



NORTH MARIN WATER DISTRICT
AGENDA - REGULAR MEETING
 November 19, 2019 – 6:00 p.m.
 District Headquarters
 999 Rush Creek Place
 Novato, California

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

Est. Time	Item	Subject
6:00 p.m.	CALL TO ORDER	
	1.	APPROVE MINUTES FROM REGULAR MEETING , November 5, 2019
	2.	GENERAL MANAGER'S REPORT
	3.	OPEN TIME: (Please observe a three-minute time limit) This section of the agenda is provided so that the public may express comments on any issues not listed on the agenda that are of interest to the public and within the jurisdiction of the North Marin Water District. When comments are made about matters not on the agenda, Board members can ask questions for clarification, respond to statements or questions from members of the public, refer a matter to staff, or direct staff to place a matter of business on a future agenda. The public may also express comments on agenda items at the time of Board consideration.
	4.	STAFF/DIRECTORS REPORTS
	5.	MONTHLY PROGRESS REPORT
	CONSENT CALENDAR The General Manager has reviewed the following items. To his knowledge, there is no opposition to the action. The items can be acted on in one consolidated motion as recommended or may be removed from the Consent Calendar and separately considered at the request of any person.	
	6.	Consent - Approve: Resolution Authorizing Application to the Director of Industrial Relations, State of CA for a Certificate of Consent to Self-Insure Workers' Compensation Liabilities Resolution
	7.	Consent - Approve: Cost Sharing for 2020 Urban Water Management Plan Update
	8.	Consent - Approve: Leveroni Creek Embankment Repair Project – Notice of Exemption
	9.	Consent - Approve: Renewal of Horizon CATV License Agreement
	ACTION CALENDAR	
	10.	Approve: Outside Auditor's FY19 Report and Management Report
	11.	Approve: Records Management Scanning Contract with BMI Imaging Systems, Inc. (BMI)
	12.	Reject: PRE Tank 4A – Reject Bid

All times are approximate and for reference only.

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

(Continued)

Est. Time	Item	Subject
		INFORMATION ITEMS
	13.	Public Communications Plan – Photo Shoot for Website Update
	14.	Increase in Facility Location Underground Service Alerts (USA)
	15.	Enterprise Fleet Review
	16.	Stafford Lake Spill/Rainfall History
	17.	FY19-20 Quarterly Progress Report – Engineering Department
	18.	FY19-20 Quarterly Progress Report – Water Conservation
	19.	MISCELLANEOUS
		Disbursements – Dated November 7, 2019
		Disbursements – Dated November 14, 2019
		2018 SCWA Water Supply Strategies Action Plan
		Point Reyes Station Community Meeting Workshop No. 3 – October 3, 2019
		<u>News Articles:</u>
		Workshops set for two Novato housing projects
		District elections debut in Novato
		Election bullies strike again in RP
		Police chief gets city manager post- NOVATO
7:30 p.m.	20.	ADJOURNMENT

1

DRAFT
NORTH MARIN WATER DISTRICT
MINUTES OF REGULAR MEETING
OF THE BOARD OF DIRECTORS
November 5, 2019

CALL TO ORDER

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

District employee Robert Clark (Operations/Maintenance) was also in attendance.

MINUTES

Director Baker asked for a few minor revisions and on motion of Director Baker, seconded by Director Fraites the Board approved the revised minutes from the October 15, 2019 meeting by the following vote:

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

NOES: None

ABSTAIN: None

ABSENT: None

GENERAL MANAGER'S REPORT

Cancelled Meetings Due to PSPS Event

Mr. McIntyre announced that both the NBWRA and NBWA meetings were cancelled last week due to the recent Public Safety Power Shutdown by PG&E.

Public Records Act Request

Mr. McIntyre stated that on October 29th the District received a public records request from Capitol Weekly for all documents related to NMWD's redistricting under the California Voting Rights Act. He added that Capitol Weekly is a Sacramento based nonprofit news and information website. Mr. McIntyre noted that we are working with our legal counsel to assemble the applicable documents.

31 Director Joly asked if Mr. McIntyre knew why Capitol Weekly chose to request our
32 records. Director Petterle also was interested to know why they picked us. Mr. McIntyre replied
33 that he assumes many public agencies received the same request.

34 Flood Control Zone 1

35 Mr. McIntyre announced he and Director Grossi will attend a special Flood Control Zone
36 1 Advisory Board meeting on November 6th at 6:30 p.m.

37 Office Renovation

38 Mr. McIntyre reported that on November 7th he and Mr. Clark will have a progress
39 meeting with our architects, Noll and Tam and Chris DeGabriele regarding the office renovation
40 project. He added that Noll and Tam is close to submitting a Master Plan report to the Board for
41 review.

42 **OPEN TIME**

43 President Baker asked if anyone in the audience wished to bring up an item not on the
44 agenda and there was no response. Director Petterle commented that this is a good sign;
45 because that means we did a good job with handling the recent Public Safety Power Shutdown
46 event.

47 **STAFF/DIRECTORS REPORTS**

48 President Baker asked if staff or Directors wished to bring up an item not on the agenda
49 and the following items were discussed:

50 Ms. Blue announced that our internal recruitment for filling the Accounting Supervisor
51 position was successful with the selection of Nancy Holton. She added that the HR/Safety
52 Manager recruitment continues and the posting closes November 18. Ms. Blue stated that the
53 job is posted on Neogov, Craigslist, the HR Special District Group and our HR legal counsel
54 also assisted by posting it on LinkedIn.

55 The Board expressed their appreciation to all District staff for a job well done during the
56 PSPS shut down event. They added that all the comments they received from the public were
57 positive. Director Joly thanked Mr. McIntyre for all the PSPS updates and the staff for standing
58 watch so proudly. He added it was an honor to see a small utility such as ours stand tall and
59 deliver our product even when PG&E faltered. Mr. McIntyre responded that it was not an easy
60 task and required a districtwide effort. Director Joly stated he was out of power for 72 hours in
61 the San Marin area and can't imagine what it would have been like if they were out of water as
62 well. Director Petterle stated it was good to be able to tell people they did not have to worry
63 about water. Director Grossi added everything went smoothly, he only heard good things and
64 we didn't have any problems due to the efforts of staff.

Director Fraites commented on the newsletter noting there is a blank space on the address section and it unfolds awkwardly. He added there should be something eye catching on the front to entice the customer to open it. Mr. McIntyre replied he appreciated the input.

QUARTERLY FINANCIAL STATEMENT

Ms. Blue presented the Quarterly Financial Statement for Fiscal Year 2019-20. She reviewed the Novato, West Marin, Oceana Marin, and Recycled Water budgets summarizing net income and expenses. She noted for the first quarter, the District generated a net income of \$1.4M and noted the ratio of total cash to budgeted annual operating expense stood at 114%.

Director Joly asked about the Stafford Treatment Plant low cost of production. Ms. Blue responded that the Treatment Plant is in full production mode right now and production costs do not reflect ongoing fixed costs during the winter season plant shutdown. She added that as time goes on overall Treatment Plant production costs will better reflect annual operating costs.

ACTION ITEMS

OPERATOR-IN-CHARGE SIDE LETTER WITH EMPLOYEE ASSOCIATION.

Ms. Blue explained that in order to comply with the state of California; the District's Oceana Marin Sewer System must have an Operator-in-Charge (OIC) on record with the State Water Resource Control Board. This agreement provides extra duty pay for the individual who performs the additional OIC duties.

On the motion of Director Petterle, and seconded by Director Joly the Board approved the Operator-in-Charge Side Letter Agreement with the Employee Association by the following vote:

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

NOES: None

ABSTAIN: None

ABSENT: None

FLOATING HOLIDAY SIDE LETTER WITH EMPLOYEE ASSOCIATION.

Ms. Blue explained under the current MOU, floating holiday accrual has caused some operational impacts to various departments. The new agreement divides the distribution of the four floating holidays to one day per quarter and allows full-time employees to accrue up to 40 hours of floating holiday leave.

Director Baker asked if this affected the Treatment Plant Operators more than our Construction crew. Ms. Blue responded that it affects all our employees and noted that the new

policy will help the District to balance the days off more efficiently. Director Grossi asked if there was any discussion with the Employee Association (EA). Ms. Blue replied that both side letter agreements were reviewed and approved by the Employee Association

On the motion of Director Petterle, and seconded by Director Joly the Board approved the Floating Holiday Side Letter Agreement with the Employee Association by the following vote:

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

NOES: None

ABSTAIN: None

ABSENT: None

KENNEDY/JENKS CONSULTANTS – CONSULTING ENGINEERING SERVICES AGREEMENT (CREST PUMP STATION)

Mr. Vogler stated Kennedy/Jenks (K/J) scope of work is to review the District's preliminary plans and specifications and complete the design to prepare a final set of bid documents. Director Grossi asked what the cost of the project will be. Mr. Vogler replied around \$650,000. Director Fraites asked if there is an illustration drawing depicting the architectural style of the building. Mr. Vogler responded that he already conducted a community workshop in the Bahia neighborhood to review the design. Director Fraites asked if we would rename the pump station to Bahia Drive. Mr. Vogler replied that this pump station feeds Crest Tank so we will carry that name forward. Director Fraites commented that there are no other structures in the vicinity and he wants to be sure the pump station building fits in. Mr. Vogler responded that we will be putting in low water use landscaping in front of the structure, however we do have space limitations since it is a small parcel size. Director Petterle commented that we have a history of having nice looking pump stations and we must live up to our image. Director Joly asked how many pump stations we have in our District. Mr. Clark responded Novato has 26. Director Joly asked how many services does Crest Pump Station supply. Mr. Clark responded approximately 1,000.

On the motion of Director Joly, and seconded by Director Fraites the Board authorized the General Manager to execute the Consulting Engineering Services Agreement for Crest Pump Station with Kennedy/Jenks Consultants by the following vote:

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

NOES: None

ABSTAIN: None

ABSENT: None

PLUM STREET TANK PROPERTY EXCHANGE – GRAND DEED

Mr. Vogler informed the Board that in order to complete the transfer of District property to 15 Zandra Place, the Board must approve a Resolution authorizing the execution of a grant deed conveying 180 square feet of District property to the new owner.

Director Baker asked if this was a lot line adjustment. Mr. Vogler concurred and stated that Dale White had worked on it. Director Baker commented that he respected Mr. White's judgement since he has been around for a long time. Director Grossi noted there was not an easement noted on the document, and asked where the easement was. Mr. Vogler stated he will do further research and get back to the Board. Director Grossi said there was no need to bring it back, just check it out.

On the motion of Director Joly, and seconded by Director Grossi the Board approved the Plum Street Tank Property Exchange – Grant Deed by the following vote:

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

NOES: None

ABSTAIN: None

ABSENT: None

**OLD RANCH ROAD TANK NO. 2 – REQUEST FOR AUTHORIZATION TO CONDUCT CEQA
PUBLIC REVIEW**

Mr. Vogler requested authorization from the Board to initiate the CEQA 30-Day Public Review Period for the project and to schedule a public hearing for the January 7, 2020 Board meeting. He added that even though it is not required, letters will go out to the owners to let them know about a scoping meeting so they have an opportunity to learn more about the project and provide comment.

Director Joly asked when the District will send out the notices. Mr. Vogler replied once he receives authorization to do so. Director Joly asked if the comments were due by December 15th. Mr. Vogler confirmed and stated that he will work with the consultant in responding to comments. Director Fraites asked how we currently get to the tank, if there is an existing road. Mr. Vogler responded that there is a paved road that goes to the last house on the street, then adjacent to it is a dirt driveway that leads up to the tank. Director Fraites commented that he noticed we will be taking out 71 trees and 62 of those are Oaks, and asked if there was any other way to access the new tank. Mr. Vogler stated that this was the only way to provide a suitable access road that wasn't too steep and problematic. He added that they tried to minimize impacts to the tree canopy and most of the trees to be removed are small in

diameter and not heritage trees. Mr. McIntyre added that the existing access is poor and this new access road alignment will help address problematic site access issues, especially during inclement weather. Director Baker noted that Wild Horse Tank is also very difficult to access. Director Grossi asked what zone this tank is located in. Mr. Vogler replied, Zone 3. Director Fraites asked if the road will be paved with asphalt or concrete. Mr. Vogler replied asphalt. Director Petterle asked if it will be visible. Mr. Vogler responded that with the heavy tree canopy and limited elevation change it will be difficult to see from afar.

On the motion of Director Petterle, and seconded by Director Fraites the Board approved initiation of the Old Ranch Road Tank No. 2 CEQA 30-Day Public Review Period and scheduling of a public hearing for the January 7, 2020 Board meeting by the following vote:

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

NOES: None

ABSTAIN: None

ABSENT: None

INFORMATION ITEMS

PG&E OCTOBER 26-30, 2019 PUBLIC SAFETY SHUTDOWN RESPONSE (PSPS) UPDATE

Mr. Clark updated the Board on the recent Public Safety Power Shutdown event. He reported that overall this was a valuable exercise for demonstrating staff's ability to work together to meet the District's mission to provide reliable water and sewer service to our customers. He noted that District staff provided an outstanding response to an unprecedented event in the history of the District. Mr. Clark added that the lessons learned will be used to improve our response for the next significant power outage or emergency event. Mr. Clark also noted that during this event Comcast internet service was down, and we had limited service from the District Verizon cell phones; noting he had heard AT&T was having the same issue. He added that during the outage we were maintaining around the clock staffing using three 8-hour shifts to make sure we maintained uninterrupted service to our customers.

Director Baker asked what would have happened if there was a local fire. Mr. Clark replied that the tanks were all at or above 80% capacity the whole time. Director Grossi asked what the impact was on the internet. Mr. Clark replied that we were unable to receive emails, and we were limited in sending out information to the outside and staff. Director Grossi stated he has point to point internet and he received uninterrupted service. Director Grossi stated that he will give Mr. Clark the information for the carrier he uses and added they are expanding their service territory.

Director Joly asked if our AMI system was down. Mr. Clark confirmed, adding we are

198 still evaluating if any data was lost. Director Joly stated that if water use was down to 3.5 million
199 gallons per day, and winter use is at 5 million, what would normal use be this time of year. Mr.
200 Clark replied from 9 to 10 million gallons per day. Director Grossi asked if we thanked our
201 customers for curtailing use. Mr. McIntyre confirmed stating that we posted thank you
202 messages on our website and social media. Director Joly asked if we received any feedback on
203 what we could do better. Mr. McIntyre stated that all the feedback was positive. Mr. Clark also
204 thanked the Board for approving purchase and rental of extra generators and fuel storage tanks,
205 stating we did not interrupt service to our customers at any time. Director Joly asked if 72 hours
206 is considered a medium sized shutdown. Mr. Clark replied that PG&E said they we could lose
207 power from two to seven days. Director Joly asked what an additional five days off would look
208 like. Mr. Clark responded that we should be able to keep up but it would be more disruptive to
209 staff operations. Mr. McIntyre also addressed Director Joly's question about the extension of
210 the event noting that another concern would be fuel. He added that the City of Santa Rosa
211 reporting having a harder time getting fuel to fill up their generators. Mr. McIntyre said to Mr.
212 Clark's credit, we rented additional fuel tanks which gave us more control over the situation.

213 Director Baker stated that this topic was discussed at the October 7th WAC meeting in
214 Santa Rosa where everyone took turns speaking on how things went during the PSPS event
215 and what they would do differently next time. He added fuel did come up as an issue, and
216 stated that the needs of Cal Fire trumped the needs of the agencies. Director Petterle stated his
217 power was back on Monday night and Director Joly stated power in San Marin was back on
218 around 4:00 p.m. on Tuesday. Mr. McIntyre commented that Oceana Marin power did not come
219 back on until Thursday, October 31st at 6:00 p.m. He added that this event essentially
220 impacted the entire staff, and everyone stepped up to ensure our customers had uninterrupted
221 service. Mr. McIntyre stated that he appreciated all staff's efforts during this event and thanked
222 Mr. Clark for taking the lead in preparing for this event. Director Petterle agreed whole heartily,
223 and noted we need to keep in mind that an earthquake will be very different. Mr. Clark added
224 that we need to continue to train staff to be responders. Director Joly stated we haven't had an
225 earthquake of considerable size since 1989 and voiced his concern over the Roger's Creek
226 fault. Director Grossi added that the San Andreas Fault still remains a big concern.

227 **MISCELLANEOUS**

228 The Board received the following miscellaneous items: Disbursements – Dated October
229 17, 2019, Disbursements – Dated October 24, 2019, Disbursements – Dated October 31, 2019,
230 Comment Letter - Development of Water Loss Performance Standards and FY20 1st Quarter
231 Labor Cost Report.

The Board received the following news articles: California finds widespread water contamination of 'forever chemicals'; Point Reyes wastewater feasibility study handed off; Annexing muddle prompts apology – Novato; Marin's big rainfall year fails to reduce fire risk Housing for staff foiled by blooper – Housing – COLLEGE OF MARIN; Winter weather outlook: 'the probabilities tilt slightly toward warmer and drier than normal'; Discounts considered for water fee – MARIN MUNICIPAL; Interim director hired to oversee finance division – Novato; FCC finds broad failure of cellular sites in Marin County; PG&E restores power to approximately 99% of customers and Editorial – Cell towers need to work during outages.

Mr. McIntyre commented on the City of Novato hiring one of our past employees, David Bentley, to temporarily step in and help in the finance department. Director Joly commented that he thought that was great. Director Baker stated that it may take a while to get someone permanently hired.

ADJOURNMENT

President Baker adjourned the meeting at 7:09 p.m.

Submitted by

Theresa Kehoe
District Secretary

2

3

4

5

NORTH MARIN WATER DISTRICT
MONTHLY PROGRESS REPORT FOR *October 2019*
November 19, 2019

Item #5

1.

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

Month	FY19/20	FY18/19	FY17/18	FY16/17	FY15/16	20 vs 19 %
July	317.2	341.1	331.0	310.3	227.2	-7%
August	283.8	300.9	303.0	299.6	235.2	-6%
September	280.5	255.0	292.4	302.3	210.0	10%
October	281.0	265.6	273.7	202.8	298.6	6%
FYTD Total	1,162.5	1,162.6	1,200.1	1,114.9	971.1	0%

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

Month	FY19/20	FY18/19	FY17/18	FY16/17	FY15/16	20 vs 19 %
July	8.9	10.2	9.5	7.9	6.6	-13%
August	8.4	9.9	8.8	7.4	7.0	-16%
September	7.8	9.5	8.4	6.4	6.4	-18%
October	7.3	8.3	7.9	5.2	6.5	-11%
FYTD Total	32.4	37.9	34.5	26.9	26.5	-15%

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

Month	FY19/20	FY18/19	FY17/18	FY16/17	FY15/16	20 vs 19 %
July	67.7	78.6	112.6	69.9	107.6	-14%
August	100.5	79.3	81.5	90.4	79.4	27%
September	115.0	60.5	122.7	96.9	38.3	90%
October	98.4	74.5	102.3	93.9	49.5	32%
FYTD Total	381.6	292.9	419.1	351.1	274.8	30%

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

Month	FY19/20	FY18/19	FY17/18	FY16/17	FY15/16	20 vs 19 %
July	36.5	30.2	27.7	27.1	21.3	21%
August	33.3	30.6	26.1	26.0	26.2	9%
September	29.7	33.5	25.0	23.5	15.7	-12%
October	26.6	20.1	19.1	8.3	15.8	32%
FYTD Total*	126.1	114.4	97.9	85.0	79.1	10%

*Excludes potable water input to the RW system: FY19=9.2 MG; FY18=15.35MG; FY17=1.4MG; FY16=7.4MG

t:\ac\excel\wtr use\production.xlsx\fy 19.20

2. Stafford Lake Data

	October Average	October 2018	October 2019
Rainfall this month	1.40 Inches	2.11 Inches	0 Inches
Rainfall this FY to date	1.70 Inches	2.11 Inches	0.13 Inches
Lake elevation*	181.1 Feet	177.4 Feet	183.6 Feet
Lake storage**	509 MG	372 MG	761 MG

* Spillway elevation is 196.0 feet

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

Temperature (in degrees)

	Minimum	Maximum	Average
October 2018 (Novato)	49	94	70
October 2019 (Novato)	35	101	69

3. Number of Services

October 31	Novato Water			Recycled Water			West Marin Water			Oceana Marin Swr		
	FY20	FY19	Incr %	FY20	FY19	Incr %	FY20	FY19	Incr %	FY20	FY19	Incr %
Total meters installed	20,750	20,747	0.0%	95	95	0.0%	791	790	0.1%	-	-	-
Total meters active	20,544	20,535	0.0%	90	91	-1.1%	783	782	0.1%	-	-	-
Active dwelling units	24,077	24,068	0.0%	-	-	-	833	832	0.1%	234	234	0.0%

t:\acexcel\wtr use\production.xlsx services mtr pt

4. Oceana Marin Monthly Status Report (October)

Description	October 2018	October 2019
Effluent Flow Volume (MG)	0.399	0.380
Irrigation Field Discharge (MG)	1.024	0
Treatment Pond Freeboard (ft)	7.5	6.2
Storage Pond Freeboard (ft)	5.9	10.2

5. Developer Projects Status Report (October)

Job No.	Project	% Complete	% This month
1.2807.00	Hamilton Cottages	94	1
1.2817.03	College of Marin – New Miwok Center	4	0
1.2816.00	Oakmont Senior Living	97	1
1.2821.00	Atherton Place	92	2
1.2824.00	Park-A-Pup	85	5
1.2823.00	Avesta	5	3

District Projects Status Report - Const. Dept. (October)

Job No.	Project	% Complete	% This month
1.6112.24	Lynwood Pump Station MCC	15	0
2.6263.20	Replace PRE Tank 4A	5	0
1.7150.00	San Mateo Tank Inlet/Outlet	5	0
1.7007.13	DCA Replacement	5	5
1.7123.26	PB Replace MCCE	5	5
1.7183.00	Replace Plastic 4-inch –Scown Lane	5	5

Employee Hours to Date, FY 18/19

As of Pay Period Ending October 31, 2019
Percent of Fiscal Year Passed = 33%

Developer Projects	Actual	Budget	% YTD Budget	District Projects	Actual	Budget	% YTD Budget
Construction	1,387	1,400	99%	Construction	754	3,740	20%
Engineering	441	1,504	29%	Engineering	678	3,096	22%

6. Safety/Liability

\\nmwdserver\administration\AC\EXCEL\Personnel\wcl\WC.XLS

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) (\$)
0	\$0	0	0	0	\$0
6	\$2,160	1	1	3	\$5,223

Days without a lost time accident through October 31, 2019 216 Days

7. Energy Cost

FYE	kWh	October		Fiscal Year-to-Date thru October		
		¢/kWh	Cost/Day	kWh	¢/kWh	Cost/Day
2020 Stafford TP		Information not available		Information not available		
Pumping		Information not available		Information not available		
Other*		Information not available		Information not available		
2019 Stafford TP	78,764	20.0¢	\$526	293,308	19.9¢	\$475
Pumping	139,019	21.1¢	\$979	663,964	20.7¢	\$1,124
Other*	44,942	27.9¢	\$418	196,114	26.7¢	\$430
	262,725	22.0¢	\$1,923	1,153,386	21.5¢	\$2,029
2018 Stafford TP	58,314	19.7¢	\$371	275,547	19.4¢	\$435
Pumping	141,312	22.8¢	\$1,111	660,408	21.1¢	\$1,134
Other*	40,821	26.6¢	\$388	191,565	27.3¢	\$429
	240,447	22.7¢	\$1,870	1,127,520	21.8¢	\$1,998

*Other includes West Marin Facilities

t:\aclboard reports\pgl\pg&e usage\fy 19.20\pg usage 10.20 19.xlsx\mo rpt

8. Water Conservation Update

	Month of October 2019	Fiscal Year to Date	Program Total to Date
High Efficiency Toilet (HET) Rebates	16	50	4102
Retrofit Certificates Filed	16	74	6316
Cash for Grass Rebates Paid Out	2	7	928
Washing Machine Rebates	1	1	6798
Water Smart Home Survey	17	41	3788

9. Utility Performance Metric

SERVICE DISRUPTIONS (No. of Customers Impacted)	October 2019	October 2018	Fiscal Year to Date 2019	Fiscal Year to Date 2018
PLANNED				
Duration Between 0.5 and 4 hours	3	6	10	34
Duration Between 4 and 12 hours			96	83
Duration Greater than 12 hours				
UNPLANNED				
Duration Between 0.5 and 4 hours	15*		47	25
Duration Between 4 and 12 hours				
Duration Greater than 12 hours				
SERVICE LINES REPLACED				
Polybutylene	4	6	32	47
Copper (Replaced or Repaired)	0	0	1	5

*Atherton Place hydrant hit by contractor. 14 services, 2 hours, unplanned

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders October 2019

11/12/2019

Type	Oct-19	Oct-18	Action Taken October 2019
<u>Consumers' System Problem:</u>			
Service Line Leaks	38	54	Notified Consumer
House Plumbing	1	0	Notified Consumer
House Valve / Meter Off	10	8	Notified Consumer
Nothing Found	12	26	Notified Consumer
Low Pressure	1	1	Low pressure due to pump affected in PG&E outage.
High Pressure	2	3	Pressure failed @ 110 PSI. HOA to replace PRV.
			Pressure failed @ 110 PSI. PRV to be installed.
Total	64	92	
<u>Service Repair Reports</u>			
Meter Replacement	2	3	Replaced
Meter Box Alignment	1	0	Repaired
Box and Lids	0	1	Replaced
Water Off/On Due To Repairs	11	10	Notified Consumer
Misc. Field Investigation	12	3	Notified Consumer
Total	26	17	
<u>Leak NMWD Facilities</u>			
Main-Leak	1	0	Repaired
Service- Leak	8	8	Repaired
Services-Nothing Found	1	1	~
Fire Hydrant-Leak	5	2	Repaired
Washer Leaks	5	6	Repaired
Total	20	17	
<u>High Bill Complaints</u>			
Consumer Leaks	1	10	~
Meter Misread	1	2	~
Nothing Found	4	16	Notified Consumer
Excessive Irrigation	10	3	Notified Consumer
Total	16	31	
<u>Water Quality Complaints</u>			
Taste and Odor	3	3	<p><i>Customer reported water tasting like plastic. (WINTERGREEN CT.)</i> Lab staff sampled kitchen and outside hose bibs. No plastic taste when lab sampled. Other results were normal for NMWD supply. Customer was notified of results.</p> <p><i>Customer reported strong chlorine taste & odor. (KATHLEEN DR.)</i> Lab staff sampled front hose bib. Chlorine levels were normal for NMWD supply. Customer was notified of results.</p> <p><i>Customer reported strong hose odor from inside the house. (PIZARRO AVE)</i> Lab staff sampled kitchen and outside hose bibs. Chlorine odor noted at sampling. Other results were normal for NMWD supply. Customer was notified of results. Referred for backflow inspection.</p>

NORTH MARIN WATER DISTRICT

Summary of Complaints & Service Orders October 2019

11/12/2019

Type	Oct-19	Oct-18	Action Taken October 2019
Other	1	0	Customer reported stomach pain after drinking from water fountain. (OLIVE WAY) Lab tested water fountain and outside hose bib. Results of analysis were normal for NMWD supply. Coliforms absent. Customer was notified of results.
Total	4	3	
TOTAL FOR MONTH:	130	160	-19%

Fiscal YTD Summary

Consumer's System Problems	348	338
Service Repair Report	101	116
Leak NMWD Facilities	88	106
High Bill Complaints	43	154
Low Bills	0	2
Water Quality Complaints	14	16
Total	594	732

Change Primarily Due To

3%	Increase In Service Line Leaks.
-13%	Decrease In Water Off/On Due to Repairs
-17%	Decrease In Service Leaks.
-72%	Decrease In Nothing Found.
-100%	Decrease in Meter Misreads.
-13%	No one issue
-19%	

"In House" Generated and Completed Work Orders

Check Meter: possible consumer/District leak, high bill, flooded, need read, etc.	91	196
Change Meter: leaks, hard to read	7	10
Possible Stuck Meter	2	0
Repair Meter: registers, shut offs	0	0
Replace Boxes/Lids	29	2
Hydrant Leaks	0	0
Trims	0	8
Dig Outs	3	24
Letters to Consumer: meter obstruction, trims, bees, gate access, etc. get meter number, kill service, etc.	2	0
	134	240

Bill Adjustments Under Board Policy: October 19 vs. October 18

Oct-19	34	\$10,084
Oct-18	47	\$11,281

Fiscal Year vs Prior FY

FY 19/20	107	\$27,766
FY 18/19	143	\$40,055

t:\cons srvc\complaint report\complain 20 official.xlsx\oct19

MEMORANDUM

To: Board of Directors

November 15, 2019

From: Julie Blue, Auditor-Controller *JB*
Nancy Holton, Senior Accountant *NH*

Subj: Auditor-Controller's Monthly Report of Investments for October 2019
L:\aclword\invest\20\investment report 1019.doc

RECOMMENDED ACTION: Information

FINANCIAL IMPACT: None

At month end the District's Investment Portfolio had an amortized cost value (i.e., cash balance) of \$22,230,557 and a market value of \$22,262,895. During October the cash balance increased by \$2,389,365. The market value of securities held increased \$32,338 during the month. The ratio of total cash to budgeted annual operating expense stood at 128%, up 14% from the prior month.

At October 31, 2019, 55% of the District's Portfolio was invested in California's Local Agency Investment Fund (LAIF), 25% in Time Certificates of Deposit, 9% in US Treasury Notes, 5% in the Marin County Treasury, and 6% retained locally for operating purposes. The weighted average maturity of the portfolio was 114 days, compared to 130 days at the end of September. The LAIF interest rate for the month was 2.19%, compared to 2.28% the previous month. The weighted average Portfolio rate was 2.21%, compared to 2.35% the previous month.

Investment Transactions for the month of October are listed below:

10/11/2019	Goldman Sachs Bank	US Bank	\$249,105.25	TCD Matured
10/11/2019	US Bank	Goldman Sachs Bank	\$247,023.01	Purchase 1.70% TCD due 10/12/21
10/15/2019	US Bank	LAIF	\$400,000.00	Trsf to LAIF account
10/17/2019	US Bank	LAIF	\$575,000.00	Trsf to LAIF account
10/31/2019	US Bank	LAIF	\$300,000.00	Trsf to LAIF account

**NORTH MARIN WATER DISTRICT
AUDITOR-CONTROLLER'S MONTHLY REPORT OF INVESTMENTS
October 31, 2019**

Type	Description	S&P Rating	Purchase Date	Maturity Date	Cost Basis ¹	10/31/2019 Market Value	Yield ²	% of Portfolio
LAIF	State of CA Treasury	AA-	Various	Open	\$12,142,380	\$12,163,165	2.19% ³	55%
Time Certificate of Deposit								
TCD	Morgan Stanley Bank	n/a	11/9/17	11/12/19	247,000	247,000	1.75%	1%
TCD	American Express Centurion	n/a	12/5/17	12/5/19	247,000	247,000	1.90%	1%
TCD	Sallie Mae Bank	n/a	1/10/18	1/10/20	247,000	247,000	2.20%	1%
TCD	Discover Bank	n/a	2/13/18	2/24/20	247,000	247,000	2.35%	1%
TCD	Wells Fargo Bank	n/a	3/28/18	3/30/20	248,000	248,000	2.55%	1%
TCD	Citibank	n/a	4/11/18	4/13/20	246,000	246,000	2.55%	1%
TCD	UBS Bank	n/a	5/30/18	6/1/20	249,000	249,000	2.70%	1%
TCD	Enerbank	n/a	6/18/18	5/18/20	249,000	249,000	2.75%	1%
TCD	BMW Bank	n/a	6/15/18	6/15/20	246,000	246,000	2.75%	1%
TCD	Bank of America	n/a	8/15/18	8/17/20	246,000	246,000	2.75%	1%
TCD	Ally Bank	n/a	9/28/18	9/28/20	246,000	246,000	2.80%	1%
TCD	Barclays Bank	n/a	11/14/18	11/16/20	246,000	246,000	3.00%	1%
TCD	CIT Bank	n/a	12/17/18	12/17/20	246,000	246,000	3.00%	1%
TCD	Reliance Bank	n/a	1/11/19	1/11/21	249,000	249,000	2.70%	1%
TCD	Iberia Bank	n/a	1/25/19	1/25/21	246,000	246,000	2.70%	1%
TCD	TIAA Bank	n/a	1/18/19	7/19/21	246,000	246,000	2.75%	1%
TCD	Merrick Bank	n/a	2/8/19	2/8/21	249,000	249,000	2.60%	1%
TCD	Eaglebank	n/a	3/15/19	3/15/21	249,000	249,000	2.60%	1%
TCD	Central Bank	n/a	4/18/19	4/19/21	249,000	249,000	2.40%	1%
TCD	Morgan Stanley Private Bank	n/a	5/23/19	5/24/21	247,000	247,000	2.40%	1%
TCD	Capital One Bank NA	n/a	8/21/19	8/23/21	247,000	247,000	1.85%	1%
TCD	Capital One Bank USA	n/a	9/6/19	9/7/21	247,000	247,000	1.75%	1%
TCD	Goldman Sachs Bank USA	n/a	10/11/19	10/12/21	247,000	247,000	1.70%	1%
					\$5,686,000	\$5,686,000	2.46%	25%
US Treasury Notes								
Treas	2.250%	n/a	7/26/18	3/31/20	998,723	1,002,539	2.56%	4%
Treas	2.750%	n/a	3/5/19	9/30/20	1,001,952	1,009,688	2.75%	5%
					\$2,000,675	\$2,012,227	2.66%	9%
Other								
Agency	Marin Co Treasury	AAA	Various	Open	\$1,080,210	\$1,080,210	2.37%	5%
Other	Various	n/a	Various	Open	1,321,292	1,321,292	0.41%	6%
TOTAL IN PORTFOLIO					\$22,230,557	\$22,262,895	2.21%	100%

Weighted Average Maturity = **114 Days**

LAIF: State of California Local Agency Investment Fund.

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

Agency: STP State Revolving Fund Loan Reserve.

Other: Comprised of 5 accounts used for operating purposes. US Bank Operating Account, US Bank STP SRF Loan Account, US Bank FSA Payments 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, 2019.

