15

Oct-16	40	\$12,631
Oct-15	18	\$2,928

Fiscal Year to Date vs. Prior FYTD

16/17 FYTD	149	\$53,860
15/16 FYTD	81	\$19,219

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MEMORANDUM

To: Board of Directors

November 11, 2016

From: David L. Bentley, Auditor-Controller 

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

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RECOMMENDED ACTION: Information

FINANCIAL IMPACT: None

At month end the District's Investment Portfolio had an amortized cost value (i.e., cash balance) of \$13,485,789 and a market value of \$13,480,677. During October the cash balance decreased by \$147,786. The market value of securities held decreased \$5,112 during the month. The ratio of total cash to budgeted annual operating expense stood at 90%, the same as the prior month.

At October 31, 2016, 40% of the District's Portfolio was invested in California's Local Agency Investment Fund (LAIF), 29% in Time Certificate of Deposit, 19% in Federal Agency Securities, 5% in Corporate Medium Term Notes, and 5% in the Marin County Treasury. The weighted average maturity of the portfolio was 205 days, compared to 207 days at the end of September. The LAIF interest rate for the month was 0.65%, compared to 0.63% the previous month. The weighted average Portfolio rate was 0.78%, compared to 0.75% the previous month. Including interest paid by The Bay Club on the StoneTree Golf Recycled Water Facilities Loan, the District earned \$12,952 in interest revenue during September, with 56% earned by Novato Water, 31% earned by Recycled Water (by virtue of the StoneTree Golf Loan) and the balance distributed to the two West Marin districts.

**NORTH MARIN WATER DISTRICT
AUDITOR-CONTROLLER'S MONTHLY REPORT OF INVESTMENTS
October 31, 2016**

Type	Description	S&P Rating	Purchase Date	Maturity Date	Cost Basis ¹	10/31/2016 Market Value	Yield ²	% of Portfolio ³
LAI	State of CA Treasury	AA-	Various	Open	\$5,336,479	\$5,337,659	0.65%	40%
Time Certificate of Deposit								
TCD	Cardinal Bank	n/a	11/12/14	11/14/16	\$249,000	\$249,000	0.80%	2%
TCD	Goldman Sachs	n/a	12/10/14	12/12/16	248,000	248,000	1.00%	2%
TCD	First Niagara Bank	n/a	4/30/15	5/1/17	249,000	249,000	0.75%	2%
TCD	Discover Bank	n/a	5/6/15	5/8/17	248,000	248,000	0.85%	2%
TCD	Capital One Bank	n/a	6/10/15	6/12/17	248,000	248,000	0.90%	2%
TCD	Flagship Cmnty Bank	n/a	6/24/15	6/24/17	249,000	249,000	0.75%	2%
TCD	American Express Bank	n/a	7/8/15	7/10/17	248,000	248,000	1.15%	2%
TCD	Capital One National Assoc	n/a	8/5/15	8/7/17	248,000	248,000	1.20%	2%
TCD	American Express Centurion	n/a	10/7/15	10/10/17	248,000	248,000	1.20%	2%
TCD	BMW Bank	n/a	12/14/15	12/11/17	248,000	248,000	1.20%	2%
TCD	Wells Fargo Bank	n/a	3/23/16	3/23/18	248,000	248,000	1.10%	2%
TCD	Mercantil Commerce Bank	n/a	6/17/16	6/15/18	248,000	248,000	1.00%	2%
TCD	Customers Bank	n/a	6/24/16	6/25/18	248,000	248,000	1.20%	2%
TCD	Merrick Bank	n/a	7/19/16	7/19/18	249,000	249,000	1.00%	2%
TCD	BMO Harris Bank	n/a	8/18/16	8/17/18	248,000	248,000	1.05%	2%
TCD	Ally Bank	n/a	10/4/16	9/28/18	248,000	248,000	1.15%	2%
					\$3,972,000	\$3,972,000	1.00%	29%
Federal Agency Securities								
FHLB	0.58% MTN	n/a	11/7/14	11/14/16	499,988	500,071	0.64%	4%
FICO	0.86% MTN	n/a	4/22/16	5/11/18	1,003,793	1,000,116	0.86%	7%
FNMA	0.875% MTN	n/a	7/19/16	7/19/18	998,880	996,074	0.97%	7%
					\$2,502,661	\$2,496,261	0.86%	19%
Corporate Medium Term Notes								
MTN	General Electric Capital	AA+	3/18/16	5/15/17	\$640,848	\$640,955	0.76%	5%
					\$640,848	\$640,955	0.75%	5%
Other								
Agency	Marin Co Treasury	AA+	Various	Open	\$736,375	\$736,375	0.32%	5%
Other	Various	n/a	Various	Open	297,426	297,427	0.50%	2%
TOTAL IN PORTFOLIO					\$13,485,789	\$13,480,677	0.78%	100%

Weighted Average Maturity = 205 Days

LAI: State of California Local Agency Investment Fund.

TCD: Time Certificate of Deposit.

FHLB: Federal Home Loan Bank, FICO: Financing Corporation, FNMA: Federal National Mortgage Association

Agency: STP State Revolving Fund Loan Reserve.

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

Other: Comprised of 4 accounts used for operating purposes. US Bank Operating Account, US Bank STP SRF Loan

Account, Bank of Marin AEEP Checking Account & NMWD Petty Cash Fund.

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

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

3 Earnings are calculated daily - this represents the average yield for the month ending October 31, 2016.

Interest Bearing Loans	Loan Date	Maturity Date	Original Loan Amount	Principal Outstanding	Interest Rate
StoneTree Golf Loan	6/30/06	2/28/24	\$3,612,640	\$1,660,218	2.40%
Employee Housing Loans (5)	Various	Various	934,200	934,200	Contingent
TOTAL INTEREST BEARING LOANS			\$4,546,840	\$2,594,418	


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

7

MEMORANDUM

To: Board of Directors

November 11, 2016

From: Chris DeGabriele, General Manager 

Subject: Spot Adjustment for the Building and Grounds Maintenance Technician I

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RECOMMENDED ACTION: Approve Recommendation**FINANCIAL IMPACT:** \$2,557 annual Payroll Cost Increase

During the annual review process for the Building and Grounds Maintenance Technician I position the Maintenance Supervisor and the Operations Superintendent reviewed the Building and Grounds Maintenance Technician I duties in comparison with the Field Service Representative (FSR) duties and believe the difference in pay is unwarranted. The difference in the Merit step salary level between the two positions is \$158 per month equal to \$2,557 per year in total payroll cost, a 2.7% difference.

The breadth of duties for the Building and Grounds Technician include a broad range of technical skills for water system installation and maintenance repair functions, a D1 Distribution Operator Certification and Pesticide Applicators Certification. In comparison, the FSR classification includes focused technical skills with respect to meters and service plumbing, but requires no special certifications. The FSR can however serve in "On Call" capacity if D1 certification is acquired and maintained.

Staff requests a spot adjustment for the Building and Grounds Technician I position be made to bring the compensation up to the same level as the FSR. The Building and Grounds Technician I employee's performance over the past five years has demonstrated his continued success in acquiring additional skills and capabilities required in the position. The level of responsibilities and the particular employees' high level performance justify consideration of this request.

The current fiscal year operations budget includes an Apprentice Electrical Mechanical Technician position that was deferred until the next fiscal year, saving \$90,455. Therefore there is no need to augment the current budget for the \$1,492 additional payroll cost over the remainder of the fiscal year.

RECOMMENDED ACTION: Approve salary spot adjustment for the Building and Grounds Technician I from \$5,700 per month to \$5,858 per month, effective December 1, 2016.

Approved by GM Date 11/11/2016

8

MEMORANDUM

To: Board of Directors November 11, 2016
 From: Robert Clark, Operations / Maintenance Superintendent
 Chris DeGabriele, General Manager *CD*
 Subject: Out of Country Travel for Danish Water Technology Alliance Fact Finding Trip
X:\MAINT SUP\2017\BOD\BOD Out of Country Travel 16.doc

RECOMMENDED ACTION: Approve recommendation

FINANCIAL IMPACT: \$1,000

On October 21, 2016 District Staff hosted a group from the Denmark Ministry of Foreign Affairs working on the Water Technology Alliance. This group includes Danish water and wastewater engineers, one of which is stationed in the US for three years, to learn and share ideas and experiences around innovations and best practices in water operations. The October 21 meeting included a presentation on how Denmark has developed operations for water and waste water to become energy neutral. That is to say the energy required for producing, distributing and treating water and wastewater comes from the energy recovered from waste by-product energy generation. The Dane's had the opportunity to visit the Stafford Lake Water Treatment Plant; Deer Island Recycled Water Plant and the Novato Sanitary District Wastewater Treatment Plant operations.

The Water Technology Alliance has funded a Water and Resource Conservation fact finding trip to Denmark for US water sector professionals to learn first-hand how the Dane's have achieved this energy neutral water operation. There has previously been a group from Illinois who participated in a similar trip and now a group of 10-12 professionals from California are being invited for similar tour in December (see attached program itinerary). An offer has been extended to the North Marin Water District and I am interested in representing the District at the December tour.

This tour group will learn from Danish government and private industry professionals in the areas of sustainability, conservation, green economy, asset management, leak detection, pressure management, metering, water/energy nexus and automation. The California group will also discuss future challenges we face in our operations to becoming energy neutral.

Expenses for tour attendance will be covered by the Danish Water Technology Alliance. Travel to and from Denmark (principally air fare) is expected to be \$1,000. Additional cost to the District is my absence away from work for the week of December 12 through December 16. A full report will be presented to the Board upon my return.

RECOMMENDATION

Approve out-of-country travel cost and time for the Operations / Maintenance Superintendent to attend fact finding trip to Denmark.

Approved by GM *CD*

Date *11/11/2016*



State of Green
Join the Future. Think Denmark

INDUSTRIENS FOND
FREMPIDEN DANSK
KONSERVATIONSFOND
The Danish Industry Foundation

WATER AND RESOURCE CONSERVATION: INNOVATION AND BEST PRACTICES IN DANISH WATER DISTRIBUTION

Program for the December 2016 Water Technology Alliance Fact Finding trip to Denmark
--Subject to changes--

Saturday December 10th
Departure from the US

Sunday December 11th
Participants arrive at Copenhagen Airport (CPH)
Denmark is 9 hours ahead of California

3:00 PM - **Participants check-in to Hotel Strand Copenhagen**
Havnegade 37, 1058 Copenhagen K, Danmark

7:00 – 10:00 PM **Joint dinner for all participants in Tivoli**



Monday December 12th

- 7:00 – 8:00 AM **Breakfast & check out at hotel**
- 8:00 – 8:30 AM **Transport to State of Green**
Vesterbrogade 1, 1620 København V
<https://stateofgreen.com/en>
- 8:30 – 10:30 AM **Joint session at State of Green**
The Danish Model: Sustainable solutions & the green economy
Host: Thomas Dall Thellesen, State of Green
- *The Danish Model*
 - *Visions for the future of water.*
 - *Best practices & key learnings*
- 10:30-11:00 AM **Transport to HOFOR**
HOFOR Hovedstadsområdets Forsyningsselskab, Ørestads Boulevard 35, DK-2300 København S
<http://www.hofor.dk/english/>
- 11:00 AM – 3:00 PM **Innovation in Danish Water Distribution**
Intelligent Water Cities
Host: Ole Adler, Director of distribution, HOFOR
- Themes & cases**
- *Copenhagen carbon neutral by 2025*
 - *Innovation flagship project "Leakman"*
 - *NRW*
 - *Digital Water Systems*
- Presentations from: HOFOR, Leakman Partners.
Lunch included
- 3:00-3:45 PM **Transport to test center for leakage detection and pipe location**
Leif Koch A/S, Rugvænget 31, DK-2630 Taastrup
- 3:45-5:00 PM **Live Demonstration of Leakage Detection Approach in Denmark**
Host: Jørgen Koch, Leif Koch A/S
- *Education of leakage operators*
 - *Solution fit to problem scoping*
- 5:00 PM **Transport to Aarhus**
Light snacks on the ride
- 08:30 PM **Check in Hotel Radisson Blu Scandinavia, Aarhus**
Margrethepladsen 1, 8000 Aarhus C
- 9:00 PM **Late Dinner in Aarhus at Raadhuus Kafeen (traditional Danish cuisine)**
Sønder Allé 3, 8000 Aarhus C
<http://www.raadhuus-kafeen.dk/>

Tuesday December 13th

7:00 – 8:00 AM

Breakfast at hotel

8:00 – 8:30 AM

Transport to AVK

AVK International A/S, Bizovvej 1, 8464 Galten

08:30-10:00

Site Visit AVK

10:00 AM – 2:30 PM

Conservation of resources in Danish Water Distribution

Drivers for leakage reduction

Host: Michael Ramlau Hansen, AVK International

Themes & cases

- *Leakage management – operation and asset management*
- *Regulatory Drivers for leakage reduction in Denmark*
- *Customer Engagement*
- *Intelligent metering from well to tap – Skanderborg project*
- *The Danish Benchmark Model*

Presentations from: AVK, DANVA, Aarhus Vand, Kamstrup, Grundfos, DHI & Carl Emil Larsen, DANVA (Danish Water Association)

Lunch included

2:30-3:00 PM

Transport to Kamstrup

Kamstrup A/S, Industrivej 28, 8660 Skanderborg

3:00-5:00 PM

Site visit at Kamstrup

- A digital future for water utilities, today

Host: Lars Bo Kristensen, Kamstrup A/S

5:00 PM

Transport to Hotel Radisson Blu Scandinavia, Aarhus

7:00 PM

Dinner at Aarhus Restaurant "Ferdinand Hotel – Restaurant"

<http://www.hotelferdinand.dk/restaurant/>

Wednesday December 14th

7:00 – 8:00 AM

Breakfast at hotel

8:00 – 8:30 AM

Transport to Aarhus Vand

Aarhus Vand, Gunnar Clausens Vej, 8260 Viby J

<http://www.aarhusvand.dk/en/international/>

8:30 AM – 12:30 PM

The Water Footprint: Optimizing resources in Danish Water Distribution

The Water/Energy Nexus

Host: Claus Homann, Aarhus Vand

Themes & cases

- *The Water/Energy Nexus – Aarhus watershed case*
- *Distribution Operation Strategy – going from storage towards pressure management*

- *Water Conservation – Looking at Water Footprint*
- *DMA - water balance and leakage management*
- *Pressure Management: Reducing Carbon Footprint and increasing pipe longevity*

Presentations from: Aarhus Vand, Danfoss, Grundfos, Rambøll.

Lunch included

12:30 – 1:30 PM

Live Demonstration of Leakage Detection Trailer
and the development in leakage operation by Aarhus Vand

1:30-4:00 PM

Transport and site visit to Truelsbjerg Water Works

A fully automated, new groundwater based water work, implemented in a partnering model and for research.

Host: Pia Jacobsen, Aarhus Vand & WTA

- Presentation of the 'partnering model': Reducing costs and fostering innovation
- Presentation of research based collaboration on water

4:00 – 4:30 PM

Transport to Hotel Radisson Blu Scandinavia, Aarhus

4:45 – 6:00 PM

Walk from hotel through "Christmas in The Old Town" of Aarhus an open-air museum of urban history and culture in Denmark and with Living history.



<https://www.dengamleby.dk/engelsk/the-old-town/>

6:30 PM

Dinner at Aarhus Restaurant "Spiselaugget", Godsbanen

<http://www.spiselaugget.dk/>

Thursday December 15th

- 7:00 – 8:00 AM **Breakfast at hotel**
- 8:00 – 9:00 AM **Check-out & Transport to Grundfos Academy**
Poul Due Jensens Vej 7
DK-8850 Bjerringbro, Denmark
- 09:00-10:30 AM **Site Visit Grundfos**
Manufacturing of the demand driven pump
Host: Kenth Hvid Nielsen, Grundfos
- 10:30 AM – 1:30 PM **Workshop on US challenges**
US participants present future challenges
Discussion with participation of Danish sector specialists

Lunch included
- 1:30-6:00 PM **Transport to Hotel Strand in Copenhagen**
Havnegade 37, 1058 Copenhagen K, Denmark

Ferry departure at 3:00 PM from Aarhus Harbor
- 7:00 PM **Dinner at Copenhagen Restaurant**

Friday December 15th

- 7:00 – 8:00 AM **Breakfast at hotel**
- 8:00 – 8:30 AM **Check-out & Transport to Rambøll**
Rambøll, Hannemanns Allé 53, DK-2300 København S
- 8:30 – 10:00 AM **Wrap-Up**
Key learnings
Water Technology Alliance Next Steps & Follow-ups
- 10:00 AM **Transport Copenhagen Airport**
- 12:25 AM **Departure from Copenhagen Airport**

9

MEMORANDUM

To: Board of Directors
From: David L. Bentley, Auditor-Controller
Subj: Waive Tier Charges
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November 11, 2016

RECOMMENDED ACTION: Approve**FINANCIAL IMPACT: Estimated \$50,000 Revenue Reduction**

Staff has discovered irregularities in the meter reading data which, in a significant number of accounts (estimated at 15%-20%), resulted in customers receiving a low bill during the summer followed by a subsequent high "catch up" bill in the fall. The timing of the water use could push some residential customers into a higher tier rate when they otherwise would have paid for their water use at the base rate. Staff is not confident that the customers impacted can be accurately identified, and is therefore recommending that all tier charges be waived for bills rendered commencing November 10 through January 5 (all 8 billing cycles which incorporates all water customers). The reduced revenue to the District on the billing rendered November 10 is \$7,756. We anticipate that the tier charges for future billings will, on average, be less for each billing cycle going forward as outdoor irrigation has generally been discontinued for the winter.