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	\$1,006,078	2.40%
Marin Country Club Loan	1/1/18	11/1/47	\$1,265,295	\$1,198,371	1.00%
Employee Housing Loans (4)	Various	Various	714,200	714,200	Contingent
TOTAL INTEREST BEARING LOANS			\$5,592,135	\$2,918,649	

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


t:\accountants\investments\2019\1019.xls\mo rpt

6

MEMORANDUM

To: Board of Directors


November 15, 2019

From: Julie Blue, Auditor-Controller Subject: Approve Resolution Authorizing Application to the Director of Industrial Relations, State of CA for a Certificate of Consent to Self-Insure Workers' Compensation Liabilities
I:\ac\board reports\board memos\2019\osip - consent to self insure - board memo.docx**RECOMMENDED ACTION:** Approve Resolution Authorizing Application to the Department of Industrial Relations**FINANCIAL IMPACT:** None

The District recently placed its 7/1/2019-4/1/2020 Workers' Compensation insurance coverage with California Mutuals Joint Powers Risk and Insurance Management Authority (JPRIMA), an insurance pool governed by California's Office of Self-Insurance Plans (OSIP). The OSIP requires that members of pools acknowledge that the pool itself is self-insured. This is not equivalent to the District itself being self-insured, as the coverage is written first-dollar with the pool, and the pool is fully reinsured through Zenith Insurance Company. Zenith is responsible for all costs through the life cycle of a claim, as is the case in a typical first-dollar program.

RECOMMENDATION

That the Board approve resolution authorizing application to the Department of Industrial Relations to self-insure workers' compensation liabilities.

Approved by GM Date 11/15/19



State of California
Department of Industrial Relations
OFFICE OF SELF-INSURANCE PLANS

**APPLICATION FOR CERTIFICATE OF CONSENT
TO SELF-INSURE AS A PUBLIC AGENCY EMPLOYER SELF-INSURER**

All questions must be answered. If not applicable, enter "N/A".

To the Director of the Department of Industrial Relations: The public agency employer identified below submits the following information to obtain a Certificate of Consent to Self-Insure the payment of workers' compensation under California Labor Code Section 3700.

LEGAL NAME OF APPLICANT (Show exactly as on Charter or other official documents):

North Marin Water District

Address: 999 Rush Creek Pl.

City: Novato State: CA Zip + 4: 94948 -

Federal Tax ID # of Group: 94-6002892

CONTACT - Who Should Correspondence Regarding This Applicant Be Addressed To:

Name: Jim Byerrum/Myra Malner Title: President/Assistant Secretary

Company Name: California Association of Mutual Water Companies Joint Powers Risk and Insurance Management Authority

Address: 15505 Whittier Blvd.

City: Whittier State: CA Zip + 4: 90603 -

Phone: (562) 947-3811 E-Mail:

TYPE OF PUBLIC ENTITY (Check one):

☐ City and/or County ☐ School District ☐ Police and/or Fire District ☐ Hospital District

☐ Joint Powers Authority ☒ Other (describe): Special District

TYPE OF APPLICATION (Check one):

☒ New Application ☐ Reapplication (Merger/Unification) ☐ Reapplication (Name Change)

☐ Other (describe):

Date Self-Insurance Program will begin: July 1, 2019

CURRENT WORKERS' COMPENSATION PROGRAM

☐ Currently Insured with State Fund Policy # _____ Expiration Date: _____

☐ Currently Self Insured, Certificate # _____

☒ Other (describe): Self Insured for first \$1M, Excess Workers' Compensation through
New York Marine & General Insurance; Policy # WC2018EPP00464; Exp Date of July 1, 2019

CLAIMS ADMINISTRATION

Who will be administering your agency's workers' compensation claims? (Check one)

☐ JPA will administer

☒ Third Party Administrator, TPA Certificate # _____

☐ Public entity will self-administer

☐ Insurance Carrier will administer

Name of Third Party Administrator:

Name: Louise Levine Title: _____

Company Name: Zenith Insurance Company

Address: 21255 Califa Street

City: Woodland Hills State: CA Zip + 4: 91367 - 5005

Phone: (818) 713-1000 E-Mail: _____

of claims reporting locations to be used to handle Agency's claims: 1

Does applicant currently have a California Certificate of Consent to Self-Insure? ☒ Yes ☐ No

If yes, what is the current Certificate Number: 7905-00

Total Number of Affiliate's California employees to be covered by Group: 52 Full Time & 10 Part Time

AGENCY EMPLOYER

Current # of Agency Employees: 52 Full Time & 10 Part Time
of Public Safety Employees (police/fire): 0

If school District, # of certificated employees: 0

Will all Agency employees be covered by this self-insurance plan? ☒ Yes ☐ No

If 'No', explain who is not covered and how workers' compensation coverage will be provided to the excluded employees:

JOINT POWERS AUTHORITY

Will applicant be a member of a JPA for workers' compensation ?

☒ Yes ☐ No (If 'yes', complete the following)

Effective date of JPA Membership: July 1, 2019 JPA Certificate # 5820

Name of JPA: California Association of Mutual Water Companies Joint Powers Risk and Insurance Management Authority

AGENCY SAFETY PROGRAM

Does the Agency have a written Injury and Illness Prevention Program (IIPP)? ☒ Yes ☐ No

Individual responsible for Agency workplace safety and IIPP program:

Name: Robert Clark Title: Operations/Maintenance Superintendent

Company Name: North Marin Water District

Address: 999 Rush Creek Place

City: Novato State: CA Zip + 4: 94945 -

Phone: (415)897-4133 E-Mail: rclark@nmwd.com

SUPPLEMENTAL COVERAGE

1.) Will your program be supplemented by any insurance or pooled coverage under a **STANDARD** workers' compensation insurance policy? ☐ Yes ☒ No (If 'Yes', complete the following):

Name of Excess Pool/Carrier: N/A

Policy #: N/A Effective Date of Coverage:

2.) Will your program be supplemented by any insurance or pooled coverage under a **SPECIFIC EXCESS** workers' compensation insurance policy? ☐ Yes ☒ No (If 'Yes', complete the following):

Name of Excess Pool/Carrier: N/A

Policy #: N/A Effective Date of Coverage:

Retention Limits:

3.) Will your program be supplemented by any insurance or pooled coverage under an **AGGREGATE EXCESS** (stop loss) specific excess workers' compensation insurance policy? ☐ Yes ☒ No (If 'Yes', complete the following):

Name of Excess Pool/Carrier: N/A

Policy #: N/A Effective Date of Coverage:

Retention Limits:

RESOLUTION FROM GOVERNING BOARD

Attach a properly executed Governing Board Resolution. See attached sample resolution on page 5.

CERTIFICATION

The undersigned on behalf of the applicant hereby applies for a Certificate of Consent to Self-Insure the payment of workers' compensation liabilities pursuant to Labor Code Section 3700. The above information is submitted for the purpose of procuring said Certificate from the Director of Industrial Relations, State of California. If the Certificate is issued, the applicant agrees to comply with applicable California statutes and regulations pertaining to the payment of compensation that may become due to the applicant's employees covered by the Certificate.

x Julie Blue
SIGNED: Authorized Official / Representative

DATE: 11/8/19

Julie Blue
Printed Name

Auditor-Controller
Title

North Marin Water District
Agency Name

RESOLUTION NO.: _____ DATED: November 19, 2019

**A RESOLUTION AUTHORIZING APPLICATION
TO THE DIRECTOR OF INDUSTRIAL RELATIONS, STATE OF CALIFORNIA
FOR A CERTIFICATE OF CONSENT TO SELF-INSURE
WORKERS' COMPENSATION LIABILITIES**

At a meeting of the Board of Directors
(Enter Name of the Board)

of the North Marin Water District
(Enter Name of Public Agency, District, Etc.)

a Special District organized and existing under the
(Enter Type of Agency, i.e., County, City, School District, etc.)

laws of the State of California, held on the 19th day of November, 2019,

the following resolution was adopted:

RESOLVED, that the above named public agency is authorized and empowered to make application to the Director of Industrial Relations, State of California, for a Certificate of Consent to Self-Insure workers' compensation liabilities and representatives of Agency are authorized to execute any and all documents required for such application.

IN WITNESS WHEREOF: I HAVE SIGNED AND AFFIXED THE AGENCY SEAL.

X _____
SIGNED: Board Secretary or Chair

DATE: November 19, 2019

Theresa Kehoe
Printed Name

District Secretary
Title

North Marin Water District
Agency Name

Affix Seal Here

7

MEMORANDUM

To: Board of Directors
 From: Rocky Vogler, Chief Engineer *RW*
 Subject: Cost Sharing for 2020 Urban Water Management Plan Update
L:\gm\uwmp 2020\letter agreement bod memo.doc

November 15, 2019

RECOMMENDED ACTION: Authorize General Manager to enter into Letter Agreement with the City of Santa Rosa to fund consulting services for preparation of the 2020 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update

FINANCIAL IMPACT: \$29,931 plus \$2,933 contingency (Included as Part of \$50,000 Budget in FY20 and FY21)

Section 2.7 of the Restructured Agreement with the Sonoma County Water Agency states: "The Agency shall periodically prepare a draft regional Urban Water Management Plan pursuant to the Water Code for consideration by the water contractors." The next Urban Water Management Plan (2020) is due for submittal to the Department of Water Resources by June 30, 2021.

Again, as was done in 2010 and 2015, the Water Contractors have banded together to enlist a consultant to update the Water Demand Analysis and Water Conservation Measures for the 2020 Urban Water Management Plan. The City of Santa Rosa has agreed to be the project manager and contracting entity for the consultant's work.

A Letter Agreement between the City of Santa Rosa and the participating Water Contractors to share the cost of the contract with the consultant, EKI Environment and Water (Burlingame, CA) is attached. For North Marin the cost share for the work is \$29,931. The Board is requested to authorize the General Manager to execute the Letter Agreement with Santa Rosa.

The consultant's analysis will provide the District with an updated water demand and updated estimate of water conservation savings consistent with methodology used by all of the other contractors. Once the demand and water conservation information is available, the District will complete its own Urban Water Management Plan with input from SCWA. Any final Urban Water Management Plan will be reviewed by District staff and our legal counsel prior to request for Board adoption.

Recommendation:

Board authorize General Manager to execute a Letter Agreement with the City of Santa Rosa to share cost of EKI's work to update Water Demand and Water Conservation Analysis for the 2020 UWMP in the amount of \$29,931 with a 10% contingency (\$2,933).

Approved by GM *RW*

Date *11/15/19*

Letter Agreement

Letter Agreement
Between and Among City of Santa Rosa
And
Cities of Rohnert Park, Petaluma, Sonoma, Cotati, Town of Windsor
And
Marin Municipal Water District, North Marin Water District and Valley of the Moon Water District
For
Funding Consulting Services for Preparation of the 2020 Urban Water Management Plan
Water Demand Analysis and Water Conservation Measures Update

1. General

The City of Santa Rosa and other Parties to this Letter Agreement (Cities of Rohnert Park, Petaluma, Sonoma, Cotati, Town of Windsor and Marin Municipal, North Marin and Valley of the Moon Water Districts) cooperatively prepared the Scope of Work for Consulting Services for Preparation of the 2020 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update. The City of Santa Rosa has agreed to contract with EKI Environment & Water ("EKI") for this work. The Parties now desire to establish a cost sharing arrangement whereby the Parties will jointly fund the work administered by the City of Santa Rosa.

2. Agreement for Professional Services and Scope of Work

The Agreement for Professional Services with EKI for Preparation of the 2020 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update ("Services Agreement") including the collectively prepared Scope of Work is attached as Exhibit A to this Letter Agreement and establishes the work to be undertaken by EKI and administered by the City of Santa Rosa.

3. Cost Share

The Parties agree that the base cost of the work performed under the Services Agreement shall be shared fifty percent (50%) on an equal basis and fifty percent (50%) on a pro-rated basis based on the number of water service connections existing in each Party's service territory as of

Letter Agreement

July 2019 (collectively "Cost Share"). Parties that have requested an upgraded, more detailed report will pay an additional flat fee. Said Cost Share for each Party is shown on Exhibit B attached to this Letter Agreement and incorporated by this reference.

4. Cost for Increase Scope of Work

No increased scope of work shall be authorized under the Services Agreement without the consent of all Parties to this Letter Agreement, and any cost for said increased scope of work shall be shared among the Parties in the same manner as described in Section 3 in this Letter Agreement.

5. Payment

Payment to the City of Santa Rosa by each Party pursuant to the Cost Share identified in Section 3 shall be made as follows:

1. Fifty percent (50%) of Cost Share made within thirty (30) days of receipt of an invoice from City of Santa Rosa subsequent to EKI executing the Services Agreement.
2. Remainder payment within thirty (30) days upon receipt of invoice subsequent to EKI completing the work (anticipated to be on December 31, 2020). Payments shall be made payable to the City of Santa Rosa and mailed to the attention of Colin Close at 69 Stony Circle, Santa Rosa, CA 95401.

6. Miscellaneous

The Parties agree to execute this Letter Agreement by December 2, 2019, which shall be the effective date of this Letter Agreement. If all Parties have not executed this Letter Agreement by said date, the Parties who have executed this Letter Agreement agree that the cost share will be recalculated among participating Parties as described in Section 3 and the Services Agreement will be amended to only include participating parties. The City of Santa Rosa will notify each Party of the recalculated cost share in writing.

7. Letter Agreement Authorization

Letter Agreement

This Letter Agreement constitutes the entire understanding and agreement of the Parties and supersedes all negotiations or previous agreements between the parties with respect to all or any part of the transaction discussed in this Letter Agreement. This Letter Agreement may be signed in counterparts. By signing below, the Parties signify authorization to enter into this Letter Agreement.

Jennifer Burke
City of Santa Rosa

Date

Darrin Jenkins
City of Rohnert Park

Date

Peggy Flynn
City of Petaluma

Date

Cathy Capriola
City of Sonoma

Date

Damien O'Bid
City of Cotati

Date

Letter Agreement

Ken MacNab
Town of Windsor

Date

Bennett Horenstein
Marin Municipal Water District

Date

Drew McIntyre
North Marin Water District

Date

Alan Gardner
Valley of the Moon Water District

Date

Attachments: Exhibit A – Professional Services Agreement
 Exhibit B – Cost Share

22 October 2019

Colin Close
City of Santa Rosa Water Department
69 Stony Circle
Santa Rosa 95401

Subject: 2020 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures
Update for Retail Agencies of the Sonoma-Marín Saving Water Partnership
(EKI B9-135)

Dear Mr. Close:

EKI Environment and Water, Inc. (EKI) has prepared the attached "Scope of Work" exhibit to summarize the major work efforts and key assumptions associated with development of the *2020 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update*. We have also included an updated schedule and cost estimate based on our understanding that three of the Water Contractors would like Detailed Reports and that six of the Water Contractors would like Streamlined Reports.

We are happy to provide any additional requested information and look forward to working with you.

Very truly yours,

EKI ENVIRONMENT & WATER, INC.



Anona Dutton, P.G., C.Hg.
Vice President



Kathryn L. Wurfing
Senior Water Resources Planner

1. SCOPE OF SERVICES

Task 1 – Preliminary Work

This task consists of initial preparatory work to set up and manage the project, with an emphasis on transparency and coordination. To streamline coordination efforts, we have assumed that there will be one main contact person designated for each Water Contractor. As shown in Table 1, costs for this task are the same irrespective of the type of reports being generated.

Subtask 1.1 – Kick-off and Data Needs Meeting and Project Management

A key means to ensure that Water Contractor staff input is incorporated throughout the process, and that the project schedule, budget, and expectations are well managed, is through frequent and organized communications. EKI will work with the City of Santa Rosa (City) and designated Water Contractor staff to identify mutually beneficial means and frequency of communication and have identified the following key items that will provide the scaffolding for efficient project management:

- One (1) in-person project kickoff meeting to introduce key members of the project team and to review project scope and objectives, as well as data needs to support development of the 2020 UWMP Water Demand/Conservation Reports;
- Provide an anticipated schedule for each task, which will be updated as needed so that the Water Contractors are adequately informed of project progress and status;
- Provide monthly invoices to the City supported by progress status reports, which will be broken down by task and subtask as identified in this proposal; and
- Conduct routine communications and other project management tasks.

Subtask 1.2 – Develop Project Timeline

EKI will prepare a detailed project schedule that will include: (1) a timeline for Water Contractors to submit data; and (2) a detailed timeline for the preparation of the 2020 UWMP Water Demand/Conservation Reports, including project milestones. All project work is anticipated to be completed by December 31, 2020.

Task 1 Deliverables

- Project kick-off meeting, with agenda and meeting notes
- Task-based project schedule, updated as needed
- Monthly invoices and task-based progress status reports

Task 2 – Information and Data Collection

This task consists of collecting and reviewing relevant data. Pertinent information needed to prepare the 2020 UWMP Water Demand/Conservation Reports shall be collected and reviewed. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

Subtask 2.1 – Submit Data Request

EKI understands that the Water Contractors have access to a significant amount of data (i.e., customer billing and water conservation program data) that can be applied for this project. EKI will submit a detailed data request to the Water Contractors immediately following the project kick-off meeting. Data will be requested in electronic format, such that it can be readily incorporated into a project database (see Subtask 2.5). For example, per the RFP, Water Contractors will be responsible for providing annual historical water conservation program participant

data in an Excel or equivalent format. We note that the data request to the Water Contractors may include a request for information from other agencies, such as detailed property characteristics from the Marin and Sonoma County assessors' offices.

Subtask 2.2 – Review and Summarize Previous DWR Comments

DWR reviewed, and in some cases provided comments on the UWMPs prepared by the Water Contractors in 2015. To the extent applicable, EKI will compile and review DWR comments on the demand and conservation section of the 2015 UWMP for each of the Water Contractors.

Subtask 2.3 – Summarize New DWR Requirements

EKI will summarize the new DWR requirements related to demand analysis and water conservation for the 2020 UWMP and provide a summary of the new requirements that need to be addressed and any recommended changes to the scope of work for review by Water Contractors.

Subtask 2.4 – Review Planning Documents

As part of the data request (Subtask 2.1), EKI will provide a summary list of the planning documents that are needed from the Water Contractors. We have assumed that the Water Contractors will provide EKI with the latest General Plan and relevant background reports and other planning documents in the timeframe specified in the agreed-upon project schedule.

EKI will review the Water Contractors' General Plans and other relevant planning documents to establish forecasted growth to 2045. If specific forecasts are not available for all Water Contractors, we have assumed that the individual Water Contractor will instruct EKI to use an alternate source, such as projections made by the Association of Bay Area Governments.

Subtask 2.5 – Conduct Data Review

EKI will collect and review the data received in response to the data request (Subtask 2.1), provided the data are received within the timeframe specified in the agreed-upon project schedule. To the extent that data are missing or not provided in a timely manner, EKI will contact the individual Water Contractors and seek direction regarding potential alternative data sources.

To facilitate the analyses conducted herein, EKI will build a working relational database in Microsoft Access to manage and mine program participation and other data. This project database and other files summarizing analytical results (Excel workbooks and GIS files) will be provided to the Water Contractors at the completion of the project.

Subtask 2.6 – Prepare Technical Memorandum #1

Following the review of the data provided by the Water Contractors, EKI will prepare a brief technical memorandum (TM) to document the data assimilation effort (TM #1). This memorandum will: (1) summarize the available historical demand and water conservation program data, (2) summarize the relevant aspects of DWR's review and new requirements, and (3) document growth projections based on planning documents.

EKI will provide the draft TM #1 to the Water Contractors for review and comment. To the extent applicable, Water Contractor comments will be incorporated into the portions of draft TM #1 that will be included in the 2020 UWMP Water Demand/Conservation Reports, described under Task 4.

Task 2 Deliverables

- Detailed data request
- Draft TM #1: Summary of Available Data, Key Data Gaps, Potential Data Gap-Filling Approaches, and Summary of DWR Comments and New Requirements

Task 3 – Develop Updated Regional Conservation Measures

The goal of this task is to update the suite of common regional conservation measures that was developed and used by the Water Contractors in 2015 and will be considered for implementation in the future. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

Subtask 3.1 – Analysis of Past Program Participation

As part of the basis for estimating the remaining potential for future conservation programs and savings, EKI will summarize historical participation in all conservation program offerings. In addition, for a selected group of Water Contractors, EKI will perform a detailed evaluation of past customer participation for each Water Contractor in up to five (5) signature conservation programs,¹ such as Cash for Grass/Mulch Madness, smart irrigation controller retrofits, hot water recirculation system rebates, Water Smart home evaluations, and public irrigation education classes.² Each of the sets of analyses described herein will include the development of compelling maps, charts and graphics that will support visualization of the results and conclusions and make them accessible to a broad audience.

Past Program Participation

EKI will summarize the total participation and device distribution from past program participation for the five signature programs within each Water Contractor's service area, based on the data provided in Task 2. Participation will be evaluated relative to key geographic, property, and customer demographic characteristics. More specifically, program participation will include breakdown and comparisons by:

- Neighborhood-level median household income, rate of home-ownership vs. rentership, and household member age, based on Census data (for residential programs);
- Age of building stock based on County Assessor parcel data (for residential and CII programs, as appropriate);
- Building, lot, and or irrigated area size, based on County Assessor parcel or other information made available (for residential and CII programs, as appropriate); and
- Distance customers travel to attend educational classes (as applicable).

This analysis will also look at temporal trends in conservation measure/program participation, with a particular focus on changes in program participation before, during, and following the recent drought and in connection with specific marketing and outreach campaigns. This approach can be utilized for both intervention-based programs, and also for more education-based programs (e.g., workshop attendance), and as shown in Figure 2, can provide important insights into reasons for program performance or lack thereof.

¹ In EKI's experience, performance of the analysis on a smaller number of key programs can yield very compelling results. If desired, additional programs can be assessed for additional cost. Like-programs may be grouped together (e.g., by device) or separately (e.g., to evaluate the difference in participation in rebate versus no-cost programs).

² Analysis of public education classes assumes that the Water Contractors can provide specific information on customers who attended the programs.

Geospatial Participation Density Analysis

For a selected group of water contractors, EKI will perform geospatial analyses of program participation to identify program participation density for the five identified programs within each Water Contractor's service area. This analysis will be used to identify statistically significant areas of high and low participation density (participation "hot" and "cold" spots) for residential conservation programs. These results will be summarized and presented by Water Contractor which: (1) will allow for a comparison of the relative program saturation between Water Contractors; and (2) can be used to inform future program targeting and marketing efforts. Maps will be produced showing hot and cold spots based on Water Contractor service areas, for each program and customer type. These data can also be provided to the Water Contractor as GIS files.

Subtask 3.2 – Analyze and Quantify Water Savings Achieved by Past Programs

In order to analyze and quantify actual water savings achieved due to past program participation, EKI proposes to utilize a "cohort analysis method", sometimes called a "Differences-to-Differences Method" to measure program-specific water savings at the account-level based on billing history and program participation data for a selected group of water contractors.³

To quantify water savings achieved by a given conservation measure/program, EKI will compare water use before and after implementation of a given intervention for program participants to the water use at geographically-stratified cohort accounts who have not participated in the same or other programs in the given time frame.⁴ The incremental volume of water saved by program participants compared to that of the cohort can then be attributed to program participation, as all other factors are normalized.

Specifically, for residential water users, comparing the change in participating account water use to a non-participating cohort located in the same geographic area (e.g., Census Block Group) effectively controls for factors that can influence water use including, climate, house and yard size, general socio-economic factors, etc. As with the above analyses, programs will be grouped to limit the overall number of analyses to those that are most meaningful for planning purposes (e.g., by fixture or educational outreach type).

Subtask 3.3 - Regional Conservation Measure Workshop

Following the results of the above analysis, EKI will work with the City to convene a workshop with representatives of the Water Contractors to review the results of the analyses – with particular emphasis on conservation measure/program performance, observed savings, and potential remaining opportunities.

During the workshop, EKI will also review the current state of the industry and identify the conservation measures that have and could provide the most water savings value for the region, including conservation measures that will support compliance with *Making Conservation a California Way of Life* and identifying those measures that most likely will be phased out if they are redundant to requirements imbedded in building and plumbing codes and state law.

Subtask 3.4 - Regional Conservation Measure Codification

Following the completion of the program water savings analysis and measure ranking, EKI will prepare a draft TM to document the methods and results (TM #2). TM #2 will describe the source of the data, technical approach, water savings by selected conservation measures/programs, and total water savings by customer sector,

³ We have assumed that the Water Contractors will be able to provide such customer-level billing data in a standardized format so as to facilitate efficient incorporation into the project database.

⁴ To be included in the analysis, participant accounts cannot have participated in any other program during this timeframe and all accounts included in the analysis must be active (i.e., occupied and demonstrating a minimum level of annual water use).

home/account level, and Water Contractor. TM #2 will also describe the regional ranking process and the cost and water savings associated with each conservation measure. TM #2 will include compelling maps, charts and graphics that will support visualization of the results and conclusions and make them accessible to a broad audience.

EKI will provide the draft TM #2 to the Water Contractors for review and comment. To the extent applicable, Water Contractor comments will be incorporated into the portions of draft TM #2 that will be included in the 2020 UWMP Water Demand/Conservation Reports, described under Task 4.

Task 3 Deliverables

- Workshop agenda, slide deck, and other materials
- Draft TM #2: Historical Water Efficiency Program Participation and Water Savings Achieved and Program Ranking

Task 4 – Demand Analysis and Water Conservation Measures Update

This task consists of preparing updated water demand analyses through 2045 for the Water Contractors. The update shall reflect adopted General Plan population and employment and land use projections, changes in water use and/or demand hardening patterns, and savings from current and future water conservation measures. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

Subtask 4.1 – Analyze Demographic Data

In response to the data request (Subtask 2.1) it is assumed that the Water Contractors will provide data on: (1) the number of historical and existing customers and associated water use over time broken down by customer category; and (2) the future connections, population, dwelling units, land use, and employment based on the most recently adopted applicable General Plans, or other appropriate source(s). This demographic and water use information shall serve as the basis for evaluating water use demands and trends for a selected group of water contractors. Changes since 2015 in the sphere of influence and proposed sphere of influence of each incorporated municipality and water district within the study area shall be identified. Each Water Contractor will also specify the demographic forecast to be used or concur with the analysis before work proceeds on the subsequent subtasks. To the extent applicable, EKI will incorporate the provided data into the database developed pursuant to Subtask 2.5 and describe it in TM #1 (Subtask 2.6).

Subtask 4.2 – Develop Water Use Characteristics

Based on the data provided, the existing and historical water use within each Water Contractor's service area will be defined in terms of annual total production and consumption by user class (residential, commercial, industrial, institutional, parks, other, as per the billing systems of each Water Contractor). Unit water demands (gallons/account/day) for each major user class (residential, commercial/industrial, public), and estimated indoor and outdoor water use will be presented. Recent account-level water billing data (Subtask 2.5) will be reviewed, as available, to determine appropriate water demand factors for the demand analysis. This review will include evaluating and selecting a baseline year that is comparable to current conditions, absent the influence of drought, economic recession, and other key drivers. Changes in water demand will be evaluated by sector over time to identify evaluate and incorporate demand hardening into the selected water demand factors. By evaluating the changes in per account water use over time, demand hardening can be observed and incorporated into future water projections.

Unit water use trends will be evaluated to define the different (higher or lower) unit water use factors to apply for future conditions. Therefore, if supported by the data, different water demand factors may be established for

new construction than applied for existing customers.

Subtask 4.3 – Estimate Future Water Demands

In order to evaluate the potential for future water savings and programs, and to inform the conservation program scenarios described below, EKI proposes to evaluate current water use by Water Contractor customers by customer sector. In addition to total water use, as described below, this evaluation will: (1) quantify indoor versus outdoor water use; (2) identify the maximum savings potential by customer sector; and (3) apply an industry-standard model to conduct the demand and conservation forecasting. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

Indoor vs. Outdoor Water Use

Indoor versus outdoor water use will be estimated to the extent that data are available. Outdoor water use remains the biggest “knob” to be turned with respect to WUE. Identifying the percentage of water use that remains dedicated to landscape irrigation provides a focused target for the implementation of WUE programs and provides an estimate for water savings potential.

Populate AWE Model

The Alliance for Water Efficiency (AWE) has developed a model that is an industry standard for projecting the cost-benefit and potential savings associated with water conservation.

EKI proposes to apply the AWE model to estimate the baseline demand projections inclusive of: (1) water savings through pre-2014 as well as through 2014-2019, (2) impacts of the current and future approved CALGreen Codes, and (3) appliance/fixtures standards already in place.

The AWE model will then be applied to project water demands inclusive of post-2019 water savings estimates for complying with the State’s new urban efficiency standards, to the extent they have been defined. EKI will provide each Water Contractor with their own model for future use.

Subtask 4.4 - Water Conservation and Economic Analysis

As part of Subtask 2.1, EKI will work with the Water Contractors to collect data to quantify the costs and water savings of the various conservation measures/programs in each service area. Based on this information, EKI will conduct an economic evaluation of selected water conservation measures using the model customized for each Water Contractor. Specifically, the costs of the water conservation measures shall be summarized and the dollar savings from reduced water demand shall be quantified yearly and based on avoided costs provided by each participating Water Contractor (which reflects their own individual options for obtaining additional water supply, if needed).

Water savings from each of the water conservation measures/ requirements shall be estimated and expressed for each 5-year increment to 25 years.

EKI preliminarily proposes to evaluate the conservation program implementation scenarios described below. EKI will work with the Water Contractors to define the specific programs to be included under each scenario.

- **Scenario 1 – Business as Usual Model:** This scenario will reflect a business-as-usual model with conservation programs offered to customers under normal supply conditions. This approach will include a suite of cost-effective programs open to all customers on a voluntary basis, with the goal of being easily sustained with minimal to moderate staff resources. This scenario will include a mix of indoor and outdoor programs.

- **Scenario 2 – Outdoor Water Use Efficiency Only Model:** This scenario will reflect a conservation program that focuses all efforts on outdoor water uses. Like the Business as Usual model, this scenario will focus on programs open to all customers on a voluntary basis and minimal to moderate staff resources.
- **Scenario 3 – Targeting Under-Represented Market Sectors Model:** This scenario will reflect a conservation program that focuses on reaching the customer groups and market sectors identified under Task 3 as having been under-represented by participation in programs to date. This scenario will consider both indoor and outdoor programs and, based on consultation with the Water Contractors, may include programs that have eligibility limitations for participation.
- **Scenario 4 – Aggressive, Water Shortage-Driven Model:** This scenario will reflect the implementation of more aggressive conservation programs during drought conditions or supply shortages that require greater than 20% water demand reduction. This scenario will reflect conservation programs that require an increased level of staff resources and more aggressive targeting of specific customer groups.

In developing the above scenarios, EKI will include higher performance technologies that are currently or likely available in the near-term (e.g., <1 gallon per flush toilets, new leak detection and water loss control technologies, etc.) as well as behavior-based measures (e.g., adjustment of irrigation watering schedules and timing, and use of membrane filtration cleaning for swimming pools in lieu of draining and refilling). As applicable, the hot and cold spot participation density analysis and the demographic and property characteristic analyses described under Subtask 3.1 will be used to identify any customer groups that are currently under-represented by participation in past programs. The findings of this evaluation will be used, in particular, to inform Scenario 3.

Subtask 4.5 – Prepare Draft Reports

EKI will prepare one draft technical report (i.e., the 2020 UWMP Water Demand/Conservation Report) for each Water Contractor that can stand alone separately from their respective 2020 UWMPs or be formatted to serve as an appendix to the 2020 UWMP, at each Water Contractor's option. Each Water Contractor's report will have the same template with individualized tables and graphs. As shown in Table 1, costs for some elements of this task vary with the type of reports being generated. However, each report will include, at a minimum, the following information:

- a. Table of contents
- b. Summary of demand analysis update results
- c. Methodology and assumptions
- d. Results and conclusions
- e. Data and information collected for analysis
- f. Detailed description of water conservation measures analysis
- g. Demographics projections
- h. Historical water use patterns
- i. Water demand projections for the next twenty-five years in five-year increments
- j. Additional (future) water savings from existing and additional conservation measures and legislative requirements
- k. References and list of contacts

Subtask 4.6 – Attend Review Meetings

EKI will attend up to a total of two (2) in-person meetings with each Water Contractor, for a total of 18 separate meetings. As shown in Table 1, costs for this task are the same irrespective of the type of reports being generated.

The first set of individual meetings with each Water Contractor will be held to discuss the basis of the demand projections and the preliminary results, and the second set of individual meetings will be held to present the draft 2020 UWMP Water Demand/Conservation Report to each Water Contractor for comments.

In an effort to be efficient, EKI will strive to hold all 18 meetings within four (4) total days (i.e., two days per each set of meetings). EKI will coordinate with the City to identify days and locations for the meetings.

Additional communication will occur as needed in person at EKI's office or by email or telephone conference calls (up to three per Water Contractor).

EKI will provide each Water Contractor with a draft electronic copy of their respective 2020 UWMP Water Demand/Conservation Report. Based on the RFP, up to two (2) revisions of the demand projections and water conservation and economic analysis per Water Contractor may be made.

Subtask 4.7 – Prepare Final Reports

EKI will revise each 2020 UWMP Water Demand/Conservation Report one time based upon a single, compiled set of comments received from each Water Contractor in electronic (e.g., red-line) format. It is assumed that all comments will be resolved within changes to the report and no separate response to comments will be issued. One (1) hard copy and one (1) electronic copy in WORD of the final report for each Water Contractor will be provided. As shown in Table 1, costs for this some elements of this task vary with the type of reports being generated.

Task 4 Deliverables

- Draft 2020 UWMP Water Demand/Conservation Reports
- Final 2020 UWMP Water Demand/Conservation Reports and associated electronic files

Major Assumptions

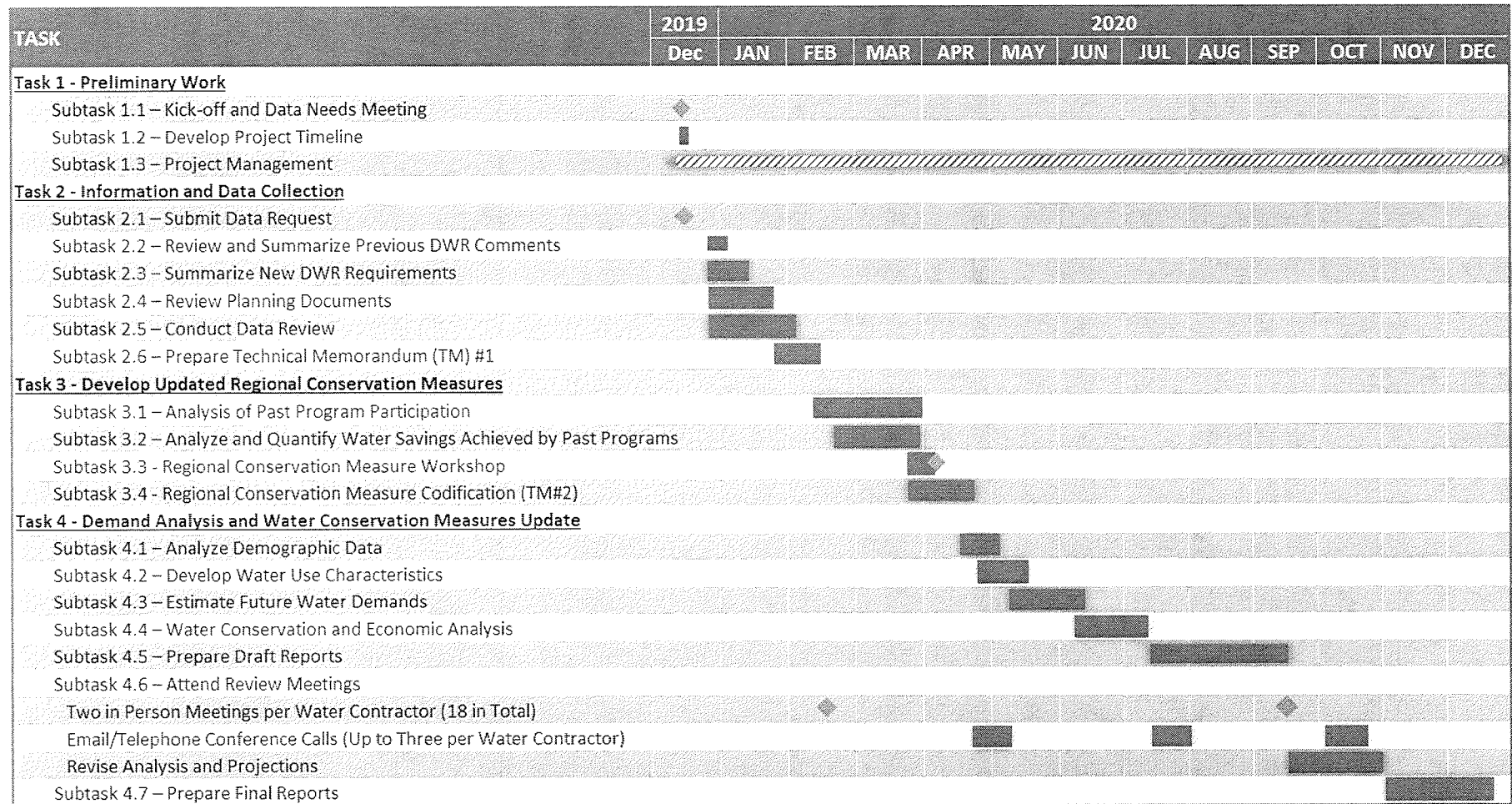
The following key assumptions have been made to support the estimate scope, schedule, and budget for this effort.

- All requested data will be provided in electronic format, and in accordance with the project schedule.
- All reviews will be conducted in a timely and coordinated fashion, and comments will be relatively minor.
- Meetings and workshops will be scheduled by the City to occur as described herein.
- Communications will be coordinated with a single representative from each Water Contractor and pursuant to the hours and meeting counts described herein.
- Water Contractors will not change their mind about which analyses, programs, or type of report they want once a decision has been made and direction provided to consultant.⁵

⁵ Such changes could be addressed under a separate scope of work. However, the estimated budgets to address such changes would need to be examined at that time and costs may be higher than reflected herein due to efficiencies that may have been lost due to the timing of such decision.

2. SCHEDULE

EKI is prepared to start work on this project immediately upon authorization to proceed. A general schedule for the project is presented below. We will inform the City and the Water Contractors of any issues that arise that may affect the schedule for completion or impact the anticipated level of effort.



3. PROPOSED FEE

Fee Schedule

A complete 2019 Rate Schedule, inclusive of the 5% labor rate discount, is included herein.

Itemized Cost Summary

A detailed cost estimate for the above proposed scope of work is presented below. The costs are identified as (1) costs to develop nine streamlined "base reports", (2) "add-on" costs to develop the more detailed reports for three agencies, and (3) total project costs. The total project costs to develop nine reports, including three detailed reports, are estimated to be \$226,845.

Table 1 - Budget Estimate for Proposed Scope of Work

TASKS	ESTIMATED COSTS		
	Base Report Costs (9 Reports)	Detailed Report Add-On Cost (3 Reports)	TOTAL
	(\$)	(\$)	(\$)
Task 1 - Preliminary Work			
Subtask 1.1 – Kick-off and Data Needs Meeting			
Kick-off Meeting	\$5,172	\$0	\$5,172
Subtask 1.2 – Develop Project Timeline			
Detailed project schedule	\$1,250	\$0	\$1,250
Subtask 1.3 – Project Management	\$9,508	\$0	\$9,508
Subtotal	\$15,930	\$0	\$15,930
Task 2 - Information and Data Collection			
Subtask 2.1 – Submit Data Request	\$967	\$0	\$967
Subtask 2.2 – Review and Summarize Previous DWR Comments	\$3,340	\$0	\$3,340
Subtask 2.3 – Summarize New DWR Requirements	\$3,099	\$0	\$3,099
Subtask 2.4 – Review Planning Documents			
Review and establish forecasted growth for 9 Water Contractors	\$4,557	\$1,538	\$6,095
Subtask 2.5 – Conduct Data Review			
Compile Project Working Database	\$3,085	\$0	\$3,085
Incorporate Demand Data	\$5,175	\$0	\$5,175
Incorporate Conservation Program Data	\$5,175	\$0	\$5,175
Subtask 2.6 – Prepare Technical Memorandum (TM) #1			
Summarize Historical Demand and Conservation Data	\$5,375	\$0	\$5,375
Summarize DWR's Review and New Requirements	\$5,375	\$0	\$5,375
Summarize Growth Projections based on Planning Documents	\$5,375	\$0	\$5,375
Subtotal	\$41,523	\$1,538	\$43,061
Task 3 - Develop Updated Regional Conservation Measures			
Subtask 3.1 – Analysis of Past Program Participation			
Evaluate participation relative to selected Census data	\$0	\$1,819	\$1,819
Evaluate participation relative to property characteristic and age data	\$0	\$1,649	\$1,649
Geospatial Participation Density Analysis	\$0	\$2,360	\$2,360
Subtask 3.2 – Analyze and Quantify Water Savings Achieved by Past Programs	\$0	\$2,531	\$2,531
Subtask 3.3 - Regional Conservation Measure Workshop	\$7,682	\$0	\$7,682
Subtask 3.4 - Regional Conservation Measure Codification			

Table 1 - Budget Estimate for Proposed Scope of Work

TASKS	ESTIMATED COSTS		
	Base Report Costs (9 Reports)	Detailed Report Add-On Cost (3 Reports)	TOTAL
	(\$)	(\$)	(\$)
Prepare Draft TM #2	\$9,556	\$0	\$9,556
Subtotal	\$17,238	\$8,359	\$25,597
Task 4 - Demand Analysis and Water Conservation Measures Update			
Subtask 4.1 – Analyze Demographic Data	\$4,682	\$173	\$4,855
Subtask 4.2 – Develop Water Use Characteristics	\$3,568	\$1,189	\$4,758
Subtask 4.3 – Estimate Future Water Demands			
Estimate Indoor vs. Outdoor Water Use	\$0	\$2,294	\$2,294
Populate AWE Model for each Water Contractor	\$7,912	\$879	\$8,791
Subtask 4.4 – Water Conservation and Economic Analysis	\$7,646	\$850	\$8,495
Subtask 4.5 – Prepare Draft Reports	\$40,597	\$4,511	\$45,107
Subtask 4.6 – Attend Review Meetings			
Two in Person Meetings per Water Contractor (18 in Total)	\$13,997		\$13,997
Email/Telephone Conference Calls (Up to Three per Water Contractor)	\$11,929	\$994	\$12,923
Revise Analysis and Projections	\$16,382	\$1,365	\$17,747
Subtask 4.7 – Prepare Final Reports	\$21,785	\$1,815	\$23,601
Subtotal	\$128,032	\$14,226	\$142,258
TOTAL:	\$202,723	\$24,122	\$226,845

(1) A communications charge of 4% of labor costs covers e-mail access, web conferencing, cellphone calls, messaging and data access, file sharing, local and long distance telephone calls and conferences, facsimile transmittals, standard delivery U.S. postage, and incidental in-house copying.

(2) "Other Direct Costs" includes direct expenses, as listed below, incurred in connection with the work and will be reimbursed at cost plus ten percent (10%) for items such as:

- a. Maps, photographs, reproductions, printing, equipment rental, and special supplies related to the work.
- b. Consultants, soils engineers, surveyors, drillers, laboratories, and contractors.
- c. Rented vehicles, local public transportation and taxis, travel and subsistence.
- d. Special fees, insurance, permits, and licenses applicable to the work.
- e. Outside computer processing, computation, and proprietary programs purchased for the work.

SCHEDULE OF CHARGES FOR EKI ENVIRONMENT & WATER, INC.**2 January 2019**

<u>Personnel Classification</u>	<u>Hourly Rate</u>	<u>5% Discounted</u>
Officer and Chief Engineer-Scientist	286	272
Principal Engineer-Scientist	275	261
Supervising I, Engineer-Scientist	265	252
Supervising II, Engineer-Scientist	255	242
Senior I, Engineer-Scientist	243	231
Senior II, Engineer-Scientist	230	219
Associate I, Engineer-Scientist	219	208
Associate II, Engineer-Scientist	205	195
Engineer-Scientist, Grade 1	191	181
Engineer-Scientist, Grade 2	180	171
Engineer-Scientist, Grade 3	165	157
Engineer-Scientist, Grade 4	146	139
Engineer-Scientist, Grade 5	129	123
Engineer-Scientist, Grade 6	113	107
Technician	104	99
Senior GIS Analyst	133	126
CADD Operator / GIS Analyst	118	112
Senior Administrative Assistant	130	124
Administrative Assistant	103	98
Secretary	85	81

Direct Expenses

Reimbursement for direct expenses, as listed below, incurred in connection with the work will be at cost plus fifteen percent (15%) for items such as:

- a. Maps, photographs, reproductions, printing, equipment rental, and special supplies related to the work.
- b. Consultants, soils engineers, surveyors, drillers, laboratories, and contractors.
- c. Rented vehicles, local public transportation and taxis, travel and subsistence.
- d. Special fees, insurance, permits, and licenses applicable to the work.
- e. Outside computer processing, computation, and proprietary programs purchased for the work.

A Communication charge for e-mail access, web conferencing, cellphone calls, messaging and data access, file sharing, local and long distance telephone calls and conferences, facsimile transmittals, standard delivery U.S. postage, and incidental in-house copying will be charged at a rate of 4% of labor charges. Large volume copying of project documents, e.g., bound reports for distribution or project-specific reference files, will be charged as a project expense as described above.

Reimbursement for company-owned automobiles, except trucks and four-wheel drive vehicles, used in connection with the work will be at the rate of sixty cents (\$0.60) per mile. The rate for company-owned trucks and four-wheel drive vehicles will be seventy-five cents (\$0.75) per mile. There will be an additional charge of thirty dollars (\$30.00) per day for vehicles used for field work. Reimbursement for use of personal vehicles will be at the federally allowed rate plus fifteen percent (15%).

CADD Computer time will be charged at twenty dollars (\$20.00) per hour. In-house material and equipment charges will be in accordance with the current rate schedule or special quotation. Excise taxes, if any, will be added as a direct expense.

Rate for professional staff for legal proceedings or as expert witnesses will be at a rate of one and one-half times the Hourly Rates specified above.

The foregoing Schedule of Charges is incorporated into the Agreement for the Services of EKI Environment & Water, Inc. and may be updated annually.

Exhibit B

2020 UWMP Demand Analysis and Water Conservation Measures Update Work Cost Split

Base Report and Optional Upgrade

Base Report Estimated Total Cost	\$ 202,723
50% Share equal basis ($\$101,362 \div 9$ contractors)	\$ 11,262
Optional Upgrade - Flat Fee per agency	\$ 8,041

Contractor	No. Services (July 2019)	Base Report 50% Share Equal Basis	Base Report 50% Share Prorated	Base Report Only	Optional Upgrade	Total	10% Contingency	Total with Contingency
Santa Rosa	52,635	\$ 11,262	\$ 28,476	\$ 39,738	\$ 8,041	\$ 47,779	\$ 4,778	\$ 52,557
Rohnert Park	9,279	\$ 11,262	\$ 5,020	\$ 16,282		\$ 16,282	\$ 1,628	\$ 17,910
Cotati	2,627	\$ 11,262	\$ 1,421	\$ 12,684		\$ 12,684	\$ 1,268	\$ 13,952
VOMWD	7,183	\$ 11,262	\$ 3,886	\$ 15,148		\$ 15,148	\$ 1,515	\$ 16,663
Sonoma	4,434	\$ 11,262	\$ 2,399	\$ 13,661		\$ 13,661	\$ 1,366	\$ 15,027
Petaluma	20,370	\$ 11,262	\$ 11,020	\$ 22,283		\$ 22,283	\$ 2,228	\$ 24,511
MMWD	61,956	\$ 11,262	\$ 33,518	\$ 44,781	\$ 8,041	\$ 52,822	\$ 5,282	\$ 58,104
NMWD	19,645	\$ 11,262	\$ 10,628	\$ 21,890	\$ 8,041	\$ 29,931	\$ 2,993	\$ 32,924
Windsor	9,229	\$ 11,262	\$ 4,993	\$ 16,256		\$ 16,256	\$ 1,626	\$ 17,882
Total	187,358	\$ 101,362	\$ 101,362	\$ 202,723	\$ 24,122	\$ 226,845	\$ 22,684	\$ 249,529

8

MEMORANDUM

To: Board of Directors
 From: Rocky Vogler, Chief Engineer *RV*
 Subject: Leveroni Creek Embankment Repair Project - Notice of Exemption
R:\Folders by Job No\6000 jobs\6600 STP jobs\6800 96 Leveroni Creek Embankment Repair\BOD Memos\NOE BOD Memo 11-15-19.doc

RECOMMENDED ACTION: Approve Filing Attached Notice of Exemption

FINANCIAL IMPACT: None – Information

Staff recommends the Board approve filing the attached Notice of Exemption for the Leveroni Creek Embankment Repair project.

The Leveroni Creek Embankment Repair project is included in the District's adopted FY 19-20 Capital Improvement Projects Budget. Leveroni Creek's left bank downstream of the 8-foot diameter culvert outfall plunge pool is slowly eroding, threatening the structural integrity of the Stafford Treatment Plant and Indian Valley Golf Course access road (see Attachment A). With the assistance of Prunuske Chatham, Inc., a similar project was completed in 2012 to protect the right bank of Leveroni Creek near the Stafford Treatment Plant's centrifuge and reclamation basins across from the current project location. Leveroni Creek provides habitat for steelhead (a federally-listed salmonid) and other species, and the project requires permit approvals from the US Army Corps of Engineers, California Department of Fish and Wildlife, Regional Water Quality Control Board and the County of Marin.

A feasibility study was prepared in 2017 to evaluate potential repair options. On July 16, 2019, the Board approved a consulting services agreement with PCI to provide design and permitting services for the current project. PCI so far has prepared a 65% design, project description, monitoring plan, and hydraulic and hydrologic analysis for submittal as a Joint Aquatic Resource Permit Application to the Regional Water Quality Control Board, California Department of Fish and Wildlife, and the US Army Corps of Engineers.

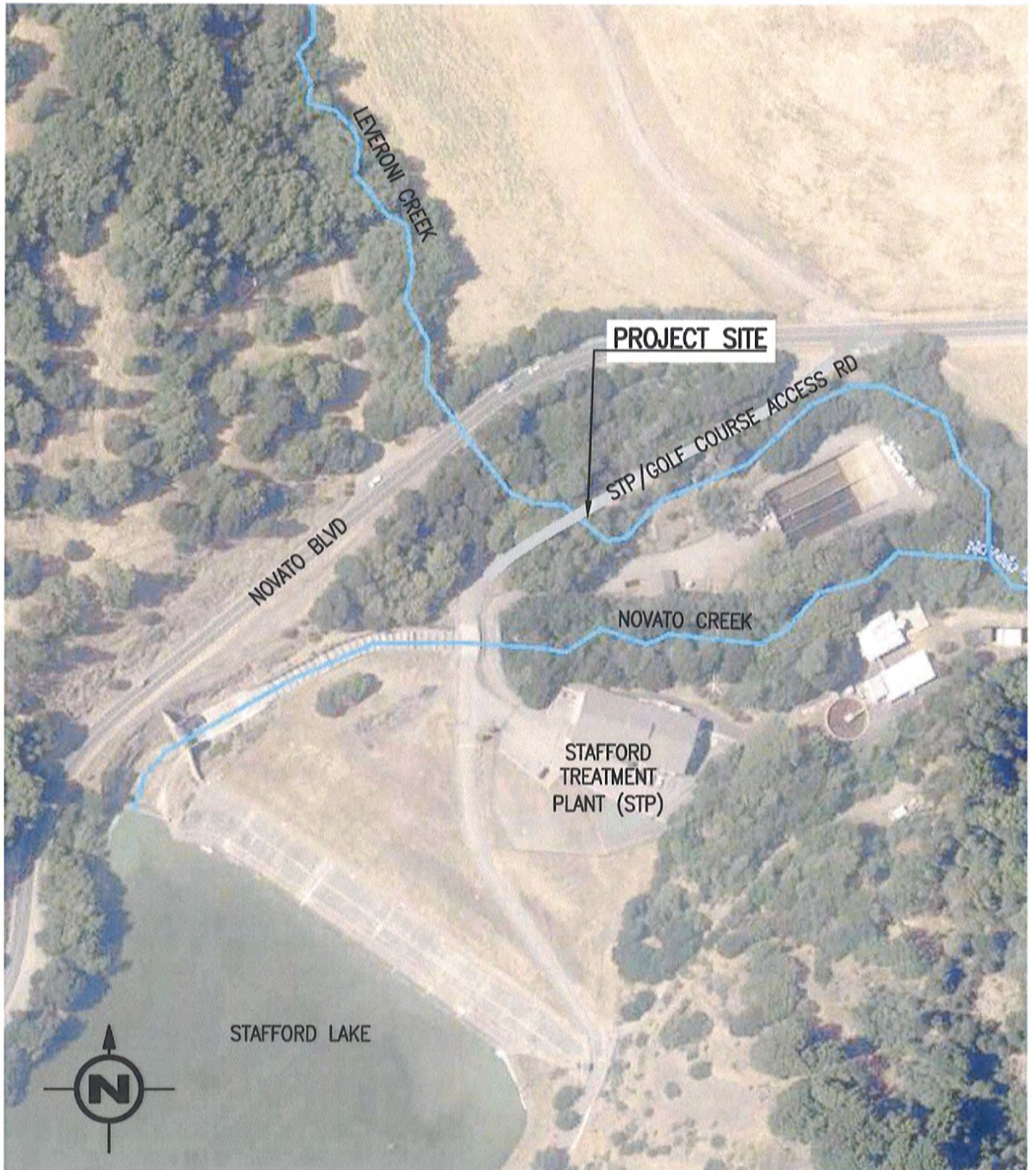
Similar to the 2012 project, it has been determined that Leveroni Creek Embankment Repair project qualifies for a Class 4 exemption under Section 15304 (minor alterations to land) of the CEQA Guidelines. The previous environmental review did not identify any significant effects that would occur from the project, and the exceptions listed in Section 15300.2 of the CEQA Guidelines were found not to apply to the project.

Staff recommends that the District file a Notice of Exemption with the County of Marin at this time. The Notice of Exemption is provided as Attachment B.

RECOMMENDATION

Approve filing of the attached Notice of Exemption.

Approved by GM *RD*
 Date *11/15/19*



**EXHIBIT A
LEVERONI CREEK
BANK REPAIR PROJECT**

DATE	SCALE	JOB. NO.	DWG. NO.
7/10/19	NTS	6600.96	MAP

Notice of Exemption

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044
County Clerk
County of: Marin
3501 Civic Center Dr #234
San Rafael, CA 94903

From: (Public Agency): North Marin Water District
999 Rush Creek Pl
Novato, CA 94945

(Address)

Project Title: Leveroni Creek Culvert and Bank Stabilization Project

Project Applicant: None

Project Location - Specific:

Located in Novato, south of Novato Blvd, approximately 1.5 miles west of San Marin Drive, beneath and adjacent to the access road that leads to Indian Valley Golf Course and the Stafford Treatment Plant.

Project Location - City: Novato Project Location - County: Marin

Description of Nature, Purpose and Beneficiaries of Project:

The project will stabilize an eroding creek bank on Leveroni Creek which supports a 96-inch culvert underneath the sole access road leading to the NMWD Stafford Treatment Plant and Indian Valley Golf Course. If erosion continues, the over-steepened bank could fall and jeopardize access to the Plant and Golf Course.

Name of Public Agency Approving Project: North Marin Water District

Name of Person or Agency Carrying Out Project: North Marin Water District

Exempt Status: (check one):

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
☒ Categorical Exemption. State type and section number: Sec. 15304, Minor Alterations to Land
☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:

The project is a minor alteration of land that will affect a section of creek bank less than 35 feet long and will not change the character of the environment. The project will generate no significant adverse impacts on resources of hazardous or critical concern pursuant to CCR section 15300.2.

Lead Agency
Contact Person: Rocky Vogler, PE Area Code/Telephone/Extension: 415-761-8945

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☐ Yes ☐ No

Signature: R. Vogler Date: 11/5/19 Title: Chief Engineer

☒ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.


Date Received for filing at OPR: _____

9

MEMORANDUM

To: Board of Directors

November 15, 2019

From: Robert Clark Operations / Maintenance Superintendent 

Subj: Renewal of Horizon CATV License Agreement

x:\maint sup\2019\bad\bod horizon ext memo 11.15.19.doc

RECOMMENDED ACTION: Approve one year extension**FINANCIAL IMPACT:** \$5,304.50 annual income

The Horizon CATV license agreement with the District allowing use of PRE tank site #4 to place a 40' high antenna, 5' x 7' equipment shed and a propane tank and emergency generator expired on October 31. The antenna was first moved to this site in 1995 after the Mt. Vision fire. Horizon has requested to exercise its' current agreement option to extend the contract.

Horizon is a small company, with a current cable TV subscriber base in West Marin from Stinson Beach extending to Dillon Beach. Their customer base is in large part the same as North Marin Water District, although the number of Horizon customers has been shrinking due to competition with satellite TV dish companies. Historically the license fee paid to the District by Horizon had been 1% of Horizon's annual basic revenue generated from its total number of cable customers served by the antenna at the PRE 4 tank site. Basic revenue is the monthly minimum charge levied for the basic service package, and did not include premium charges for additional channels or features. This complicated annual adjustment to the agreement was revised last year to a \$5,150 annual fee with an annual increase of 3% moving forward.

The District requires that Horizon limit the extension term to one year so that the District can conclude the design impacts from the new PRE 4 water tank design. Staff, proposes the renewed license agreement be for one year from November 1, 2019 to October 31, 2020.

RECOMMENDATION

Board approval renewal of license agreement with Horizon CATV for a one year extension term.


Approved by GM Date 11/15/19

10

MEMORANDUM

To: Board of Directors

November 15, 2019

From: Julie Blue, Auditor/Controller 

Subject: Accept – Outside Auditor's FY19 Report and Management Report

t:\finance\audit\audit19\bod accept outside auditor's 2019 report.docx

RECOMMENDED ACTION: Accept FY19 Financial Report and Management Letter

FINANCIAL IMPACT: None with this Review. Annual Audit Cost is \$16,280.

Chris Brown of Fedak & Brown LLP will attend the meeting to present the Comprehensive Annual Financial Report (CAFR) (Attachment 1) and the Management Report (Attachment 2).

The key statement in the Independent Auditor's Report found on page 8 is that: "In our opinion, the financial statements referred to above present fairly, in all material aspects, the financial position of the North Marin Water District as of June 30, 2019 and 2018, respectively, and the changes in its net position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America." This "unmodified opinion" is the best, or highest, opinion that an outside auditor can issue on an entity's financial statements.

The Management Report (Attachment 2) states that the auditor did not identify any deficiencies in the District's internal control that might result in material misstatement of the District's financial position. The independent auditor did not have any comments or recommendations regarding internal controls.

Accounting adjustments were made by staff after submitting the general ledger to the outside auditor and are disclosed on the last six pages of the Management Report. The number of adjusting entries decreased from the prior FY from 31 to 13 (51% decrease). The following changes make up the majority of the adjusting entries:

- 1) A GASB 68 increase in pension expense of \$1,675,531 and a decrease in the Pension Liability of \$214,564 to \$12,560,160.
- 2) A GASB 75 increase in other post-employment benefits (OPEB) expense of \$315,924 and an increase in the OPEB Liability of \$396,599 to \$4,520,164.

Staff has reviewed the audited financial report and finds it acceptable.

RECOMMENDATION

Accept the Outside Auditor's FY19 Financial Report and Management Letter.



NORTH MARIN WATER DISTRICT

Novato, California

Comprehensive Annual Financial Report For the Fiscal Years Ended June 30, 2019 and 2018





NORTH MARIN WATER DISTRICT

Name	Title	Elected/ Appointed	Current Term
Jack Baker	President	Elected	12/15 - 12/20
Michael Joly	Vice-President	Appointed	02/17 - 12/20
Rick Fraites	Director	Elected	12/18 - 12/22
James Grossi	Director	Elected	12/18 - 12/22
Stephen Petterle	Director	Elected	12/15 - 12/20

**Drew McIntyre, General Manager
North Marin Water District
999 Rush Creek Place
Novato, California 94945
(415) 897-4133 – www.nmwd.com**

North Marin Water District
Comprehensive Annual Financial Report
For the Fiscal Years Ended June 30, 2019 and 2018

NORTH MARIN WATER DISTRICT
999 Rush Creek Place
Novato, California 94945

Prepared by:
Finance Department
Julie Blue, Auditor-Controller

**North Marin Water District
Comprehensive Annual Financial Report
For the Fiscal Years Ended June 30, 2019 and 2018**

Table of Contents

	<u>Page No.</u>
Table of Contents	i
Introductory Section	
Letter of Transmittal	1-4
Organizational Chart	5
District Service Area Map	6
GFOA's Certificate of Achievement for Excellence in Financial Reporting	7
Financial Section	
Independent Auditor's Report	8-9
Management's Discussion and Analysis	10-15
Basic Financial Statements:	
Statements of Net Position	16-17
Statements of Revenues, Expenses and Changes in Net Position	18
Statements of Cash Flows	19-20
Notes to the Basic Financial Statements	21-56
Required Supplementary Information:	
Schedules of Changes in the District Total OPEB Liability and Related Ratios	57
Schedules of the District's Proportionate Share of Net Pension Liability	58
Schedules of Pension Plan Contribution's	59
Supplemental Information:	
Combining Schedule of Net Position – June 30, 2019	60
Combining Schedule of Net Position – June 30, 2018	61
Combining Schedule of Revenues, Expenses and Changes in Net Position – June 30, 2019	62
Combining Schedule of Revenues, Expenses and Changes in Net Position – June 30, 2018	63
Statistical Information Section:	
Statistical Section – Table of Contents	64
Changes in Net Position by Component – Last Ten Fiscal Years	65-66
Operating Revenues by Source – Last Ten Fiscal Years	67
Operating Expenses by Activity – Last Ten Fiscal Years	68
Non-Operating Revenue and Expenses – Last Ten Fiscal years	69
Revenue Base – Last Ten Fiscal Years	70
Customers by Type – Last Ten Fiscal Years	71
Revenue Rates – Last Ten Fiscal Years	72
Ten Largest Water Customers by Revenue – Current Fiscal Year and Ten Years Ago	73
Ratios of Outstanding Debt by Type – Last Ten Fiscal Years	74
Pledged-Revenue Coverage – Last Ten Fiscal Years	75
Demographic and Economic Statistics – Last Ten Fiscal Years	76
Demographic and Economic Statistics – Ten Largest Employers – Current Year	77
Operating and Capacity Indicators – Total Employees – Last Ten Fiscal Years	78
Other Operating and Capacity Indicators – Last Ten Fiscal Years	79
Report on Internal Controls and Compliance	
Independent Auditor's Report on Internal Control Over Financial Reporting And on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	80-81

Introductory Section

Working Draft Subject to Revision



NORTH MARIN WATER DISTRICT

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

PHONE
415-897-4133

EMAIL
info@nmwd.com

WEB
www.nmwd.com

November 19, 2019

Board of Directors
North Marin Water District

It is our pleasure to submit the Annual Financial Report for the North Marin Water District (District) for the fiscal years ended June 30, 2019 and 2018, following guidelines set forth by the Governmental Accounting Standards Board. District staff prepared the data incorporated in this financial report. The District is ultimately responsible for both the accuracy of the data and the completeness and fairness of presentation, including all disclosures in this financial report. We believe that the data presented is accurate in all material respects. This report is designed in a manner that the Governmental Accounting Standards Board believes necessary to enhance your understanding of the District's financial position and activities.

Generally Accepted Accounting Principles (GAAP) require that management provide a narrative introduction, overview and analysis to accompany the financial statements in the form of the Management's Discussion and Analysis (MD&A) section. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The District's MD&A can be found on page 10 of this report.

District Structure and Leadership

The District is an independent special district, which operates under the authority of Division 12 of the California Water Code. The District has been providing water service to its customers since 1948. The District is governed by a five-member Board of Directors, with each Director elected from one of five geographical areas from within the District's service area. The General Manager administers the day-to-day operations of the District in accordance with policies and procedures established by the Board of Directors. As of June 30, 2019, the District employed 52 regular employees, plus temporary and seasonal employees as the workload dictates. There are currently 22 office positions and 30 field positions. The District's Board of Directors meets on the first and third Tuesday of each month. Meetings are publicly noticed and citizens are encouraged to attend.

District Services

The District provides water service to the greater Novato area and to areas of West Marin (Point Reyes Station, Olema, Bear Valley, Inverness Park and Paradise Ranch Estates). The District provides sewer service to the Oceana Marin subdivision adjacent to Dillon Beach.

The District provides water service to approximately 61,000 residents in the greater Novato area through 20,546 potable water service connections and 91 recycled water connections. The District also provides water service to approximately 1,800 residents in the Point Reyes service area of West Marin County through 783 service connections and sewer service to approximately 500 residents in the Oceana Marin service area of West Marin County through 234 service connections.

District Services, continued

Residential customers comprise approximately 93% of the District's customer base and consume approximately 80% of the water produced annually by the District. The District purchases approximately 75% of its Novato water supply from the Sonoma County Water Agency (Agency) with the balance derived from the District's Stafford Lake Reservoir and some recycled water. The District purchased approximately 1.9 billion gallons of water in fiscal year 2019 and 2.0 billion gallons in 2018 from the Agency.

Economic Condition, Outlook and Major Initiatives

The District 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.

The Russian River water delivery system operated by the Agency typically provides 75% of Novato's water supply. Novato rainfall in fiscal year 2019 totaled 38.75" which was about 144% of the historical average annual rainfall. In fiscal year 2019 ample water was available in Lake Sonoma for fish, agriculture and urban use on the lower Russian River system and no restrictions on the Russian River water deliveries were imposed. North Marin's Stafford Lake water treatment plant produced 567 million gallons of water to augment Russian River supplies with local water supply during the fiscal year. Recycled water treatment facilities at Novato Sanitary District, Las Gallinas Valley Sanitary District and North Marin's Deer Island treatment facilities combined to provide 191 million gallons of highly treated recycled wastewater to large landscape irrigation customers and various commercial car washes in Novato.

The Agency has deferred its plan to construct previously contemplated Russian River water production and delivery facilities (pumps and pipelines) to fulfill the Restructured Agreement contract requirements for increased Russian River water. The Agency is now focused on compliance with the Biological Opinion in the Russian River watershed issued by the National Marine Fisheries Service, laying out the requirements to preserve, protect and restore the fisheries and maintain the existing Russian River water supplies. Additionally, state legislation passed in November 2009 (SB7X-7) requires a 20% reduction in per capita water use by 2020. The District has already achieved the SB7X-7 goal, but continues to strive to achieve more water conservation and development of recycled water to further stretch its local source of supply in future years.

A 3.5% rate increase for customers in the Novato service area was authorized by the Board of Directors effective June 1, 2019. At \$725 per year, the cost of water service for a typical Novato detached single-family home using 87,600 gallons of water a year remains a good value for Novato customers.

In West Marin, normal year water supply conditions existed on Lagunitas Creek.

District Water Supply

Stafford Lake – Local Source Provides 25% of the District'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 AF (acre-feet) (1,450 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 fiscal year 2019 and 2018, 1,740 AF (567 MG) and 1,982 AF (646 MG) respectively, was produced by the Stafford Lake Water Treatment Plant.

Russian River – Provides 75% of the District'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). Lake Mendocino's Coyote Dam impounds the Eel River diversions and winter runoff from the local watershed. Lake Sonoma's Warm Springs Dam impounds winter runoff from the Dry Creek and Warm Springs watersheds. Lakes Mendocino and Sonoma combined can store 367,500 acre feet to meet the regions' water supply needs, which totaled 43,970 acre feet in fiscal year 2019. Releases from the lakes flow to a point about 10 miles upstream of Guerneville where six deep Ranney Collector wells collect 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 Agency's aqueduct system.