Background

Over the past months the frequency and number of high-bill complaint calls has increased. The first step in responding to a high-bill complaint is to compare the water use with prior periods. If the use is indeed out-of-line with prior periods, a Field Service Representative (FSR) is dispatched to double-check the meter reading. During the past few months, the FSR dispatched to double-check the read typically found the meter reading accurate. Staff then advised customers that the water use increase was likely attributable to summer irrigation use, and speculated that 2016 water use was higher than the comparable period 2015 use when California's mandatory water conservation regulation was in effect. However, this explanation seldom satisfied customers, and customer call volume complaining of high bills continued to increase.

As staff studied the issue, we observed that high use often immediately followed abnormally low use that had occurred during the prior (summer) billing period. Staff performed a number of statistical analyses, and eventually discovered that one of the FSRs had been recording a significant number of meter reads in quick succession. The hand-held computer into which the FSR enters meter reads time-stamps each read. Staff discovered that a FSR hired in

May of 2015 was reading meters at a speed that defied reason. He had apparently determined that by entering low reads into the billing system, customers would receive a low bill and would not call to complain, thereby allowing him to perform his work without the trouble of reading every meter.

Fortunately, one of the District's internal controls is to rotate the meter reading routes so that the same FSR does not read the same route consecutively. When the route with the low reads was read again two months later by another FSR, an accurate read was obtained, balancing the low read from the prior bill, and in essence "catching up" the water use. The customer then received a high bill, and was justifiably upset.

The deceitful FSR was confronted with the evidence. He admitted he had been "just punching in the numbers" and his employment with the District was terminated.

It will take another six weeks for all of the routes the former FSR last read to be read by another FSR. An analysis shows that the number of reads recorded in quick succession began to decline as the number of complaints increased. However, some customers will still receive "catch-up" bills before all of the estimated data is cleared from the system.

New internal control measures are being put into place, including regular random field audits of meter reads by the Consumer Services Supervisor, a revision of the daily meter read report to include summary information that will allow quick determination if meters are being read too quickly or breaks between reads are inappropriately long, and management assignment of meter reading route rotation.

The General Manager has drafted a letter to the Independent Journal to explain what happened and apologize to District customers. The letter will include information about the Advanced Meter Information system we are preparing to pilot test, which will largely eliminate the human factor in gathering water use data for billing and customer service purposes.

Recommendation

Approve waiving tier charges for all customer bills rendered through January 5, 2017.

10

MEMORANDUM

To: Board of Directors
From: David L. Bentley, Auditor-Controller
Subj: Request for Additional Bill Adjustment – West Marin Senior Services
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November 11, 2016

RECOMMENDED ACTION: Consider**FINANCIAL IMPACT: \$0 - \$1,109**

West Marin Senior Services, located at 12051 State Route 1 in Point Reyes Station, received two consecutive high bills, and no leak has been found. The problem is compounded by an estimated read by the District.

Background

West Marin Senior Services provides assisted living for up to 8 residents, and serves as the headquarters for in-home support services for senior citizens in the West Marin community. The structure was converted from a single-family residence in 2006. Water use has averaged a little over 300 gpd since 2006.

The meter read history on this account over the past 5 months is tangled. The meter is located behind a locked gate, and has been served by a radio-read meter¹ since 2009. When the meter was read on May 31 of this year, the meter radio transmitted a read 1256, an increase of 222 Ccf from the prior (April 4) read, indicating consumption of 166,000 gallons (15 times normal). A Field Service Representative (FSR) was dispatched to double-check the read, but found the gate locked, and was therefore unable to view the meter register. In response the billing staff, believing that the read of 1256 was unreasonable, estimated the consumption at 11,000 gallons, which is typical for this account, and input a read of 1049 into the billing system and rendered a bill accordingly.

Two months later the meter was read again. On August 5 the meter radio transmitted a read of 1287. Again, a FSR was dispatched, and on August 8 the FSR was able, with the gate code, to view the meter. He reported a visual read of 1214, which is less than both radio reads previously obtained. The meter register, like the odometer in a car, does not go backwards. This indicates that either the meter radio transmitter was sending erroneous information, or, more likely, the FSR misread the register when he obtained the visual read.

A bill was generated using the visual read of 1214, which translates to consumption of 123,000 gallons². When West Marin Senior Services received the \$1,743 bill, they called, obviously concerned. Billing staff decided to have the suspect meter tested for accuracy, and on August 17 the meter was replaced. A water consumption "data-logger", which measures

¹ A radio-read meter transmits the register read by radio frequency to a hand-held receiver with line-of-sight up to a distance of 50'.

² August 8 visual read of 1214 less the May estimated read of 1049 = 165 Ccf x 748 gallons = 123,000 gallons.

consumption in two-hour increments, was placed on the service on August 25 and recorded use for 7 days, in hopes of solving the mystery. Nothing unusual was detected.

When the suspect meter was returned to the office, the billing staff was alarmed to see that the meter register read 1404, indicating 142,000 gallons had gone through the meter in the 9-day period since the August 8 visual read. The suspect meter was shipped to San Jose for testing and found to be accurate. The new meter installed registered use of 14,000 gallons over the remaining 28 days in the billing period, which is reasonable. However, the resulting bill for 166,000 gallons (142,000 + 14,000) came to \$2,385.

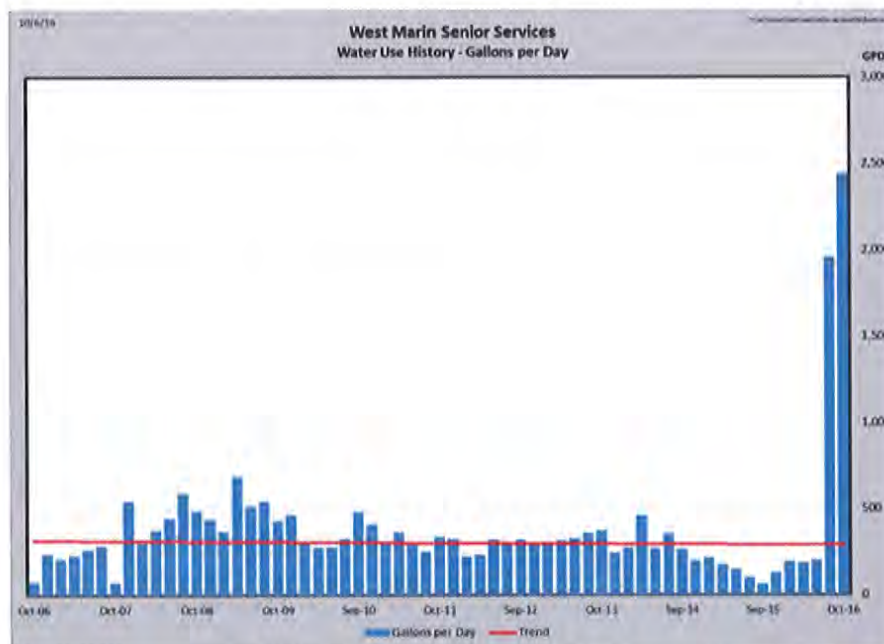
The total charge for the two billing periods is \$4,128 (\$1,743 + \$2,385). After a credit of \$2,894 as authorized under the Bill Adjustment Policy, the remaining balance, after deducting the \$125 payments made against both the August bill and October bills (\$250 total), is \$1,109.

Options for the Board to consider:

1. Reduce the \$1,109 balance due to \$0, allowing the two \$125 payments to clear the account in full, granting an additional \$1,109 credit;
2. Reduce the \$1,109 balance due to \$810, rendering a charge based on the cost of water produced³, granting an additional \$299 credit;
3. Deny any further bill adjustment.

Recommendation:

Option 2. The register indicates the water went through the meter, but Staff compounded the situation by estimating the May read, which delayed the customer's opportunity to investigate the March/April high use until August.



³ FY17 budgeted Source, Pumping, Operations and Treatment = \$248,000 / 62MG Consumption = \$4/1,000 gal x 265,000 gallons = \$1,060 - \$250 paid = \$810.



November 7, 2016

North Marin Water District
999 Rush Creek Place
Novato, CA 94945
Attention: NMWD Board of Directors

RE: WMSS Stockstill House Water Bill/Account # 2040102

Dear NMWD Board of Directors,

West Marin Senior Services (WMSS), a 40 year old nonprofit agency, is attending your 11/15/16 NMWD Board meeting to ask for relief from a billing morass that we find incomprehensible over the past six months at Stockstill House, our Licensed Residential Care Facility for the Elderly (RCFE), in Point Reyes Station. WMSS recognizes and appreciates the dedication and service provided by NMWD as an essential Public Utility.

David Bentley's memo of 10/28/16 frames our situation pretty well in the first few sentences: "*West Marin Senior Services, located at 12051 State Route 1 in Point Reyes Station, received two consecutive high bills, and no leak has been found. The problem is compounded by an estimated read by the District.*"

West Marin Senior Services, provides assisted living for up to 8 residents, and serves as the headquarters for in-home support services for senior citizens in the West Marin community. The structure was converted from a single-family residence in 2006. Water use has averaged a little over 300 gpd since 2006.

The meter read history on this account over the past 5 months is tangled..."

Please note that West Marin Senior Services offices are located at 11435 State Route 1 (the Creamery Annex) in Point Reyes Station as distinct from the site in question, Stockstill House our Licensed RCFE. The WMSS Board discussed the situation and Mr. Bentley's authorized offer of resolution under NMWD's Bill Adjustment Policy. However, WMSS is still faced with a settlement offer that is much higher than our normal billing and we have no plausible explanation.

A tremendous increase in water use was recorded at the Stockstill House property in late May but WMSS was not notified until August, when we inquired after receiving an unusually high bill. Stockstill House gates are

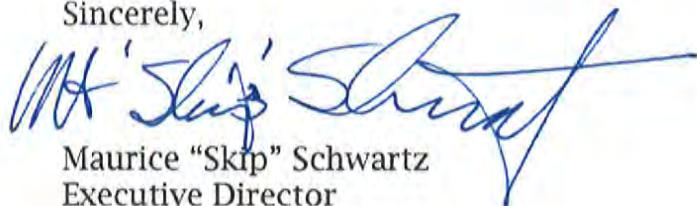
always kept closed for our elders' safety. Access by ringing the bell is easy, but NMWD personnel apparently made no attempt to gain access and sight-read the meter in May, June or July - possibly the NMWD thinking was that equipment or personnel were malfunctioning. When WMSS became aware of suspected high use months later and we were understandably surprised and alarmed! NMWD told us they could not help and that we were responsible for any problems on the downstream side of the meter. WMSS immediately called in professionals and checked all systems and water using equipment and found no leaks. When we checked the meter visually, we found the dial was stationary whenever water in the house was off. In August, NMWD removed the radio-reader, installed a new flow meter (8/17), tested the old meter and installed a data logger for a week (8/25)... Subsequently, Stockstill House water use registered within normal range from that point to the time of this writing. In fact the meter was accessed and read as 19 on 10/4/16 and when we checked today (11/7/16) it read 28 - a use of 6,754 gal in 34 days or approximately 198gpd, well within our norms...

Referring to data in Mr. Bentley's memo; a leak of 142,000 gal in 9 days (equivalent to about fourteen 10,000 gal swimming pools) or 15,778gpd would almost certainly show on the surface and we could not find any sign of water surfacing on our (or our neighbor's) poorly percolating property.

So in summary, West Marin Senior Services has no explanation for unfathomable water use at Stockstill House during the periods in question. We were both surprised and disappointed to have been notified very late in the detection and progression of what was possibly a severe leak of potable water at our residential elder care facility in Point Reyes Station. WMSS was offered no timely support or explanation from NMWD. WMSS had no benefit of time to investigate and ameliorate any problem that may have existed. In this instance, the rigor of the District's policy for notice and support, equipment upkeep, personnel training, data collection and record keeping seem "tangled" and questionable. Following NMWD removal and replacement of equipment we are seeing only a normal range of water use.

WMSS appreciates the important public service provided by NMWD. We are always pleased and prompt to pay NMWD for water used. However, in this particular instance, we ask respectfully for relief from extraordinary costs...

Sincerely,



Maurice "Skip" Schwartz
Executive Director




STOCKSTILL HOUSE RCFE - West Marin Senior Services

11

MEMORANDUM

To: Board of Directors
November 11, 2016

From: Chris DeGabriele, General Manager 

Subj: Consultant Services Agreement for Headquarters Upgrade Architectural Concept Plan –
Noll & Tam Architects
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RECOMMENDED ACTION: Board Authorize the General Manager to Enter into a Consulting Services Agreement with Noll & Tam Architects

FINANCIAL IMPACT: Up to \$98,980 (\$3M available in the FY17 Capital Improvement Project Budget)

At the July 15th Board of Directors Meeting, the Board authorized staff to solicit architectural proposals for space planning and concept design for the District Headquarters Facility Upgrade. Proposals were solicited from six architectural firms. Five firms submitted detailed proposals and interviews were held with the top three firms that submitted proposals. The District management team participated in review of proposals and in the interview process. Staff recommends moving forward with Noll & Tam Architects for the space planning and concept proposal (Master Plan). Noll & Tam's draft scope of work is included as Attachment 1, identifying that the total proposed fee is \$89,480 with an additional \$9,500 if mechanical, plumbing and electrical engineering services are needed.

The schedule contemplates that work will begin in early December and complete by mid-April, with the presentation of a draft Master Plan to the Board of Directors. District legal counsel is reviewing the Consulting Services Agreement, with regard to indemnification as changes are requested by Noll & Tam Architects of the standard indemnification provisions.

RECOMMENDATION:

Board authorize the General Manager to enter into a Consulting Services Agreement with Noll & Tam Architects to conduct the space planning and concept proposal (Master Plan) for the District Headquarters Upgrade.

DRAFT 11/7/2016



729 Heinz Avenue
Berkeley
CA 94710
510.649.8295
fax 510.649.3008
nollandtam.com

November 7th 2016

North Marin Water District
Attn: Chris DeGabriele, General Manager
999 Rush Creek Place
P.O.Box 146
Novato, CA 94948

**Re: NMWD Master Plan Study
Novato, CA**

Dear Mr. DeGabriele

Noll & Tam Architects is pleased to present our proposal for master plan consulting services for this project. This proposal is based upon the North Marin Water District RFP, dated 7/25/2016 and Noll & Tam proposal, dated 9/7/2016. Our understanding of the work and proposed fees are summarized below.

Project Description:

North Marin Water District
Assessment and Master Plan

Work Plan and Scope of Service:

Task 1: Project Initiation and Assessment

Kick-Off Meeting

Attended by Noll & Tam, key members of the design team, and NMWD staff. This Meeting will clarify the project goals and vision, decision-making process, program requirements, scope of work, work plan, project schedule, meeting schedule, and project budget, if applicable.

Assessment

Information gathering by meetings with District staff and questionnaires. Noll & Tam will investigate, analyze to understand your operations across the entire site and gather and review all available documentation on the existing facility and prepare BIM Revit base plan. Our engineering team will come to the site to perform an assessment of the existing building and its systems, including:

- Operations, including administration, lab, engineering, maintenance, storage, vehicles, inventory, etc.
- Roofing and waterproofing systems
- Architectural building elements
- Windows and doors
- Accessibility and ADA compliance
- Structural systems (for all building elements)
- Site elements including access, circulation, parking, storage, landscaping, drainage, storm water management, site lighting
- Sustainability
- Mechanical and plumbing systems (evaluated by architects)
- Electrical, lighting, and telecommunications systems (evaluated by architects)

Mechanical, Electrical, and Plumbing engineering consultants are included as an additive alternate service.

Presentation to District staff to review assessment conclusions and make document adjustments as necessary.

Meetings:

Kick Off Meeting (Meeting-01) – Noll & Tam, District Staff
On-Site Building Evaluation, Noll & Tam Staff and Engineers
NMWD Presentation #1 (Meeting-02)

Deliverables:

Project Schedule
Project Work Plan
Revit base plans and documents
Site and Building Evaluation Report
Site and Building Program
Project Goals and Objectives

Task 2: Conceptual Design Phase 1

Development of a number of preliminary conceptual design alternatives for the site and buildings. Including options for both renovation of the existing buildings and new construction. A minimum of one option will address a phasing strategy to keep the Headquarters operating during construction. We will meet with District staff to review all alternatives in detail, and select up to three alternatives to further develop into the following design phase.

Meetings:

NMWD Presentation #2

Deliverables:

Conceptual Site and Building Design Alternatives

Task 3: Conceptual Design Phase 2

Development of up to three conceptual design alternatives for the site and buildings. If the District prefers to move ahead with a single preferred alternative at this point, we can certainly accommodate that and reduce our scope correspondingly. Each alternative will include:

- Site plan, showing buildings, storage areas, parking, vehicular and pedestrian circulation, landscape and hardscape, demonstration garden, storm water management, security, and other relevant features
- Building plans, including floor plans, program functional layout, conceptual furnishings plans where needed, lab plan, vehicles, major equipment, storage, etc.
- Conceptual Landscape design
- Sustainability features
- Phasing plan
- Preliminary Cost estimate
- Computer rendered visualization(s) of exterior and/or interior of proposed design concept

Preliminary Cost estimates will be developed to accurately model both construction costs as well as associated project soft costs, including escalation, so the District will be able to make decisions and proceed with knowledge of financial limitations.

We have included 3-4 computer rendered visualizations to communicate design intent to the District and Board. Noll & Tam and the District will determine the most suitable visualizations for the project scope.

Presentation meeting with District staff to evaluate all of the alternatives, receive feedback and propose changes as needed required. Noll & Tam will make any modifications to the plans and other assumptions in response to district comments before preparing the final concepts.

Deliverables:

Conceptual Site and Building Design Alternatives

Cost estimates

Phasing plans

Computer visualizations

Meetings:

NMWD Presentation #3

Task 4: Master Plan Document

Draft Master Plan Report for presentation to the North Marin Water District Board.

Master plan document will include the proposed implementation plan, and the costs will account for all project costs including construction, soft costs, and escalation. Board feedback will be incorporated into the final version of the document.

The final document will be organized as follows:

- Executive Summary
- Table of Contents
- Introduction
- Site and Building Evaluations
- Needs Assessment and Programming
- Summary of the community participation process, if any
- Meeting Notes
- Conceptual Design Alternative(s)
- Project Cost Models
- Implementation Plan: phasing, schedule, and financial

Meetings:

Final NMWD Presentation (#4)

Board of Directors Meeting

Deliverables:

Master Plan Document

Compensation:

We propose to perform the work described above on a Time and Materials basis, not to exceed \$89,480. Compensation and estimated hours are detailed on the attached fee summary proposal and estimated hours sheet.

Exclusions:

- Mechanical, Electrical, and Plumbing engineering consultants are included as an additive alternate service.
- Community outreach and community presentations are excluded. Noll & Tam estimates \$2,500 to \$3,500 per community meeting, depending on level of preparation requested.

Thank you for selecting us for this project. We look forward to the opportunity to work with you.

Sincerely,

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

Christopher Noll

Principal

Fee Summary

North Marin Water District Headquarters Upgrade

Novato, CA

9/6/2016

		MASTERPLAN	TOTALS
Basic Service	Consultant		
Architectural Services	Noll & Tam	\$66,080	\$66,080
Structural Engineering	Estructure	\$6,600	\$6,600
Civil Engineering	CSW ST2	\$3,300	\$3,300
Landscape Architect	Quadriga	\$3,300	\$3,300
Cost Estimating	mack5	\$7,700	\$7,700
Subtotal Basic Services		\$86,980	\$86,980
Reimbursable Expense Allowance		\$2,500	\$2,500
Total Proposed Fee			\$89,480

Additional Assessment Services, if needed:

Mechanical and Plumbing Engineering	Capital Engineering	\$4,500
Electrical Engineering	O'Mahony & Myer	\$4,000

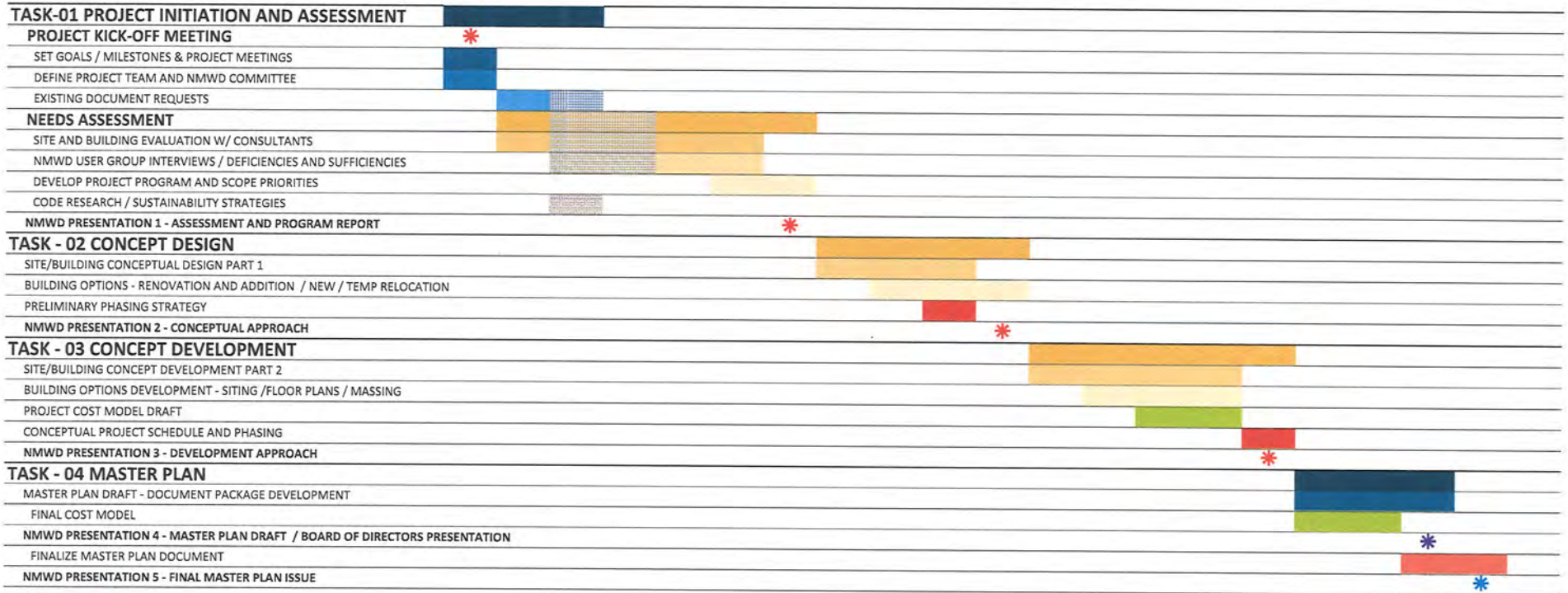
Based on the information in the RFP, it does not seem that an MEP assessment is needed at this time. We have provided estimated fees for these services, if required.

Estimated Hours

	Est. Hrs	Rates
Noll & Tam Architects		
Principal - Chris Noll:	60hrs	\$200/hr
Project Manager - Scott Salge:	118hrs	\$170/hr
Laboratory Planner - Andrew Russell:	24hrs	\$150/hr
Interior Designer:	22hrs	\$150/hr
Designer/Technical Staff:	226hrs	\$120/hr
	Total: 450 hrs	
Estructure		
Principal - Maryann Phipps:	13hrs	\$275/hr
Structural Designer:	20hrs	\$120/hr
	Total: 33 hrs	
CSW ST2		
Principal - Jim Grossi:	5hrs	\$210/hr
Engineer:	13hrs	\$147/hr
	Total: 17 hrs	
Quadriga		
Principal - Christine Talbot:	3hrs	\$165/hr
Project Director:	8hrs	\$130/hr
Senior Designer:	14hrs	\$105/hr
	Total: 25 hrs	
mack⁵		
Senior Cost Manager - Cynthia Madrid:	41hrs	\$170/hr
	Total: 41 hrs	

ESTIMATED START DATE		12/5/2016																				
WEEK NUMBER BY YEAR		W49	W50	W51	W52	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17
MONTH		DEC				JAN					FEB				MAR				APR			
MONDAY		05	12	19	26	02	09	16	23	30	06	13	20	27	06	13	20	27	03	10	17	24


ASSESSMENT & MASTERPLAN **WORK PLAN ESTIMATE OF 4.5 MONTHS**



* NMWD MEETING
 * BOARD OF DIRECTORS PRESENTATION

12

MEMORANDUM

To: Board of Directors
From: Robert Clark, Operations / Maintenance Superintendent 
Subject: First Quarter 2016/17 Update
X:\MAINT SUP\2017\BOD\101 16-17 O&M Update.doc

November 11, 2016

RECOMMENDED ACTION: Information

FINANCIAL IMPACT: None

Safety Summary

No lost time incidents were recorded during the period (July, August September 2016). Hearing tests were performed for 23 employees who are at times exposed to 80 decibels and above noise levels during their normal job duties and no OSHA recordable results were identified. New Electrical / Mechanical Technicians attended an arc flash and electrical safety course.

Maintenance Summary

Staff stayed on schedule with routine maintenance tasks, completing 39 unplanned work orders out of 301 total work orders completed this period. This is a ratio of 13% with a target of less than 20% for unplanned vs. planned work. Project work included: tank access and hatch alarm installations with Upper Wild Horse left to be completed; programmable logic controllers and radio installations are near completion with Diablo Hills hydropneumatic system to be completed this fall; and the Frosty Lane cross tie motor operated valve power and SCADA installations are in progress. The 4th annual inspection of the Leveroni creek bank stabilization and vegetation project was completed and the site continues to be on track to meet success criteria for the five year monitoring program.

Operations Summary

The Stafford Treatment Plant (STP) began the period under typical late summer production conditions producing 257 MG of water. Novato received 1,004 MG in total water produced with a peak day of 17.1 MG. The Point Reyes Treatment plant produced 21.7 MG with a peak day of 444,000 gallons. The Operations Superintendent met with the new Marin County Fire personnel in Point Reyes to review hydrant operation and maintenance and fire department training notification practices. The Districts residential recycled water fill station program had twelve customer inquiries this summer and three of them came in to sign up for the program. Due to the high cost of operation and the easing of the drought restrictions, the dispatch of recycled water for residential customers was set up at a hydrant along Wood Hollow Dr. with 48,000 gallons of recycled water

picked up by residential customers. The Deer island recycled water plant was in operation during the period and produced 6.3 million gallons of water for the Stone Tree golf course.

Water Quality Summary


With the assistance of Operations' staff, Construction/Maintenance staff and additional contract vendors, the District is on track to complete all the required annual backflow testing by mid-December. Annual inspection of the waste discharge facilities at STP by the Novato Sanitary District (NSD) staff resulted in no permit non-compliant findings and the improvements made to the system are meeting expectations. The inspection team of District and NSD staff did recommend that the flow meter be calibrated annually and consider a shade screen to inhibit algae growth in the sludge thickener to help reduce total suspended solids. In Point Reyes the treatment plant continues to have good water quality with no high salinity excursions observed with the Gallagher well in operation.

13

MEMORANDUM

To: Board of Directors

November 11, 2016

From: Katie Young, District Secretary 

Subj: Draft Annual Report
U:\gm\admin sec\y\admin ass\annual report\15-16\memo re draft report.docx

RECOMMENDED ACTION: Information Only

FINANCIAL IMPACT: None at this time

Attached is the Draft Annual Report for Fiscal Year 2015-2016 for your review. Please submit comments for incorporation into the annual report to me by Friday, November 18th. After which comments will be incorporated or addressed with the Board, the General Manager will review and the finished product will be submitted for approval at the December 6th Board meeting.



**NORTH MARIN
WATER DISTRICT**

North Marin Water District



Annual Report FY 2015-2016

HISTORICAL HIGHLIGHTS

- 1948** The Novato community approves formation of North Marin Water District and purchase of the Novato Water Company.
- 1949** Novato voters impose a significant tax upon themselves (77¢/\$100 assessed value) to finance a \$2 million bond issue to purchase and upgrade the private water system and to construct a dam at Stafford Lake and build a water treatment plant.
- 1951** Contractor T.E. Connolly of San Francisco constructs Stafford Lake Dam, designed by Kennedy Engineers, to impound 560 million gallons (MG) of water.
- 1952** Stafford Water Treatment Plant, designed by Kennedy Engineers and built by C. Norman Peterson, goes into operation. It has a capacity of 3.75 million gallons per day (mgd).
- 1954** The spillway at Stafford Lake is raised to increase the reservoir capacity to 1.45 billion gallons, boosting the annual safe yield of Stafford Lake to 620MG.
- 1960** Voters approve a \$3.79 million bond issue to finance system improvements, notably construction an aqueduct connecting Novato to the Russian River.
- 1961** The North Marin Aqueduct, a 9.4-mile, 30" pipeline from Petaluma to Novato is completed.
- 1963-66** Multiple water storage tanks are constructed, increasing storage from 2MG to 16MG.
- 1970s** Five small West Marin improvement districts are annexed into NMWD at the request of West Marin citizens: Oceana Marin Sewer in 1969; Point Reyes Station/Inverness Park Water in 1970; Olema Water in 1973; Tomales Sewer in 1975; and Paradise Ranch Estates Water in 1979.
- 1973-75** System storage capacity is increased to 26MG with construction of the Atherton (5MG welded steel) and Pacheco (5MG concrete) Tanks.
- 1974** Stafford Treatment Plant is modified to increase production capacity to 6.3 mgd.
- 1980s** North Marin assumes a leadership role in the water conservation field, pioneering programs such as connection fee discounts for installation of xeriscapes in new residential construction and "Cash-For-Grass" rebates for existing customers who replace irrigated turf with xerophytic plants.
- 1983** The US Army Corps of Engineers completes the construction of the Warm Springs Dam, creating a water supply pool in Lake Sonoma of 69 billion gallons.
- 1990s** Marin United Taxpayers twice touts NMWD as the Best Managed Public Agency in Marin County.
- 1998** The District celebrated 50 Golden Years of Quality, Excellent Service and Tradition.
- 2001** Marin Municipal Water District agrees to reorganize boundaries at Hamilton AFB to be coincident with Novato city limits, enabling NMWD to serve areas within Novato formerly served by MMWD.
- 2002** Amaroli Tank, a 4.5MG buried concrete tank adjacent to Highway 101 on Ammo Hill, is completed and increases total Novato area storage capacity to 33MG.
- 2005** A 180,000-gallon concrete storage tank is constructed in Point Reyes Station to replace a 36-year-old 100,000-gallon redwood tank serving the West Marin community.
- 2006** The Restructured Agreement for Water Supply with Sonoma County Water Agency (SCWA) is executed, authorizing SCWA to construct facilities to increase North Marin's water delivery entitlement to meet Novato's future needs consistent with the community general plan.
- 2006** The Stafford Water Treatment Plant \$16 million reconstruction project is completed enabling Stafford Lake water to meet anticipated future water quality standards.
- 2007** The 0.5 mgd Deer Island Recycled Water Facility, located adjacent to Highway 37 immediately south of Deer Island, commenced operation in June 2007 serving Stone Tree Golf Course.
- 2008** The 500,000-gallon Center Road Tank in west Novato is completed.
- 2009** Palmer Drive Tank is completed adding 3MG of first-zone storage in southern Novato, and increasing total Novato area storage capacity to 37MG.
- 2013** Expansion of the recycled water distribution system to north and south Novato is completed. Utilizing federal grant and loan funds and working in conjunction with Novato & Las Gallinas Valley Sanitary Districts, the project will provide 130MG annually to large-landscape customers.
- 2015** The Gallagher Well Pipeline is completed principally with grant financing, connecting the West Marin system to a supply free from salt water intrusion.
- 2016** The \$22 million Aqueduct Energy Efficiency Project is completed, replacing the North Marin Aqueduct 30" diameter pipeline with a 42" pipeline from South Petaluma to Redwood Landfill, thereby eliminating the need for the Kastania Pump Station.

For a narrative description of North Marin Water District history of formation and expansion in Novato and West Marin, please visit our website at www.nmwd.com and click on Service Area.