During the fiscal years 2019 and 2018, the District received 5,917 AF (1,928 MG) and 6,104 AF (1,989 MG) respectively, of Russian River water. The District has an agreement in place with the Agency to provide sufficient supply to meet the District'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 species under the Endangered Species Act. The Biological Opinion for water supply in the Russian River watershed has been issued by the National Marine Fisheries Service laying out the requirements to preserve, protect and restore the fisheries and maintain the existing Russian River water supplies. The District continues to actively support the necessary development of the Russian River water supply and protection of the Russian River fisheries.

Internal Control Structure

District management is responsible for the establishment and maintenance of the internal control structure that ensures the assets of the District are protected from loss, theft or misuse. The internal control structure also ensures that adequate accounting data is compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The District's internal control structure is designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefit likely to be derived, and (2) the valuation of costs and benefits requires estimates and judgments by management.

Budgetary Control

The District Board of Directors annually adopts an operating and capital budget prior to the new fiscal year. The budget authorizes and provides the basis for reporting and control of financial operations and accountability for the District's enterprise operations and capital projects. The budget and reporting applied to the District is consistent with the accrual basis of accounting and the financial statement basis.

Investment Policy

The Board of Directors has adopted an investment policy that conforms to state law, District ordinance and resolutions, prudent money management, and the “prudent person” standard. The objective of the Investment Policy is safety, maturity and yield. District funds are invested in the State Treasurer’s Local Agency Investment Fund, US Treasury notes and time certificates of deposit.

Water Rates and District Revenues

Revenue from user charges generated from District customers supports District operations. Accordingly, water and sewer rates are reviewed annually. Water and sewer rates are user charges imposed on customers for services and are the primary component of the District’s revenue. Water rates are comprised of a commodity (water use) charge and a bi-monthly service charge; whereas, sewer rates are comprised exclusively of a fixed charge.

Audit and Financial Reporting

State Law and Bond covenants require the District to obtain an annual audit of its financial statements by an independent Certified Public Accountant. The accounting firm of Fedak and Brown LLP has conducted the audit of the District’s financial statements. Their unmodified Independent Auditor’s Report appears in the Financial Section.

Awards and Acknowledgements

For the tenth consecutive year, the District was awarded the Government Finance Officers Association of the United States and Canada’s (GFOA) *Certificate of Achievement for Excellence in Financial Reporting* for its 2018 and 2017 Consolidated Annual Financial Report (CAFR). To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized CAFR. The report must satisfy both generally accepted accounting principles and applicable legal requirements.

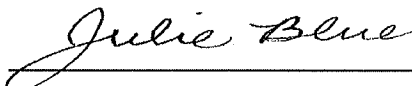
A Certificate of Achievement is valid for a period of one year. We believe that this CAFR meets the Certificate of Achievement Program’s requirements and we are submitting it to the GFOA to determine its eligibility for 2019.

Preparation of this report was accomplished by the combined efforts of District staff. We appreciate the dedicated efforts and professionalism that these staff members contribute to the District. We would also like to thank the members of the Board of Directors for their continued support in planning and implementation of the North Marin Water District’s fiscal policies.

Respectfully submitted,



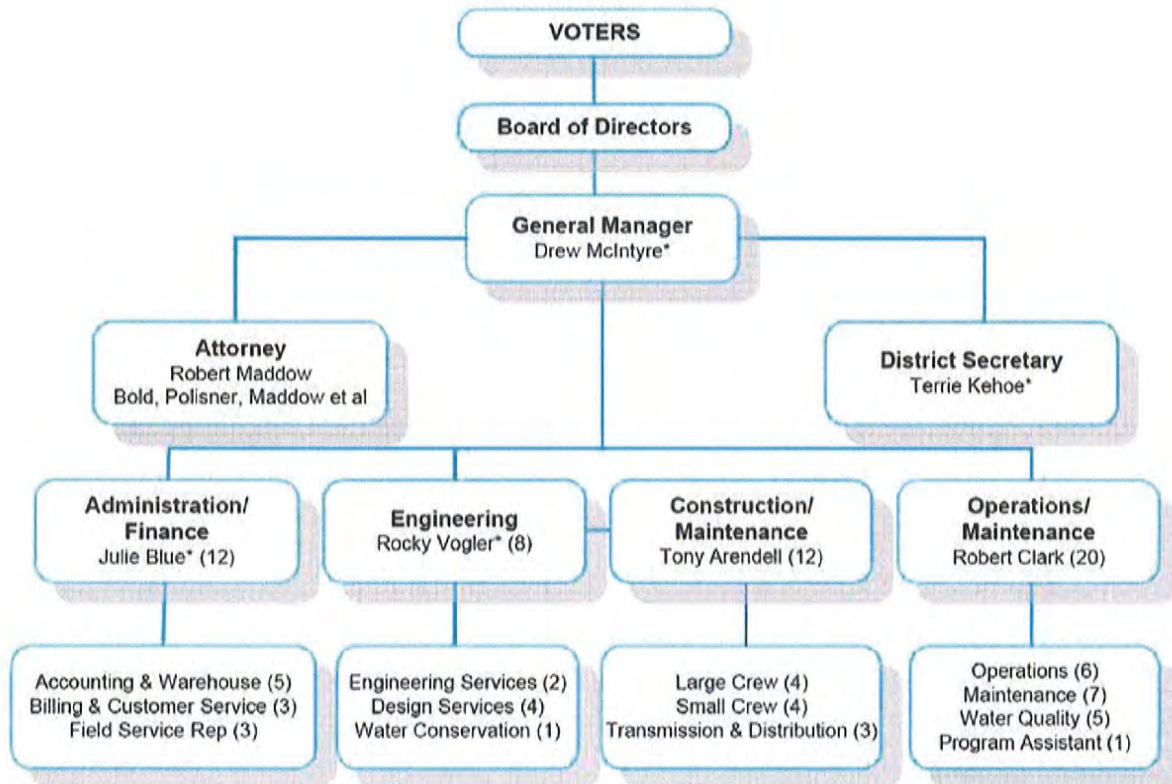
Drew McIntyre
General Manager



Julie Blue
Auditor-Controller

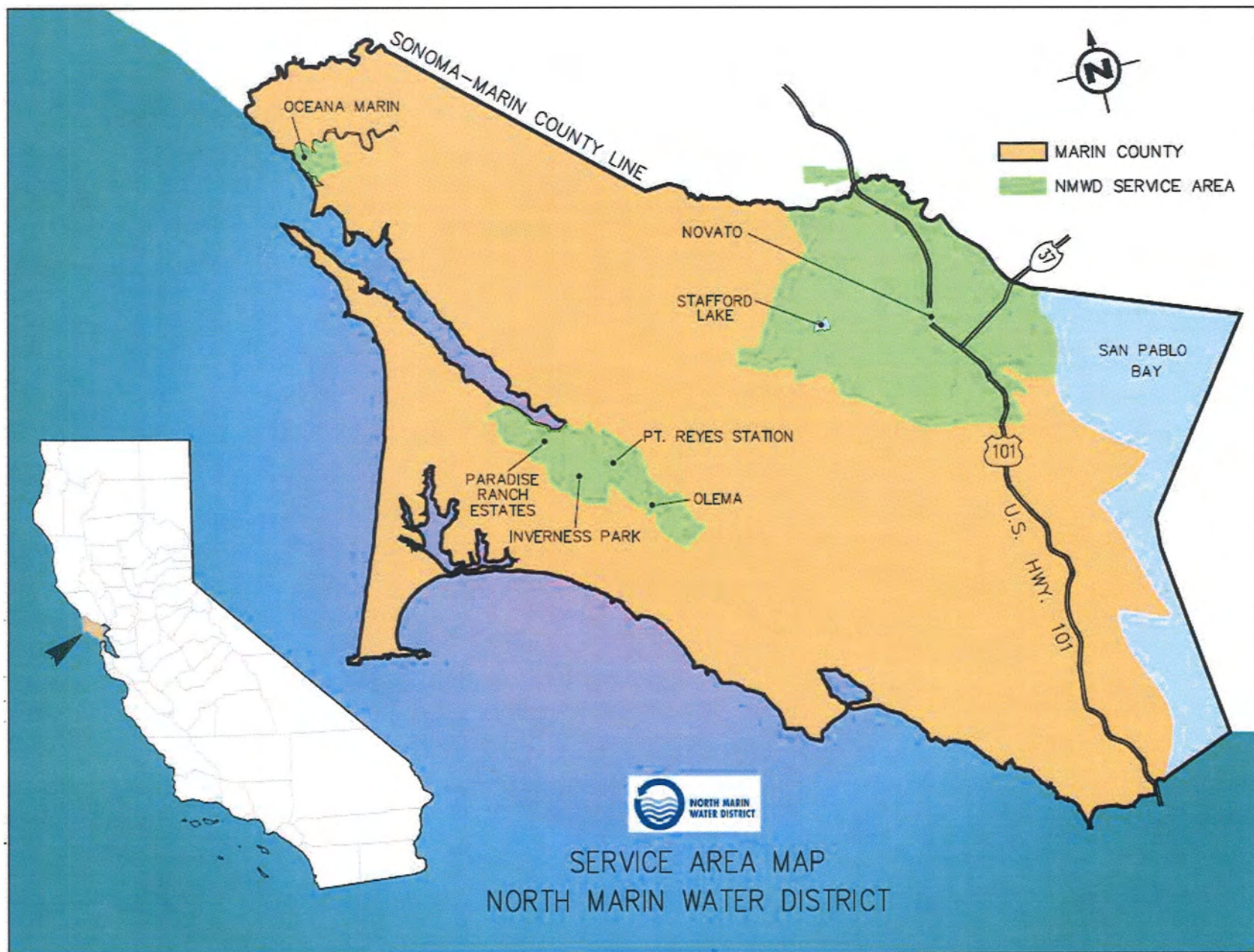
North Marin Water District Organizational Chart

As of
June 30, 2019



* Also serves as District Officer

Budgeted FTE: 54





Government Finance Officers Association

**Certificate of
Achievement
for Excellence
in Financial
Reporting**

Presented to

**North Marin Water District
California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrell

Executive Director/CEO

< Page Intentionally Left Blank >

Financial Section

WORKS DRAFT SUBJECT TO REVISION

Independent Auditor's Report

Board of Directors
North Marin Water District
Novato, California

Report on the Financial Statements

We have audited the accompanying financial statements of the North Marin Water District (District), which comprises the statement of net position as of June 30, 2019 and 2018, and the related statement of revenues, expenses and changes in net position, and cash flows for the year then ended, and the related notes to the financial statements, which collectively comprise the District's basic financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these basic financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audit contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the State Controller's Minimum Audit Requirements for California Special Districts. Those standards require that we plan and perform our audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the North Marin Water District as of June 30, 2019 and 2018, respectively, and the changes in its net position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis on pages 10 through 15 and the required supplementary information on pages 57 through 59 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

Independent Auditor's Report, continued

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquires, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Matters

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the District's basic financial statements as a whole. The introductory section on pages 1 through 7, the supplementary information of combining schedules on pages 60 through 63, and the statistical section on pages 64 through 79 are presented for purposes of additional analysis and are not required parts of the basic financial statements. The supplementary information of combining schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements taken as a whole. The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued a report dated November 19, 2019, on our consideration of the District's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance. This report can be found on pages 80 and 81.

Fedak & Brown LLP
Cypress, California
November 19, 2019

North Marin Water District
Management's Discussion and Analysis
For the Fiscal Years Ended June 30, 2019 and 2018

The following Management's Discussion and Analysis (MD&A) of activities and financial performance of the North Marin Water District (District) provides an introduction to the financial statements of the District for the fiscal years ended June 30, 2019 and 2018. We encourage readers to consider the information presented here in conjunction with the transmittal letter in the Introductory Section and with the basic financial statements and related notes, which follow this section.

Financial Highlights

- In fiscal year 2019, the District's net position increased 3.7% or \$3,975,806 to \$110,799,251. The increase of \$3,975,806 was primarily due to increases of \$1,809,097 from ongoing operations and \$2,166,709 from capital contributions. In fiscal year 2018, the District's net position increased 2.8% or \$2,911,473 to \$106,823,445. The increase of \$2,911,473 was primarily due to increases of \$1,860,518 from ongoing operations and \$4,265,041 from capital contributions, which were offset by the effect of a \$3,214,086 restatement to net position related to the implementation of GASB 75. (See note 13 for further information).
- In fiscal year 2019, the District's operating revenues decreased 1.5% or \$321,848 to \$21,722,246. In fiscal year 2018, the District's operating revenues increased 18.1% or \$3,390,618 to \$22,094,094.
- In fiscal year 2019, the District's operating expenses before depreciation decreased 0.5% or \$89,538 to \$16,371,492. In fiscal year 2018, the District's operating expenses before depreciation increased 9.0% or \$1,361,343 to \$16,461,030.

Required Financial Statements

This annual report consists of a series of financial statements. The Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position and Statement of Cash Flows provide information about the activities and performance of the District using accounting methods similar to those used by private sector companies.

The Statement of Net Position includes all of the District's investments in resources (assets) and the obligations to creditors (liabilities). It also provides the basis for computing a rate of return, evaluating the capital structure of the District and assessing the liquidity and financial flexibility of the District. All of the current year's revenue and expenses are accounted for in the Statement of Revenues, Expenses and Changes in Net Position. This statement measures the success of the District's operations over the past year and can be used to determine if the District has successfully recovered all of its costs through its rates and other charges. This statement can also be used to evaluate profitability and credit worthiness. The final required financial statement is the Statement of Cash Flows, which provides information about the District's cash receipts and cash payments during the reporting period. The Statement of Cash Flows reports cash receipts, cash payments and net changes in cash resulting from operations, investing, non-capital financing, and capital and related financing activities and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in cash balance during the reporting period.

Financial Analysis of the District

One of the most important questions asked about the District's finances is, "Is the District better off or worse off as a result of this year's activities?" The Statement of Net Position and the Statement of Revenues, Expenses and Changes in Net Position report information about the District in a way that helps the reader answer this question. These statements include all assets, deferred outflows, liabilities and deferred inflows using the *accrual basis of accounting*, which is similar to the accounting used by most private sector companies. All of the current year's revenues and expenses are taken into account regardless of when the cash is received or paid.

North Marin Water District
Management's Discussion and Analysis
For the Fiscal Years Ended June 30, 2019 and 2018

Financial Analysis of the District, continued

These two statements report the District's *net position* and changes in it. One can think of the District's net position – the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources – as one way to measure the District's financial health, or *financial position*. Over time, *increases or decreases* in the District's net position are one indicator of whether its *financial health* is improving or deteriorating. However, one will need to consider other non-financial factors such as changes in economic conditions, population growth, new or changed government legislation or accounting standards, as well as changes in Federal and State water quality standards.

Notes to the Basic Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to the basic financial statements can be found on pages 21 through 56.

Statements of Net Position

Condensed Statements of Net Position					
	2019	2018	Change	2017	Change
Assets:					
Current assets	\$ 21,123,008	19,686,189	1,436,819	16,343,722	3,342,467
Non-current assets	6,447,198	7,080,538	(633,340)	6,473,193	607,345
Capital assets, net	137,498,651	136,589,808	908,843	128,580,395	8,009,413
Total assets	165,068,857	163,356,535	1,712,322	151,397,310	11,959,225
Deferred outflows of resources	2,788,721	3,538,325	(749,604)	2,931,861	606,464
Liabilities:					
Current liabilities	5,707,594	6,218,548	(510,954)	6,429,846	(211,298)
Non-current liabilities	50,810,377	52,966,629	(2,156,252)	43,331,998	9,634,631
Total liabilities	56,517,971	59,185,177	(2,667,206)	49,761,844	9,423,333
Deferred inflows of resources	540,356	727,627	(187,271)	655,355	72,272
Net position:					
Net investment in capital assets	102,727,031	102,392,652	334,379	98,131,574	4,261,078
Restricted for capital projects and	71,715	2,186,164	(2,114,449)	2,140,681	45,483
Unrestricted	8,000,505	2,244,629	5,755,876	3,639,717	(1,395,088)
Total net position	\$ 110,799,251	106,823,445	3,975,806	103,911,972	2,911,473

As noted earlier, net position may serve over time as a useful indicator of a government's financial position. In the case of the District, assets and deferred outflows of the District exceeded liabilities and deferred inflows by \$110,799,251 and \$106,823,445 as of June 30, 2019 and 2018, respectively.

By far the largest portion of the District's net position (93% and 96% as of June 30, 2019 and 2018, respectively) reflects the District's investment in capital assets (net of accumulated depreciation) less any related debt used to acquire those assets that is still outstanding. The District uses these capital assets to provide services to customers within the District's service area; consequently, these assets are *not* available for future spending.

At the end of fiscal year 2019 and 2018, the District showed a positive balance in its unrestricted net position of \$8,000,505 and \$2,246,629. See note 12 for the amount of spendable net position that may be utilized in future years.

North Marin Water District
Management's Discussion and Analysis
For the Fiscal Years Ended June 30, 2019 and 2018

Statements of Revenues, Expenses and Changes in Net Position

Condensed Statements of Revenues, Expenses and Changes in Net Position

	2019	2018	Change	2017	Change
Revenue:					
Operating revenue	\$ 21,772,246	22,094,094	(321,848)	18,703,476	3,390,618
Non-operating revenue	759,127	503,856	255,271	505,230	(1,374)
Total revenue	22,531,373	22,597,950	(66,577)	19,208,706	3,389,244
Expense:					
Operating expense	16,371,492	16,461,030	(89,538)	15,099,687	1,361,343
Depreciation and amortization	3,451,155	3,434,069	17,086	3,416,411	17,658
Non-operating expense	899,629	842,333	57,296	810,060	32,273
Total expense	20,722,276	20,737,432	(15,156)	19,326,158	1,411,274
Net income(expense) before capital contributions	1,809,097	1,860,518	(51,421)	(117,452)	1,977,970
Capital contributions	2,166,709	4,265,041	(2,098,332)	11,643,388	(7,378,347)
Change in net position	3,975,806	6,125,559	(2,149,753)	11,525,936	(5,400,377)
Net position, beginning of year	106,823,445	103,911,972	2,911,473	92,386,036	11,525,936
Prior period adjustment	-	(3,214,086)	3,214,086	-	(3,214,086)
Net position, beginning of year – as restated	106,823,445	100,697,886	6,125,559	92,386,036	8,311,850
Net position, end of year	\$ 110,799,251	106,823,445	3,975,806	103,911,972	2,911,473

The statement of revenues, expenses and changes of net position shows how the District's net position changed during the fiscal years. In the case of the District, net position increased 3.7% or \$3,975,806 to \$110,799,251. The increase of \$3,975,806 was primarily due to increases of \$1,809,097 from ongoing operations and \$2,166,709 from capital contributions. In 2018, the District's net position increased 2.8% or \$2,911,473 to \$106,823,445. The increase of \$2,911,473 was primarily due to increases of \$1,860,518 from ongoing operations and \$4,265,041 from capital contributions, which were offset by the effect of a \$3,214,086 restatement to net position related to the implementation of GASB 75. (See note 13 for further information).

A closer examination of the sources of changes in net position:

In 2019, the District's total revenues decreased 0.3% or \$66,577 to \$22,531,373. The District's operating revenues decreased by 1.5% or \$321,848 to \$21,772,246 due primarily to decreases of \$427,396 in water consumption sales and \$155,846 in water sales to other agency, which were offset by an increase of \$246,068 in bi-monthly service charges.

In 2019, the District's non-operating revenues increased by 50.7% or \$255,271 to \$759,127 due primarily to an increase of \$253,981 in investment earnings.

In 2019, the District's capital contributions decreased by 49.2% or \$2,098,332 to \$2,166,709 due primarily to decreases of \$1,562,596 in developer contributions and \$548,615 in state and local capital grants.

In 2018, the District's total revenues increased by 17.6% or \$3,389,244 to \$22,597,950. The District's operating revenues increased by 18.1% or \$3,390,618 to \$22,094,094 due primarily to increases of \$2,962,703 in water consumption sales, \$229,466 in bi-monthly service charges, and \$155,846 in water sales to other agency.

In 2018, the District's non-operating revenues decreased by 0.3% or \$1,374 to \$503,856 due primarily to a decrease of \$88,285 in other non-operating revenues, offset by increases of \$52,822 in investment earnings and \$22,255 in rental revenue.

North Marin Water District
Management's Discussion and Analysis
For the Fiscal Years Ended June 30, 2019 and 2018

Statements of Revenues, Expenses and Changes in Net Position, continued

In 2018, the District's capital contributions decreased by 63.4% or \$7,378,347 to \$4,265,041 due primarily to decreases of \$6,556,345 in state and local capital grants and \$2,662,698 in federal capital grants, offset by increases of \$1,419,881 in developer contributions and \$420,815 in connection fees.

In 2019, the District's total expenses including depreciation decreased 0.1% or \$15,156 to \$20,722,276. The District's operating expenses decreased 0.5% or \$89,538 to \$16,371,492 due primarily to decreases of \$435,980 in water treatment, \$231,823 in customer service, \$86,708 in water facilities operations, \$85,930 in transmission and distribution, \$77,442 in source of supply, and \$36,444 in sewage collection and treatment, which were offset by increases of \$837,641 in general and administrative and \$32,238 in pumping expense.

In 2019, the District's depreciation and amortization increased by 0.5% or \$17,086 to \$3,451,155 due primarily to the maturation of existing capital assets depreciation and additional depreciation for replacement assets.

In 2019, the District's non-operating expenses increased by 6.8% or \$57,296 to \$899,629 due primarily to an increase of \$128,236 in interest expense on long-term debt, offset by \$86,180 in prior year debt issuance costs.

In 2018, the District's total expenses including depreciation increased by 7.3% or \$1,411,274 to \$20,737,432. The District's operating expenses increased 9.0% or \$1,361,343 to \$16,461,030 due primarily to increases of \$990,407 in source of supply, \$220,197 in water treatment, \$164,322 in transmission and distribution, \$142,358 in water facilities operations, \$75,014 in pumping expense, and \$65,975 in customer service expense, which were offset by a decrease of \$292,732 in general administrative expense.

In 2018, the District's depreciation and amortization increased by 0.5% or \$17,658 to \$3,434,069 due primarily to the maturation of existing capital assets depreciation and additional depreciation for replacement assets.

In 2018, the District's non-operating expenses increased by 4.0% or \$32,273 to \$842,333 due primarily to an increase of \$86,180 in debt issuance costs, offset by a decrease of interest expense on long-term debt.

Total District Revenues

	2019	2018	Change	2017	Change
Operating revenues:					
Water consumption sales	\$ 16,337,171	16,764,567	(427,396)	13,801,864	2,962,703
Monthly meter service charge	4,810,296	4,564,228	246,068	4,334,762	229,466
Sewer service charges	252,720	239,890	12,830	215,989	23,901
Water sale to other agency	-	155,846	(155,846)	-	155,846
Other charges and services	372,059	369,563	2,496	350,861	18,702
Total operating revenues	21,772,246	22,094,094	(321,848)	18,703,476	3,390,618
Non-operating revenues:					
Property tax revenue	115,706	109,927	5,779	107,210	2,717
Investment earnings	436,684	182,169	254,515	129,347	52,822
Interest earnings from note – BPGL	48,002	48,536	(534)	39,419	9,117
Rental revenue	91,532	105,406	(13,874)	83,151	22,255
Other non-operating revenues	67,203	57,818	9,385	146,103	(88,285)
Total non-operating revenues	759,127	503,856	255,271	505,230	(1,374)
Total revenues	\$ 22,531,373	22,597,950	(66,577)	19,208,706	3,389,244

In 2019 and 2018, total District revenues decreased \$66,577 and increased \$3,389,244, respectively.

North Marin Water District
Management's Discussion and Analysis
For the Fiscal Years Ended June 30, 2019 and 2018

Total District Expenses

	<u>2019</u>	<u>2018</u>	<u>Change</u>	<u>2017</u>	<u>Change</u>
Operating expenses including depreciation expense:					
Source of supply	\$ 5,492,324	5,569,766	(77,442)	4,579,359	990,407
Pumping	458,594	426,356	32,238	351,342	75,014
Water facilities operations	993,209	1,079,917	(86,708)	937,559	142,358
Water treatment	2,131,166	2,567,146	(435,980)	2,346,949	220,197
Transmission and distribution	3,301,629	3,387,559	(85,930)	3,223,237	164,322
Sewage collection and treatment	127,513	163,957	(36,444)	151,205	12,752
Customer service	510,341	742,164	(231,823)	676,189	65,975
General and administrative	3,007,301	2,169,660	837,641	2,462,392	(292,732)
Water conservation	349,415	354,505	(5,090)	371,455	(16,950)
Depreciation and amortization	3,451,155	3,434,069	17,086	3,416,411	17,658
Total operating expenses including depreciation expense	19,822,647	19,895,099	(72,452)	18,516,098	1,379,001
Non-operating expenses:					
Interest expense – long-term debt	875,354	747,118	128,236	791,211	(44,093)
Debt issuance costs	-	86,180	(86,180)	-	86,180
Other non-operating expenses	24,275	9,035	15,240	18,849	(9,814)
Total non-operating expenses	899,629	842,333	57,296	810,060	32,273
Total expenses	\$ 20,722,276	20,737,432	(15,156)	19,326,158	1,411,274

In 2019 and 2018, total District expenses decreased \$15,156 and increased by \$1,411,274, respectively.

Capital Asset Administration

Changes in capital asset amounts for 2019 were as follows:

	<u>Balance 2018</u>	<u>Additions</u>	<u>Transfers/ Deletions</u>	<u>Balance 2019</u>
Capital assets:				
Non-depreciable assets	\$ 25,964,598	4,405,064	(5,016,110)	25,353,552
Depreciable assets	168,132,910	4,971,044	(5,971)	173,097,983
Accumulated depreciation	(57,507,700)	(3,451,155)	5,971	(60,952,884)
Total capital assets, net	\$ 136,589,808	5,924,953	(5,016,110)	137,498,651

Changes in capital asset amounts for 2018 were as follows:

	<u>Balance 2017</u>	<u>Additions</u>	<u>Transfers/ Deletions</u>	<u>Balance 2018</u>
Capital assets:				
Non-depreciable assets	\$ 16,027,426	11,587,138	(1,649,966)	25,964,598
Depreciable assets	166,801,583	1,509,157	(177,830)	168,132,910
Accumulated depreciation	(54,248,614)	(3,434,069)	174,983	(57,507,700)
Total capital assets, net	\$ 128,580,395	9,662,226	(1,652,813)	136,589,808

At the end of fiscal year 2019 and 2018, the District's investment in capital assets amounted to \$137,498,651 and \$136,589,808, respectively (net of accumulated depreciation). This investment in capital assets includes: land, transmission and distribution systems, reservoirs, tanks, pumps, buildings and structures, equipment, vehicles and construction-in-progress, etc. (See note 6 for further information)

North Marin Water District
Management's Discussion and Analysis
For the Fiscal Years Ended June 30, 2019 and 2018

Debt Administration

Changes in long-term debt amounts for 2019 were as follows:

	<u>Balance 2018</u>	<u>Additions</u>	<u>Principal Payments</u>	<u>Balance 2019</u>
Long-term debt:				
Bonds payable	\$ 72,000	-	(72,000)	-
Loans payable	37,513,463	-	(2,277,265)	35,236,198
Total long-term debt	\$ 37,585,463	-	(2,349,265)	35,236,198

Changes in long-term debt amounts for 2018 were as follows:

	<u>Balance 2017</u>	<u>Additions</u>	<u>Principal Payments</u>	<u>Balance 2018</u>
Long-term debt:				
Bonds payable	\$ 94,000	-	(22,000)	72,000
Loans payable	31,922,939	7,383,204	(1,792,680)	37,513,463
Total long-term debt	\$ 32,016,939	7,383,204	(1,792,680)	37,585,463

(See note 9 for further information)

Requests for Information

This financial report is designed to provide the District's funding sources, customers, stakeholders and other interested parties with an overview of the District's financial operations and financial condition. Should the reader have questions regarding the information included in this report or wish to request additional financial information, please contact the District's Auditor-Controller at 999 Rush Creek Place, Novato, California 94945, Telephone: (415) 897-4133.

Basic Financial Statements

**North Marin Water District
Statement of Net Position
June 30, 2019 and 2018**

	<u>2019</u>	<u>2018</u>
Current assets:		
Cash and cash equivalents (note 2)	\$ 8,980,983	3,484,730
Restricted – cash and cash equivalents (note 2)	1,498,122	1,450,786
Restricted – investments (note 2)	4,715,320	6,469,611
Accrued interest receivable	88,871	84,055
Accounts receivable – water and sewer sales and services	4,221,181	4,513,370
Accounts receivable – governmental agencies	162,445	69,830
Accounts receivable – other	220,474	10,550
Capital grants and loan proceeds receivable	-	2,270,095
Notes receivable (note 3)	263,785	296,420
Notes receivable – employee housing assistance loans, net (note 4)	39,200	495,000
Materials and supplies inventory	701,952	471,314
Prepaid expenses and deposits	230,675	70,428
Total current assets	<u>21,123,008</u>	<u>19,686,189</u>
Non-current assets:		
Restricted – investments (note 2)	3,744,249	3,701,301
Notes receivable (note 3)	2,027,949	2,665,037
Notes receivable – employee housing assistance loans, net (note 4)	675,000	714,200
Capital assets, not being depreciated (note 6)	25,353,552	25,964,598
Depreciable capital assets, net (note 6)	112,145,099	110,625,210
Total non-current assets	<u>143,945,849</u>	<u>143,670,346</u>
Total assets	<u>165,068,857</u>	<u>163,356,535</u>
Deferred outflows of resources:		
Deferred other post-employment benefits outflows (note 10)	172,404	-
Deferred pension outflows (note 11)	2,616,317	3,538,325
Total deferred outflows of resources	<u>\$ 2,788,721</u>	<u>3,538,325</u>

Continued on next page

See accompanying notes to the basic financial statements

North Marin Water District
Statement of Net Position, continued
June 30, 2019 and 2018

	<u>2019</u>	<u>2018</u>
Current liabilities:		
Accounts payable and accrued expenses	\$ 1,265,960	2,641,524
Accrued wages and related payables	280,870	272,429
Accrued claims payable (note 7)	54,541	97,581
Customer advances and deposits	1,886,908	1,066,100
Accrued interest payable – long-term debt	166,595	136,334
Long-term liabilities – due within one year:		
Compensated absences (note 8)	136,644	121,864
Bonds payable (note 9)	-	24,000
Loans payable (note 9)	1,916,076	1,858,716
Total current liabilities	<u>5,707,594</u>	<u>6,218,548</u>
Non-current liabilities:		
Long-term liabilities – due in more than one year:		
Compensated absences (note 8)	409,931	365,593
Bonds payable (note 9)	-	48,000
Loans payable (note 9)	33,320,122	35,654,747
Total other post-employment benefits liability (note 10)	4,520,164	4,123,565
Net pension liability (note 11)	12,560,160	12,774,724
Total non-current liabilities	<u>50,810,377</u>	<u>52,966,629</u>
Total liabilities	<u>56,517,971</u>	<u>59,185,177</u>
Deferred inflows of resources:		
Deferred other post-employment benefits inflows (note 10)	-	158,611
Deferred pension inflows (note 11)	540,356	727,627
Total deferred inflows of resources	<u>540,356</u>	<u>886,238</u>
Net position: (note 12, 13)		
Net investment in capital assets	102,727,031	102,392,652
Restricted for capital projects and debt service	71,715	2,186,164
Unrestricted	8,000,505	2,244,629
Total net position	<u>\$ 110,799,251</u>	<u>106,823,445</u>

See accompanying notes to the basic financial statements

North Marin Water District
Statement of Revenues, Expenses and Changes in Net Position
For the Years Ended June 30, 2019 and 2018

	<u>2019</u>	<u>2018</u>
Operating revenues:		
Water consumption sales	\$ 16,337,171	16,764,567
Bi-monthly meter service charge	4,810,296	4,564,228
Sewer service charges	252,720	239,890
Water sale to other agency	-	155,846
Other charges and services	372,059	369,563
Total operating revenues	<u>21,772,246</u>	<u>22,094,094</u>
Operating expenses:		
Source of supply	5,492,324	5,569,766
Pumping	458,594	426,356
Water facilities operations	993,209	1,079,917
Water treatment	2,131,166	2,567,146
Transmission and distribution	3,301,629	3,387,559
Sewage collection and treatment	127,513	163,957
Customer service	510,341	742,164
General and administrative	3,007,301	2,169,660
Water conservation	349,415	354,505
Total operating expenses	<u>16,371,492</u>	<u>16,461,030</u>
Operating income before depreciation	5,400,754	5,633,064
Depreciation expense – capital recovery	<u>(3,451,155)</u>	<u>(3,434,069)</u>
Operating income	<u>1,949,599</u>	<u>2,198,995</u>
Non-operating revenues(expenses):		
Property tax revenue	115,706	109,927
Investment earnings	436,684	182,169
Interest earnings from note receivable – BPGL	48,002	48,536
Rental revenue	91,532	105,406
Interest expense – long-term debt	(875,354)	(747,118)
Other non-operating revenues	67,203	57,818
Other non-operating expenses	(24,275)	(9,035)
Debt issuance costs	-	(86,180)
Total non-operating revenues, net	<u>(140,502)</u>	<u>(338,477)</u>
Net income before capital contributions	<u>1,809,097</u>	<u>1,860,518</u>
Capital contributions:		
Developers and others	654,138	2,216,734
Connection fees	1,492,380	1,455,400
Capital grants – federal	-	24,101
Capital grants – state and local	20,191	568,806
Capital contributions	<u>2,166,709</u>	<u>4,265,041</u>
Change in net position	<u>3,975,806</u>	<u>6,125,559</u>
Net position, beginning of year – as restated (note 13)	<u>106,823,445</u>	<u>100,697,886</u>
Net position, end of year	<u>\$ 110,799,251</u>	<u>106,823,445</u>

See accompanying notes to the basic financial statements

North Marin Water District
Statement of Cash Flows
For the Years Ended June 30, 2019 and 2018

	<u>2019</u>	<u>2018</u>
Cash flows from operating activities:		
Cash receipts from customers and others	\$ 21,920,631	21,254,606
Cash paid to employees for salaries and wages	(4,844,737)	(5,962,511)
Cash paid to vendors and suppliers for materials and services	(11,734,384)	(7,008,503)
Net cash provided by operating activities	<u>5,341,510</u>	<u>8,283,592</u>
Cash flows from non-capital financing activities:		
Property tax revenue	<u>115,706</u>	<u>109,927</u>
Net cash provided by non-capital financing activities	<u>115,706</u>	<u>109,927</u>
Cash flows from capital and related financing activities:		
Acquisition and construction of capital assets	(2,253,967)	(10,810,811)
Proceeds from capital contributions and connection fees	2,166,709	4,265,041
Proceeds from principal issued on long-term debt	-	7,383,204
Costs paid on debt issuance	-	(86,180)
Principal paid on long-term debt	(2,349,265)	(1,814,680)
Interest paid on long-term debt	(845,093)	(717,426)
Net cash used in capital and related financing activities	<u>(3,281,616)</u>	<u>(1,780,852)</u>
Cash flows from investing activities:		
Proceeds from sale of investments	6,498,425	2,735,242
Purchases of investments	(4,717,193)	(5,956,352)
Principal received on notes receivable	669,723	253,189
Principal received on employee housing assistance loans	495,000	-
Principal issued on notes receivable	-	(1,695,758)
Principal issued on employee housing assistance loans	-	(275,000)
Investment earnings	422,034	143,440
Net cash provided by(used in) investing activities	<u>3,367,989</u>	<u>(4,795,239)</u>
Net increase in cash and cash equivalents	<u>5,543,589</u>	<u>1,817,428</u>
Cash and cash equivalents, beginning of year	<u>4,935,516</u>	<u>3,118,088</u>
Cash and cash equivalents, end of year	<u>\$ 10,479,105</u>	<u>4,935,516</u>
Reconciliation of cash and cash equivalents to statement of financial position:		
Cash and cash equivalents	\$ 8,980,983	3,484,730
Restricted assets – cash and cash equivalents	<u>1,498,122</u>	<u>1,450,786</u>
Total cash and cash equivalents	<u>\$ 10,479,105</u>	<u>4,935,516</u>

Continued on next page

See accompanying notes to the basic financial statements

North Marin Water District
Statement of Cash Flows, continued
For the Year Ended June 30, 2018

	<u>2019</u>	<u>2018</u>
Reconciliation of operating income to net cash provided by operating activities:		
Operating income	\$ 1,949,599	2,198,995
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation expense – capital recovery	3,451,155	3,434,069
Rental revenue	91,532	105,406
Other non-operating revenue	67,203	57,818
Other non-operating expenses	(24,275)	(9,035)
Changes in assets, deferred outflows of resources, liabilities and deferred inflows of resources:		
(Increase)Decrease in assets:		
Accounts receivable – water and sewer sales and services	292,189	(989,514)
Accounts receivable – governmental agencies	(92,615)	(24,733)
Accounts receivable – other	(209,924)	11,535
Materials and supplies inventory	(237,238)	22,787
Prepaid expenses and other deposits	(160,247)	26,728
Decrease(Increase) in deferred outflows of resources		
Other post-employment benefits related	(172,404)	-
Pension related	922,008	(606,464)
Increase(Decrease) in liabilities:		
Accounts payable and accrued expenses	(1,375,564)	(879,558)
Accrued wages and related payables	8,441	11,093
Accrued claims payable	(43,040)	(94,541)
Customer advances and deposits	820,808	297,216
Compensated absences	59,118	(162,474)
Other post-employment benefit liability	396,599	2,919,446
Net pension liability	(214,564)	1,733,935
(Decrease)Increase in deferred inflows of resources		
Other post-employment benefits related	-	158,611
Pension related	(187,271)	72,272
Total adjustments	<u>3,391,911</u>	<u>6,084,597</u>
Net cash provided by operating activities	<u>\$ 5,341,510</u>	<u>8,283,592</u>
Non-cash investing, capital and financing transactions:		
Change in fair value of investments	\$ 57,836	31,416
Change in capital contributions – grants	\$ 2,270,095	3,781,780

See accompanying notes to the basic financial statements

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(1) Reporting Entity and Summary of Significant Accounting Policies

A. Organization and Operations of the Reporting Entity

The North Marin Water District (District) is an independent special district formed in April 1948, which operates under the authority of Division 12 of the California Water Code. The District's service area includes the City of Novato, adjacent areas, plus annexed areas in West Marin County. The District is governed by a five-member Board of Directors who serve overlapping four-year terms.