NORTH MARIN WATER DISTRICT

BOARD OF DIRECTORS

Jack Baker, served since 1983
Rick Fraites, served since 2003
Steve Petterle, served since 2001
Dennis Rodoni, served since 1995
John Schoonover, served since 1984

OFFICERS

Chris DeGabriele, General Manager, appointed 1995
Katie Young, District Secretary, appointed 2012
David L. Bentley, Auditor-Controller, appointed 1987
Drew McIntyre, Chief Engineer, appointed 1998

DEPARTMENT MANAGERS

Administration & Finance	David L. Bentley
Construction/Maintenance	Tony Arendell
Engineering	Drew McIntyre
Operations/Maintenance	Robert Clark

MISSION STATEMENT

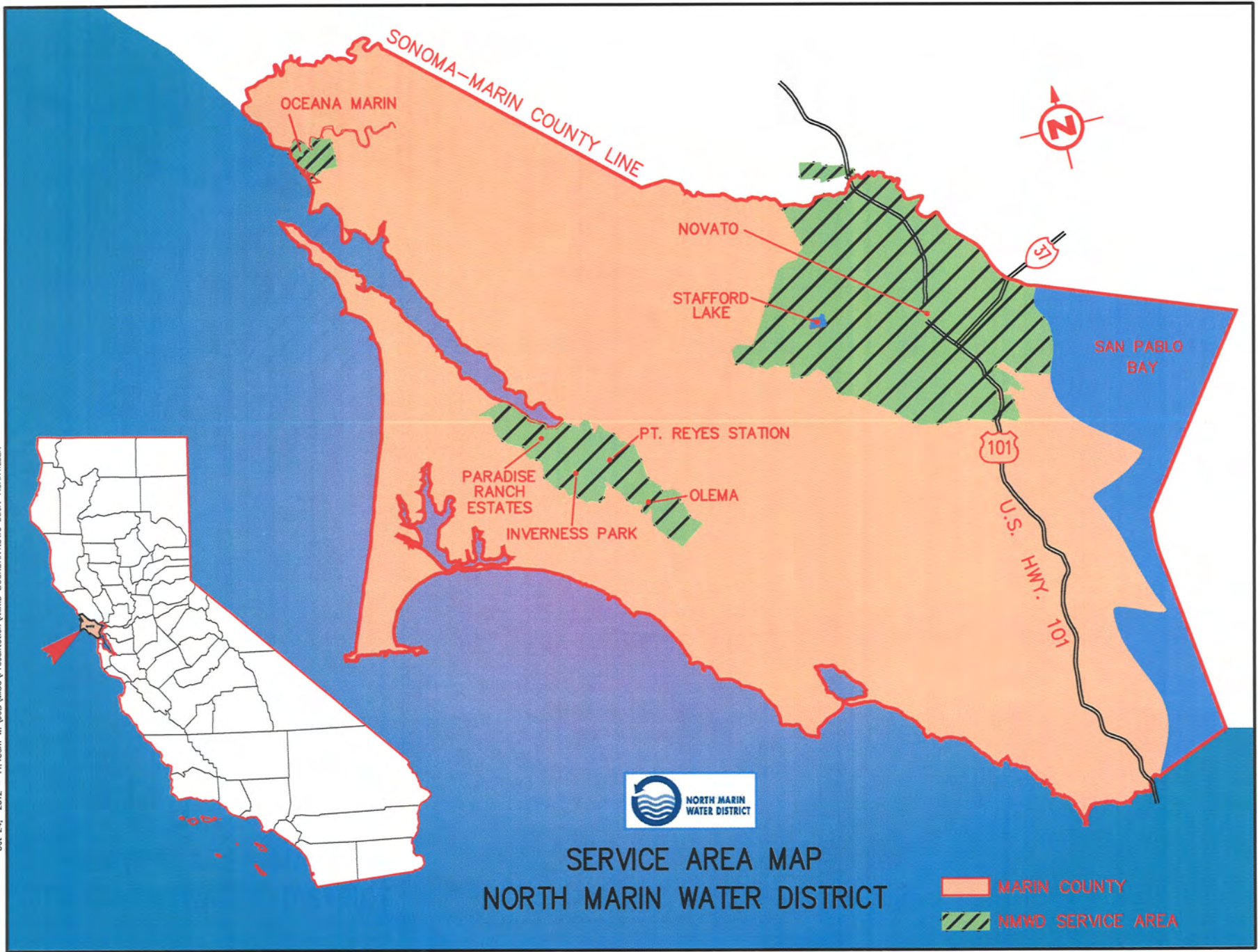
We provide an adequate supply of safe, reliable and high quality water and deliver reliable and continuous sewer service to our customers at reasonable cost consistent with good conservation practices and minimum environmental impact.

BOARD MEETINGS

Regular Board meetings are held on the first and third Tuesday of each month at 7:00 p.m. Meetings are normally held at North Marin Water District headquarters, 999 Rush Creek Place, Novato. For meeting agendas, contact the District Secretary at 415-761-8921 or visit the website at www.nmwd.com

(Front cover photo: Aqueduct Energy Efficiency Project Dedication & Ribbon Cutting)

Oct 24, 2012 - 11:18am W:\JOB\MISC\Presentation\NMWD BOUNDARY.DWG User: ACANTILLER



MESSAGE FROM THE GENERAL MANAGER ... *Chris DeGabriele*

The North Marin Water District (North Marin) carries out its Mission with a highly-motivated and competent staff empowered to conduct the District's business by placing customer needs and welfare first. Each day, District employees strive to carry out their work mindful of these basic principles: Good Water, Good Service, Good Value, and A Safe Place to Work. This annual report updates customers on the North Marin accomplishments in Fiscal Year (FY) 2016 and provides a snapshot of our current efforts and financial performance.



The Russian River water delivery system from Sonoma County Water Agency (SCWA) typically provides 80% of Novato's water supply, but continues to have limited capacity in summer months. Rainfall in FY 2016 totaled 21.5", eighty percent of average and the fifth consecutive low rainfall year. Notwithstanding below average Novato rainfall, Stafford Lake did fill and spill on March 9, 2016. Governor Brown's drought declaration for all California continued and mandatory restrictions on outdoor water use were imposed by the State Water Resources Control Board, requiring a 24% reduction in Novato Water Production compared to the same periods in 2013. Fiscal year water production was down 32% compared to 2013 as Novato customers Novato responded to the Governor's conservation mandate. Water was available in the Russian River system for fish, agriculture and urban deliveries. North Marin's Stafford Lake Water Treatment Plant was utilized to augment Russian River supplies with local water supply and the Deer Island, Novato Sanitary and, Las Gallinas recycled water treatment facilities delivered highly-treated recycled water to irrigate Stone Tree Golf Course and North Marin's expanded recycled water distribution system in north and south Novato.

The Aqueduct Energy Efficiency Project, where the North Marin Aqueduct is now upsized to 42" diameter, was completed and in service from Redwood Landfill to Kastania Road just south of Petaluma. The AEEP dedication was held on October 1, 2015.

SCWA continues focus on the Biological Opinion for water supply in the Russian River watershed issued by the National Marine Fisheries Service laying out the requirements to preserve, protect and restore the fisheries over the next 15 years and maintain the existing

Russian River water supply. Additionally, state legislation passed in November 2009 (SB7X-7) will force a 20% reduction in per capita water use by 2020. North Marin must achieve more water conservation and expansion of recycled water to further stretch our local source of supply in future years.

In West Marin, normal year water supply conditions on Lagunitas Creek prevailed yet customers in West Marin experienced mandated water restrictions in response to the Governors drought response. Studies began on finding a second upstream well free from any potential salinity intrusion.

In June 2016, a 5% water rate increases became effective. At \$672 per year, the cost of water service for a typical Novato single family home using 100,500 gallons of water a year is just below the median of bay area urban area water purveyors (see chart page 17). Water remains a good value for Novato customers.

WATER SUPPLY

STAFFORD LAKE – Local Source Provides 20% of North Marin’s Supply

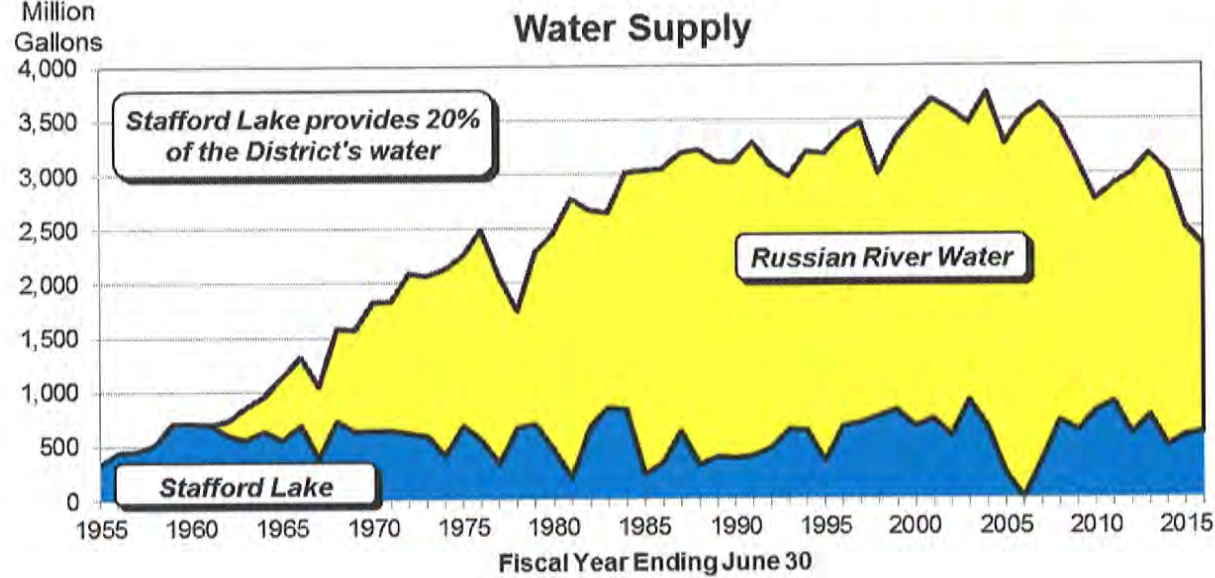
Stafford Lake lies four miles west of downtown Novato and collects the runoff from 8.3 square miles of watershed land adjacent to the upper reaches of Novato Creek. The lake has a surface area of 230 acres and holds 4,450 acre feet or 1,450 million gallons (MG) of water. Water from Stafford Lake is fed into the 6 million gallons per day (MGD) treatment plant located just below the dam. In FY 2016, 1,850 acre feet (601 MG) of water was produced from Stafford Lake Water Treatment Plant.

RUSSIAN RIVER – Provides 80% of North Marin’s Annual Supply

Russian River water originates from both the Eel River and the Russian River watersheds northeast of the City of Ukiah (Lake Mendocino) and west of Healdsburg (Lake Sonoma). The Coyote Dam and Lake Mendocino impounds the Eel River diversions and winter runoff from the local watershed. Warm Springs Dam and Lake Sonoma impound winter runoff from the Dry Creek and Warm Springs local watersheds. Lakes Mendocino and Sonoma combined can store 367,500 acre feet to meet the regions’ water supply needs, which totaled 40,477 acre feet in FY 2016. Releases from the lakes flow to a point about 10 miles upstream of Guerneville (see map on page 16 of this report), where six deep Ranney Collector wells draw river water that has been filtered through 60 to 90 feet of natural sand and gravel to perforated pipes located at the bottom of each well. The thick layer of sand and gravel through which the

water must pass before reaching the intake pipes provides a highly-efficient, natural filtration process which, with chlorination treatment, produces a clear, potable, bacteria-free water. This water is then fed directly into the SCWA aqueduct system.

In FY 2016, North Marin received 5,788 acre feet (1,886 MG) of Russian River water. North Marin has an agreement in place with SCWA to provide sufficient supply and meet Novato's current and future water supply needs. There continues to be competing interests for Russian River water, principally to protect steelhead and salmon listed as threatened or endangered species under the Endangered Species Act.



ADMINISTRATION



The Administration Department is comprised of the Administrative Services, Consumer Services, Finance, Human Resources and Information Systems divisions.

Consumer Services is responsible for the accurate and timely meter reading and billing, rendering and accounting for 140,000 bills annually. During the year, field staff responded to 1,139 customer calls for water service assistance and received a 93% positive response from customers pertaining to the service rendered.

- The Conservation Incentive Rate, enacted in Novato in June 2004 and focused on residential water

use exceeding 1,845 gallons per day, continued to prove successful in reducing water demand. Residential consumption in the targeted tier was down 88% in FY 2016 compared to FY 2003. Less than 1% of residential customers used in excess of 1,845 gallons per day sometime during the fiscal year. In addition to reducing consumption, the incentive rate has generated \$771,000 in additional revenue since inception, which funds are dedicated to further promote water conservation measures in Novato.

- In January 2007 a Conservation Incentive Tier Rate (CITR) was implemented in Novato. The new tier rate is applicable to residential water use between 615 and 1,845 gallons per day. About 4% of residential customers used in excess of 615 gallons per day sometime during the year (96% of residential customers never used more than 615 gallons per day). The CITR is designed to further encourage high-use residential customers to review and tighten-up their landscape irrigation practices. FY2016 water use within the CITR range had declined 74% compared to FY2006.
- In February, the District's 2016 Urban Area Water Cost Comparison (see chart on page 17) showed that North Marin's cost of water service ranked 10th out of the

seventeen urban agencies serving the greater San Francisco Bay Area. The annual cost for water service to a typical single-family home in Novato was \$672/yr.

The Finance Department (pictured to the right) is responsible for general accounting and budgeting, payroll, purchasing, treasury management, risk management, materials inventory and human resources. The accounting staff renders a full financial statement monthly with extensive cost-accounting detail allowing District managers to closely monitor revenue and expenditures relative to the adopted budget.



The Government Finance Officers Association (GFOA) has awarded the District a Certificate of Achievement for Excellence in Financial Reporting for our comprehensive annual financial report (CAFR) for fiscal year ended June 30, 2015. This is the seventh consecutive year the District has received this award. The GFOA states that this Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting, and its attainment represents a significant accomplishment by a government and its management. The following staff members made significant contributions to this CAFR: Chris DeGabriele, David Bentley, Dianne Landeros, Nancy Holton, and Nancy Williamson.

Fiscal Year 2016 financial highlights include:

- The District, on a consolidated basis, received 87% of budgeted operating revenue and expended 91% of budgeted operating expenditures, resulting in a net income of \$378,000. \$15.6 million (43%) of the Improvement Project Budget was expended. During the year the District received \$2.6 million in Capital Contributions from CalTrans and \$500,000 in grant proceeds to finance its capital improvement projects program, and ended the year with a cash balance of \$13.0 million, a decrease of \$1.2 million from the prior year.

- Novato potable water consumption decreased 12% from the prior year. Stafford Lake Water Treatment Plant produced 601 MG, up 5% from the prior year. The net income of \$569,000 fell short of \$1.4 million budgeted net income, and compares to a net income of \$1.3 million the prior year.
- The Novato Sanitary District and Las Gallinas Valley Sanitary District, along with the Deer Island Recycled Facility combined to produce 139 MG of Recycled Water, down 6% from the prior year. The fiscal year net loss of \$340,000 exceeded the \$315,000 budgeted loss.
- West Marin Water consumption was down 12% from the prior year. The \$96,000 net income compares to a budgeted net income of \$74,000 and to net income of \$118,000 the prior year. West Marin Water ended the fiscal year with a cash balance of \$1.1 million. A 5% increase applicable to West Marin water customers was approved effective July 1, 2016.
- Oceana Marin Sewer's net income of \$53,000 compares to a budgeted net income of \$9,000 and to net income of \$55,000 the prior year. Oceana Marin ended the year with a \$464,000 cash balance.

ENGINEERING

The Engineering Department consists of professional and technical staff that oversee the planning, permitting, design, construction and project management of water supply, treatment, transmission and distribution facilities necessary to serve North Marin's customers in Novato and West Marin. Engineering functions for wastewater-related facilities are also provided by the Engineering Department to support North Marin's wastewater collection, treatment and disposal system in Oceana Marin. Property owners or developers desiring new water service or an upgrade to their existing service are assisted by the Engineering Department pursuant to North Marin regulations.



In the Novato service area, the Engineering Department oversaw the majority of twenty-one projects with a combined fiscal

year total expenditure of \$5.4M.

Of these twenty-one projects, sixteen were completed within the budget year. Some of the significant projects included the design of the Recycled Water Central Expansion Project, the South Novato Blvd. - Rowland to Sunset Pipe Replacement project (pictured above) and the Sunset Tank chlorine Mixing System project. (Pictured to the right).



In the West Marin service area, including Oceana Marin, the Engineering Department oversaw four of the five projects with combined fiscal year total expenditures of \$230,000. The most significant projects in West Marin were Upsizing the 4" Pipe from Bear Valley Tanks and the Point Reyes Tanks #2 & #3 Seismic Piping Upgrade projects (pictured below).



WATER CONSERVATION

North Marin Water District maintains a comprehensive and innovative Water Conservation Program aimed at both residential and non-residential customers (commercial and large landscape). Each program element is analyzed to assure that it will efficiently produce long-lasting water savings mutually worthwhile to the customer and the District. The District's water use efficiency programs cumulatively saved approximately 428 million gallons of water during FY 2016.



During the drought, our community removed the equivalent of 35 football fields of grass. That's 50 million gallons of water saved every year.

**Thank you for doing your part.
There's never enough to waste.**

Residential activities include residential water use surveys (224), high-efficiency washing machine (HEW, 103 rebates paid, high-efficiency toilet (HET) replacements (266 rebates paid), a Cash-for-Grass Program (turf removal rebate pictured above - 132 rebates paid), Conservation Incentive Tier Rates, flapper rebates, weather-based irrigation controller rebates, landscape efficiency rebates, a plumbing retrofit-on-resale program (toilets, showerheads, and bathroom sink faucets) and rainwater collection and gray water rebates. Hot Water Circulation and Pool Cover rebates were recently added to the program along with the "Lawn Be Gone" program aimed at promoting the sheet mulching technique of removing lawn. Water conservation programs for non-residential customers include HET rebates, high-efficiency washing machine rebates, and free water audits/surveys. Large landscape customers are provided landscape water budgets comparing actual use to calculated use based on local weather data and landscape area. Large landscape audits and landscape efficiency upgrade rebates are also offered to mixed-use accounts and dedicated metered sites.

The public outreach program includes a School Education Program (in cooperation with SCWA), the "WaterLine" newsletter (sent in spring and fall), bill inserts and text, newspaper advertisements and articles, and a variety of other customer outreach events and campaigns (including participation in the Sonoma Marin Saving Water Partnership "Drought" and "Take It From the Tap" campaigns). The District maintains an interactive website where customers can look at everything from a graph of their water use history, to water use efficiency rebate information and can even pay their water bill. The District also maintains and regularly updates a Facebook page. The outreach program is designed to increase customer participation in the various conservation programs offered by the District and to increase customer awareness and stewardship of the water resource.



The District also maintains and regularly updates a Facebook page. The outreach program is designed to increase customer participation in the various conservation programs offered by the District and to increase customer awareness and stewardship of the water resource.



Finally, the District requires new development to meet some of the most stringent water-use efficiency standards in the nation, including: installation of a high-efficiency washing machine (HEW), high-efficiency toilets (HETs), weather-based irrigation controllers, a maximum of 600 square feet of turf for new residential development and no turf for new commercial development, soil amendment and mulching requirements, drip or other subsurface irrigation for all irrigated non-turf areas, and other landscape irrigation efficiency measures consistent with the updated State Model Water Efficient Landscape Ordinance.

OPERATIONS AND MAINTENANCE DEPARTMENT



The Operations and Maintenance Department is comprised of three groups – Operations, Maintenance and Water Quality – which work together to provide Novato and West Marin customers with good water and good service at good value while continuing to provide a safe place to work. Along with these groups, the O&M Technical Assistant provides document control for the Cross Connection Control, Maintenance Management and Asset Management programs, as well as managing the District's Recycled Water Monitoring Reports.

OPERATIONS

The Operations Group is comprised of five Distribution and Treatment Operations staff who work closely with the Water Quality Group, sharing the responsibility of monitoring the Stafford Lake watershed and working cooperatively with landowners, the Indian Valley Golf Course and the Marin County Parks and Open Space District.

The Operations Group manages the potable water supply and distribution systems for Novato and West Marin communities. In Novato, this department balances the tasks of treating and distributing water from Stafford Lake and imported Russian River water while maintaining appropriate water storage and pressure levels to reliably meet all water system demands and fire protection requirements.

In Novato, the group managed storage of 28 million gallons (MG) of potable finished water in 35 tanks through four hydraulic pressure zones with 27 pump stations. There is 1 million gallons of recycled water storage and 8 miles of distribution mains providing 44 customer sites with recycled water from the Deer Island, Novato and the Las Gallinas Valley Sanitary Districts Recycled Water Treatment Facilities.

In West Marin, the group operates the Lagunitas Creek wells and Point Reyes Treatment Plant. Water is supplied through 6 pump stations and 13 storage tanks to Point

Reyes Station, Olema, Inverness Park, Paradise Ranch Estates, and Bear Valley. Additionally, the department oversees the wastewater collection and treatment operations in Oceana Marin.

Operations activities and accomplishments during 2015-16 included 13 improvement projects, 2 major maintenance tasks during the winter shutdown and over 500 routine maintenance tasks throughout the year.

Work performed to complete the Point Reyes Well #2 Rebuild, Treatment Plant taste and odor optimization, GAC replacement and filter optimization were key to the continued high quality water that the group provides. The continued drought limited the water production operation at the Stafford Lake Water Treatment Plant to 601 MG.

MAINTENANCE

The Maintenance Group is comprised of Electrical/Mechanical, Building/Grounds, Fleet, and Distribution Cross Connection and Control staff and is responsible for all maintenance tasks throughout the Novato, West Marin and Oceana Marin service areas.

Maintenance works closely with Operations to ensure proper operation of Treatment and Distribution equipment for continuous service to our customers. In Novato, this equipment includes the Stafford Lake Water Treatment plant, Deer Island Recycled Water Treatment



Facility, 27 pump stations, 35 tanks, 13 pressure regulators, 2,300 cross connection devices, 2,600 hydrants and 3,900 valves.

In West Marin, the Maintenance group maintains the Lagunitas Creek wells, Point Reyes treatment plant, 13 tanks and 6 pump stations in West Marin at Point Reyes Station, Olema, Inverness Park, Paradise Ranch Estates, and Bear Valley. Additionally, the group maintains the collection and wastewater treatment operations in Oceana Marin.

Maintenance accomplishments during 2015-16 included 6 facilities improvement projects and over 450 routine maintenance tasks. Staff continued to execute the day-to-day activities while performing projects on the remote telemetry unit upgrades and radio communication links

at 3 Novato Tank sites. Improvement projects also included two storage tank water quality mixing systems, Point Reyes Well start-up, Aqueduct cathodic protection inspections, facilities security enhancements, and upgrades to tank overflow alarms.

WATER QUALITY

The Water Quality Group is comprised of chemists and lab technicians providing oversight to all aspects of North Marin operations to ensure that water quality is protected, using a multi-



barrier approach. Surveillance and monitoring is performed at multiple points from source to tap. North Marin's laboratory performs thousands of water quality tests each year (as required under state and federal drinking water regulations) to support the work performed by other District departments. Annually, a water quality report is sent to all District customers in both Novato and West Marin. In addition, Water Quality staff responds to customer calls with specific information on water quality.

During the year, Water Quality staff closely monitored Stafford Lake identifying the diverse algal species to better understand the precursors to taste and odor concerns. Dozens of species of algae are present throughout the year in high numbers within Stafford Lake, including five species of cyanobacteria, six species of green algae and diatoms, and one protozoan.

CONSTRUCTION/MAINTENANCE DEPARTMENT

The Construction/Maintenance Department installs, repairs and replaces water main pipelines and their appurtenances (valves, hydrants, services and meters, etc.) in upgrading and maintaining our facilities. The Construction/Maintenance Department may be contracted by developers to install new water mains, services, fire hydrants and fire services. In addition, staff upgrades ¾" service lines to 1" to comply with the Novato Fire Protection District's requirements for sprinklers in new building construction. Staff is on call at all times and may be the first to respond to emergencies such as service leaks, main breaks, or knocked-over hydrants. Construction/Maintenance staff work hand-in-hand with the public, the City of Novato and developers to install high-quality and reliable facilities to serve North Marin customers.

During FY 2015/16, North Marin Water District's Construction crews replaced 143 polybutylene (PB) and 21 copper water service laterals due to leaks in Novato and West Marin.

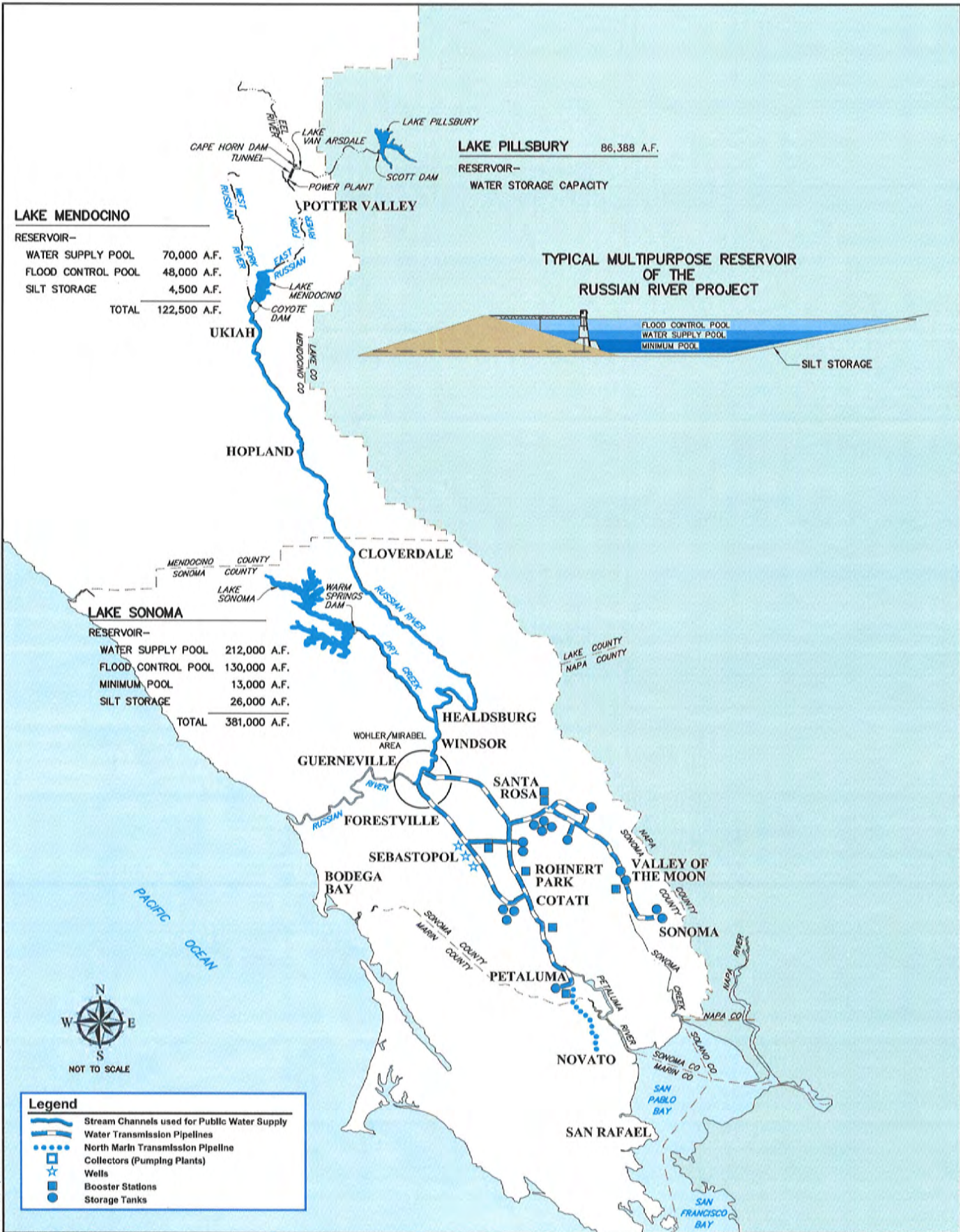


Crews worked on the following Capital Improvement Projects in the Novato system: Novato Blvd Cast Iron Pipe Replacement from Rowland Blvd to Sunset Pkwy, Zone A Pressure Improvement-Ignacio, Sunset Tank Chlorine Mixing System, and PB Replacement Grandview (14 Services). Crews also worked on the following Capital Improvement Projects in the West Marin Water system: Point Reyes Tank Seismic Upgrade and the Upsizing the 4" Pipeline to Bear Valley Tanks.

The Construction/Maintenance Department worked with Ghilotti Construction on the Zone A Pressure Improvement-Ignacio project. This was the first job that the District crews and

the Contractor worked on under the new On-Call Construction services contract. The job went well with both the Contractor and the District crew working together to complete this project, with Ghilotti Construction having the equipment and the experience with deeper excavation and the District having the experience in working with existing piping systems.



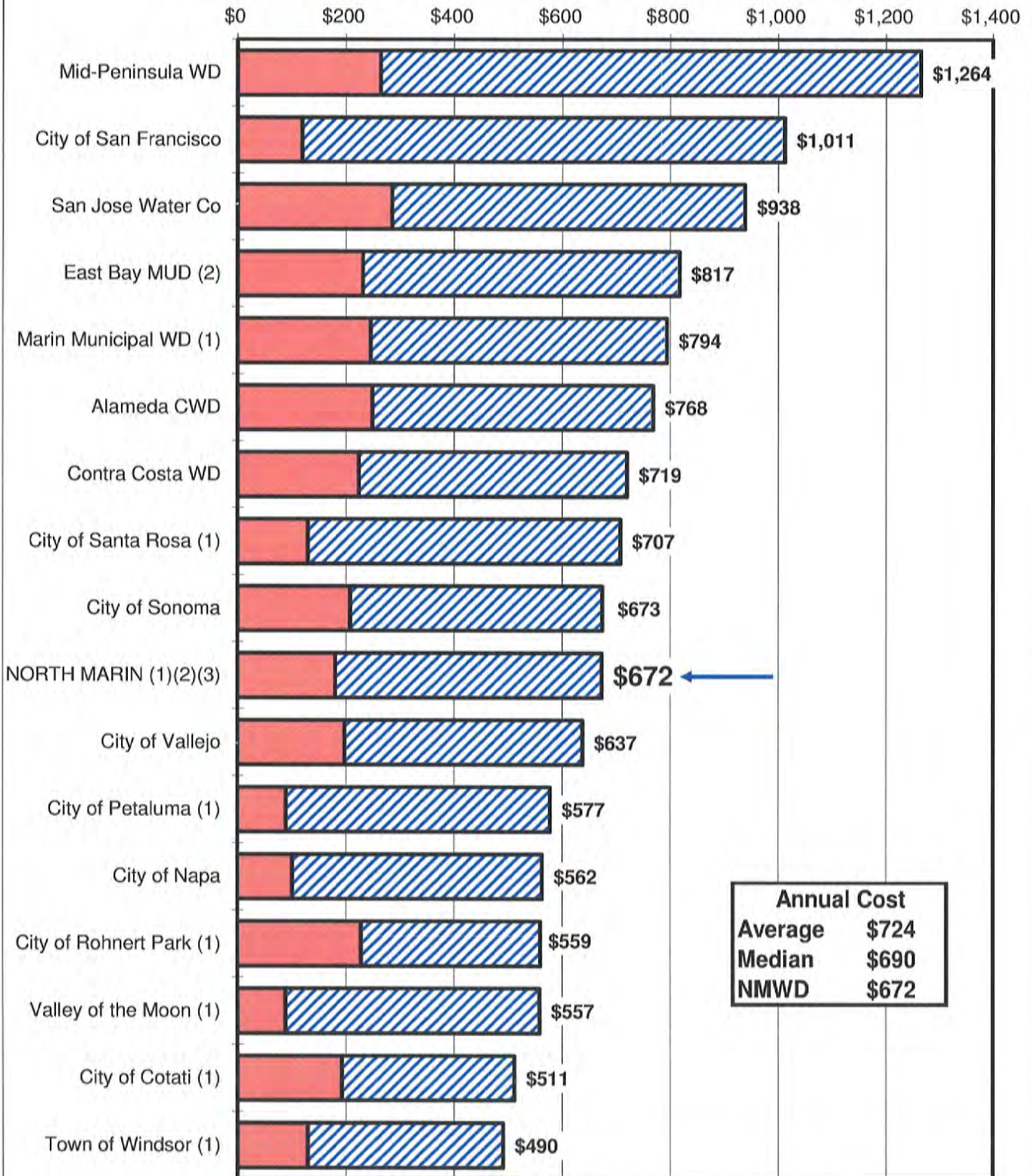


Disclaimer
This map document and associated data are distributed for informational purposes only "AS IS" at the published scale and provided without warranty of any kind expressed or implied. The positional accuracy of the data is approximate and not intended to represent survey map accuracy. The Sonoma County Water Agency assumes no responsibility arising from use of this information.

Russian River Water System

2016 URBAN AREA TOTAL ANNUAL WATER COST COMPARISON

Typical Detached Single-Family Home Annual Consumption = 100,500 Gallons



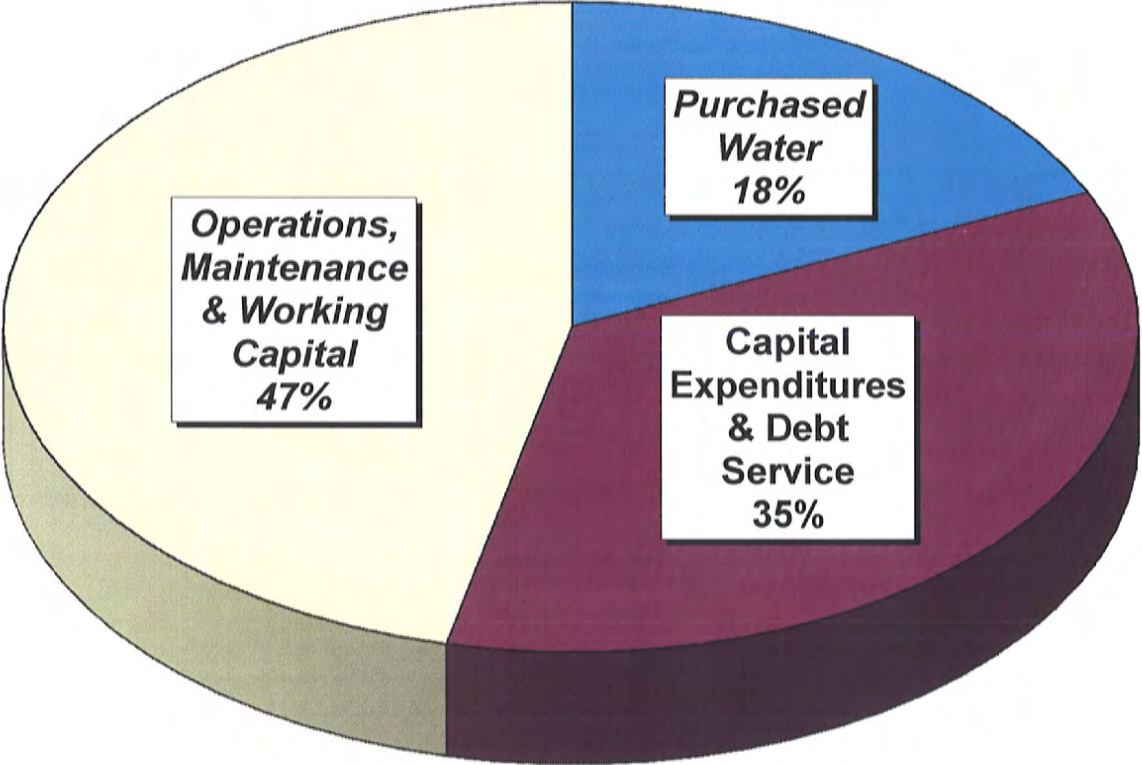
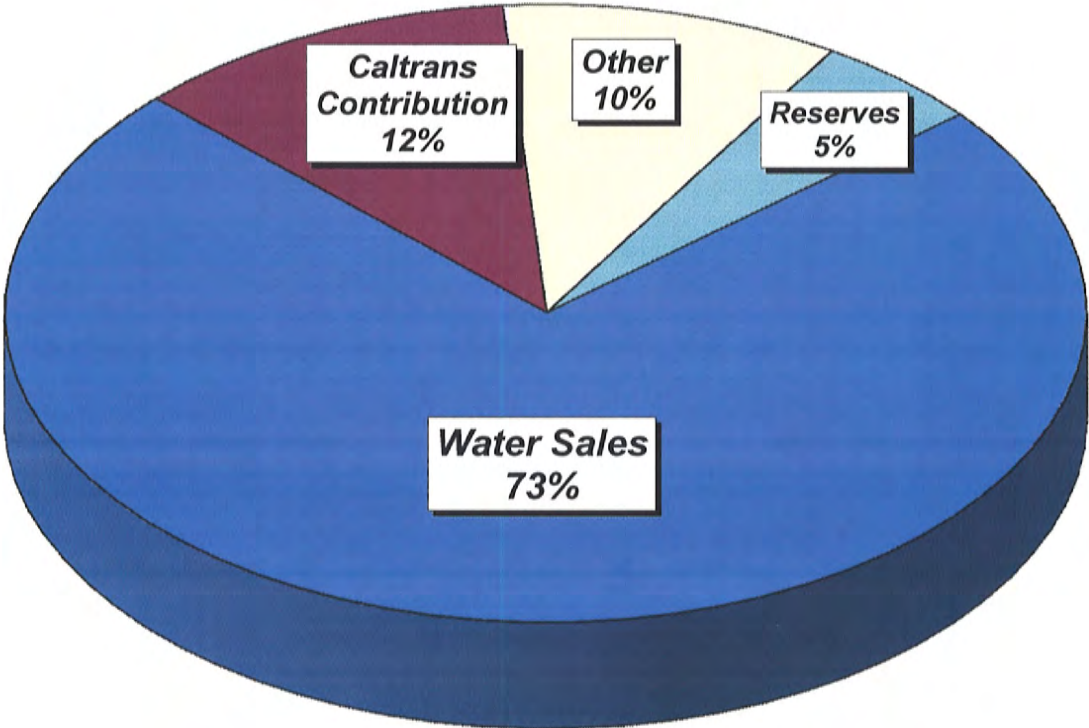
Annual Cost	
Average	\$724
Median	\$690
NMWD	\$672