The criteria used in determining the scope of the financial reporting entity is based on the provisions of Governmental Accounting Statements No. 61, *The Financial Reporting Entity*. The District is the primary governmental unit based on the foundation of a separately elected governing board that is elected by the citizens in a general popular election. Component units are legally separate organizations for which the elected officials of the primary government are financially accountable. The District is financially accountable if it appoints a voting majority of the organization's governing body and: 1) It is able to impose its will on that organization, or 2) There is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government.

The District's operations are accounted for by the following service areas, some of which were originally established as Improvement Districts. Although the Improvement Districts are legally separate organizations, they are reported herein as if they were part of the primary government because the primary government controls the Improvement Districts and the Board of Directors serve as their governing board. The following service areas are reported as blended component units.

Novato Water System – The Novato Water System is the primary service division of the District and represents the basic primary component of the District.

West Marin Water System formally *Point Reyes Service Area*. – This service area began in 1970 as a separate voter-approved Improvement District. Point Reyes was consolidated with the Olema Improvement District in 1996 and the Paradise Ranch Estate Improvement District in 2002, forming the West Marin Water System.

Oceana Marin Sewer Service – By agreement with a private developer, this service area was formed to provide sewer service to area residents commencing in June 1973.

Novato Recycled Water System – This enterprise fund was formed by the District in 2007 to account for the operation of the District's recycled water treatment and distribution system.

B. Basis of Accounting and Measurement Focus

The District reports its activities as an enterprise fund, which is used to account for operations that are financed and operated in a manner similar to a private business enterprise, where the intent of the District is that the cost of providing water or wastewater disposal to its service area on a continuing basis be financed or recovered primarily through user charges (water sales and sewer service charges), capital grants and similar funding. Revenues and expenses are recognized on the full accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned and expenses are recognized in the period incurred, regardless of when the related cash flows take place.

Operating revenues and expenses, such as water sales and sewer service charges, along with water purchases and wastewater disposal, result from exchange transactions associated with the principal activity of the District. Exchange transactions are those in which each party receives and gives up essentially equal value. Management, administration and depreciation expenses are also considered operating expenses. Other revenues and expenses not included in the above categories are reported as non-operating revenues and expenses. Non-operating revenues and expenses, such as grant funding, investment income and interest expense, result from non-exchange transactions, in which the District gives (receives) value without directly receiving (giving) value in exchange.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

C. Financial Reporting

The District's basic financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP), as applied to enterprise funds. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The District solely operates as a special-purpose government which means it is only engaged in business-type activities; accordingly, activities are reported in the District's proprietary fund.

The District has adopted the following GASB pronouncements in the current year:

Governmental Accounting Standards Board Statement No. 83

In November 2016, the GASB issued Statement No. 83 – Certain Asset Retirement Obligations. This Statement (1) addresses accounting and financial reporting for certain asset retirement obligations (AROs), (2) establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs, (3) requires that recognition occur when the liability is both incurred and reasonably estimable, (4) requires the measurement of an ARO to be based on the best estimate of the current value of outlays expected to be incurred, (5) requires the current value of a government's AROs to be adjusted for the effects of general inflation or deflation at least annually, and (6) requires disclosure of information about the nature of a government's AROs, the methods and assumptions used for the estimates of the liabilities, and the estimated remaining useful life of the associated tangible capital assets.

The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. Earlier application is encouraged.

Governmental Accounting Standards Board Statement No. 88

In April 2018, the GASB issued Statement No. 88 – Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements. The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt.

This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established.

This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses.

For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt.

The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. Earlier application is encouraged.

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows and Net Position

1. Use of Estimates

The preparation of the basic financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported changes in net position during the reporting period.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows and Net Position

2. Cash and Cash Equivalents

Substantially all of the District's cash is invested in interest bearing accounts. The District considers all highly liquid investments with a maturity of three months or less to be cash equivalents.

3. Investments and Investment Policy

The District has adopted an investment policy directing the District's Auditor-Controller to deposit funds in financial institutions.

Changes in market value that occur during a fiscal year are recognized as investment income reported for that fiscal year. Investment income includes interest earnings, changes in market value, and any gains or losses realized upon the liquidation or sale of investments.

4. Fair Value Measurements

The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on valuation inputs used to measure the fair value of the asset, as follows:

- **Level 1** – Valuation is based on quoted prices in active markets for identical assets.
- **Level 2** – Valuation is based on directly observable and indirectly observable inputs. These inputs are derived principally from or corroborated by observable market data through correlation or market-corroborated inputs. The concept of market-corroborated inputs incorporates observable market data such as interest rates and yield curves that are observable at commonly quoted intervals.
- **Level 3** – Valuation is based on unobservable inputs where assumptions are made based on factors such as prepayment rates, probability of defaults, loss severity and other assumptions that are internally generated and cannot be observed in the market.

5. Accounts Receivable

The District extends credit to customers in the normal course of operations. Management deems all accounts receivable as collectible at year-end. Accordingly, an allowance for doubtful accounts has not been recorded.

6. Property Taxes

The County of Marin Assessor's Office assesses all real and personal property within the County each year. The County of Marin Tax Collector's Office bills and collects the District's share of property taxes and assessments. The County of Marin Treasurer's Office remits current and delinquent property tax collections to the District throughout the year. Property tax in California is levied in accordance with Article 13A of the State Constitution at one percent (1%) of countywide assessed valuations.

7. Restricted Assets

Restricted assets are financial resources generated for a specific purpose such as capital projects or debt service. These assets are for the benefit of a specified purpose and, as such, are legally or contractually restricted by an external third-party agreement.

8. Prepaid Expenses

Certain payments to vendors reflect costs or deposits applicable to future accounting periods and are recorded as prepaid items in the basic financial statements.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows and Net Position, continued

9. Capital Assets

Capital assets acquired and/or constructed are capitalized at historical cost. District policy has set the capitalization threshold for capitalizing equipment purchases at \$5,000. Donated assets are recorded at estimated cost at the date of donation. Upon retirement or other disposition of capital assets, the cost and related accumulated depreciation are removed from the respective balances and any gains or losses are recognized. Depreciation is recorded on a straight-line basis over the estimated useful lives of the assets as follows:

- Dam – 100 years
- Transmission and distribution systems – 50 to 150 years
- Treatment plant – 20 to 50 years
- Sewer mains and pumps – 10 to 40 years
- Buildings and storage facilities – 35 to 50 years
- Equipment and vehicles – 5 to 10 years

10. Deferred Outflows of Resources

The statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, *deferred outflows of resources*, represents a consumption of resources applicable to future periods and therefore will *not* be recognized as an outflow of resources (expenditure) until that time. The District has the following items that qualify for reporting in this category:

Post-Employment Benefits Other Than Pensions (OPEB)

- Deferred outflow for the net changes in assumptions which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with post-employment benefits through the Plan.
- Deferred outflow for the net differences between the actual and expected experience which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with post-employment benefits through the Plan.

Pensions

- Deferred outflow which is equal to the employer contributions made after the measurement date of the net pension liability. This amount will be amortized-in-full against the net pension liability in the next fiscal year.
- Deferred outflow for the net differences between the actual and expected experience which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the Plan.
- Deferred outflow for the net changes in assumptions which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the Plan.
- Deferred outflow for the net difference in projected and actual earnings on investments of the pension plans fiduciary net position. This amount is amortized over a 5 year period.

11. Compensated Absences

The District's employees have a vested interest in accrued vacation time. All vacation hours will eventually be either used or paid-off by the District. Employees earn vacation time on a semi-monthly basis. Employees normally earn and use their current vacation time with a small portion being unused each year. As this occurs, the District incurs a future obligation to pay for these unused hours and accrues a liability for such accumulated and unpaid vacation time.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows and Net Position, continued

11. Compensated Absences, continued

Full-time District employees earn sick leave at a rate of one day per month. District employees may elect to be paid for accumulated and unused sick leave in excess of 90 days, at a rate of one-half of the value of such accumulated amount. The District has accrued a liability for such excess amounts. Employees hired after 10/1/2000 may apply their unused sick leave credit to enhance CalPERS retirement benefits but are not eligible to receive any pay for accrued unused sick leave from the District.

12. Post-Employment Benefits Other Than Pensions (OPEB)

For purposes of measuring the total OPEB liability and deferred outflows/inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the District's OPEB plan (Plan) and additions to/deductions from the Plans' fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, the Plan recognizes benefit payments when due and payable in accordance with the benefit terms.

GASB 75 requires that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

- Valuation Date: July 1, 2017
- Measurement Date: June 30, 2019
- Measurement Period: July 1, 2018 to June 30, 2019

13. Pensions

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the District's California Public Employees' Retirement System (CalPERS) plans (Plans) and additions to/deductions from the Plans' fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

GASB 68 requires that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

- Valuation Date: June 30, 2017
- Measurement Date: June 30, 2018
- Measurement Period: July 1, 2017 to June 30, 2018

14. Deferred Inflows of Resources

The statement of net position will sometimes report a separate section for deferred inflows of resources. This financial statement element, *deferred inflows of resources*, represents an acquisition of resources applicable to future periods and therefore will *not* be recognized as an inflow of resources (revenue) until that time. The District has the following items that qualify for reporting in this category:

Pensions

- Deferred inflow for the net difference in actual and proportionate share of employer contribution and net changes in proportion which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the Plan.
- Deferred outflow for the net change due to differences in the changes in proportions of the net pension liability which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the Plan.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows and Net Position, continued

15. Water and Sewer Sales

Water sales are billed on a bi-monthly cyclical basis. Estimated unbilled water and sewer sales and service charges through June 30th have been accrued as of year-end.

16. Capital Contributions

Capital contributions represent cash and capital asset additions contributed to the District by property owners, granting agencies or real estate developers desiring services that require capital expenditures or capacity commitment.

17. Capital and Operating Grants

When a grant agreement is approved and eligible expenditures are incurred, the amount is recorded as a capital or operating grant receivable on the statement of net position and as capital grant contribution or operating grant revenue, as appropriate, on the statement of revenues, expenses and changes in net position.

18. Budgetary Policies

The District adopts an annual non-appropriated budget for planning, control, and evaluation purposes. Budgetary control and evaluation are affected by comparison of actual revenue and expense with planned revenue and expense for the period. Encumbrance accounting is not used to account for commitments related to unperformed contracts for construction and services.

19. Net Position

The financial statements utilize a net position presentation. Net position is categorized as follows:

- **Net Investment in Capital Assets** – This component of net position consists of capital assets, net of accumulated depreciation and reduced by any outstanding debt against the acquisition, construction or improvement of those assets.
- **Restricted Net Position** – This component of net position consists of constraints placed on net position use imposed by creditors, grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.
- **Unrestricted Net Position** – This component of net position consists of net position that does not meet the definition of *restricted* or *net investment in capital assets*.

20. Reclassification

The District has reclassified certain prior year information to conform to current year presentations.

(2) Cash and Investments

Cash and investments as of June 30 are classified in the accompanying financial statements as follows:

	<u>2019</u>	<u>2018</u>
Cash and cash equivalents	\$ 8,980,983	3,484,730
Restricted – cash and cash equivalents	1,498,122	1,450,786
Total cash and cash equivalents	<u>\$ 10,479,105</u>	<u>4,935,516</u>
Restricted – investments	\$ 4,715,320	6,469,611
Restricted – investments non-current	3,744,249	3,701,301
Total restricted investments	<u>\$ 8,459,569</u>	<u>10,170,912</u>
Total cash and investments	<u>\$ 18,938,674</u>	<u>15,106,428</u>

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(2) Cash and Investments, continued

Cash and investments as of June 30 consist of the following:

	2019	2018
Cash on hand	\$ 350	350
Deposits with financial institutions	288,046	148,673
Deposits with County of Marin Treasury	1,602,447	957,605
Investments	17,047,831	13,999,800
Total cash and investments	\$ 18,938,674	15,106,428

Investments Authorized by the California Government Code and the District's Investment Policy

The table below identifies the investment types that are authorized by the District in accordance with the California Government Code (or the District's investment policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or the District's investment policy, where more restrictive) that address interest rate risk, credit risk, and concentration of credit risk.

Authorized Investment Type	Maximum Maturity	Maximum Percentage Of Portfolio *	Maximum Investment in One Issuer
State and Local Agency Bonds	5 years	100%	None
U.S. Treasury Obligations	5 years**	100%	None
U.S. Agency Securities	5 years**	100%	None
Banker's Acceptances	180 days	40%	30%
Commercial Paper	270 days	40%	10%
Non-negotiable Certificates of Deposit	1 year	30%	None
Negotiable Certificates of Deposit	5 years	30%	None
Medium-Term Notes	5 years	30%	None
Repurchase agreements	30 days	100%	None
Money Market Mutual Funds	N/A	20%	10%
California Local Agency Investment Fund (LAIF)	N/A	100%	None
California Asset Management Program (CAMP)	N/A	100%	None

* Excluding amounts held by bond trustee that are not subject to California Government Code.

** Except when authorized by the District's legislative body in accordance with Government Code Section 53601

Custodial Credit Risk

Custodial credit risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. With respect to investments, custodial credit risk generally applies only to direct investments in marketable securities. Custodial credit risk does not apply to a local government's indirect investment in securities through the use of mutual funds or government investment pools (such as LAIF).

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(2) Cash and Investments, continued

Custodial Credit Risk, continued

The California Government Code and the District's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit), and, the District's investment policy that requires no more than two-thirds of the District's deposits in a depository shall be collateralized by mortgage-backed securities, with the remainder to be secured by non-mortgage-backed securities. The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure District deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. Of the District's bank balances, up to \$250,000 is federally insured and the remaining balance is collateralized in accordance with the Code; however, the collateralized securities are not held in the District's name.

Investment in State Investment Pool

The District is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by the California Government Code under the oversight of the Treasurer of the State of California. The fair value of the District's investment in this pool is reported in the accompanying financial statements at amounts based upon the District's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

The pool portfolio is invested in a manner that meets the maturity, quality, diversification and liquidity requirements set forth by GASB 79 for external investment pools that elect to measure, for financial reporting purposes, investments at amortized cost. LAIF does not have any legally binding guarantees of share values. LAIF does not impose liquidity fees or redemption gates on participant withdrawals.

Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the District manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio matures or comes close to maturity evenly over time as necessary to provide requirements for cash flow and liquidity needed for operations. Information about the sensitivity of the fair values of the District's investments to market interest rate fluctuations is provided by the following table that shows the distribution of the District's investments by maturity date:

Investments at June 30, 2019, consisted of the following:

Investment Type	Amount	Remaining Maturity (in Months)		
		12 months or less	13 to 24 months	25-60 months
Local Agency Investment Fund	\$ 8,602,964	8,602,964	-	-
Certificates-of-deposit	5,933,000	3,214,000	2,473,000	246,000
U.S. Treasury note	2,511,867	1,501,320	1,010,547	-
Total	\$ 17,047,831	13,318,284	3,483,547	246,000

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(2) Cash and Investments, continued

Interest Rate Risk, continued

Investments at June 30, 2018, consisted of the following:

Investment Type	Amount	Remaining Maturity (in Months)		
		12 months or less	13 to 24 months	25-60 months
Local Agency Investm \$	3,821,716	3,821,716	-	-
Certificates-of-deposit	4,703,000	1,489,000	3,214,000	-
U.S. Treasury note	2,485,371	1,990,898	494,473	-
U.S. Agency securities	2,989,713	2,989,713	-	-
Total	\$ 13,999,800	10,291,327	3,708,473	-

Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented below is the minimum rating required by (where applicable) the California Government Code, the District's investment policy, or debt agreements, and the actual rating as of year-end for each investment type.

Credit ratings at June 30, 2019, consisted of the following:

Investment Type	Amount	Minimum Legal Rating	Exempt From Disclosure	Ratings AA+ to AA-
Local Agency Investm \$	8,602,964	N/A	8,602,964	-
Certificates-of-deposit	5,933,000	N/A	5,933,000	-
U.S. Treasury note	2,511,867	AA+	-	2,511,867
Total	\$ 17,047,831		14,535,964	2,511,867

Credit ratings at June 30, 2018, consisted of the following:

Investment Type	Amount	Minimum Legal Rating	Exempt From Disclosure	Ratings AA+ to AA-
Local Agency Investm \$	3,821,716	N/A	3,821,716	-
Certificates-of-deposit	4,703,000	N/A	4,703,000	-
U.S. Treasury note	2,485,371	AA+	-	2,485,371
U.S. Agency securities	2,989,713	AA+	-	2,989,713
Total	\$ 13,999,800		8,524,716	5,475,084

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(2) Cash and Investments, continued

Fair Value Measurements

Investments measured at fair value on a recurring and non-recurring basis, are as follows:

Investments at June 30, 2019:

Investment Type	Total	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Certificates-of-deposit	\$ 5,933,000	-	5,933,000	-
U.S. Treasury note	2,511,867	2,511,867	-	-
Total investments measured at fair value	8,444,867	2,511,867	5,933,000	-
Investments measured at amortized cost:				
Local Agency Investment Fund (LAIF)	8,602,964			
Total	\$ 17,047,831			

Investments at June 30, 2018:

Investment Type	Total	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Certificates-of-deposit	\$ 4,703,000	-	4,703,000	-
U.S. Treasury note	2,485,371	2,485,371	-	-
U.S. Agency securities	2,989,713	2,989,713	-	-
Total investments measured at fair value	10,178,084	5,475,084	4,703,000	-
Investments measured at amortized cost:				
Local Agency Investment Fund (LAIF)	3,821,716			
Total	\$ 13,999,800			

(3) Notes Receivable

Changes in notes receivable amounts for 2019 were as follows:

	Balance 2018	Additions	Principal Payments	Balance 2019	Current Portion	Long-term Portion
Notes receivable:						
Black Point Golf Links	\$ 1,302,617	-	(221,514)	1,081,103	226,884	854,219
Marin Country Club	1,658,840	-	(448,209)	1,210,631	36,901	1,173,730
Total notes receivable	\$ 2,961,457	-	(669,723)	2,291,734	263,785	2,027,949

Changes in notes receivable amounts for 2018 were as follows:

	Balance 2017	Additions	Principal Payments	Balance 2018	Current Portion	Long-term Portion
Notes receivable:						
Black Point Golf Links	\$ 1,518,888	-	(216,271)	1,302,617	221,514	1,081,103
Marin Country Club	-	1,695,758	(36,918)	1,658,840	74,906	1,583,934
Total notes receivable	\$ 1,518,888	1,695,758	(253,189)	2,961,457	296,420	2,665,037

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(3) Notes Receivable, continued

Black Point Golf Links

The District has entered into a contractual agreement with Black Point Golf Links, which now goes by Stone Tree Golf Club, whereby the golf club agreed to reimburse the District for construction costs incurred for a new recycled water pipeline, in-lieu of connection fees. The reimbursement is collected in bi-monthly installments through February 2024, including interest at a rate of 2.40%.

As of June 30, the amount receivable under the contract is as follows:

<u>Fiscal Year</u>		<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$	226,884	23,688	250,572
2021		232,383	18,189	250,572
2022		238,017	12,555	250,572
2023		243,787	6,785	250,572
2024		140,032	1,249	141,281
Total		1,081,103	62,466	1,143,569
Less: current portion:		(226,884)		
Total Long-term	\$	<u>854,219</u>		

Marin Country Club

On June 10, 2015, the District entered into a contractual agreement with the Marin Country Club, which whereby the Country Club agreed to reimburse the District for construction costs incurred for a new recycled water facility, in-lieu of connection fees. Marin Country Club is the primary customer of the Central Service Area pipeline of which this receivable contributes significantly to related District debt. (See note 9 for further information). The reimbursement is collected in bi-monthly installments through November 2047, including interest at a rate ranging from 1.00% to 2.80%.

As of June 30, the amount receivable under the contract is as follows:

<u>Fiscal Year</u>		<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$	36,901	11,953	48,854
2021		37,271	11,582	48,853
2022		37,646	11,208	48,854
2023		38,024	10,830	48,854
2024		38,406	10,448	48,854
2025-2029		197,891	46,378	244,269
2030-2034		208,028	36,241	244,269
2035-2039		218,685	25,584	244,269
2040-2044		229,887	14,381	244,268
2045-2047		167,892	3,095	170,987
Total		1,210,631	181,700	1,392,331
Less: current portion:		(36,901)		
Total Long-term	\$	<u>1,173,730</u>		

(4) Notes Receivable – Employee Housing Assistance Loans

The District's Employer Assisted Housing Program (Program) allows up to \$300,000 to be loaned to an employee for a period of up to 15 years for the purchase of a home within the District's service area. This will allow the employee to respond rapidly to customer calls or emergencies affecting the operation of the District. Repayment is due upon sale of the employee's residence, termination of employment, or other events as described in the Program documents. Interest earned on the loan is contingent upon and directly proportional to the appreciation in value occurring on the purchased property. The balance of the outstanding loans may be offset by an allowance representing the impairment in value due to the decline in market value of the homes financed since the loan inception date.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(4) Notes Receivable – Employee Housing Assistance Loans, continued

The following is a listing of employee housing assistance loans and their corresponding origination dates as follows:

The balance at June 30 consists of the following:

<u>Origination</u>	<u>2019</u>	<u>2018</u>
August 2004	\$ -	250,000
Sept. 2004	39,200	39,200
Nov. 2007	150,000	150,000
June 2010	-	245,000
March 2015	250,000	250,000
June 2018	275,000	275,000
Total	714,200	1,209,200
Less: current portion:	(39,200)	(495,000)
Total Long-term \$	<u>675,000</u>	<u>714,200</u>

(5) Internal Balances

Due To/From Other Funds and Transfers

As of June 30, 2019 there were no internal balances.

Internal balances consist of the following as of June 30, 2018, were as follows:

<u>Purpose</u>	<u>Receivable Fund</u>	<u>Payable Fund</u>	<u>Amount</u>
Advance	Novato Recycled	Novato Water	\$ <u>543,218</u>

Transfers between funds as of June 30, 2019, were as follows:

<u>Purpose</u>	<u>Transfer From</u>	<u>Transfer To</u>	<u>Amount</u>
Capital Contribution	Novato Recycled	Novato Water	\$ <u>1,239,907</u>

In 2019, the Novato Recycled system transferred \$1,239,907, in net position to the Novato Water system for the purpose of transferring funds previously borrowed for the Recycled Water Central Expansion Project back to Novato after receiving a State revolving fund loan and grant funds. (See the Supplementary Schedules on pages 60 through 61 for further information)

Transfers between funds as of June 30, 2018, were as follows:

<u>Purpose</u>	<u>Transfer From</u>	<u>Transfer To</u>	<u>Amount</u>
Capital Contribution	Novato Water	Novato Recycled	\$ <u>5,481,925</u>

In 2018, the Novato Water system transferred \$5,481,925, in net position to the Novato Recycled system for the local share of the North/South Recycled Water Expansion, SRF loan payments and grant administration costs. (See the Supplementary Schedules on pages 62 through 63 for further information)

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(6) Capital Assets

Construction-In-Progress

The District has been involved in various construction projects throughout the year. The balances of the various construction projects that comprise the construction-in-progress balances at June 30 are as follows:

The balance of construction-in-progress at June 30 consists of the following projects:

	2019	2018
Developer construction – Novato Water	\$ 613,771	535,686
Other construction – Novato Water	6,880,431	7,753,464
Other construction – Novato Recycled	15,743,265	15,623,282
Other construction – West Marin Water	556,010	443,808
Other construction – Oceana Marin Sewer	86,984	135,267
Total construction-in-progress per year	<u>\$ 23,880,461</u>	<u>24,491,507</u>

Changes in capital assets for the year were as follows:

	Balance 2018	Additions/ Transfers	Deletions/ Transfers	Balance 2019
Non-depreciable assets:				
Land and land rights	\$ 1,473,091	-	-	1,473,091
Construction-in-progress	24,491,507	4,405,064	(5,016,110)	23,880,461
Total non-depreciable assets	<u>25,964,598</u>	<u>4,405,064</u>	<u>(5,016,110)</u>	<u>25,353,552</u>
Depreciable assets:				
Distribution system	84,577,710	1,762,068	-	86,339,778
Treatment plant	21,184,413	872,310	-	22,056,723
Storage facilities	20,999,594	2,083,226	-	23,082,820
Transmission system	29,405,627	-	-	29,405,627
Source facilities	5,596,066	79,779	-	5,675,845
Sewer facilities	1,203,030	55,081	-	1,258,111
Structures and improvements	1,902,893	-	-	1,902,893
Other plant and equipment	3,263,577	118,580	(5,971)	3,376,186
Total depreciable assets	<u>168,132,910</u>	<u>4,971,044</u>	<u>(5,971)</u>	<u>173,097,983</u>
Accumulated depreciation:				
Distribution system	(30,703,189)	(1,728,161)	-	(32,431,350)
Treatment plant	(8,977,019)	(676,160)	-	(9,653,179)
Storage facilities	(7,005,381)	(458,928)	-	(7,464,309)
Transmission system	(3,972,992)	(248,088)	-	(4,221,080)
Source facilities	(2,184,117)	(111,676)	-	(2,295,793)
Sewer facilities	(630,923)	(26,580)	-	(657,503)
Structures and improvements	(1,303,856)	(41,425)	-	(1,345,281)
Other plant and equipment	(2,730,223)	(160,137)	5,971	(2,884,389)
Total accumulated depreciation	<u>(57,507,700)</u>	<u>(3,451,155)</u>	<u>5,971</u>	<u>(60,952,884)</u>
Total depreciable assets, net	<u>110,625,210</u>	<u>1,519,889</u>	<u>-</u>	<u>112,145,099</u>
Total capital assets, net	<u>\$ 136,589,808</u>	<u>5,924,953</u>	<u>(5,016,110)</u>	<u>137,498,651</u>

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(6) Capital Assets, continued

Changes in capital assets for the year were as follows:

	<u>Balance 2017</u>	<u>Additions/ Transfers</u>	<u>Deletions/ Transfers</u>	<u>Balance 2018</u>
Non-depreciable assets:				
Land and land rights	\$ 1,473,091	-	-	1,473,091
Construction-in-progress	<u>14,554,335</u>	<u>11,587,138</u>	<u>(1,649,966)</u>	<u>24,491,507</u>
Total non-depreciable assets	<u>16,027,426</u>	<u>11,587,138</u>	<u>(1,649,966)</u>	<u>25,964,598</u>
Depreciable assets:				
Distribution system	83,757,326	820,384	-	84,577,710
Treatment plant	21,184,413	-	-	21,184,413
Storage facilities	20,903,086	96,508	-	20,999,594
Transmission system	28,896,399	509,228	-	29,405,627
Source facilities	5,596,066	-	-	5,596,066
Sewer facilities	1,193,077	9,953	-	1,203,030
Structures and improvements	1,902,893	-	-	1,902,893
Other plant and equipment	<u>3,368,323</u>	<u>73,084</u>	<u>(177,830)</u>	<u>3,263,577</u>
Total depreciable assets	<u>166,801,583</u>	<u>1,509,157</u>	<u>(177,830)</u>	<u>168,132,910</u>
Accumulated depreciation:				
Distribution system	(28,995,554)	(1,707,635)	-	(30,703,189)
Treatment plant	(8,281,847)	(695,172)	-	(8,977,019)
Storage facilities	(6,579,383)	(425,998)	-	(7,005,381)
Transmission system	(3,728,626)	(244,366)	-	(3,972,992)
Source facilities	(2,069,261)	(114,856)	-	(2,184,117)
Sewer facilities	(604,149)	(26,774)	-	(630,923)
Structures and improvements	(1,262,416)	(41,440)	-	(1,303,856)
Other plant and equipment	<u>(2,727,378)</u>	<u>(177,828)</u>	<u>174,983</u>	<u>(2,730,223)</u>
Total accumulated depreciation	<u>(54,248,614)</u>	<u>(3,434,069)</u>	<u>174,983</u>	<u>(57,507,700)</u>
Total depreciable assets, net	<u>112,552,969</u>	<u>(1,924,912)</u>	<u>(2,847)</u>	<u>110,625,210</u>
Total capital assets, net	<u>\$ 128,580,395</u>	<u>9,662,226</u>	<u>(1,652,813)</u>	<u>136,589,808</u>

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(7) Accrued Claims Payable

The District self-insures its workers' compensation obligation and established a risk financing internal service fund where assets are set aside for claim settlements associated with the risk of loss up to certain limits for workers' compensation claims.

Settled claims have not exceeded the accrued coverage amounts in any of the last three fiscal years. Liabilities are recorded when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. The accrued claims payable balance includes an amount for claims that have been incurred but not paid.

The balance at June 30 consists of the following:

	<u>2019</u>	<u>2018</u>
Accrued claims payable, beginning of year	\$ 97,581	192,122
Current year claims recognized	11,911	26,420
Current year claims paid	(11,911)	(14,509)
Prior year claims incurred	-	28,340
Prior year claims paid	<u>(43,040)</u>	<u>(134,792)</u>
Accrued claims payable, end of year	\$ <u>54,541</u>	<u>97,581</u>

(8) Compensated Absences

Compensated absences comprise unpaid vacation and sick leave which is accrued as earned.