LEGEND
 Service
 Commodity

(1) Sonoma County Water Agency Prime Contractor.
 (2) Based on weighted average commodity charge - all zones.
 (3) Excludes West Marin rates and charges.

North Marin Water District - Fiscal Year 2015-16

Source of Funds: \$23.0 Million



Use of Funds: \$23.0 Million

SUMMARY FINANCIAL INFORMATION

June 30, 2016

NET ASSETS

		Novato	West Marin	Oceana
Assets	Total	Novato Water	Recycled Water	Marin Sewer
Cash & Investments	13,032,102	10,608,716	823,013	1,136,711
Receivables & Other Assets	9,689,648	6,626,476	2,944,073	116,459
Construction-in-Progress	2,758,346	1,374,170	1,130,190	241,603
Property, Plant & Equipment (net)	111,417,296	86,934,755	18,115,052	5,573,548
Total Assets	\$136,897,391	\$105,544,117	\$23,012,328	\$7,068,321
Liabilities				
Current Liabilities	\$6,043,694	\$5,100,965	\$800,909	\$125,750
Long-Term Debt	38,180,913	26,324,774	10,959,307	896,832
Total Liabilities	\$44,224,607	\$31,425,739	\$11,760,216	\$1,022,582
Net Assets				
Invested in Capital Assets	\$116,577,000	\$95,565,492	\$13,643,470	\$6,211,633
Restricted & Designated Reserves	9,262,948	5,151,795	2,928,095	1,110,582
Earned Surplus	(33,167,164)	(26,598,907)	(5,319,452)	(1,276,476)
Net Assets	\$92,672,784	\$74,118,380	\$11,252,113	\$6,045,739

REVENUE & EXPENSE

Operating Revenue	\$17,411,543	\$15,793,139	\$701,903	\$720,580	\$195,921
Operating Expense	16,704,342	15,001,502	844,234	651,281	207,324
Operating Income/(Loss)	\$707,200	\$791,637	(\$142,331)	\$69,299	(\$11,403)
Non-Operating Revenue/(Expense)	(328,732)	(222,770)	(197,635)	27,008	64,665
Net Income/(Loss)	\$378,468	\$568,867	(\$339,966)	\$96,307	\$53,262

CASH FLOW

Net Income/(Loss)	\$378,468	\$568,867	(\$339,966)	\$96,307	\$53,262
Add Back Depreciation	3,286,353	2,577,081	472,040	189,039	48,193
Cash Generated	\$3,664,822	\$3,145,948	\$132,074	\$285,346	\$101,455
Other Sources/(Uses)					
Connection Fees	\$278,690	\$255,000	-	-	23,690
Capital Asset Acquisition	(5,594,630)	(4,492,364)	(878,971)	(215,749)	(7,547)
Principal Paid on Debt	(1,721,903)	(1,049,263)	(609,185)	(63,455)	-
Grant Proceeds	532,247	69,958	462,289	-	-
Caltrans Capital Contributon	2,649,186	2,649,186	-	-	-
Connection Fee Transfer	0	(806,664)	806,664	-	-
Working Capital & Miscellaneous	(964,076)	(744,004)	(212,042)	(9,894)	1,864
Total Other Sources/(Uses)	(\$4,820,486)	(\$4,118,151)	(\$431,245)	(289,097)	18,006
Net Cash Generated/(Used)	(\$1,155,664)	(\$972,203)	(\$299,171)	(\$3,751)	\$119,461

CHARACTERISTICS OF SERVICE AREAS

Statistics (at June 30, 2016)	Water		Sewer	Total
	Novato Potable & RW	West Marin Service Area	Oceana Marin	
Service Area (Square Miles)	75	24	1	100
Active Connections	20,579	780	230	21,589
Dwelling Units	23,975	825	230	25,030
Estimated Population	61,300	1,700	400	63,400
Average Household Size (People)	2.6	2.1	1.9	2.5
FTE Employees	50.7	-	-	50.7
Fire Hydrants	2,646	168	-	2,814
Miles of Pipeline	327	26	5	358
Storage (million gallons)	38.4	1.0	-	39.4

Annual Water Volumes (MG) (FY2015-16)

Russian River Water Purchases	1,727			1,727
Stafford Water Treatment Plant	601			601
Recycled Water	139			139
Point Reyes Water Treatment Plant		65		65
Oceana Marin Wastewater Treatment			6	6
Total Water Production	2,467	65	6	2,538
RR Water Wheeled to MMWD	1,725			1,725

Annual Budget - FY2016-17

Operating Revenue	\$18,656,000	\$778,000	\$214,000	\$19,648,000
Connection Fees/Misc	1,465,000	81,000	84,000	1,630,000
Grant/Loan Proceeds	12,987,000	0	0	12,987,000
Contribution (To)/From Reserves	(7,000)	406,000	82,000	481,000
Total Sources	\$33,101,000	\$1,265,000	\$380,000	\$34,746,000

Operating Labor	\$6,543,000	\$238,000	\$67,000	\$6,848,000
Other Operating Expense (less Deprec)	7,842,000	301,000	103,000	8,246,000
Capital Expenditures	16,266,000	625,000	210,000	17,101,000
Debt Service & Other Expenditures	2,450,000	101,000	0	2,551,000
Total Outlays	\$33,101,000	\$1,265,000	\$380,000	\$34,746,000

Annual Water/Sewer Cost (FY2015-16)

to Typical Single-Family Detached Residence				
Service Charge	\$30.00/2 mo.	\$30.00/2 mo.	\$78.00/mo.	
Annual Consumption (Typical)	100,500 gal	55,400 gal		
Wt'd Avg Water Rate / 1,000 gal ¹	\$4.90	\$8.96		
Typical Annual Cost:				
Service Charge	\$180	\$180	\$936	
Commodity Charge	\$492	\$496	\$0	
Allocated Tax ²	\$0	\$59	\$211	
Total Annual Cost	\$672	\$735	\$1,147	

Notes

1 FY16 weighted average commodity rate. Rates vary by elevation zone to reflect different energy, pumping and storage costs. Novato rates ranged from \$4.46 to \$6.17 per 1,000 gallons, and in West Marin from \$7.61 to \$12.69. Average excludes tier rate charges as typical residential consumption is below tier threshold.

2 FY16 allocated share of Marin County 1% ad valorem tax per active connection. Tax is collected by the County and allocated by formula to the West Marin districts.

HISTORICAL STATISTICS

Fiscal Year Ending June 30:		<u>2016</u>	<u>2014</u>	<u>2012</u>	<u>2010</u>
Active Services	-Novato Water	20,535	20,505	20,490	20,435
	-Novato Recycled	44	44	2	3
	-West Marin Water	780	776	777	769
	-Oceana Marin Sewer	230	229	227	225
	Total Active Services	21,589	21,554	21,496	21,432
Full-Time Equivalent (FTE) Employees		50.7	50.5	52.5	54.3
FTE Employees per 1,000 Active Services		2.3	2.3	2.4	2.5
FTE Employees per \$1M Capital Assets		0.31	0.35	0.41	0.47
Miles of Pipeline		358	356	348	345
Storage (MG)		39.4	39.4	38.4	37.9

Water Production (MG)

Point Reyes Treatment Plant		65	84	78	79
Stafford Treatment Plant		601	479	586	800
Recycled Water		139	157	57	55
Russian River Water Purchases		1,727	2,531	2,411	1,954
Total Water Production		2,532	3,251	3,132	2,888
Wheeled to Marin Municipal WD		1,725	2,543	1,916	2,189

Novato Service Area Average Day Potable Water Production (MG)

Annual		6.4	8.2	8.2	7.5
Peak Month		10.2	12.4	12.0	11.8
Peak Week		11.1	12.8	12.5	12.3
Peak Day		12.2	14.9	15.4	13.4

Financial History

Source of Funds

Water Sales	\$16,840,826	\$19,394,214	\$15,017,396	\$11,999,270
Investment Earnings	125,078	108,914	109,194	205,905
Tax Revenue	102,259	90,070	101,559	100,220
Grant Proceeds	532,248	479,903	1,548,002	289,400
Connection Fees	278,690	152,800	1,005,680	1,796,028
Loan Proceeds	0	3,375,378	10,105,041	0
Other Sources	3,944,898	5,335,566	1,346,244	1,174,124
Reserves	1,155,661	(4,769,954)	(6,135,421)	990,737
	<u>\$22,979,660</u>	<u>\$24,166,891</u>	<u>\$23,097,695</u>	<u>\$16,555,684</u>

Use of Funds

Purchased Water	\$4,189,723	\$6,123,015	\$5,047,469	\$3,630,416
Operation & Maintenance	9,228,266	8,045,840	7,563,393	9,452,956
Debt Service	2,528,938	2,448,776	1,770,894	1,578,440
Capital Expenditures	5,594,631	5,238,179	8,706,655	724,948
Other Uses	1,438,102	2,311,081	9,284	1,168,924
	<u>\$22,979,660</u>	<u>\$24,166,891</u>	<u>\$23,097,695</u>	<u>\$16,555,684</u>

Where We Stand


Assets	\$136,897,391	\$121,670,779	\$117,946,610	\$95,473,061
Liabilities	44,224,607	38,566,904	41,885,220	22,808,499
Net Assets	<u>\$92,672,784</u>	<u>\$83,103,875</u>	<u>\$76,061,390</u>	<u>\$72,664,562</u>

14

MEMORANDUM

To: Board of Directors

November 11, 2016

From: Chris DeGabriele, General Manager 

Subj: WAC Meeting – November 7, 2016

t:\gm\sc\wac agenda and minutes\2016\wac mtg 110716.docx

RECOMMENDED ACTION: Information Only

FINANCIAL IMPACT: None

Agenda and supporting information Attached

9. Water Supply Conditions and Temporary Urgency Change Order – Pam Jeane advised that Lake Mendocino holds approximately 50,000 acre feet and is at 90% of the target storage curve, although releases have increased to meet minimum flows as the watershed has quickly dried up subsequent to the October rains. Lake Sonoma holds 211,000 acre feet and is at 86% of capacity with minimal releases. On the question, Pam Jeane reported that the Potter Valley Temporary Variance has sunset because Lake Pillsbury storage has increased above 27,000 acre feet. She did advise that a pulse flow release was made into the Eel River at about the time rainfall incidents began in October.

10. Sonoma Marin Saving Water Partnership –

a. Water Production Relative to 2013 Benchmark – The table showing Sonoma Marin Saving Water Partnership Water Production Relative to 2013 Benchmark was reviewed. September water production is down 13% compared to 2013 and the aggregate, June 2015 through September 2016, water production is down 22%.

b. 2016 EPA Water Sense Partner of the Year Award and Excellence Award – The awards were circulated among the participants at the meeting, and a photo taken subsequent to the meeting.

c. SWRCB Urban Advisory Group – Jennifer Burke explained that the Governor's Executive Order recommended making Water Conservation a way of life in California and that four elements are being proposed:

1) Use Water Wisely by extending the Emergency Water Conservation regulations. A draft is expected in December. Water utilities are urging continuation of the self-certification process while State Board staff is advocating a return to a mandated percentage reduction.

2) Making water waste prohibitions and reporting permanent.

3) Eliminating water waste, which means likely replacing the 20 by 2020 gpcd target with a water budget approach.

4) Strengthening drought resilience with changes to the Urban Water Management Plan and Water Shortage Contingency Plans.

A draft report is due sometime in mid-November with a 10-day comment period due on November 28th. The next Urban Advisory Group meeting will be on November 18th. The report is to be issued on December 10th.

11. Biological Opinion Status Update – The Fish Habitat flows and water rights project draft EIR comment period has been extended to February 14, 2017. Grant Davis advised that the Water Resources Development Act includes funding for a Regional Water Conservation Hatchery on the Russian River System.

12. Integrated Regional Water Management Plans Update – Brad Sherwood advised that agreements have been executed with Department of Water Resources, Scripps Institute, Colorado State University and National Oceanic and Atmospheric Administration to develop the radar units for the AQPI Project. The radar units are being developed at Colorado State. It's expected that the units will be placed in the next 1.5 years and the system up and running in the next 5 years. AQPI is Advanced Quantitative Precipitation Information which receives \$19M in funding effort from the Bay Area Integrated Regional Water Management Planning effort among Sonoma County Water Agency, Santa Clara Valley Water District, San Francisco Public Utilities Commission and the Bay Area Flood Protection Agencies Association, providing more precise rainfall forecasting for atmospheric rivers.



**WATER ADVISORY COMMITTEE
AND
TECHNICAL ADVISORY COMMITTEE**

MONDAY, NOVEMBER 7, 2016

9:00AM

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

This is a combined *WAC* and *TAC* meeting.

1. Check In
2. Public Comment
3. Acknowledgement of secretary Linda Hall at her final WAC Meeting
4. Acknowledgement of SCWA WAC Liaison Efren Carrillo
5. Recap from the August 1, 2016 WAC/TAC Meeting and Approval of Minutes
6. Recap from the October 3, 2016 TAC Meeting and Approval of Minutes
7. Approve WAC/TAC 2017 Meeting Schedule
8. Water Supply Coordination Council
9. Water Supply Conditions and Temporary Urgency Change Order
10. Sonoma Marin Saving Water Partnership
 - a. Water Production Relative to 2013 Benchmark
 - b. 2016 EPA WaterSense Partner of the Year Award & Excellence Award (WAC photo with Awards following meeting)
 - c. SWRCB Urban Advisory Group
11. Biological Opinion Status Update
 - a. Fish Habitat Flows and Water Rights Project DEIR
12. Integrated Regional Water Management Plan(s) Update
13. Sustainable Groundwater Management Act Governance
14. Items for Next Agenda
15. Check Out

Draft Minutes of Water Advisory Committee and Technical Advisory Committee
35 Stony Point Road, Santa Rosa, California
August 1, 2016

Attendees: Erin Carlstrom, City of Santa Rosa
Linda Reed, City of Santa Rosa
Jennifer Burke, City of Santa Rosa
Rocky Vogler, City of Santa Rosa
Linda Hall, City of Santa Rosa
Dominic Foppoli, Town of Windsor
Jim Smith, Town of Windsor
Paul Piazza, Town of Windsor
Elizabeth Cargay, Town of Windsor
Susan Harvey, City of Cotati
Craig Scott, City of Cotati
Mark Heneveld, Valley of the Moon Water District
Dan Muelrath, Valley of the Moon Water District
Laurie Gallian, City of Sonoma
Dan Takasugi, City of Sonoma
Joe Callinan, City of Rohnert Park
Mary Grace Pawson, City of Rohnert Park
Marc Bautista, City of Rohnert Park
Mike Healy, City of Petaluma
Dan St. John, City of Petaluma
Kent Carothers, City of Petaluma
Rick Fraites, North Marin Water District
Jack Baker, North Marin Water District
Chris DeGabriele, North Marin Water District
Drew McIntyre, North Marin Water District
Mike Ban, Marin Municipal Water District
Efren Carrillo, Board of Supervisors
James Gore, Board of Supervisors
Grant Davis, SCWA
Jay Jasperse, SCWA
Carrie Pollard, SCWA
Brad Sherwood, SCWA
Lynne Rosselli, SCWA

Public Attendees: Brenda Adelman, RRWPC
Dietrich Stroeh, Stuber-Stroeh Engineering Group
David Keller, Friends of the Eel River
Jim Downey, Penngrove/Kenwood Water District
Quiana Stodder, Town of Windsor

1. Check-in
Mike Healy, WAC Chair, called the meeting to order at 9:02 a.m.
2. Public Comments
None
3. Recap from the May 2, 2016 WAC/TAC Meeting and Approval of Minutes
Moved by Susan Harvey, City of Cotati, seconded by Mark Heneveld, Valley of the Moon, to approve the minutes of the May 2, 2016 WAC/TAC meeting; unanimously approved.

a. Fish Habitat Flows and Water Rights Project DEIR

Project DEIR is to be released on August 19, with follow up public workshop meetings to discuss the project.