Changes to compensated absences for 2019 were as follows:

<u>Balance 2018</u>	<u>Earned</u>	<u>Taken</u>	<u>Balance 2019</u>	<u>Current Portion</u>	<u>Long-term Portion</u>
\$ 487,457	929,401	(870,283)	546,575	136,644	409,931

Changes to compensated absences for 2018 were as follows:

<u>Balance 2017</u>	<u>Earned</u>	<u>Taken</u>	<u>Balance 2018</u>	<u>Current Portion</u>	<u>Long-term Portion</u>
\$ 649,931	936,608	(1,099,082)	487,457	121,864	365,593

(9) Long-term Debt

Changes in long-term debt amounts for 2019 were as follows:

	<u>Balance 2018</u>	<u>Additions</u>	<u>Principal Payments</u>	<u>Balance 2019</u>	<u>Current Portion</u>	<u>Long-term Portion</u>
Long-term debt:						
Bonds payable:						
1980 Revenue bonds – PRE-1	\$ 26,000	-	(26,000)	-	-	-
1981 Revenue bonds – PR-6	46,000	-	(46,000)	-	-	-
Total bonds payable	<u>72,000</u>	<u>-</u>	<u>(72,000)</u>	<u>-</u>	<u>-</u>	<u>-</u>
Loans payable:						
2005 DWR loan – Novato Water	10,050,647	-	(809,070)	9,241,577	411,801	8,829,776
2005 SWRCB loan – Novato Recycled	2,189,287	-	(220,824)	1,968,463	226,124	1,742,339
2011-2012 SWRCB loans – Novato Recycled	7,630,605	-	(433,018)	7,197,587	443,323	6,754,264
2011 B of M loan – Novato Water	5,155,631	-	(310,707)	4,844,924	321,053	4,523,871
2011 B of M loan – West Marin Water	756,790	-	(45,608)	711,182	47,127	664,055
2016 SWRCB Loan – Novato Recycled Centre	7,130,503	-	(218,038)	6,912,465	206,648	6,705,817
2018 JP Morgan Chase Loan – Novato Water	4,600,000	-	(240,000)	4,360,000	260,000	4,100,000
Total loans payable	<u>37,513,463</u>	<u>-</u>	<u>(2,277,265)</u>	<u>35,236,198</u>	<u>1,916,076</u>	<u>33,320,122</u>
Total long-term debt	\$ <u>37,585,463</u>	<u>-</u>	<u>(2,349,265)</u>	<u>35,236,198</u>	<u>1,916,076</u>	<u>33,320,122</u>

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(9) Long-term Debt, continued

Changes in long-term debt amounts for 2018 were as follows:

	Balance 2017	Additions	Principal Payments	Balance 2018	Current Portion	Long-term Portion
Long-term debt:						
Bonds payable:						
1980 Revenue bonds – PRE-1	\$ 38,000	-	(12,000)	26,000	13,000	13,000
1981 Revenue bonds – PR-6	56,000	-	(10,000)	46,000	11,000	35,000
Total bonds payable	94,000	-	(22,000)	72,000	24,000	48,000
Loans payable:						
1977 U.S. EDA loan – Novato Water	17,679	-	(17,679)	-	-	-
1977 U.S. EDA loan – West Marin Water	1,963	-	(1,963)	-	-	-
2005 DWR loan – Novato Water	10,840,721	-	(790,074)	10,050,647	402,132	9,648,515
2005 SWRCB loan – Novato Recycled	2,404,935	-	(215,648)	2,189,287	220,824	1,968,463
2011-2012 SWRCB loans – Novato Recycled	8,053,559	-	(422,954)	7,630,605	433,018	7,197,587
2011 B of M loan – Novato Water	5,455,915	-	(300,284)	5,155,631	310,707	4,844,924
2011 B of M loan – West Marin Water	800,868	-	(44,078)	756,790	45,608	711,182
2016 SWRCB Loan – Novato Recycled Centre	4,347,299	2,783,204	-	7,130,503	206,427	6,924,076
2018 JP Morgan Chase Loan – Novato Water	-	4,600,000	-	4,600,000	240,000	4,360,000
Total loans payable	31,922,939	7,383,204	(1,792,680)	37,513,463	1,858,716	35,654,747
Total long-term debt	\$ 32,016,939	7,383,204	(1,814,680)	37,585,463	1,882,716	35,702,747

Bonds Payable

1980 Revenue Bonds – Issue PRE-1

On August 22, 1980, the District issued revenue bonds totaling \$240,000 for the system rehabilitation of the Paradise Ranch Estates (PRE) water distribution system.

The bonds are scheduled to mature in 2020. Principal is payable annually on April 1st and interest is payable semi-annually on October 1st and April 1st at a rate of 5.000%. At June 30, 2019, the District had paid the bonds in-full.

1981 Revenue Bonds – Issue PR-6

On August 28, 1981, the District issued revenue bonds totaling \$217,800 to finance the further work needed to rehabilitate the Point Reyes and Inverness Park water systems including the addition of a 300,000 gallon tank in Point Reyes Station and a 100,000 gallon tank in Inverness Park.

The bonds are scheduled to mature in 2022. Principal is payable annually on July 1st and interest is payable semi-annually on July 1st and January 1st at a rate of 5.000%. At June 30, 2019, the District had paid the bonds in-full.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(9) Long-Term Debt, continued

Loans Payable

2005 DWR Loan – Novato Water segment

In 2005, the District entered into an agreement with the California Department of Water Resources (DWR) for a loan in an amount not-to-exceed \$16,528,850 with an interest rate of 2.39% per annum for the reconstruction of the Stafford Water Treatment Plant. Principal and interest payments on the loan are due each year on January 1st and July 1st.

The loan is scheduled to mature in fiscal year 2030. The loan will be repaid semi-annually over a 20-year period based on the repayment schedule below:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 411,801	225,738	637,539
2021	838,422	206,052	1,044,474
2022	858,580	185,895	1,044,475
2023	879,223	165,251	1,044,474
2024	900,362	144,112	1,044,474
2025-2029	4,837,119	385,253	5,222,372
2030	516,070	6,168	522,238
Total	9,241,577	1,318,469	10,560,046
Less current portion	(411,801)		
Total non-current	\$ 8,829,776		

2005 SWRCB Loan – Novato Recycled Water segment

In 2005, the District entered into an agreement with the California State Water Resources Control Board (SWRCB) for a loan in an amount of \$4,302,560 with an interest rate of 2.4% per annum for the construction of the Deer Island Recycled Water Facility.

As noted in note 3, the District entered into a contractual agreement with Black Point Golf Links whereby the golf course agreed to reimburse the District for construction costs incurred for the new recycled water facility, in-lieu of connection fees. Black Point Golf Links, as the major customer of the recycled water facility, contributes significantly to the repayment of this loan through the repayment of the note receivable to the District.

The loan is scheduled to mature in 2027. Principal and interest are payable annually on June 19th at a rate of 2.4%. Future annual debt service requirements on the loan are as follows:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 226,124	47,243	273,367
2021	231,551	41,816	273,367
2022	237,108	36,259	273,367
2023	242,798	30,569	273,367
2024	248,626	24,741	273,367
2025-2027	782,256	37,845	820,101
Total	1,968,463	218,473	2,186,936
Less current portion	(226,124)		
Total non-current	\$ 1,742,339		

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(9) Long-Term Debt, continued

Loans Payable, continued

2011-2012 SWRCB Loans – Novato Recycled Water segment – North and South Service Areas

In fiscal year 2011, the District entered into an agreement with the California State Water Resources Control Board (SWRCB) for a loan in an amount not-to-exceed \$4,364,335 with an interest rate of 2.60% per annum for the construction of the Recycled Water Expansion project – North Service Area. As of June 30, 2013, eligible costs for reimbursement were \$4,364,335 plus \$11,270 in capitalized interest charges for a total loan of \$4,375,605. Principal and interest payments of \$281,892 are due and payable annually on the loan until fiscal year 2033.

In fiscal year 2012, the District entered into an agreement with the California State Water Resources Control Board (SWRCB) for a loan in an amount not-to-exceed \$5,480,740 with an interest rate of 2.20% per annum for the construction of the Recycled Water Expansion project – South Service Area. Principal and interest payments of \$332,407 are due and payable annually on the loan until fiscal year 2034. Future annual debt service payments on the loan are as follows:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 443,323	170,976	614,299
2021	453,876	160,423	614,299
2022	464,681	149,618	614,299
2023	475,745	138,554	614,299
2024	487,075	127,224	614,299
2025-2029	2,615,061	456,434	3,071,495
2030-2034	2,257,826	133,837	2,391,663
Total	7,197,587	1,337,066	8,534,653
Less current portion	(443,323)		
Total non-current	\$ 6,754,264		

2011 Bank of Marin Loan – Novato Water and West Marin Water segments

In October 2013, the District entered into a loan agreement with the Bank of Marin for a 20-year \$8.0 million construction loan with an interest rate of 3.42% per annum for the North Marin Aqueduct Energy Efficiency Project and West Marin water improvements. The loan is scheduled to mature in September of fiscal year 2032. A principal and interest payment of \$46,067 is payable monthly on the 27th day of each month. Future annual debt service requirements on the loan are as follows:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 368,180	184,620	552,800
2021	381,461	171,339	552,800
2022	394,701	158,099	552,800
2023	408,400	144,400	552,800
2024	422,223	130,577	552,800
2025-2029	2,343,075	420,925	2,764,000
2030-2032	1,238,066	51,802	1,289,868
Total	5,556,106	1,261,762	6,817,868
Less current portion	(368,180)		
Total non-current	\$ 5,187,926		

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(9) Long-Term Debt, continued

Loans Payable, continued

2016 SWRCB Loan – Novato Recycled Water segment – Central Service Area

In fiscal year 2016, the District entered into an agreement with the California State Water Resources Control Board (SWRCB) for financing the construction of the Recycled Water Expansion project – Central Service Area for an amount not-to-exceed \$10,450,708. Of this amount, \$7,130,503 is a 30-year loan at 1% interest and \$3,320,205 is grant funded.

As noted in note 3, the District entered into a contractual agreement with the Marin Country Club whereby the Country Club agreed to reimburse the District for construction costs incurred for a new recycled water pipeline, in-lieu of connection fees. Marin Country Club is the primary customer of the Central Service Area pipeline of which this receivable contributes significantly to the District's repayment of this loan.

Principal and interest payments on the loan are due each year on December 31st maturing in fiscal year 2048. Future annual debt service requirements on the loan are as follows:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 206,648	69,125	275,773
2021	208,715	67,058	275,773
2022	210,802	64,971	275,773
2023	212,910	62,863	275,773
2024	215,039	60,734	275,773
2025-2029	1,107,884	270,980	1,378,864
2030-2034	1,164,397	214,467	1,378,864
2035-2039	1,223,793	155,071	1,378,864
2040-2044	1,286,220	92,646	1,378,866
2045-2048	1,076,057	27,036	1,103,093
Total	6,912,465	1,084,951	7,997,416
Less current portion	(206,648)		
Total non-current	\$ 6,705,817		

2018 JP Morgan Chase Loan

In fiscal year 2018, the District entered into an agreement with JP Morgan Chase Bank for a loan in an amount of \$4,600,000 with an interest rate of 2.69% per annum for financing the acquisition and construction of the automated meter information system throughout the District's Novato service area. Principal and interest payments on the loan are due semi-annually on September 1st and March 1st maturing in fiscal year 2033. Future annual debt service requirements on the loan are as follows:

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 260,000	117,284	377,284
2021	270,000	110,290	380,290
2022	275,000	103,027	378,027
2023	280,000	95,630	375,630
2024	290,000	88,098	378,098
2025-2029	1,570,000	319,034	1,889,034
2030-2033	1,415,000	96,302	1,511,302
Total	4,360,000	929,665	5,289,665
Less current portion	(260,000)		
Total non-current	\$ 4,100,000		

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(10) Other Post-employment Benefits (OPEB) Plan

General Information about the OPEB Plan

Plan Description

The District offers other post-employment medical benefits to retired employees who satisfy the eligibility rules. Spouses and surviving spouses are also eligible to receive benefits.

Benefits Provided

For retirees between the ages of 55 to 65 with a minimum of 12 years of service, who retired prior to January 1, 2013, the District's contribution toward the chosen medical plan will be 90% of the Kaiser Basic Medical Plan premium amount. For retirees between the ages of 55 to 65 with a minimum of 12 years of service, who retire on or after January 1, 2013, the District's contribution toward the chosen plan will be 85% of the Kaiser Basic Medical Plan premium amount. The District will make a monthly contribution toward the cost of health insurance coverage for all other retirees based on the contract effective at the time of their retirement. Employees hired after October 1, 2018 require a minimum of 20 years of service to be eligible.

Employees Covered by Benefit Terms

At June 30, the following employees were covered by the benefit terms:

	2019	2018
Inactive employees or beneficiaries currently receiving benefit payments	34	34
Inactive employees entitled to but not receiving benefit payments	4	4
Active employees	53	53
Total Plan membership	<u>91</u>	<u>91</u>

Contributions

The Plan and its contribution requirements for eligible retired employees of the District are established and may be amended by the Board of Directors. The District pays a portion of the cost of health insurance for retirees under any group plan offered by CalPERS, subject to certain restrictions as determined by the District. The annual contribution is based on the actuarially determined contribution. For the fiscal year ended June 30, 2018, the District's contributions were \$375,787 which included \$304,254 of pay-as-you-go contributions and \$71,533 in an implicit subsidy. At June 30, 2018, the contributions were reclassified from expense to reduce the total OPEB liability.

Total OPEB Liability

The District's total OPEB liability was measured as of June 30, 2018 and the total OPEB liability used to calculate the total OPEB liability was determined by an actuarial valuation as of July 1, 2017. Standard actuarial update procedures were used to project/discount from valuation to measurement dates.

Actuarial Assumptions

The total OPEB liability was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.00 percent
Salary increases	3.00 percent, average, including inflation
Discount rate	3.62 percent
Healthcare cost trend rates	6.00 percent for 2017, 5.00 percent for 2018, 5.00 percent for 2019, and 5.00 percent for 2020 and later years
Retirees' share of benefit-related costs	10 percent of projected health insurance premiums for retirees between ages 55 to 65 with a minimum 12 years of service who retired prior to January 1, 2013. 15 percent of projected health insurance premiums for retirees between ages 55 to 65 with a minimum 12 years of service who retired after January 1, 2013. Employees hired after October 1, 2018 need a minimum of 20 years of service to be eligible.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(10) Other Post-employment Benefits (OPEB) Plan, continued

Total OPEB Liability, continued

Actuarial Assumptions, continued

Notes:

The discount rate was based on the Municipal Bond 20-Year High Grade Rate Index.

Pre-retirement mortality rates were based on the RP-2014 Employee Mortality Table for Males or Females, as appropriate, without projection. Post-retirement mortality rates were based on the RP-2014 Health Annuitant Mortality Table for Males or Females, as appropriate, without projection.

Actuarial assumptions used in the July 1, 2017 valuation were based on a review of plan experience during the period July 1, 2015 to June 30, 2017.

Discount Rate

The discount rate used to measure the total OPEB liability was 4.00 percent. The projection of cash flows used to determine the discount rate assumed that District contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB Plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees and beneficiaries. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Changes in the Total OPEB Liability

	Total OPEB Liability 2018-2019	Total OPEB Liability 2017-2018
Balance at Beginning of Year	\$ 4,123,565	4,418,205
Changes for the year:		
Service cost	137,480	145,989
Interest	150,690	132,454
Changes in benefit terms	-	-
Difference between expected and actual experience	163,205	-
Changes in assumptions or other inputs	195,564	(197,296)
Benefit payments	(250,340)	(375,787)
Net changes	396,599	(294,640)
Balance at End of Year	\$ 4,520,164	4,123,565

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following presents the total OPEB liability of the District, as well as what the District's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.62 percent) or 1-percentage-point higher (4.62 percent) than the current discount rate:

Sensitivity in the discount rate as of 2019 was as follows:

	Discount Rate - 1% (2.62%)	Current Discount Rate (3.62%)	Discount Rate + 1% (4.62%)
District's Total OPEB liability \$	4,966,840	4,520,164	4,135,523

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(10) Other Post-employment Benefits (OPEB) Plan, continued

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate, continued

Sensitivity in the discount rate as of 2018 was as follows:

	Discount Rate - 1% (2.62%)	Current Discount Rate (3.62%)	Discount Rate + 1% (4.62%)
District's Total OPEB liability \$	4,542,175	4,123,565	3,762,403

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the total OPEB liability of the District, as well as what the District's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (5.00 percent decreasing to 4.00 percent) or 1-percentage-point higher (7.00 percent decreasing to 6.00 percent) than the current healthcare cost trend rates:

Sensitivity in the healthcare trend rate as of 2019 was as follows:

	1% Decrease (5.00% decreasing to 4.00%)	Healthcare Cost Trend Rates (6.00% decreasing to 5.00%)	1% Increase (7.00% decreasing to 6.00%)
District's Total OPEB liability \$	4,298,561	4,520,164	4,782,371

Sensitivity in the healthcare trend rate as of 2018 was as follows:

	1% Decrease (5.00% decreasing to 4.00%)	Healthcare Cost Trend Rates (6.00% decreasing to 5.00%)	1% Increase (7.00% decreasing to 6.00%)
District's Total OPEB liability \$	3,934,508	4,123,565	4,345,977

For the year ended June 30, 2019 and 2018, the District recognized OPEB expense of \$315,924 and \$239,758, respectively.

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At June 30, 2019, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

Description	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	\$ 39,422	-
Differences between actual and expected experience	132,982	-
Total	\$ 172,404	-

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(10) Other Post-employment Benefits (OPEB) Plan, continued

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At June 30, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

Description		Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	\$	-	(158,611)
Total	\$	-	(158,611)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Actuarially Determined Deferred Outflows and (Inflows) - OPEB Plan

Fiscal Year Ending June 30:		Net, Changes in Assumptions		Net, Differences between Expected and Actual Experience		Net, Deferred Outflows/(Inflows) of Resources
2020	\$	(2,469)	\$	30,223		27,754
2021		(2,469)		30,223		27,754
2022		(2,469)		30,223		27,754
2023		32,345		30,223		62,568
2024		14,484		12,090		26,574
Thereafter		-		-		-
Total	\$	39,422	\$	132,982		172,404

Schedule of Changes in the District's Total OPEB Liability and Related Ratios

See page 57 for the Required Supplementary Schedule.

(11) Defined Benefit Pension Plan

Plan Description

All qualified permanent and probationary employees are eligible to participate in the District's separate Miscellaneous Employee Pension Plans, cost-sharing multiple employer defined benefit pension plans administered by the California Public Employees' Retirement System (CalPERS). Benefit provisions under the Plan is established by State statute and Local Government resolution. CalPERS issues publicly available reports that include a full description of the pension plan regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website or may be obtained from their executive office: 400 P Street, Sacramento, CA, 95814.

Benefits Provided

CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is one of the following: The Basic Death Benefit, or the Optional Settlement 2W Death Benefit. The cost of living adjustments for each plan are applied as specified by the Public Employees' Retirement Law.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(11) Defined Benefit Pension Plan, continued

On September 12, 2012, the California Governor signed the California Public Employees' Pension Reform Act of 2013 (PEPRA) into law. PEPRA took effect January 1, 2013. The new legislation closed the District's CalPERS 2.5% at 55 Risk Pool Retirement Plan to new employee entrants effective December 31, 2012. For employees hired prior to January 1, 2013, who are current members of CalPERS or a reciprocal agency as of December 31, 2012 and have not been separated from service from such agency for more than six months, the retirement benefit is 2.5% @ 55 years of age; highest single year of compensation. All other employees hired on or after January 1, 2013, the retirement benefit is 2.0% @ 62 years of age; 3 year final compensation.

The Plans' provision and benefits in effect at June 30, 2019 are summarized as follows:

	Miscellaneous Plan	
	Tier 1	Tier 2
	Prior to January 1, 2013	On or after January 1, 2013
Hire date		
Benefit formula	2.5% @ 55	2.0% @ 62
Benefit vesting schedule	5 years of service	5 years of service
Benefit payments	monthly for life	monthly for life
Retirement age	50 - 55	52 - 67
Monthly benefits, as a % of eligible compensation	2.0% to 2.5%	1.0% to 2.5%
Required employee contribution rates	7.951%	6.750%
Required employer contribution rates	11.432%	6.985%

Contributions

Section 20814(c) of the California Public Employees' Retirement Law requires that the employer contribution rates, for all public employers, be determined on an annual basis by the actuary and shall be effective on July 1 following notice of the change in rate. Funding contributions for the Plan is determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The District is required to contribute the difference between the actuarially determined rate and the contribution rate of employees.

For the fiscal year ended June 30 the contributions for the Plan were as follows:

	Miscellaneous Plan	
	2019	2018
Contributions – employer	\$ 1,155,358	1,017,325

Net Pension Liability

As of June 30 the District reported net pension liabilities for its proportionate share of the net pension liability of the Plan as follows:

	Proportionate Share of Net Pension Liability	
	2019	2018
Miscellaneous Plan	\$ 12,560,160	12,774,724

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(11) Defined Benefit Pension Plan, continued

The District's net pension liability for the Plan is measured as the proportionate share of the net pension liability for the pool. The net pension liability of the Plan is measured as of June 30, 2018, and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2017, rolled forward to June 30, 2018, using standard update procedures. The Districts' proportion of the net pension liability was based on a projection of the Districts' long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined.

The District's change in the proportionate share of the net pension liability for the Plan as of the measurement date June 30, 2019 was as follows:

	<u>Miscellaneous</u>
Proportion – June 30, 2018	0.12881%
Proportion – June 30, 2019	<u>0.13034%</u>
Change – Increase (Decrease)	<u>0.00153%</u>

The District's change in the proportionate share of the net pension liability for the Plan as of the measurement date June 30, 2018 was as follows:

	<u>Miscellaneous</u>
Proportion – June 30, 2017	0.12759%
Proportion – June 30, 2018	<u>0.12881%</u>
Change – Increase (Decrease)	<u>0.00122%</u>

Deferred Pension Outflows (Inflows) of Resources

As of June 30, 2019 and 2018, the District recognized pension expense of \$1,675,531 and \$2,217,067, respectively.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(11) Defined Benefit Pension Plan, continued

Deferred Pension Outflows (Inflows) of Resources, continued

At June 30, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Description	2019		2018	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to the measurement date at June 30	\$ 1,155,358	-	1,017,325	-
Net, differences between actual and expected experience	317,915	-	-	(210,531)
Net, changes in assumptions	1,080,951	-	1,810,636	-
Net differences between projected and actual earnings on plan investments	62,093	-	443,293	-
Net, differences between actual contribution and proportionate share of contribution	-	(514,716)	-	(517,096)
Net, change due to differences in proportion of net pension liability	-	(25,640)	267,071	-
Total	\$ 2,616,317	(540,356)	3,538,325	(727,627)

As of June 30 2019 and 2018, employer pension contributions of \$1,155,358 and \$1,017,325, were reported as deferred outflows of resources related to contributions subsequent to the measurement date were and will be recognized as a reduction of the net pension liability in the fiscal years ended June 30, 2020 and 2019, respectively.

At June 30, 2019, the District recognized other amounts reported by the Plan actuarial as deferred outflows of resources and deferred inflows of resources related to the pension liability. Pension related amounts will be recognized as pension expense (income) as follows.

Actuarially Determined Deferred Outflows and (Inflows) - Miscellaneous Plan

Fiscal Year Ending June 30:	Net, Differences between Expected and Actual Experience	Net, Changes in Assumptions	Net, Differences between Projected and Actual Earnings Pension Plan Investments	Net, Differences between Actual Contribution and Proportionate Share of Contribution	Net, Changes Due to Differences in Proportions	Net, Deferred Outflows/(Inflows) of Resources
2020	\$ 84,716	630,113	416,445	(259,715)	28,837	\$ 900,396
2021	101,643	496,658	58,163	(176,052)	(29,813)	450,599
2022	131,556	(45,820)	(310,464)	(78,949)	(24,664)	(328,341)
2023	-	-	(102,051)	-	-	(102,051)
2024	-	-	-	-	-	-
Thereafter	-	-	-	-	-	-
Total	\$ 317,915	1,080,951	62,093	(514,716)	(25,640)	\$ 920,603

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(11) Defined Benefit Pension Plan, continued

At June 30, 2018, the District recognized other amounts reported by the Plan actuarial as deferred outflows of resources and deferred inflows of resources related to the pension liability. Pension related amounts will be recognized as pension expense (income) as follows.

Deferred Pension Outflows (Inflows) of Resources, continued

Actuarially Determined Deferred Outflows and (Inflows) - Miscellaneous Plan

Fiscal Year Ending June 30:	Net, Differences between Expected and Actual Experience	Net, Changes in Assumptions	Net, Differences between Projected and Actual Earnings Pension Plan Investments	Net, Differences between Actual Contribution and Proportionate Share of Contribution	Net, Changes Due to Differences in Proportions	Net, Deferred Outflows/(Inflows) of Resources
2019	\$ (68,002)	569,317	(27,007)	(278,697)	206,385	\$ 401,996
2020	(79,728)	687,387	518,497	(161,031)	59,668	1,024,793
2021	(62,801)	553,932	160,215	(77,368)	1,018	574,996
2022	-	-	(208,412)	-	-	(208,412)
2023	-	-	-	-	-	-
Thereafter	-	-	-	-	-	-
Total	\$ (210,531)	1,810,636	443,293	(517,096)	267,071	\$ 1,793,373

Actuarial Assumptions

The total pension liability in the June 30, 2018 and 2017, actuarial valuation report was determined using the following actuarial assumptions:

Valuation dates	June 30, 2017 and 2016
Measurement dates	June 30, 2018 and 2017
Actuarial cost method	Entry Age Normal in accordance with the requirements of GASB Statement No. 68
Actuarial assumptions:	
Discount rate	7.15%
Inflation	2018 – 2.50%
	2017 – 2.75%
Salary increases	Varies by Entry Age and Service
Investment Rate of Return	7.50 % Net of Pension Plan Investment and Administrative Expenses; includes inflation
Mortality Rate Table*	Derived using CalPERS' Membership Data for all Funds
Period upon which actuarial Experience Survey assumptions were based	2018 – 1997–2015
	2017 – 1997–2011
Post Retirement Benefit	2018 – Contract COLA up to 2.50% until Purchasing Power Protection Allowance Floor on Purchasing Power applies, 2.50% thereafter
	2017 – Contract COLA up to 2.75% until Purchasing Power Protection Allowance Floor on Purchasing Power applies, 2.75% thereafter

* The mortality table used above was developed based on CalPERS' specific data. The table includes 20 years of mortality improvements using Society of Actuaries Scale BB. For more details on this table, please refer to the 2014 Experience Study report. Further details of the Experience Study can be found on the CalPERS website.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(11) Defined Benefit Pension Plan, continued

Discount Rate

The discount rate used to measure the total pension liability was 7.15% for the Plan. To determine whether the municipal bond rate should be used in the calculation of a discount rate for the Plan, the amortization and smoothing periods recently adopted by CalPERS were utilized. The crossover test was performed for a miscellaneous agent plan and a safety agent plan selected as being more at risk of failing the crossover test and resulting in a discount rate that would be different from the long-term expected rate of return on pension investments.

Based on the testing of the plans, the tests revealed the assets would not run out. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability for the Plan.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns of all the funds' asset classes, expected compound returns were calculated over the short-term (first 10 years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent.

The table below reflects the long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation.

Asset Class	New Strategic	Real Return Years 1-10*	Real Return Year 11+**
Global Equity	50.0%	4.80%	5.98%
Global Fixed Income	28.0%	1.00%	2.62%
Inflation Sensitive	0.0%	77.00%	1.81%
Private Equity	8.0%	6.30%	7.23%
Real Estate	13.0%	3.75%	4.93%
Infrastructure and Forestland	0.0%	0.00%	0.00%
Liquidity	1.0%	0.00%	-0.92%
Total	100.0%		

* An expected inflation of 2.5% used for this period

** An expected inflation of 3.0% used for this period

Sensitivity of the Proportionate Share of Net Pension Liability to Changes in the Discount Rate

The table below presents the District's proportionate share of the net position liability for the Plan, calculated using the discount rate, as well as what the District's proportional share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(11) Defined Benefit Pension Plan, continued

Sensitivity of the Proportionate Share of Net Pension Liability to Changes in the Discount Rate

At June 30, 2019, the discount rate comparison was the following:

	Discount Rate - 1% (6.15%)	Current Discount Rate (7.15%)	Discount Rate + 1% (8.15%)
District's Net Pension Liability	\$ 19,203,695	12,560,160	7,076,031

At June 30, 2018, the discount rate comparison was the following:

	Discount Rate - 1% (6.15%)	Current Discount Rate (7.15%)	Discount Rate + 1% (8.15%)
District's Net Pension Liability	\$ 19,235,760	12,774,724	7,423,578

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in separately issued CalPERS financial reports. See pages 58-59 for Required Supplementary Schedules.

Payable to the Pension Plan

At June 30, 2019 and 2018, the District reported no payables for the outstanding amount of contribution to the pension plan

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(12) Net Position

Calculation of net position per fund as of June 30, 2019, was as follows:

	Novato Water	Novato Recycled	West Marin Water	Oceana Marin Sewer	Total
Net investment in capital assets:					
Capital assets, not being depreciated	\$ 8,863,074	15,743,265	659,421	87,792	25,353,552
Depreciable capital assets, net	89,391,550	16,730,223	4,952,370	1,070,956	112,145,099
Capital project loan proceeds unused	26,650	-	437,928	-	464,578
Current:					
Loans payable	(992,854)	(876,095)	(47,127)	-	(1,916,076)
Non-current:					
Loans payable	(17,453,648)	(15,202,419)	(664,055)	-	(33,320,122)
Total net investment in capital assets	<u>79,834,772</u>	<u>16,394,974</u>	<u>5,338,537</u>	<u>1,158,748</u>	<u>102,727,031</u>
Restricted net position:					
Connection fee reserve	-	-	71,181	-	71,181
Cash reserve for debt service	-	-	534	-	534
Total restricted net position	<u>-</u>	<u>-</u>	<u>71,715</u>	<u>-</u>	<u>71,715</u>
Unrestricted net position:					
Non-spendable net position:					
Current:					
Materials and supplies inventory	701,952	-	-	-	701,952
Prepaid expenses and deposits	226,384	-	-	4,291	230,675
Notes receivable – employee housing loans	39,200	-	-	-	39,200
Non-current:					
Notes receivable	-	2,027,949	-	-	2,027,949
Notes receivable – employee housing loans	675,000	-	-	-	675,000
Total non-spendable net position	<u>1,642,536</u>	<u>2,027,949</u>	<u>-</u>	<u>4,291</u>	<u>3,674,776</u>
Spendable net position are designated as follows:					
Other post-employment benefits reserve	4,123,565	-	-	-	4,123,565
Operating reserve (deficit)*	(6,431,902)	4,998,664	1,275,713	359,689	202,164
Total spendable net position (deficit)*	<u>(2,308,337)</u>	<u>4,998,664</u>	<u>1,275,713</u>	<u>359,689</u>	<u>4,325,729</u>
Total unrestricted net position	<u>(665,801)</u>	<u>7,026,613</u>	<u>1,275,713</u>	<u>363,980</u>	<u>8,000,505</u>
Total net position	<u>\$ 79,168,971</u>	<u>23,421,587</u>	<u>6,685,965</u>	<u>1,522,728</u>	<u>110,799,251</u>

* Deficit is primarily due to recognition of GASBs 68 and 75.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(12) Net Position, continued

Calculation of net position per fund as of June 30, 2018, was as follows:

	Novato Water	Novato Recycled	West Marin Water	Oceana Marin Sewer	As Restated Total
Net investment in capital assets:					
Capital assets, not being depreciated	\$ 9,658,022	15,623,282	547,219	136,075	25,964,598
Depreciable capital assets, net	87,515,008	17,204,048	5,119,254	786,900	110,625,210
Capital project loan proceeds unused	35,534	2,904,879	447,894	-	3,388,307
Current:					
Bonds payable	-	-	(24,000)	-	(24,000)
Loans payable	(952,839)	(860,269)	(45,608)	-	(1,858,716)
Non-current:					
Bonds payable	-	-	(48,000)	-	(48,000)
Loans payable	(18,853,439)	(16,090,126)	(711,182)	-	(35,654,747)
Total net investment in capital assets	77,402,286	18,781,814	5,285,577	922,975	102,392,652
Restricted net position:					
Connection fee reserve	-	-	102,491	-	102,491
Wohler pipeline reserve	416,369	-	-	-	416,369
Collector No. 6 reserve	1,637,095	-	-	-	1,637,095
Cash reserve for debt service	-	-	30,534	-	30,534
Accrued interest for debt service	-	-	(325)	-	(325)
Total restricted net position	2,053,464	-	132,700	-	2,186,164
Unrestricted net position:					
Non-spendable net position:					
Current:					
Materials and supplies inventory	471,314	-	-	-	471,314
Prepaid expenses and deposits	54,324	-	12,150	3,954	70,428
Notes receivable – employee housing loans	495,000	-	-	-	495,000
Non-current:					
Notes receivable	-	2,665,037	-	-	2,665,037
Notes receivable – employee housing loans	714,200	-	-	-	714,200
Total non-spendable net position	1,734,838	2,665,037	12,150	3,954	4,415,979
Spendable net position are designated as follows:					
Other post-employment benefits reserve	4,008,682	-	-	-	4,008,682
Operating reserve	(10,988,208)	3,318,029	1,001,067	489,080	(6,180,032)
Total spendable net position	(6,979,526)	3,318,029	1,001,067	489,080	(2,171,350)
Total unrestricted net position	(5,244,688)	5,983,066	1,013,217	493,034	2,244,629
Total net position	\$ 74,211,062	24,764,880	6,431,494	1,416,009	106,823,445

* Deficit is primarily due to recognition of GASBs 68 and 75.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(13) Adjustment to Net Position

Other Post-employment Benefits (OPEB) – GASB 75 Implementation

In fiscal year 2018, the District implemented GASB pronouncements 74 and 75 to recognize its total other post-employment benefits (OPEB) liability. As a result of the implementation, the District recognized the OPEB liability and recorded a prior period adjustment, a (decrease) to net position, of \$4,418,205 at July 1, 2017. The District recorded a prior period adjustment, an increase to net position, to reclassify from liabilities to net position, the prior year's OPEB liability, recognized in accordance with GASB 45, of \$1,204,119 at July 1, 2017.

The adjustment to net position is as follows:

Net position at July 1, 2017, as previously stated	\$ 103,911,972
Effect of adjustment to record total other post-employment benefits liability	(4,418,205)
Effect of adjustment to remove other post-employment benefits liability under GASB 45	1,204,119
Total adjustment to net position	<u>(3,214,086)</u>
Net position at July 1, 2017, as restated	<u>\$ 100,697,886</u>

(14) Deferred Compensation Savings Plan

For the benefit of its employees, the District participates in a 457 Deferred Compensation Program (Program). The purpose of this Program is to provide deferred compensation for public employees that elect to participate in the Program. Generally, eligible employees may defer receipt of a portion of their salary until termination, retirement, death or unforeseeable emergency. Until the funds are paid or otherwise made available to the employee, the employee is not obligated to report the deferred salary for income tax purposes.