10. Integrated Regional Water Management Plan(s) Update

North Coast report was given by Efren Carrillo. Next quarterly meeting of the North Coast Resource Partnership is in Eureka on October 21. The 10 year celebration of NCRP in Sonoma County has been postponed until April 2017.

Supervisor Gore explained the use of \$1M to leverage spending for projects. Long term goals are to be established for the Russian River watershed.

Brad Sherwood, SCWA, reported that the Bay Area IRWMP has \$6.5M available for Disadvantaged Community Outreach grants. On Monday, August 15 there will be an informational webinar meeting to discuss the funds and how to participate in the distribution of the funds for projects.

11. Items for next TAC Agenda on June 6

Sonoma Marin Saving Water Partnership

Water Supply Conditions

Biological Opinion Status Update

12. Check Out

Next TAC meeting is September 12

Next WAC TAC meeting is November 7

Meeting was adjourned at 9:50 a.m.

Minutes of Technical Advisory Committee
35 Stony Point Road, Santa Rosa, California
October 3, 2016

Attendees: Linda Reed, City of Santa Rosa
Jennifer Burke, City of Santa Rosa
Rocky Vogler, City of Santa Rosa
Lauren Curiel, City of Santa Rosa
Gina Perez, City of Santa Rosa
Paul Piazza, Town of Windsor
Elizabeth Cargay, Town of Windsor
Mary Grace Pawson, City of Rohnert Park
Mike Healy, City of Petaluma
Kent Carothers, City of Petaluma
Craig Scott, City of Cotati
Dan Takasugi, City of Sonoma
Chris DeGabriele, North Marin Water District
Drew McIntyre, North Marin Water District
Dan Muelrath, Valley of the Moon Water District
Mike Ban, Marin Municipal Water District
Grant Davis, SCWA
Pam Jeane, SCWA
Michael Thompson, SCWA
Brad Sherwood, SCWA
Carrie Pollard, SCWA
Lynne Rosselli, SCWA

Public Attendees: Brenda Adelman, RRWPC
Bob Anderson, United Winegrowers
Evan Jacobs, California American Water

1. Check-in
Chair Chris DeGabriele called the meeting to order at 9:10 a.m.
2. Public Comment
None
3. Recap from September 12, 2016 Meeting and Approval of Minutes
Moved by Craig Scott, City of Cotati, seconded by Linda Reed, City of Santa Rosa, to approve the minutes of the September 12, 2016 TAC meeting; unanimously approved.
4. Water Supply Conditions and Temporary Urgency Change Order
Pam Jeane, SCWA, reported that Lake Sonoma is at 87% of capacity, and Lake Mendocino is at (almost) 90% of capacity. River flows look good.

Temporary Urgency Change Order expires at the end of this month.

Estuary is still closed. Comments followed from public and the members.

5. Sonoma Marin Saving Water Partnership

a. Water Production Relative to 2013 Benchmark

Chris DeGabriele, North Marin Water District, made comments on the table that was made available to the committee members.

b. SWRCB Urban Water Advisory Group

Jennifer Burke, City of Santa Rosa, Grant Davis, SCWA, and Carrie Pollard, SCWA, are participating in the state-developed Water Conservation Urban Advisory group to make recommendations for a report (due January 2017) required by the governor's May 9, 2016 executive order. Jennifer Burke attended a two-day workshop in mid-September to learn expectations and the schedule for the report. Jennifer Burke made comments regarding the report. Report will be made available on 11/4 with a 10-day comment period. Grant Davis and Jennifer Burke are requesting comments and recommendations to bring to the group. Carrie Pollard, SCWA, provided further details of the work group meetings. Comments followed from public and the members.

6. Biological Opinion Status Update

Pam Jeane, SCWA, reviewed the update that was made available to the committee members. SWCA will be recommending a time extension to the current Fish Habitat Flows and Water Rights Project DEIR comment period that ends 10/17. Comments followed from other members.

7. Items for Next Agenda

Water Supply Conditions and Temporary Urgency Change Order
Sonoma Marin Saving Water Partnership
Biological Opinion Status Update

8. Check Out

Next TAC meeting scheduled for December 5, 2016
Next WAC/TAC meeting is November 7, 2016

Meeting was adjourned at 9:48 a.m.

2017 TAC - WAC / TAC MEETING SCHEDULE

35 Stony Point Road, Santa Rosa, California

Month	Day	Body	Time
JANUARY	9	TAC	9:00a.m.
FEBRUARY	6	WAC / TAC	9:00a.m.
MARCH	6	TAC	9:00a.m.
APRIL	3	SPECIAL WAC/TAC	9:00a.m.
MAY	1	WAC / TAC	9:00a.m.
JUNE	5	TAC	9:00a.m.
JULY	10	TAC	9:00a.m.
AUGUST	7	WAC / TAC	9:00a.m.
SEPTEMBER	11	TAC	9:00a.m.
OCTOBER	2	TAC	9:00a.m.
NOVEMBER	6	WAC / TAC	9:00a.m.
DECEMBER	4	TAC	9:00a.m.

State Water Resources Control Board Conservation Standard Tracking for the Sonoma-Marín Saving Water Partnership

Table 1: Monthly Water Use Relative to 2013 Benchmark

Water Retailer	September 2016 (Gallons)	2013 Benchmark (Gallons)	Savings Relative to 2013 Benchmark	September 2016 GPCD*	FY 2015/2016 Conservation Standard
Cal Am	27,073,000	30,782,000	12%	100	25%
Cotati	26,426,516	31,249,111	15%	121	20%
Marin Municipal	798,074,269	893,484,613	11%	140	20%
North Marin	290,504,606	332,000,000	12%	158	24%
Petaluma	261,006,651	313,181,673	17%	140	16%
Rohnert Park	130,548,945	160,000,000	18%	100	16%
Santa Rosa	612,162,012	694,288,510	12%	118	16%
Sonoma	65,267,955	74,000,859	12%	188	28%
Valley of the Moon	82,570,643	98,602,642	16%	116	20%
Windsor	116,492,058	132,322,073	12%	141	16%
SMSWP Total	2,410,126,656	2,759,911,481	13%	132	19%

* GPCD is provided as information only

Table 2: Aggregate June 2015 to Current Month Relative to 2013 Benchmark

Water Retailer	Aggregate June 2015 to Date (Gallons)	2013 Benchmark (Gallons)	Savings Relative to 2013 Benchmark	FY 2015/2016 Conservation Standard
Cal Am	345,394,161	439,061,000	21%	25%
Cotati	367,886,130	459,906,101	20%	20%
Marin Municipal	10,517,583,965	12,883,862,382	18%	20%
North Marin	3,499,701,228	4,688,000,000	25%	24%
Petaluma	3,510,441,701	4,519,830,857	22%	16%
Rohnert Park	1,928,738,137	2,333,000,000	17%	16%
Santa Rosa	7,670,894,910	10,027,441,121	24%	16%
Sonoma	776,231,108	1,073,453,334	28%	28%
Valley of the Moon	1,076,078,703	1,483,761,214	27%	20%
Windsor	1,442,425,396	1,831,442,406	21%	16%
SMSWP Total	31,135,375,439	39,760,602,153	22%	19%

2016 WaterSense Excellence Award Winners

Nine WaterSense partners received **Excellence Awards** to recognize their support for a specific aspect of the program in 2015. Following is just a sample of the work that contributed to their awards:

Excellence in Strategic Collaboration:

- **Cascade Water Alliance** in Washington partnered with the Seattle nonprofit Built Green to encourage construction of WaterSense labeled homes with a \$1,000 rebate for homes built to both of their criteria. The Alliance also worked with King County Housing authority to conduct affordable housing audits and provide WaterSense labeled products for retrofits.
- **High Sierra Showerheads** worked with the California Department of Corrections & Rehabilitation to identify a WaterSense labeled tamper-proof showerhead that would be suitable for prisons and correctional facilities; the department plans to retrofit more than 6,000 showerheads in facilities to save an estimated 385 million gallons annually.

Excellence in Promoting WaterSense Labeled Products:

- During Fix a Leak Week, the **City of Durham (North Carolina) Water Management** agency showcased WaterSense labeled products via television and online advertisements, Facebook, and public events, reaching over 3,600 people, and sold 277 water efficiency kits that included WaterSense labeled showerheads, faucet aerators, and other efficient products.
- **The Sonoma-Marín Saving Water Partnership** promoted WaterSense labeled products during “Drought Drive-Up” events in Santa Rosa, CA—where 1,200 participants received custom drought tool kits with labeled showerheads—and through its traveling Water Smart Home exhibit.

Excellence in Education and Outreach:

- The **City of Carmel Utilities** reached tens of thousands of residents with an entertaining toilet leak video on YouTube during an irrigation system maintenance workshop at The Home Depot for Sprinkler Spruce-Up and through a “water wheel” game that educated Public Safety Day participants about WaterSense labeled products.
- The **City of Fort Worth, TX**, and a local running club hosted a 5k “Chasing Leaks, Fixing Flappers” running



istockphoto/millynick

race, partnered with The Home Depot on regional plant sales to promote water-efficient landscapes, and hosted a Water Efficiency @ Work Symposium for commercial and industrial facilities.

- **The Regional Water Authority** in Sacramento, CA, partnered with the Sacramento Bee Media on a “Be Water Smart Decorating” contest for pre-school through fifth grade students to decorate pictures of RWA’s detective-inspired mascot, Les Leaky, as he hunts down leaks and other water-wasting mysteries.
- **The Toro Company** conducted 46 training events on weather-based irrigation controllers, displayed at 22 trade expos to promote its WaterSense labeled controllers, and sponsored a weekly radio program, The Water Zone, to educate the public on WaterSense labeled products and best practices for outdoor water efficiency.

Excellence in Innovation and Research:

- **American Standard** engineered and manufactured the first ready-for-market residential faucets created with three-dimensional printing in metal, and all three models meet WaterSense performance and efficiency criteria.

tification Provider Partner of the Year, certified 233 homes for KB Home to meet the WaterSense labeled homes specification—more than double the number of homes the organization certified in 2014. By the end of 2015, the company trained a dozen inspectors to perform WaterSense specification inspections.

Through its partnership with KB Home, Energy Inspectors Corporation emphasized the benefits of implementing water-saving measures as homes are built. In reaction to severe drought, the company successfully drew attention to the merits of the WaterSense program to its builder clients in California, resulting in an increased number of homes certified. Energy Inspectors Corporation incorporated WaterSense into its messaging for builders and installing trades across the southwest to further the reach of the program.

PROFESSIONAL CERTIFYING ORGANIZATION PARTNER OF THE YEAR

Sonoma-Marin Saving Water Partnership (Santa Rosa, CA)

Three-time WaterSense Professional Certifying Organization Partner of the Year, Sonoma-Marin Saving Water Partnership (SMSWP) continues to expand its WaterSense labeled Qualified Water Efficient Landscaper (QWEL) certification program. In 2015, SMSWP worked with six new organizations in Idaho, California, and New Mexico that might not otherwise have had the resources to develop a certification curriculum to adopt the QWEL program. SMSWP also directly helped more than 65 irrigation professionals earn certification through its WaterSense labeled program.

“One of the big factors is spreading the word,” says Gregory Plumb water agency programs specialist. “We’re very committed to the QWEL program, and we’ve done our best to help other organizations adopt the program. Many of these other agencies might not have been in the position to develop these materials.”

The partnership regularly communicates with QWEL-certified professionals in the Bay Area of California

to make them aware of WaterSense-related events and continuing education opportunities. At the 2015 Sonoma County Fair, SMSWP displayed information on how to make lawns more water-efficient and introduced residents to QWEL-certified irrigation professionals. SMSWP also engaged in state initiatives to promote WaterSense training and certification as California

continues to address water conservation during its drought.

For more information about the WaterSense Partner of the Year awards, or to learn how to become a WaterSense partner, please visit www.epa.gov/watersense. [WE](#)

Beth Livingston is the Brand Manager for WaterSense.

Forester University & University of Florida TREEO Present:
Water Conservation Master Class Series

On-Demand 4-Session Webcast Series

Conservation Program and Coordinator Training

4 PDH / 0.4 CEU

- **Session 1 Optimizing Outdoor Water Conservation Design & Implementation**
Judith Benson, Clear Water Products & Services, Inc., EPA WaterSense 2010 Irrigation Partner of the Year
- **Session 2 Improving Indoor Water Efficiency, Planning & Implementation**
Paul Lander, Ph.D., ASLA, LEED AP and Troy Aichele, LEED AP (O+M) MCA 2010 Educator of the Year
- **Session 3 Engaging Your Audience and Creating Lasting Change**
Stacie Greco, M.S., Water Conservation Coordinator, Alachua County Environmental Protection Department
- **Session 4 Creating and Implementing an Effective Asset Management Plan**
Lois Ann Sorensen, MBA, Demand Management Program Manager, Southwest Florida Water Management District

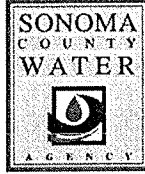
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Russian River Biological Opinion Update – November 2016

The Sonoma County Water Agency is continually planning and implementing the Russian River Biological Opinion requirements. The following project updates provide a brief synopsis of current work. For more detailed information about these activities, please visit www.sonomacountywater.org.

Fish Flow Project

On August 19, the Water Agency released the Environmental Impact Report for the Fish Habitat Flows and Water Rights Project. Open House workshops were held on August 22 (Cloverdale) and on August 24 (Monte Rio) and public hearing was held on September 13, in Santa Rosa.

In response to public comments, Directors Carrillo and Gore proposed that the public comment period be extended and additional hearings be added. On October 4, the Board of Directors approved an item to extend the Fish Flow public comment period to February 14, 2017 (a total of 180 days) and added public hearings in Cloverdale (November 16) and Guerneville (November 17), both at 6 p.m.

Dry Creek Habitat Enhancement Project

- Miles 2 and 3: In-stream construction is complete for the season on 0.6 miles of creek downstream of the Truett Hurst Winery and on a 0.3 mile reach downstream of the Westside Road Bridge. Water Agency Staff are working with property owners to finalize designs and right-of-way agreements for remaining Mile 2 and 3 sites planned for construction in 2017.
- Miles 4-6: Planning, preliminary field investigation and design are under way for Miles 4 - 6.
- The US Army Corps is using information from Mile 2-6 to complete two feasibility studies that should pave the way for federal funding. The first Army Corps study under the Continuing Authorities Program (CAP) will help complete Miles 2 and 3. A draft CAP study was recently completed and recommends Army Corps construction of reach 4a (total length 0.4 miles) at a total federal cost of \$3.28 million. The second Army Corps effort for Mile 4-6 planning, called a General Investigation (GI) Ecosystem Restoration study, has less funding restrictions and should be completed by 2018.

Fish Monitoring

In September, Water Agency biologists sampled juvenile fish throughout Dry Creek. Video, sonar, and tag detection equipment has been installed near the mouth of Dry Creek, at the Healdsburg fish ladder, and in the new Mirabel fish ladder to count returning adult fish. Through October 15, 175 Chinook salmon have been detected at the new Mirabel fish ladder, 86 Chinook were observed at Healdsburg, and 40 salmon (unknown species-likely Chinook) were seen entering Dry Creek.

Mirabel Screen and Fish Ladder Replacement

Major construction activities are complete. Testing is ongoing on the new screens; and interpretive signs are being designed for the viewing gallery. An opening ceremony and tour is slated for November 2.

Russian River Estuary Management Project

- The 2016 Lagoon Management Period began on May 15 and ended on October 15.
- During the 2016 management season, the mouth of the Russian River closed five times:

- May 31: An outlet channel was implemented on June 7, but scoured open later that day.
- June 15: An outlet channel was implemented on June 27, which scoured open that evening.
- July 1: The estuary self-breached on July 12.
- September 11: The estuary self-breached on September 30.
- October 12: Water Agency artificially breached the barrier beach on October 20.
- During the past two years, studies were conducted to determine if and how the historic Goat Rock State Park jetty impacts the formation of the barrier beach and lagoon water surface elevation. Comments have been received on the draft report, and a final report will be released in the fall.