Federal law requires deferred compensation assets to be held in trust for the exclusive benefit of the participants. Accordingly, the District is in compliance with this legislation. Therefore, these assets are not the legal property of the District, and are not subject to claims of the District's general creditors. Market value of the plan assets held in trust at June 30, 2019 and 2018, were \$6,736,623 and \$6,500,484, respectively.

The District has implemented GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*. Since the District has little administrative involvement and does not perform the investing function for this plan, the assets and related liabilities are not shown on the statement of net position.

(15) Risk Management

The District is exposed to various risks of loss related to torts, theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The District purchases commercial insurance policies with a variety of coverage including a \$10.0 million excess general liability policy with a \$1.0 million self-insured retention limit, a \$62,492,000 property and equipment policy, a \$1.0 million public official's liability policy, a \$1.0 million cyber liability policy, a \$614,000 vehicle physical damage policy, and a \$500,000 employee fidelity bond policy.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(16) Governmental Accounting Standards Board Statements

Newly Issued Accounting Pronouncements, But Not Yet Effective

The Governmental Accounting Standards Board (GASB) has issued several pronouncements prior to June 30, 2019, that has effective dates that may impact future financial presentations.

Governmental Accounting Standards Board Statement No. 84

In January 2017, the GASB issued Statement No. 84 – *Fiduciary Activities*. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported.

This Statement establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities.

This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. Custodial funds generally should report fiduciary activities that are not held in a trust or equivalent arrangement that meets specific criteria.

The provisions of this Statement are effective for reporting periods beginning after December 15, 2018. The impact of the implementation of this Statement to the District's financial statements has not been assessed at this time.

Governmental Accounting Standards Board Statement No. 87

In June 2017, the GASB issued Statement No. 87 – *Leases*. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities.

The provisions of this Statement are effective for reporting periods beginning after December 15, 2019. Earlier application is encouraged. The impact of the implementation of this Statement to the District's financial statements has not been assessed at this time.

Governmental Accounting Standards Board Statement No. 89

In June 2018, the GASB issued Statement No. 89 – *Accounting for Interest Cost Incurred before the End of a Construction Period*. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period.

This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. Such interest cost includes all interest that previously was accounted for in accordance with the requirements of paragraphs 5–22 of Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, which are superseded by this Statement. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(16) Governmental Accounting Standards Board Statements

Newly Issued Accounting Pronouncements, But Not Yet Effective, continued

Governmental Accounting Standards Board Statement No. 89, continued

This Statement also reiterates that in financial statements prepared using the current financial resources measurement focus, interest cost incurred before the end of a construction period should be recognized as an expenditure on a basis consistent with governmental fund accounting principles.

The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. Earlier application is encouraged. The requirements of this Statement should be applied prospectively. The impact of the implementation of this Statement to the District's financial statements has not been assessed at this time.

Governmental Accounting Standards Board Statement No. 90

In August 2018, the GASB issued Statement No. 90 – *Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61*. The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value.

For all other holdings of a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit, and the government or fund that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit.

This Statement also requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. Transactions presented in flows statements of the component unit in that circumstance should include only transactions that occurred subsequent to the acquisition.

The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. Earlier application is encouraged. The requirements should be applied retroactively, except for the provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100 percent equity interest. Those provisions should be applied on a prospective basis. The impact of the implementation of this Statement to the District's financial statements has not been assessed at this time.

Governmental Accounting Standards Board Statement No. 91

In August 2018, the GASB issued Statement No. 91 – *Conduit Debt Obligations*. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(16) Governmental Accounting Standards Board Statements

Newly Issued Accounting Pronouncements, But Not Yet Effective, continued

Governmental Accounting Standards Board Statement No. 91, continued

This Statement also addresses arrangements—often characterized as leases—that are associated with conduit debt obligations. In those arrangements, capital assets are constructed or acquired with the proceeds of a conduit debt obligation and used by third-party obligors in the course of their activities. Payments from third-party obligors are intended to cover and coincide with debt service payments. During those arrangements, issuers retain the titles to the capital assets. Those titles may or may not pass to the obligors at the end of the arrangements.

This Statement requires issuers to disclose general information about their conduit debt obligations, organized by type of commitment, including the aggregate outstanding principal amount of the issuers' conduit debt obligations and a description of each type of commitment. Issuers that recognize liabilities related to supporting the debt service of conduit debt obligations also should disclose information about the amount recognized and how the liabilities changed during the reporting period.

The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. Earlier application is encouraged.

(17) Commitments and Contingencies

Wohler/Collector No. 6 Agreement

The District is party to an agreement with the Sonoma County Water Agency (SCWA) that provides, among other matters, that the District is obligated to pay for a prorated share of certain SCWA's costs to improve or expand the SCWA's water utility plant. The agreement expires on June 30, 2040 and is subject to renewal for 40-year terms. Under the agreement, the District is obligated to pay promptly all billings from the SCWA and may not withhold payment pending resolution of disputes, if any, which might exist between the District and SCWA. At June 30, 2019, the District's reserve balances for these obligations were \$0 (Wohler Pipeline) and \$0 (Collector #6).

Novato Sanitary District

The District has entered into a contract with the Novato Sanitary District (NSD) which requires NSD to supply secondary treated effluent of sufficient quantity to the District for the recycled water treatment operation. The District pays NSD \$20 per year for an annual lease of the site for the Deer Island Recycled Water Treatment Facility which is owned and operated by the District.

Solar Power Services, Facilities and Site Agreement

In February 2012, the District entered into a Solar Power Services Agreement to purchase all the solar power generated from the Solar Power Generating Facility constructed near the District's Stafford Treatment Plant facilities at a Take-or-Pay price of \$0.1700 per kilowatt hour escalating 3.0% annually to \$0.2981 per kilowatt hour over a 20-year contract period. Also, in February 2013, the District executed a 20-year lease with the Solar Services company to construct the Solar Power Generating Facility on District land for a land lease of \$100 for the period (or \$5 per year).

Construction Contracts

The District has a variety of agreements with developers and private parties relating to the installation, improvement or modification of transmission facilities and distribution systems within its service area. The financing of such improvements is provided primarily from advances for construction. The District also improves and modifies its existing infrastructure and finances such improvements from its reserves. The District has committed to approximately \$213,002 in remaining costs of existing District capital projects as of June 30, 2019.

North Marin Water District
Notes to the Basic Financial Statements
For the Years Ended June 30, 2019 and 2018

(17) Commitments and Contingencies, continued

Grant Awards

Grant funds received by the District are subject to audit by the grantor agencies. Such audit could lead to requests for reimbursements to the grantor agencies for expenditures disallowed under terms of the grant. Management of the District believes that such disallowances, if any, would not be significant.

Litigation

In the ordinary course of operations, the District is subject to claims and litigation from outside parties. After consultation with legal counsel, the District believes the ultimate outcome of such matters, if any, will not materially affect its financial condition.

(18) Subsequent Events

Events occurring after June 30, 2019, have been evaluated for possible adjustment to the financial statements or disclosure as of November 19, 2019, which is the date the financial statements were available to be issued.

< Page Intentionally Left Blank >

Required Supplementary Information

Working Draft Subject to Revision

North Marin Water District
Schedule of Changes in the District Total OPEB Liability and Related Ratios
As of June 30, 2019
Last Ten Years*

	<u>2019</u>	<u>2018</u>
Total OPEB Liability		
Service cost	\$ 137,480	145,989
Interest	150,690	132,454
Changes in benefit terms	-	-
Differences between expected and actual experience	163,205	-
Changes in assumptions or other inputs	195,564	(197,296)
Benefit payments	<u>(250,340)</u>	<u>(375,787)</u>
Net change in total OPEB liability	396,599	(294,640)
Total OPEB liability - beginning	<u>4,123,565</u>	<u>4,418,205</u>
Total OPEB liability - ending	\$ <u>4,520,164</u>	<u>4,123,565</u>
Covered payroll	\$ <u>5,434,109</u>	<u>5,635,521</u>
Total OPEB liability as a percentage of covered employee payroll	<u>83.18%</u>	<u>73.17%</u>

Notes:

* Historical information presented above follows the measurement periods for which GASB 74 & 75 were applicable. The fiscal year ended June 30, 2018, (valuation date of June 30, 2017) was the first year of implementation required by GASB 74 & 75, therefore only two years are shown.

North Marin Water District
Schedules of the District's Proportionate Share of the Net Pension Liability
As of June 30, 2019
Last Ten Years*

Description	Fiscal Year 6/30/2019	Fiscal Year 6/30/2018	Fiscal Year 6/30/2017	Fiscal Year 6/30/2016	Fiscal Year 6/30/2015
District's proportion of the net pension liability	0.13034%	0.12881%	0.12759%	0.12558%	0.10769%
District's proportionate share of the net pension liability	\$ 12,560,160	12,774,724	11,040,789	8,619,837	6,701,264
District's covered payroll	\$ 4,953,247	4,600,500	4,542,666	4,305,518	4,106,287
District's proportionate share of the net pension liability as a percentage of its covered payroll	253.57%	277.68%	243.05%	200.20%	163.20%
Plan's fiduciary net position as a percentage of the total pension liability	74.43%	72.80%	73.98%	78.63%	83.47%

Notes:

Changes in Benefit Terms – For the measurement date June 30, 2018, there were no changes in the benefit terms.

Changes of Assumptions – For the measurement date June 30, 2018, there were no changes in the assumptions.

* Historical information presented above follows the measurement periods for which GASB 68 & 71 were applicable. The fiscal year ended June 30, 2015, was the first year of implementation required by GASB 68 & 71; therefore only five years are shown.

North Marin Water District
Schedules of Pension Plan Contributions
As of June 30, 2019
Last Ten Years*

Description	Fiscal Year 6/30/2019	Fiscal Year 6/30/2018	Fiscal Year 6/30/2017	Fiscal Year 6/30/2016	Fiscal Year 6/30/2015
Actuarially determined contribution	\$ 1,175,139	1,037,552	926,656	836,212	930,146
Contributions in relation to the actuarially determined contribution	(1,155,358)	(1,017,325)	(926,448)	(828,792)	(669,066)
Contribution deficiency (excess)	\$ 19,781	20,227	208	7,420	261,080
District's covered payroll	\$ 4,953,247	4,600,500	4,542,666	4,305,518	4,305,518
Contribution's as a percentage of covered-employee payroll	23.33%	22.11%	20.39%	19.25%	15.54%

Notes:

* Historical information presented above follows the measurement periods for which GASB 68 & 71 were applicable. The fiscal year ended June 30, 2015, (valuation date of June 30, 2014) was the first year of implementation required by GASB 68 & 71; therefore only five years are shown.

< Page Intentionally Left Blank >

Supplemental Information

Manuscript Draft Subject to Review

Combining Schedules

CONFIDENTIAL SOURCE DO NOT PRINT

North Marin Water District
Combining Schedule of Net Position
For the Year Ended June 30, 2019

	Novato Water	Novato Recycled	West Marin Water	Oceana Marin Sewer	Total
Current assets:					
Cash and cash equivalents	\$ 3,799,851	3,793,104	1,079,642	308,386	8,980,983
Restricted – cash and cash equivalents	-	890,072	607,995	55	1,498,122
Restricted – investments	4,715,320	-	-	-	4,715,320
Accrued interest receivable	88,871	-	-	-	88,871
Accounts receivable – water and sewer sales	3,788,473	259,581	171,863	1,264	4,221,181
Accounts receivable – governmental agencies	162,445	-	-	-	162,445
Accounts receivable – other	155,155	-	-	65,319	220,474
Notes receivable	-	263,785	-	-	263,785
Notes receivable – employee housing loans, net	39,200	-	-	-	39,200
Materials and supplies inventory	701,952	-	-	-	701,952
Prepaid expenses and deposits	226,384	-	-	4,291	230,675
Total current assets	13,677,651	5,206,542	1,859,500	379,315	21,123,008
Non-current assets:					
Restricted – investments	3,744,249	-	-	-	3,744,249
Notes receivable	-	2,027,949	-	-	2,027,949
Notes receivable – employee housing loans, net	675,000	-	-	-	675,000
Capital assets, not being depreciated	8,863,074	15,743,265	659,421	87,792	25,353,552
Depreciable capital assets, net	89,391,550	16,730,223	4,952,370	1,070,956	112,145,099
Total non-current assets	102,673,873	34,501,437	5,611,791	1,158,748	143,945,849
Total assets	116,351,524	39,707,979	7,471,291	1,538,063	165,068,857
Deferred outflows of resources:					
Deferred other post-employment benefits outflows	172,404	-	-	-	172,404
Deferred pension outflows	2,616,317	-	-	-	2,616,317
Total deferred outflows of resources	2,788,721	-	-	-	2,788,721
Current liabilities:					
Accounts payable and accrued expenses	\$ 1,226,300	39,660	-	-	1,265,960
Accrued wages and related payables	215,040	24,577	29,843	11,410	280,870
Accrued claims payable	50,451	1,527	1,854	709	54,541
Customer advances and deposits	1,826,631	14,614	42,447	3,216	1,886,908
Accrued interest payable – long-term debt	39,095	127,500	-	-	166,595
Long-term liabilities – due within one year:					
Compensated absences	136,644	-	-	-	136,644
Loans payable	992,854	876,095	47,127	-	1,916,076
Total current liabilities	4,487,015	1,083,973	121,271	15,335	5,707,594
Non-current liabilities:					
Long-term liabilities – due in more than one year:					
Compensated absences	409,931	-	-	-	409,931
Loans payable	17,453,648	15,202,419	664,055	-	33,320,122
Other post-employment benefits liability	4,520,164	-	-	-	4,520,164
Net pension liability	12,560,160	-	-	-	12,560,160
Total non-current liabilities	34,943,903	15,202,419	664,055	-	50,810,377
Total liabilities	39,430,918	16,286,392	785,326	15,335	56,517,971
Deferred inflows of resources:					
Deferred pension inflows	540,356	-	-	-	540,356
Total deferred inflows of resources	540,356	-	-	-	540,356
Net position:					
Net investment in capital assets	79,834,772	21,078,150	5,338,537	1,158,748	107,410,207
Restricted for capital projects and debt service	-	-	101,715	-	101,715
Unrestricted	(665,801)	2,343,437	1,245,713	363,980	3,287,329
Total net position	\$ 79,168,971	23,421,587	6,685,965	1,522,728	110,799,251

See accompanying notes to the basic financial statements

North Marin Water District
Combining Schedule of Net Position
For the Year Ended June 30, 2018

	Novato Water	Novato Recycled	West Marin Water	Oceana Marin Sewer	Total
Current assets:					
Cash and cash equivalents	\$ -	2,028,452	894,884	561,394	3,484,730
Restricted – cash and cash equivalents	-	869,672	581,104	10	1,450,786
Restricted – investments	6,469,611	-	-	-	6,469,611
Accrued interest receivable	84,055	-	-	-	84,055
Accounts receivable – water and sewer sales	3,935,703	391,744	182,875	3,048	4,513,370
Accounts receivable – governmental agencies	69,830	-	-	-	69,830
Accounts receivable – other	10,550	-	-	-	10,550
Capital grants and loan proceeds receivable	-	2,270,095	-	-	2,270,095
Notes receivable	-	296,420	-	-	296,420
Notes receivable – employee housing loans, net	495,000	-	-	-	495,000
Materials and supplies inventory	471,314	-	-	-	471,314
Prepaid expenses and deposits	54,324	-	12,150	3,954	70,428
Total current assets	11,590,387	5,856,383	1,671,013	568,406	19,686,189
Non-current assets:					
Restricted – investments	3,701,301	-	-	-	3,701,301
Internal balances	(543,218)	543,218	-	-	-
Notes receivable	-	2,665,037	-	-	2,665,037
Notes receivable – employee housing loans, net	714,200	-	-	-	714,200
Capital assets, not being depreciated	9,658,022	15,623,282	547,219	136,075	25,964,598
Depreciable capital assets, net	87,515,008	17,204,048	5,119,254	786,900	110,625,210
Total non-current assets	101,045,313	36,035,585	5,666,473	922,975	143,670,346
Total assets	112,635,700	41,891,968	7,337,486	1,491,381	163,356,535
Deferred outflows of resources:					
Deferred pension outflows	3,538,325	-	-	-	3,538,325
Total deferred outflows of resources	3,538,325	-	-	-	3,538,325
Current liabilities:					
Accounts payable and accrued expenses	2,535,120	45,328	-	61,076	2,641,524
Accrued wages and related payables	212,372	20,301	30,451	9,305	272,429
Accrued claims payable	90,652	2,342	3,513	1,074	97,581
Customer advances and deposits	1,010,123	10,297	41,763	3,917	1,066,100
Accrued interest payable – long-term debt	36,434	98,425	1,475	-	136,334
Long-term liabilities – due within one year:					
Compensated absences	121,864	-	-	-	121,864
Bonds payable	-	-	24,000	-	24,000
Loans payable	952,839	860,269	45,608	-	1,858,716
Total current liabilities	4,959,404	1,036,962	146,810	75,372	6,218,548
Non-current liabilities:					
Long-term liabilities – due in more than one year:					
Compensated absences	365,593	-	-	-	365,593
Bonds payable	-	-	48,000	-	48,000
Loans payable	18,853,439	16,090,126	711,182	-	35,654,747
Total other post-employment benefits liability	4,123,565	-	-	-	4,123,565
Net pension liability	12,774,724	-	-	-	12,774,724
Total non-current liabilities	36,117,321	16,090,126	759,182	-	52,966,629
Total liabilities	41,076,725	17,127,088	905,992	75,372	59,185,177
Deferred inflows of resources:					
Deferred other post-employment benefits inflows	158,611	-	-	-	158,611
Deferred pension inflows	727,627	-	-	-	727,627
Total deferred inflows of resources	886,238	-	-	-	886,238
Net position:					
Net investment in capital assets	77,402,286	18,781,814	5,285,577	922,975	102,392,652
Restricted for capital projects and debt service	2,053,464	-	132,700	-	2,186,164
Unrestricted	(5,244,688)	5,983,066	1,013,217	493,034	2,244,629
Total net position	\$ 74,211,062	24,764,880	6,431,494	1,416,009	106,823,445

See accompanying notes to the basic financial statements

North Marin Water District
Combining Schedule of Revenues, Expenses and Changes in Net Position
For the Year Ended June 30, 2019

	Novato Water	Novato Recycled	West Marin Water	Oceana Marin Sewer	Total
Operating revenues:					
Water consumption sales	\$ 14,510,861	1,120,488	705,822	-	16,337,171
Bi-monthly meter service charge	4,562,329	62,783	185,184	-	4,810,296
Sewer service charges	-	-	-	252,720	252,720
Other charges and services	364,134	148	7,777	-	372,059
Total operating revenues	19,437,324	1,183,419	898,783	252,720	21,772,246
Operating expenses:					
Source of supply	5,167,409	300,457	24,458	-	5,492,324
Pumping	389,149	3,930	65,515	-	458,594
Water facilities operations	711,175	222,749	59,285	-	993,209
Water treatment	1,945,958	15,503	169,705	-	2,131,166
Transmission and distribution	3,142,281	16,869	142,479	-	3,301,629
Sewage collection and treatment	-	-	-	127,513	127,513
Customer service	485,787	1,118	21,459	1,977	510,341
General and administrative	2,864,101	52,910	64,365	25,925	3,007,301
Water conservation projects	341,784	-	7,631	-	349,415
Total operating expenses	15,047,644	613,536	554,897	155,415	16,371,492
Operating income before depreciation	4,389,680	569,883	343,886	97,305	5,400,754
Depreciation	(2,752,213)	(473,826)	(186,922)	(38,194)	(3,451,155)
Operating income(loss)	1,637,467	96,057	156,964	59,111	1,949,599
Non-operating revenues(expenses):					
Property tax revenue	1,949	-	55,074	58,683	115,706
Investment earnings	296,310	76,542	58,210	5,622	436,684
Interest earnings(loss) from note receivable – BPGL	-	48,002	-	-	48,002
Rental revenue	86,132	-	5,150	250	91,532
Interest expense – long-term debt	(525,922)	(320,633)	(28,799)	-	(875,354)
Other non-operating revenues	66,521	-	682	-	67,203
Other non-operating expenses	(3,164)	(3,354)	(810)	(16,947)	(24,275)
Total non-operating revenues, net	(78,174)	(199,443)	89,507	47,608	(140,502)
Net income(loss) before capital contributions	1,559,293	(103,386)	246,471	106,719	1,809,097
Capital contributions:					
Developers and others	654,138	-	-	-	654,138
Connection fees	1,484,380	-	8,000	-	1,492,380
Capital grants – state and local	20,191	-	-	-	20,191
Capital contributions	2,158,709	-	8,000	-	2,166,709
Change in net position	3,718,002	(103,386)	254,471	106,719	3,975,806
Net position transfer (note 5)	1,239,907	(1,239,907)	-	-	-
Net position, beginning of year	74,211,062	24,764,880	6,431,494	1,416,009	106,823,445
Net position, end of year	\$ 79,168,971	23,421,587	6,685,965	1,522,728	110,799,251

See accompanying notes to the basic financial statements

North Marin Water District
Combining Schedule of Revenues, Expenses and Changes in Net Position
For the Year Ended June 30, 2018

	Novato Water	Novato Recycled	West Marin Water	Oceana Marin Sewer	Total
Operating revenues:					
Water consumption sales	\$ 15,149,251	914,863	700,453	-	16,764,567
Bi-monthly meter service charge	4,353,168	33,850	177,210	-	4,564,228
Sewer service charges	-	-	-	239,890	239,890
Water sale to other agency	155,846	-	-	-	155,846
Other charges and services	361,539	26	7,398	600	369,563
Total operating revenues	20,019,804	948,739	885,061	240,490	22,094,094
Operating expenses:					
Source of supply	5,356,748	199,340	13,678	-	5,569,766
Pumping	372,601	2,781	50,974	-	426,356
Water facilities operations	923,736	103,387	52,794	-	1,079,917
Water treatment	2,377,531	19,838	169,777	-	2,567,146
Transmission and distribution	3,242,993	20,856	123,710	-	3,387,559
Sewage collection and treatment	-	-	-	163,957	163,957
Customer service	711,431	919	27,224	2,590	742,164
General and administrative	2,002,414	53,882	86,494	26,870	2,169,660
Water conservation projects	344,890	-	9,615	-	354,505
Total operating expenses	15,332,344	401,003	534,266	193,417	16,461,030
Operating income before depreciation	4,687,460	547,736	350,795	47,073	5,633,064
Depreciation	(2,730,867)	(473,970)	(191,950)	(37,282)	(3,434,069)
Operating income(loss)	1,956,593	73,766	158,845	9,791	2,198,995
Non-operating revenues(expenses):					
Property tax revenue	-	-	53,227	56,700	109,927
Investment earnings	127,724	25,609	21,753	7,083	182,169
Interest earnings from note receivable – BPGL	-	48,536	-	-	48,536
Rental revenue	99,906	-	5,000	500	105,406
Interest expense – long-term debt	(472,593)	(243,795)	(30,730)	-	(747,118)
Debt issuance costs	(86,180)	-	-	-	(86,180)
Other non-operating revenues	51,649	4,548	18	1,603	57,818
Other non-operating expenses	(7,460)	-	(763)	(812)	(9,035)
Total non-operating revenues, net	(286,954)	(165,102)	48,505	65,074	(338,477)
Net income(loss) before capital contributions	1,669,639	(91,336)	207,350	74,865	1,860,518
Capital contributions:					
Developers and others	533,970	1,682,520	-	244	2,216,734
Connection fees	1,387,000	-	68,400	-	1,455,400
Capital grants – federal	-	24,101	-	-	24,101
Capital grants – state and local	47,618	521,188	-	-	568,806
Capital contributions	1,968,588	2,227,809	68,400	244	4,265,041
Change in net position	3,638,227	2,136,473	275,750	75,109	6,125,559
Net position transfer	(5,481,925)	5,481,925	-	-	-
Net position, beginning of year – as restated	76,054,760	17,146,482	6,155,744	1,340,900	100,697,886
Net position, end of year	\$ 74,211,062	24,764,880	6,431,494	1,416,009	106,823,445

See accompanying notes to the basic financial statements

< Page Intentionally Left Blank >

Statistical Information Section

CONFIDENTIAL SUBJECT TO PRIVACY

North Marin Water District Statistical Section

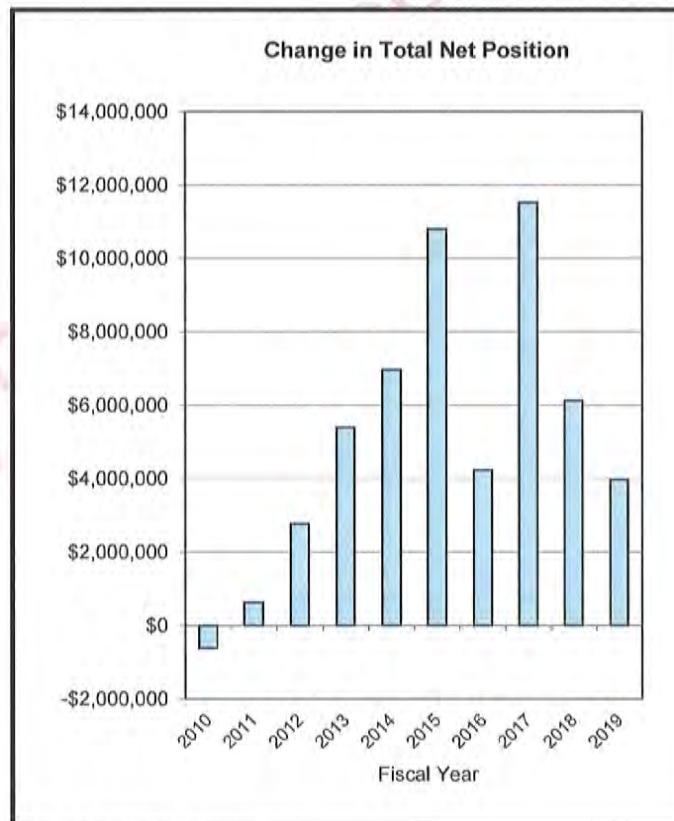
This part of the District's comprehensive annual financial report presents detailed information as context for understanding what the information in the financial statements, note disclosures, and required supplementary information say about the District's overall financial health.

Table of Contents

	<u>Page No.</u>
Financial Trends	65-69
These schedules contain information to help the reader understand how the District's financial performance and well-being have changed over time.	
Revenue Capacity	70-73
These schedules contain information to help the reader assess the District's most significant own-source revenue, water sales.	
Debt Capacity	74-75
These schedules present information to help the reader assess the affordability of the District's current levels of outstanding debt and the District's ability to issue additional debt in the future.	
Demographic Information	76-77
This schedule offers demographic indicators to help the reader understand the environment within which the District's financial activities take place.	
Operating Information	78-79
This schedule contains service and infrastructure data to help the reader understand how the information in the District's financial report relates to the service the District provides.	

North Marin Water District
Changes in Net Position and Net Position by Component
Last Ten Fiscal Years

	Fiscal Year		
	2010	2011	2012
Change in net position:			
Operating revenues (see schedule 2)	\$12,381,493	\$13,797,012	\$15,435,733
Operating expenses (see schedule 3)	(13,083,372)	(11,878,612)	(12,610,862)
Depreciation and amortization	(2,659,883)	(2,660,418)	(2,726,598)
Operating income(loss)	(\$3,361,762)	(\$742,018)	\$98,273
Net non-op revenue(expense) (see schedule 4)	(255,218)	(414,563)	(531,318)
Net income(loss) before capital contributions	(\$3,616,980)	(\$1,156,581)	(\$433,045)
Capital contributions	2,998,366	1,785,475	3,200,979
Change in net position	(\$618,614)	\$628,894	\$2,767,934
Net position by component:			
Net investment in capital assets	\$60,880,162	\$63,542,479	\$61,882,478
Restricted	5,321,639	3,171,305	2,993,055
Unrestricted	6,462,761	6,579,672	11,185,857
Prior period adjustment	-	-	-
Total net position	\$72,664,562	\$73,293,456	\$76,061,390



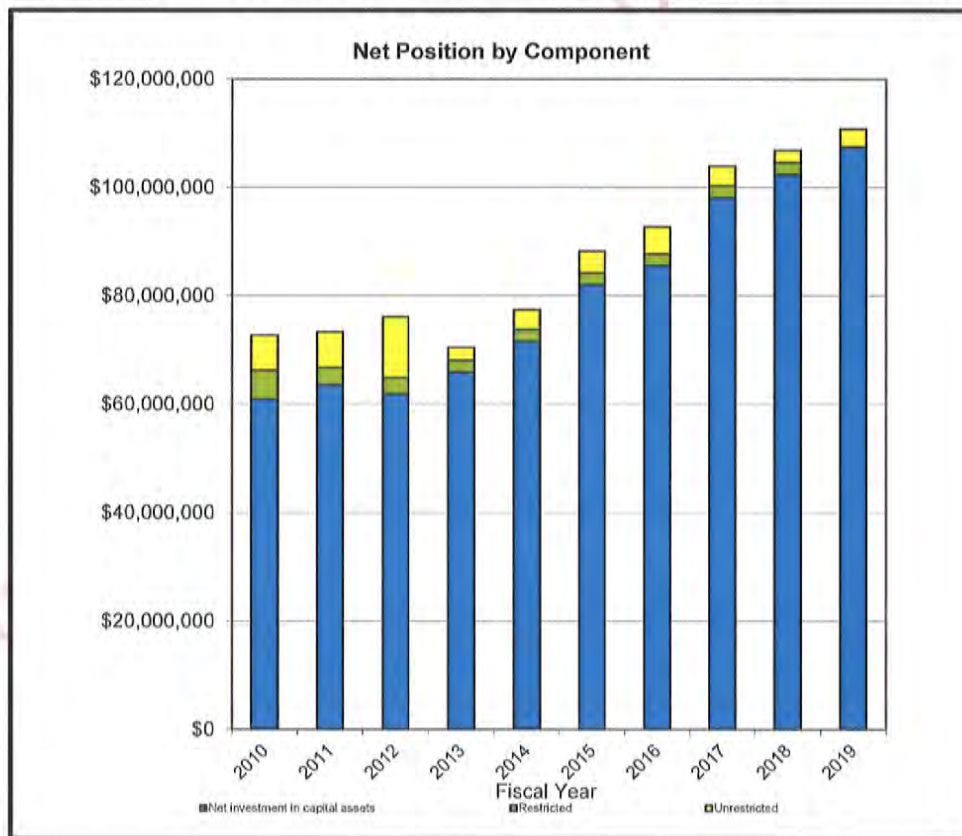
Source: North Marin Water District Audited Financial Statements

⁽¹⁾ Asset lives were adjusted in Fiscal Year 2009 which resulted in a large depreciation adjustment

North Marin Water District
Changes in Net Position and Net Position by Component
Last Ten Fiscal Years, continued

Schedule 1

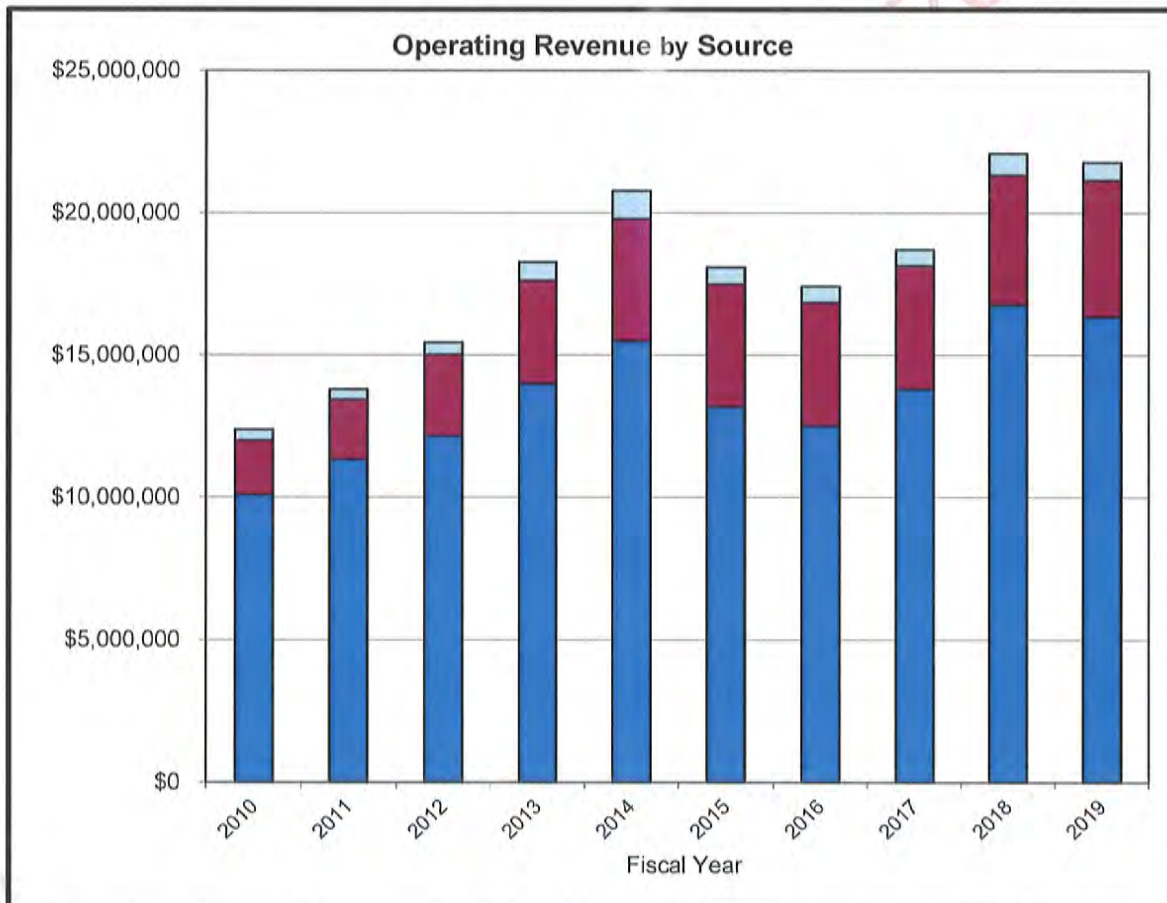
Fiscal Year						
Restated 2013	Restated 2014	2015	2016	2017	2018	2019
\$18,256,638	\$20,772,429	\$18,081,308	\$17,411,543	\$18,703,476	\$22,094,094	\$21,772,246
(13,140,845)	(13,309,833)	(13,328,124)	(13,704,737)	(15,099,687)	(16,461,030)	(16,371,492)
(2,793,360)	(3,128,302)	(3,183,725)	(3,286,353)	(3,416,411)	(3,434,069)	(3,451,155)
\$2,322,433	\$4,334,294	\$1,569,459	\$420,453	\$187,378	\$2,198,995	\$1,949,599
(285,490)	(518,474)	(488,661)	(328,734)	(304,830)	(338,477)	(140,502)
\$2,036,943	\$3,815,820	\$1,080,798	\$91,719	(\$117,452)	\$1,860,518	\$1,809,097
3,357,870	3,144,256	9,714,111	4,139,047	11,643,388	4,265,041	2,166,709
\$5,394,813	\$6,960,076	\$10,794,909	\$4,230,766	\$11,525,936	\$6,125,559	\$3,975,806
\$65,839,724	\$71,538,168	\$82,037,287	\$85,542,035	\$98,131,574	\$102,392,652	\$107,410,207
2,186,452	2,156,020	2,170,429	2,122,980	2,140,681	2,183,812	101,715
2,404,385	3,696,449	3,977,830	5,007,769	3,639,717	2,246,981	3,287,329
-	-	-	-	-	(3,214,096)	-
\$70,430,561	\$77,390,637	\$88,185,546	\$92,672,784	\$103,911,972	\$103,609,349	\$110,799,251