Interim Flow Changes

The Water Agency filed a Temporary Urgency Change Petition (TUCP) with the State Water Board in order to comply with the Biological Opinion flow requirements. The State Water Board issued a TUC order in May. The order is currently being implemented.

Public Outreach, Reporting & Legislation

- The Dry Creek Habitat Enhancement Bulletin was distributed in August; signage developed for high-visibility project at Truett-Hurst.
- Outreach continues to be focused on the Fish Flow DEIR, including publicizing the availability of the document, community workshops and hearings.
- The ribbon cutting and official opening of Russian River Fish Ladder and Viewing Gallery took place on November 2.



Chinook migrating through Russian River Fish Ladder and Viewing Gallery, October 20, 2016.

15

DISBURSEMENTS - DATED NOVEMBER 3, 2016

Date Prepared 11/3/16

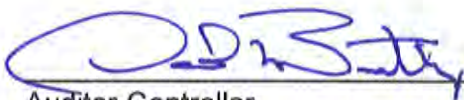
The following demands made against the District are listed for approval and authorization for payment in accordance with Section 31302 of the California Water Code, being a part of the California Water District Law:

Seq	Payable To	For	Amount
1	Alphagraphics	Postage for Novato Fall Waterline (18,500)	\$3,163.50
2	Austin, Jennifer & Denis	Refund Overpayment on Closed Account	87.22
3	Bold & Polisner	Sept Legal Fees: AMI Project (\$147), Audit Letter (\$23), Conflict of Interest (\$441), Director's Compensation (\$2,500), Employee Assisted Housing (\$84), JM Pipe Claim (\$42), Misc (\$63), Potter Valley Relicensing (\$336), Rudnick Estates (\$378), RW Exp Central (\$1,617), SCWA (\$42) Watershed Maintenance	6,828.02
4	BSP Rowland Plaza	Refund Overpayment on Closed Account	382.58
5	CalPERS	Health Insurance Premium (Employees \$46,974, Retirees \$10,510 & Employee Contribution \$11,796)	69,279.57
6	Cla-Val	Pressure Regulator Repair Kit	187.53
7	Corbett, Robert & Jennifer	Refund Overpayment on Closed Account	96.24
8		Cafeteria Plan: Uninsured Medical & Vision Reimbursement	464.00
9	Environmental Resource Assoc	Annual Performance Testing Study (Lab)	2,066.91
10	Environmental Express	Conical Tube (1,000) (Lab)	288.64
11	Fedak & Brown	Progress Pymt#4: FY15 Financial Statement Audit (Balance Remaining on Contract \$1,420)	3,300.00
12	GFS Chemicals	Turbidity Standard (1 gal) (STP)	345.65
13	Grainger	Door Closer (\$133) & V-Belts (3) (STP) (\$154)	288.85
14	Groeniger	Couplings (4)	165.30
15	Hobson, Jean	Refund Overpayment on Closed Account	55.09

Seq	Payable To	For	Amount
16	InfoSend	September Processing Fee for Water Bills (\$1,436) & Postage (\$3,950)	5,385.34
17	Intellaprint Systems	Semi-Annual Maintenance on Wide Format Engineering Copier	417.00
18	Johnson, Wendell	Exp Reimb: Mileage (\$524) & Hotel (\$130) for Chief Engineer Interview	653.90
19	Lemos, James	Exp Reimb: Safety Boots	172.35
20	Lincoln Life	Deferred Compensation PPE 10/31/16	14,801.74
21		Cafeteria Plan: Childcare Reimbursement	416.66
22	Madison, Christine	Refund Overpayment on Closed Account	91.23
23	Madruga Iron Works	3' x 5' Vault Lid w/Reader (2)	3,971.38
24	Mutual of Omaha	November Group Life Insurance	892.66
25	Nationwide Retirement Solution	Deferred Compensation PPE 10/31/16	1,580.00
26	Nickel, Loren	Refund Overpayment on Closed Account	54.68
27	NMWD Employee Association	Dues (8/15-10/15/16)	1,200.00
28	Novato Police Dept	Telephone Answering Service (Aug-Oct)	600.00
29	Pace Supply	Service Saddles (3) & Elbows (27) (\$153)	293.62
30	Pape Machinery	Outrigger Pads (2)	136.83
31	NMWD Petty Cash	Safety Snacks (\$69.05) & Charging Cord for iPhone (\$21.74)	90.79
32	Pollard Water	Combination Hydrant Wrench & Spanner	47.85
33	Pyron, Leigh	Refund Overpayment on Closed Account	33.57
34		Cafeteria Plan; Childcare Reimbursement	208.33
35	RF MacDonald	Replacement Pump & Motor for Upper Wildhorse Pump #1	2,094.57
36	Sebastopol Bearing & Hydraulic	Coupling Spacers for Pump Drive	195.11
37	SPG Solar Facility	Sept Energy Delivered Under Solar Services Agreement	13,182.48

Seq	Payable To	For	Amount
38	State Water Resources Control	D1 Water Distribution Operator Certificate (Bergstrom) (9/16-8/19)	70.00
39	Thomas Scientific	Monthly Sterilization Check for Autoclave (20 pk) (Lab)	72.06
40	Transcat	Ultrasonic Flowmeter Battery Charger	199.92
41	Tucker, June C	Refund Overpayment on Closed Account	86.24
42	Univar	Sodium Hypochlorite (1,200 gal) (STP)	1,124.58
43	USA BlueBook	Repair Kit for Griffco Valves (6)	511.36
44	Utiliworks Consulting	Prog Pymt #7: Sept AMI Consulting (Bal Remaining on Contract \$93,108)	6,818.46
45	Verizon Wireless	October CIMIS Station Data Transfer Fee	47.87
46	Viale, Raquel & Ken	Refund Overpayment on Closed Account	97.42
47	Waldecker, Carl	Refund Overpayment on Closed Account	30.00
48	Weitz, Jodi	Refund Overpayment on Closed Account	62.43
49	White & Prescott	Progress Pymt#21: Center Rd Topo & Pymt#22: Shell Station Water Line Easement (Balance Remaining on Contract \$23,000)	2,720.00
		TOTAL DISBURSEMENTS	<u>\$145,359.53</u>

The foregoing payroll and accounts payable vouchers totaling \$145,359.53 are hereby approved and authorized for payment.



Auditor-Controller

10/31/16

Date



General Manager

10/31/2016

Date

DISBURSEMENTS - DATED NOVEMBER 10, 2016

Date Prepared 11/8/16

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

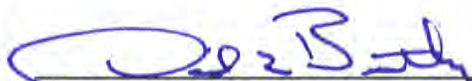
Seq	Payable To	For	Amount
P/R*	Employees	Net Payroll PPE 10/31/16	\$133,850.86
EFT*	US Bank	Federal & FICA Taxes PPE 10/31/16	56,302.40
EFT*	State of California	State Taxes & SDI PPE 10/31/16	10,402.20
EFT*	CalPERS	Pension Contribution PPE 10/31/16	35,086.47
1	All Star Rents	Propane (STP) (21 gal)	67.63
2	American Family Life Ins	October Employee Contribution for Accident, Disability & Cancer Insurance	3,631.86
3	Angulo, Alfredo	Novato "Cash for Grass" Rebate Program	400.00
4	Ansari-Jaberi, Tabandeh	Novato "Toilet Rebate" Program	100.00
5	Association of State Dam Safety Officials	Annual Dues (10/16-9/17) (McIntyre) (Budget \$50)	52.00
6	Athens Administrators	Replenish Workers' Comp Check Written (10/1-10/31/16) (\$551), September Bill Review Fee (\$284) & November Workers' Comp Admin Fee (\$1,000)	1,834.85
7	Bennett Trenchless Engineers	Progress Pymt#8: RW Expansion Project-Hwy 101 Crossing (Balance Remaining on Contract \$13,744)	2,460.00
8	Bentley, David L.	Exp Reimb: Sept/Oct Parking, Lunch with Insurance Reps & ACWA Fall Conference Registration (\$695)	796.47
9	Caltest Analytical Laboratory	Lab Testing	35.00
10		Cafeteria Plan: Uninsured Medical Reimbursement	419.00
11	Clark, Robert E.	Exp Reimb: Hotel Cost for AWWA Conference in San Diego (10/23-27)	749.53
12	DeGabriele, Chris	Exp Reimb: October Mileage	143.10


Seq	Payable To	For	Amount
13	Diamond, Glenn & Moana	Refund Overpayment on Open Account	914.67
14	Digital Prints & Imaging	Conformed Specification Books for Recycled Water Central West Project (13 sets)	762.02
15	Engineering News Record	Subscription Renewal (McIntyre) (2/17-2/18) (Budget \$80)	87.00
16	Environmental Management	Repair Norman Tank Access Road	10,000.00
17	Evoqua Water Technologies	Rental & Service on Deionization System (\$310) (Lab)	610.00
18	Ferguson Waterworks	Vaults (2' x 5' x 3') (2) (\$1,218), 8" Adaptor (\$374), 6" Gasket (\$137) & Valve (\$641)	2,370.76
19	Fremouw Environmental Service	Oily Waste Disposal (Auto Shop)	357.09
20	GHD	Progress Pymt#5: Sept AMI CEQA (Balance Remaining on Contract \$24,035)	3,693.00
21	Golden Gate Petroleum	Gas (\$2.29/gal) & Diesel (\$2.40/gal)	2,349.87
22	Grainger	Trowels (2) (\$81), Concrete Groover, Hand Edger, Sidewalk Edger, Hand Floats (2) (\$49), Epoxy Compound, Nozzle & Applicator	263.75
23	Hahn, Mark	Novato "Toilet Rebate" Program	100.00
24	HCO Communications	Refund of Recycled Water Load Security Deposit Less Charge for 6 Water Loads @ \$5 per Load	70.00
25	HERC Rentals	John Deer Excavator Rental (1 week) (Novato Creek Cleaning)	1,250.62
26	Jewhurst III, John	Novato "Cash for Grass Rebate" Program	230.00
27	Kamikawa, Melanie	Novato "Washer Rebate" Program	50.00
28		Cafeteria Plan: Uninsured Medical Reimbursement	95.85
29	Krackeler Scientific	Inoculating Loops (2) (Lab)	333.70
30	LeBallister's	Native Grass Seeds for Erosion Control (24 lbs)	462.49
31	Maltby Electric	Ground Rod, Elbows (4) & Electrical Wire	158.42

Seq	Payable To	For	Amount
32	Marion Park Associates	Novato "Toilet Rebate" Program	400.00
33	McLellan, WK	Misc Paving (2 Locations)	970.20
34	Drew McIntyre	Exp Reimb: Mileage, Hotel & Food for AWWA Fall Conference in San Diego (10/23-26)	844.29
35	MSC Industrial Supply	Utility Pump (STP)	266.24
36	Novato Disposal Service	October Trash Removal	438.29
37	Novato Sanitary District	Semi-Annual Billing for Admin Building Sewer Service Charge for 2016/17	2,277.68
38	Novato Horse & Pet Supply	Straw for Erosion Control (10 Bales)	130.37
39	Pace Supply	Valve (6) (\$178), Flanges (2) (\$128), Reducer, Epoxy Paint (\$213), Valves (4) (\$192), Flanges (2) PVC Flanges (8) Nipples (14), Tees (3), Copper Pipe (600') (\$1,438) & Couplings (3) (\$249) PVC Pipe (20 - 8" x 20")	3,051.23
40	Parkinson Accounting Systems	Sept Professional Services: Modify Budget vs. Expenditures Report (\$634) & Accounting Software Support (\$1,500)	2,133.75
41	PG&E	Claim Settlement: Reimbursement for Cost to Repair Gas Line Allegedly Incurred While NMWD was Excavating a Water Line on Plum St.	1,362.50
42	Pharr, Nell Dean	Novato "Toilet Rebate" Program	100.00
43	Pinpoint Products	Leak Detector (Construction) (Budget \$8,000)	7,135.19
44	RMC Water & Environment	Prog Pymt#24: RW Central Service Area (Balance Remaining on Contract \$44,900)	4,402.50
45	Roy's Sewer Service	Rodding Sewer Mains of Roots & Various Locations in Oceana Marin	7,475.00
46	Shirley, Allen	Novato "Washer Rebate" Program	50.00
47	Sierra Chemical	Chlorine (2,000 lbs) (STP)	1,181.69
48	Soiland	Asphalt (18 tons)	168.26
49	Staples Business Advantage	Notebook, Copy Paper (40-Letter Size Reams) (\$157) & Coffee (4-31oz cans)	212.32

Seq	Payable To	For	Amount
50	State Water Resources Control Board	D2 Certification Renewal (Castellucci) (5/17-5/20) (Budget \$80)	60.00
51	Tamagno Green Products	Sludge Removal @ STP (145 yds)	3,625.00
52	United Parcel Service	Delivery Service: Sent Pressure Data Logger Back for Repair	13.00
53	USA BlueBook	1 1/2" Nozzles (2) & Nitric Acid (\$70) (STP)	231.78
54	VWR International	Tube Culture (36) (Lab)	134.99
55	Wiley Price & Radulovich	Disciplinary Matter (\$735) & Accommodation Inquiry (\$52)	787.00
TOTAL DISBURSEMENTS			<u>787.00</u> <u>\$307,941.89</u>

The foregoing payroll and accounts payable vouchers totaling \$307,941.89 are hereby approved and authorized for payment.

 _____
 Auditor-Controller Date 11/7/16

 _____
 General Manager Date 11/7/2016



P 303.347.6100 F 303.730.0851

www.WaterRF.org

6666 W. Quincy Ave., Denver CO 80235-3098

October 26, 2016

Chris DeGabriele
North Marin Water District
999 Rush Creek Place
Novato, CA 94945-2426

RECEIVED

NOV 03 2016

North Marin Water District

Dear Mr. DeGabriele:

Sonoma County Water Agency recently renewed your 2016 subscription to the Water Research Foundation (WRF). Through the support and participation of organizations such as yours, the utility-focused One Water research sponsored by WRF can continue to move forward.

We encourage you to take full advantage of the benefits available to you as a WRF subscriber. Your organization will receive the biggest return on its investment by actively participating in our research projects, engaging in our professional development and education programs, tapping into the growing variety of available resources and tools, and applying research results that can advance your organization's effectiveness and efficiency.

As a subscriber to WRF, your organization can participate and use the many benefits available in a number of ways:

- Complete access to the WRF's research information and resources via the Website at WaterRF.org
- The opportunity to provide input into WRF's research agenda
- Access to the WRF's extensive international network of researchers and water experts
- The opportunity to participate in research projects and serve on project advisory committees
- Complimentary access to local and regional workshops and live and recorded Webcasts
- Subscriptions to WRF's quarterly magazine, *Advances in Water Research*, and other monthly e-communications

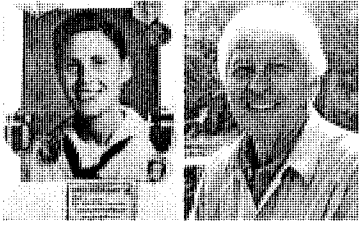
As a token of appreciation, we are pleased to send you the enclosed 2016 certificate of participation. We hope you will display it proudly, knowing that you and your organization are supporting the discovery of new information and best practices that make a real difference in improving public health.

If you have any suggestions or questions about participation opportunities or our research program, please do not hesitate to contact me. WRF honors your support and is committed to providing you with scientifically sound knowledge that is critically important to the ever-changing needs of the water community.

Sincerely,

Robert C. Renner, P.E., B.C.E.E.
Chief Executive Officer

RCR:kcp:68

Jerome (Jerry) Aparton(1927 - 2016)

Jerome (Jerry) Aparton Died 10/30/2016 - Born 4/28/1927 Jerry was a native San Franciscan, an Eagle Scout and an athlete who played football at Mission High School and later at University of California (Berkeley). With the outbreak of World War II, he enlisted at age 16 in the Navy and served in the Naval Air Corps. (as a pilot off the carrier, USS Essex). Upon return from service, he attended Cal and later the Stanford Business School, where he was President of his class. He spent the next 20 years with Chubb & Son, becoming a Regional Vice President and then became an International Insurance Broker for the next 20 years, where among other things helped in the founding of the field

of Risk Management. Jerry received many professional awards and was a CPCU (Chartered Professional Casualty Underwriter) and ARM (Associate in Risk Management). He served as President of the Society of Insurance Brokers, Founding Chairman of the Insurance Brokers & Agents Legislative Committee (ABL) and served the Insurance Commissioner as founding Chairman of the Insurance Education Board in addition to other tasks for the Insurance Department. He served on the City of Hope Insurance Board and was a Vice President of the CPCU Society in San Francisco, Los Angeles and New York. In retirement he served as an Educator at USF. He leaves a loving wife, Susan Barossi Aparton of Greenbrae, two sons, Craig Aparton of Seattle, WA; Bruce Aparton (wife Tamara and granddaughter Lilah) of Oakland, CA; in addition to a daughter, Victoria Aparton Parker (husband Thomas and granddaughter Madeline and grandson, Tyler) of Philadelphia, PA. Jerry was preceded in death by his former wife, Nancy Low Aparton in 1991. Donations may be made to Hospice by the Bay. There will be a private family ceremony.

Published in Marin Independent Journal from Nov. 3 to Nov. 6, 2016