**North Marin Water District
Operating Revenue by Source
Last Ten Fiscal Years**

Schedule 2

Fiscal Year	Water Sales	Bi-Monthly Service Charges	Other Charges and Services	Total Operating Revenue
2010	10,086,100	1,913,170	382,223	12,381,493
2011	11,334,728	2,109,255	353,029	13,797,012
2012	12,156,765	2,860,630	418,338	15,435,733
2013	13,987,034	3,630,425	639,178	18,256,638
2014	15,480,438	4,308,584	983,407	20,772,429
2015	13,180,015	4,312,108	589,188	18,081,311
2016	12,508,927	4,331,899	570,717	17,411,543
2017	13,801,864	4,334,762	566,850	18,703,476
2018	16,764,567	4,564,228	765,299	22,094,094
2019	16,337,171	4,810,296	624,779	21,772,246

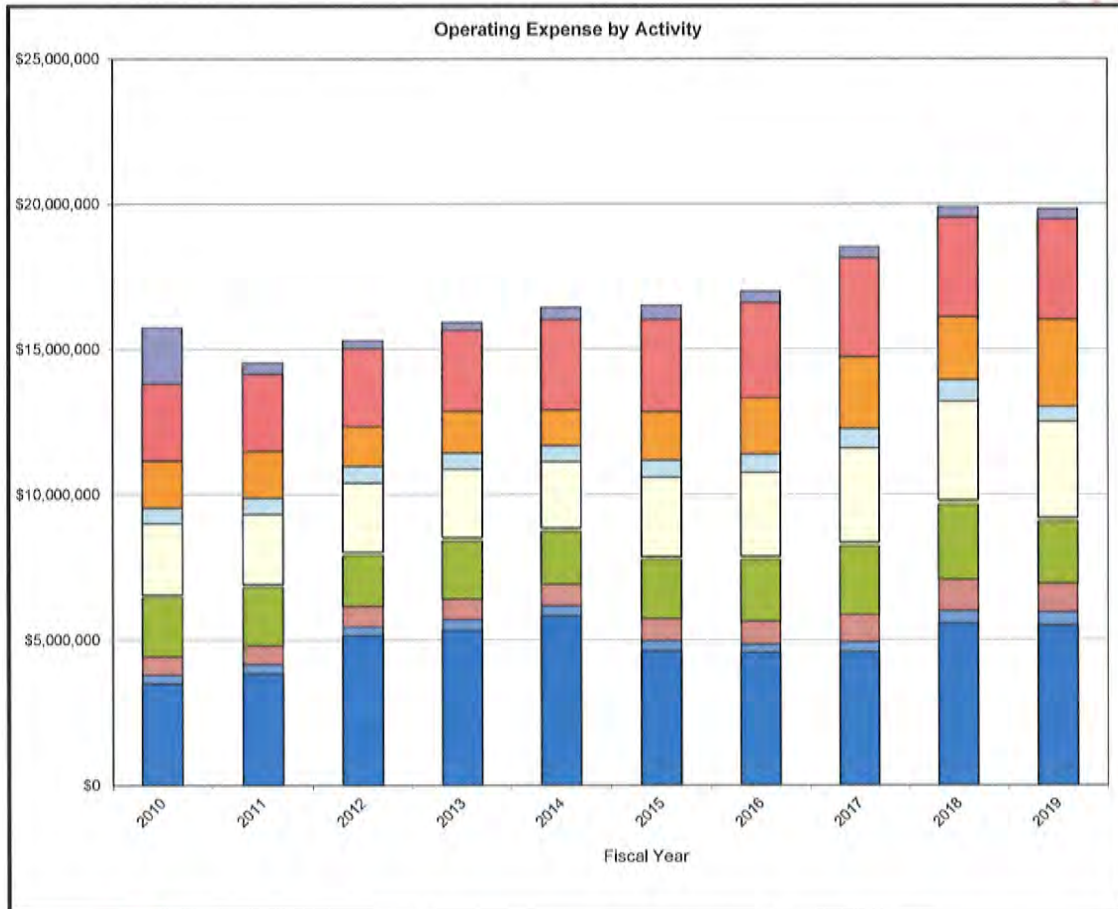


Source: North Marin Water District Audited Financial Statements

North Marin Water District Operating Expenses by Activity Last Ten Fiscal Years

Schedule 3

Fiscal Year	Source of Supply	Pumping	Operations	Water Treatment	Sewage Coll. & Treat.	Transmission & Distrib.	Customer Service	General & Admin (2)	Other Op. Expense	Deprec and Amortization (1)	Total Op Expense
2010	3,497,565	298,583	633,259	2,027,052	95,116	2,450,765	535,401	1,616,317	1,929,314	2,659,883	15,743,255
2011	3,856,027	299,462	648,743	2,012,125	103,054	2,400,638	564,940	1,605,455	388,168	2,660,418	14,539,030
2012	5,150,183	304,075	708,570	1,747,166	112,801	2,373,132	580,534	1,358,682	275,719	2,690,535	15,301,397
2013	5,342,988	351,816	716,780	1,988,904	127,903	2,340,330	552,202	1,449,793	272,107	2,784,670	15,925,493
2014	5,834,854	341,597	742,706	1,815,429	120,548	2,270,764	550,709	1,221,849	411,377	3,128,302	16,438,135
2015	4,624,655	352,007	751,940	2,020,865	108,928	2,727,168	588,579	1,673,156	478,360	3,183,725	16,509,383
2016	4,565,833	281,255	797,806	2,099,887	134,193	2,871,290	628,981	1,934,011	391,481	3,286,353	16,991,090
2017	4,579,359	351,342	937,559	2,346,949	151,205	3,223,237	676,189	2,462,392	371,455	3,416,411	18,516,098
2018	5,569,766	426,356	1,079,917	2,567,146	163,957	3,387,559	742,164	2,169,660	354,505	3,434,069	19,895,099
2019	5,492,324	458,594	993,209	2,131,166	127,513	3,301,629	510,341	3,007,301	349,415	3,451,155	19,822,647



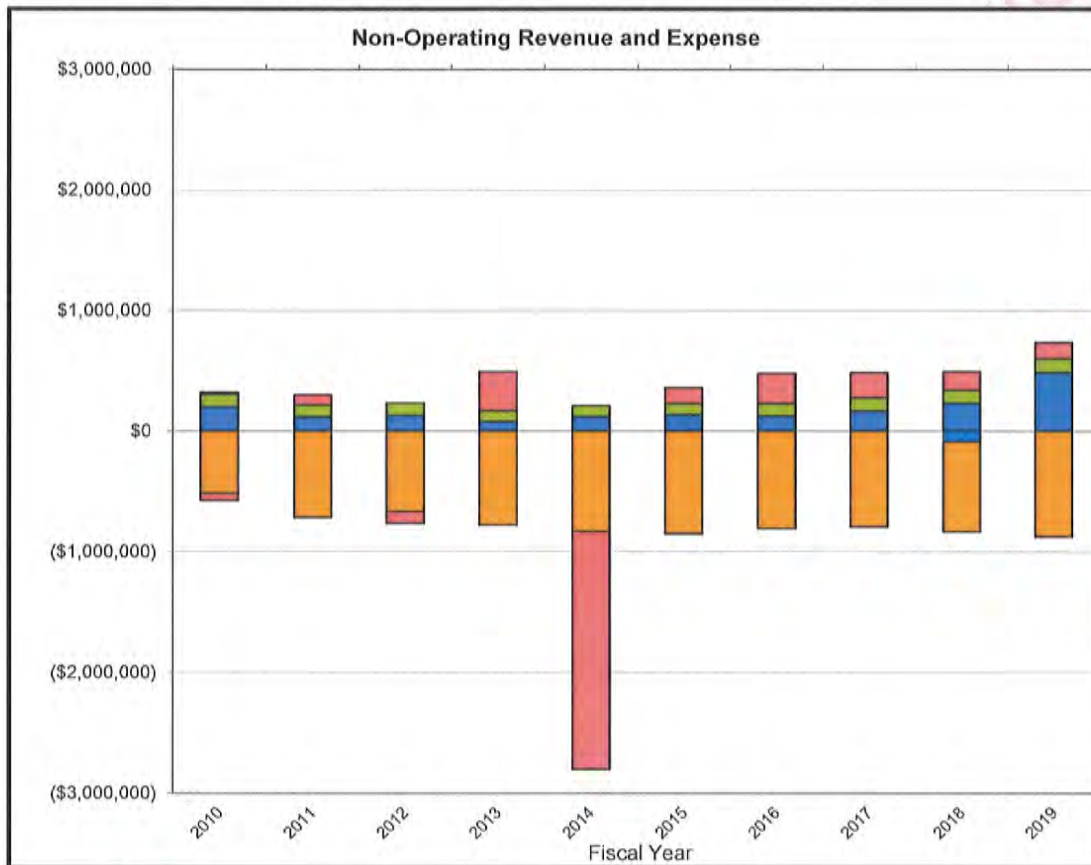
Source: North Marin Water District Audited Financial Statements

- (1) FY09 Excludes \$7,691,033 depreciation due to change in asset lives
(2) Reduced by overhead absorption

**North Marin Water District
Non-operating Revenues and Expenses
Last Ten Fiscal Years**

Schedule 4

Fiscal Year	Investment Income ⁽¹⁾	Property Taxes	Gain/(Loss) on Asset Sales	Debt Issuance Costs	Interest Expense	Other Inc & Exp, net	Net Non-Op Rev/(Exp)
2010	202,459	100,220	17,796	-	(513,763)	(61,930)	(255,218)
2011	118,410	96,768	-	-	(715,491)	85,750	(414,563)
2012	130,974	101,559	-	-	(665,713)	(98,138)	(531,318)
2013	80,713	88,088	-	-	(778,762)	324,471	(285,490)
2014	120,671	90,071	-	-	(830,830)	(1,972,027) ⁽²⁾	(2,592,115)
2015	135,307	94,391	-	-	(847,950)	129,591	(488,661)
2016	125,078	102,259	-	-	(807,035)	250,969	(328,729)
2017	168,766	107,210	-	-	(791,211)	210,405	(304,830)
2018	230,705	109,927	-	(86,180)	(747,118)	154,189	(338,477)
2019	484,686	115,706	-	-	(875,354)	134,460	(140,502)



Notes:

- (1) Includes interest income and realized and unrealized gains and losses on investments.
 (2) Includes CalPERS Side Fund Payoff (\$2,073,701).

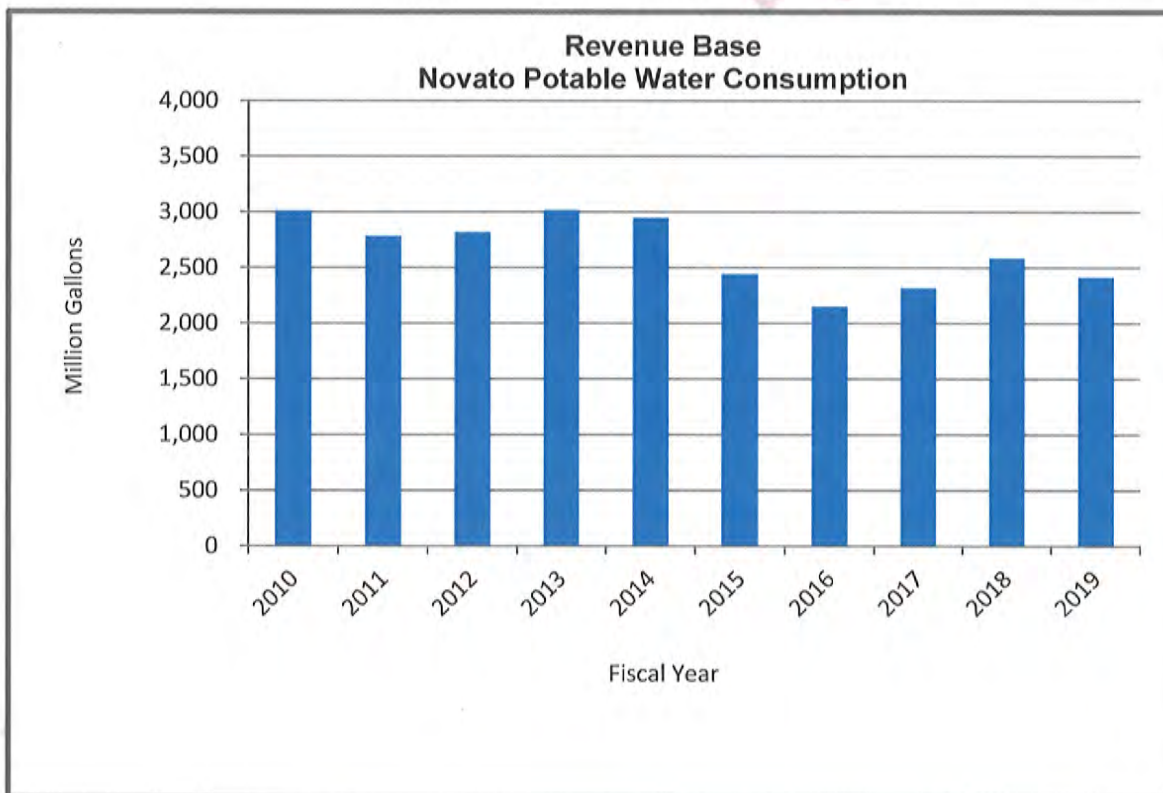
Source: North Marin Water District Audited Financial Statements

**North Marin Water District
Revenue Base
Last Ten Fiscal Years**

Schedule 5

**North Marin Water District
Revenue Base
Last Ten Fiscal Years**

Fiscal Year	Novato Potable Water Consumption (Million Gallons)
2010	3,011
2011	2,786
2012	2,820
2013	3,018
2014	2,948
2015	2,444
2016	2,152
2017	2,317
2018	2,584
2019	2,416



Note: See Schedule 2 "Revenue by Source" for information regarding water sales.

**North Marin Water District
Customers by Type
Last Ten Fiscal Years**

Schedule 6

Fiscal Year	Customer Type						Total	
	Novato Potable & Recycled					West Marin Water		Oceana Marin Sewer
	Single-Family Residential	Multi-Family Residential	Commerical/ Business	Government	Recycled			
2010	18,208	730	1,280	220	3	769	225	21,435
2011	18,239	715	1,280	230	3	770	227	21,464
2012	18,298	720	1,246	226	2	777	227	21,496
2013	18,350	687	1,222	233	17	776	227	21,512
2014	18,491	699	1,222	231	44	776	229	21,692
2015	18,541	698	1,226	230	44	778	229	21,746
2016	18,561	704	1,239	232	44	780	230	21,790
2017	18,631	700	1,254	229	47	780	231	21,872
2018	18,449	699	1,217	220	53	785	232	21,655
2019	18,387	701	1,210	233	91	783	234	21,639

Source: North Marin Water District - Finance Department

**North Marin Water District
Novato Water Revenue Rates
Last Ten Fiscal Years**

Schedule 7

Bimonthly Service Charge										
Meter Size	6/30/10	6/30/11	6/30/12	6/30/13	6/30/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19
5/8" & 3/4"	\$ 14.40	\$ 20.00	\$ 25.00	\$ 30.00	\$ 30.00	\$ 30.00	\$ 30.00	\$ 31.50	\$ 33.00	\$ 34.15
1"	28.80	40.00	50.00	60.00	60.00	60.00	60.00	63.00	66.00	68.30
1 1/2"	35.30	49.00	61.00	73.00	73.00	73.00	73.00	77.00	80.50	83.30
2"	54.95	76.00	95.00	114.00	114.00	114.00	114.00	120.00	125.50	129.90
3"	108.55	151.00	189.00	227.00	227.00	227.00	227.00	238.00	248.50	257.20
4"	173.95	242.00	303.00	364.00	364.00	364.00	364.00	382.00	399.00	413.00
6"	364.95	507.00	634.00	761.00	761.00	761.00	761.00	799.00	835.00	864.00
8"	544.15	756.00	945.00	1,134.00	1,134.00	1,134.00	1,134.00	1,191.00	1,244.50	1,288.00

Water Use Rate (per 1,000 Gallons)										
User Type	6/30/10	6/30/11	6/30/12	6/30/13	6/30/14	6/30/15	6/30/16	6/30/17	6/30/18	6/30/19
<u>Residential Zone A</u>										
Base Rate ⁽¹⁾	\$ 3.29	\$ 3.49	\$ 3.73	\$ 4.03	\$ 4.29	\$ 4.46	\$ 4.77	\$ 5.01	\$ 5.24	\$ 5.42
Tier 1: 616-1845 gpd	5.24	5.55	5.94	6.42	6.84	7.11	7.61	7.99	8.35	8.64
Tier 2: >1845 gpd	9.11	9.66	10.34	11.17	11.90	12.38	13.25	13.91	14.54	15.05
<u>Non-Residential Zone A</u>										
Base Rate ⁽¹⁾	3.62	3.84	4.11	4.44	4.73	4.92	5.26	5.52	5.77	5.97
Seasonal Rate	3.90	4.13	4.42	4.77	5.08	5.28	5.65	5.93	6.20	6.42

Notes:

(1) Rates shown exclude additional elevation rate applicable to customers in upper elevation zones

N/A - Rate class was not established during the period

Source: North Marin Water approved rates

**North Marin Water District
Ten Largest Water Customers by Revenue
Current Fiscal Year and Ten Years Ago**

Schedule 8

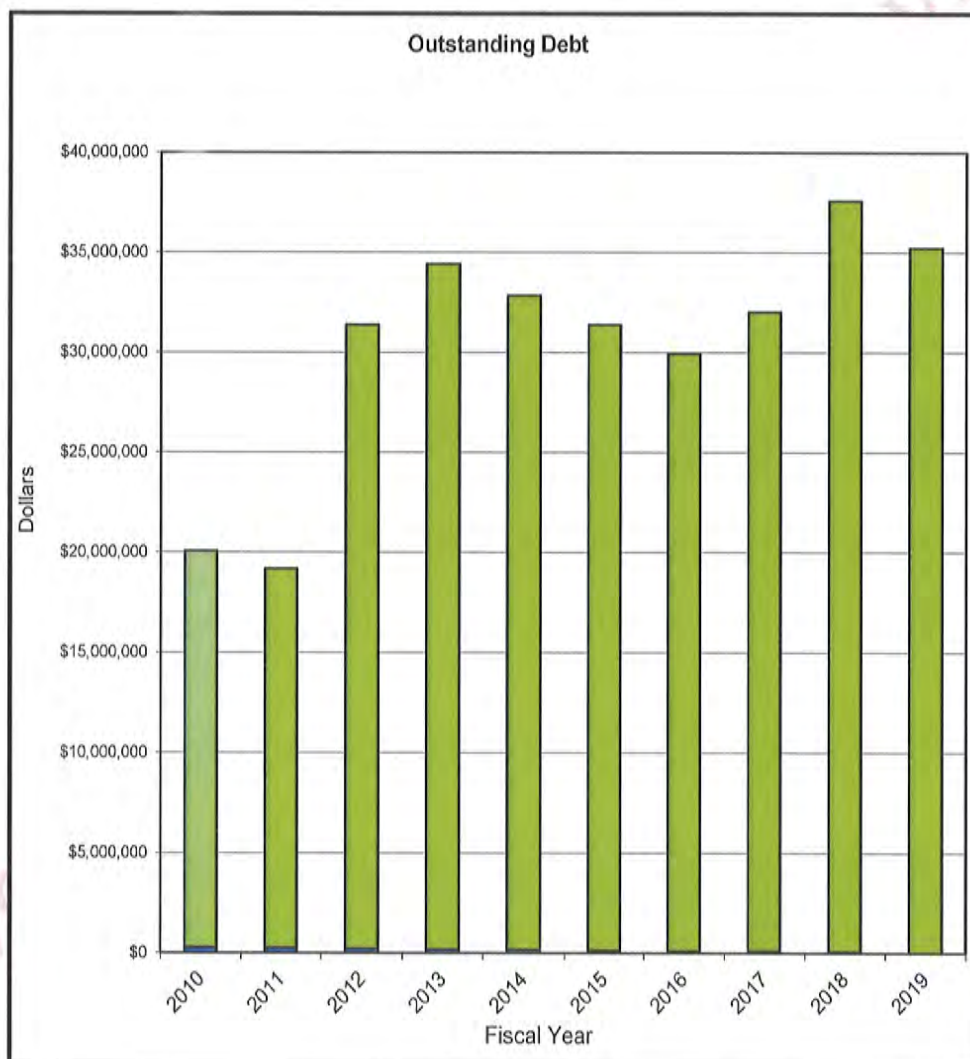
	FY 2018/19	% of Total	FY 2008/09	% of Total
1	City of Novato	2.3%	City Of Novato	1.8%
2	StoneTree Golf	1.8%	Novato Unified School District	1.8%
3	Novato Unified School District	1.7%	StoneTree Golf	1.8%
4	BioMarin Pharmaceutical	1.3%	Coast Guard Spanish Housing	1.6%
5	Fireman's Fund	0.8%	Fireman's Fund	0.7%
6	Meadow Park Hamilton	0.7%	Meadow Park Hamilton	0.7%
7	Indian Valley Golf	0.7%	Indian Valley Golf	0.6%
8	Coast Guard Spanish Housing	0.6%	Shea Prop	0.5%
9	Bay Vista Apartments	0.5%	Western Oaks Village Hoa	0.4%
10	Marion Park Apartments	0.5%	BioMarin Pharmaceutical	0.4%
		<u>10.8%</u>		<u>10.3%</u>
	Total Water Service Revenue	\$21,772,246		\$12,526,294

Source: NMWD CORE billing system (t:\acexcel\wtr use\top revenue 2007_2017.xlsx\top 10

**North Marin Water District
Ratio of Outstanding Debt by Type
Last Ten Fiscal Years**

Schedule 9

Fiscal Year	Bonds Payable	Loans Payable	Total		
			Debt	Per Capita	As a Share of Personal Income ⁽¹⁾
2010	\$ 282,809	19,790,955	20,073,764	\$ 329.08	0.34%
2011	250,587	18,924,944	19,175,531	314.35	0.30%
2012	209,203	31,173,317	31,382,520	514.47	0.48%
2013	181,652	34,241,715	34,423,367	564.32	0.54%
2014	159,916	32,687,391	32,847,307	538.48	0.49%
2015	136,000	31,237,390	31,373,390	514.32	0.46%
2016	116,000	29,823,693	29,939,693	490.81	0.43%
2017	94,000	31,922,939	32,016,939	524.87	0.45%
2018	72,000	37,513,463	37,585,463	616.16	0.52%
2019	-	35,236,198	35,236,198	577.64	0.53%



Source: North Marin Water District Audited Financial Statements

⁽¹⁾ Per Capita/Personal Income per Capita (See Schedule 11)

**North Marin Water District
Pledged-Revenue Coverage
Last Ten Fiscal Years**

Schedule 10

Fiscal Year	Revenue ⁽¹⁾	Expense ⁽²⁾	Net Available	Debt Service		Total	Coverage
			Revenue	Principal	Interest		Ratio
2010	\$ 14,635,090	(13,102,113)	1,532,977	690,462	694,044	\$ 1,384,506	1.11
2011	14,506,888	(11,905,026)	2,601,862	644,740	740,416	1,385,156	1.88
2012	16,789,744	(12,610,862)	4,178,882	1,116,410	654,484	1,770,894	2.36
2013	19,761,431	(13,284,705)	6,476,726	1,337,041	778,762	2,115,803	3.06
2014	21,364,965	(13,437,213)	7,927,752	1,618,138	830,830	2,448,968	3.23
2015	19,308,316	(13,424,517)	5,883,799	1,686,523	847,951	2,534,474	2.32
2016	18,191,410	(13,727,613)	4,463,797	1,721,904	807,034	2,528,938	1.77
2017	20,209,860	(15,118,535)	5,091,325	1,769,239	757,781	2,527,020	2.01
2018	24,053,350	(16,470,065)	7,583,285	1,814,680	747,118	2,561,798	2.96
2018	24,023,753	(16,395,767)	7,627,986	2,349,265	875,354	3,224,619	2.37

Notes:

- (1) Revenues includes Connection Fee Revenue, Interest Revenue,
Rent & Lease Revenue, other non-operating revenue
(2) Expense excludes depreciation and interest expense.

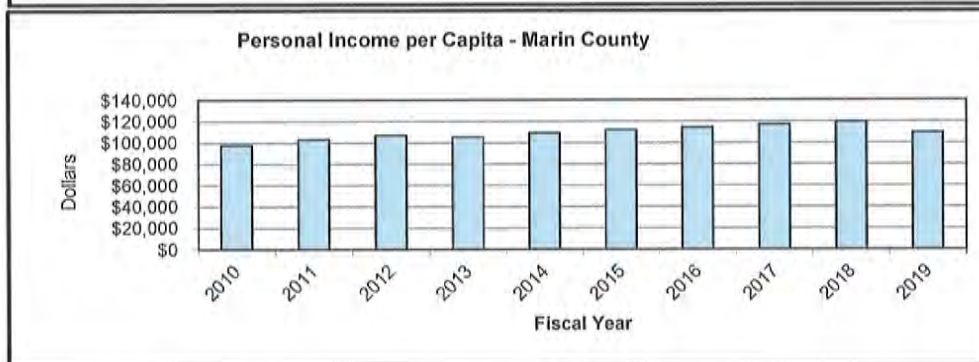
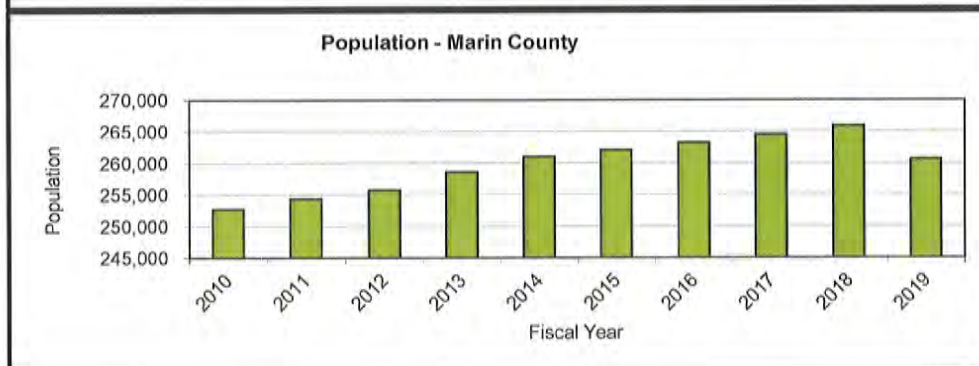
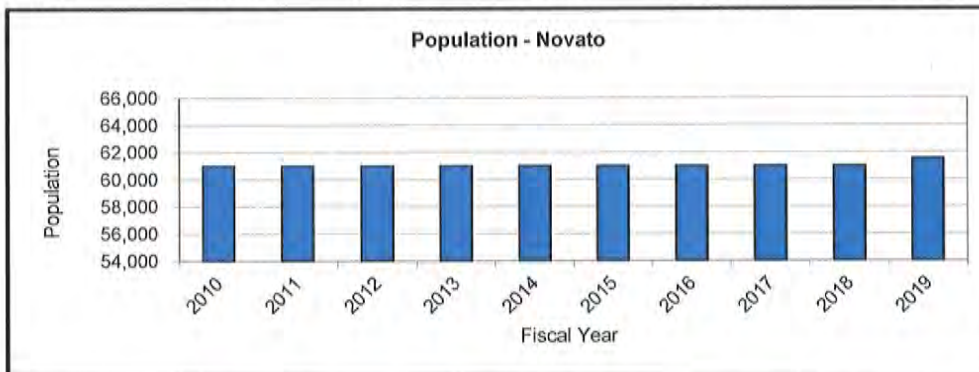
Source: North Marin Water District Audited Financial Statements

t:\ac\debt\src\debt coverage ratio li ten year history.xls

**North Marin Water District
Demographics and Economic Statistics
Last Ten Fiscal Years**

Schedule 11

Year	Novato Service Area ⁽¹⁾		County of Marin		
	Estimated Population	Unemployment Rate	Population	Personal Income (thousands of dollars)	Personal Income per Capita
2010	61,000	7.7%	252,708	\$24,653,687	\$97,558
2011	61,000	7.4%	254,389	\$26,250,147	\$103,189
2012	61,000	6.5%	255,765	\$27,360,972	\$106,977
2013	61,000	5.3%	258,569	\$27,220,334	\$105,273
2014	61,000	4.1%	261,033	\$28,455,468	\$109,011
2015	61,000	3.5%	262,105	\$29,332,433	\$111,911
2016	61,000	3.5%	263,257	\$30,059,737	\$114,184
2017	61,000	3.1%	264,535	\$30,945,833	\$116,982
2018	61,000	2.6%	265,891	\$31,803,488	\$119,611
2019	61,520	2.5%	260,651	\$28,492,821	\$109,314



Sources: NMWD Annual Report population estimate, County of Marin Economic Forecast at
<http://www.labormarketinfo.edd.ca.gov/cgi/dataanalysis/areaselection.asp?tableName=Labforce>
<https://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSRresults.asp?selectedarea=Marin+County&selectedindex=21&menuChoice=localareapro&state=true&geogArea=0604000041&countyName=&submit1=View+Local+Area+Profile>

Notes:

(1) District estimates (t:\acexcel\annual report\population est.xls)

North Marin Water District
Demographics and Economics Statistics – Ten Largest Employers
Current Year **Schedule 12**

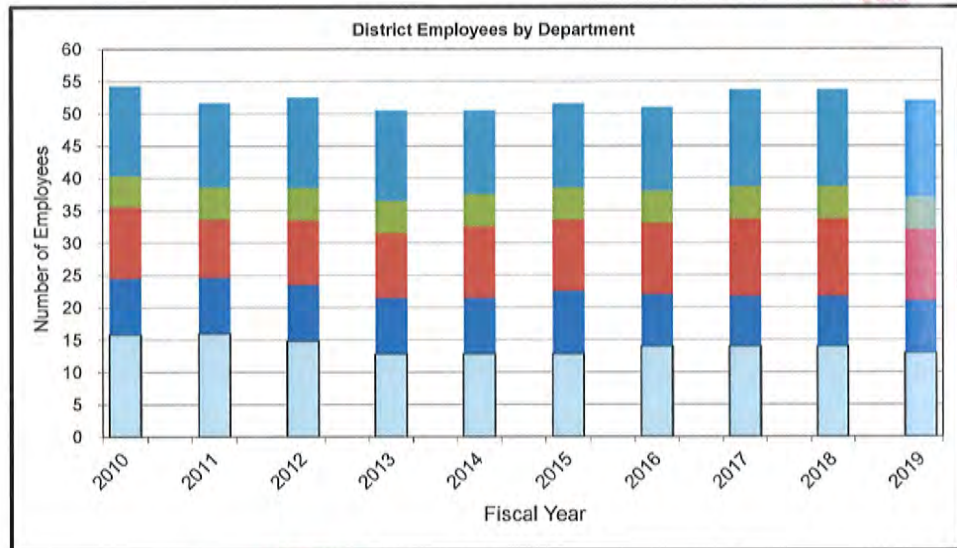
FY 2018/2019			FY 2008/2009		
Employer	Number of Employees	Percent of Total Employment	Employer	Number of Employees	Percent of Total Employment
1 BioMarin Pharmaceutical	1,005	3.31%	Fireman's Fund	968	5.28%
2 Novato Unified School District	803	2.83%	Novato Unified School District	829	4.44%
3 2K/Visual Concepts Entertainment	660	1.98%	BioMarin Pharmaceutical	549	1.91%
4 Bradley Electric	342	1.14%	ImageMovers Digital	435	0.91%
5 Costco Wholesale	316	1.05%	Novato Community Hospital	340	1.48%
6 Novato Community Hospital	304	1.04%	Target Store	284	1.32%
7 City of Novato	290	1.01%	Visual Concepts	275	1.23%
8 Ultragenix	275	0.97%	Costco Wholesale	274	1.15%
9 Safeway Stores	250	0.95%	Buck Institute	246	1.06%
10 Novato Healthcare Center	233	0.93%	Safeway Stores	243	0.99%
	4,478	15.66%		4,443	18.28%

Source: City of Novato

**North Marin Water District
Operating and Capacity Indicators – Total Employees
Last Ten Fiscal Years**

Schedule 13

Department	Fiscal Year End									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Administrative Services	16	16	15	13	13	13	14	14	14	13
Engineering Services	9	9	9	9	9	10	8	8	8	8
Construction /Maintenance	11	9	10	10	11	11	11	12	12	11
Water Quality	5	5	5	5	5	5	5	5	5	5
Operations / Maintenance	14	13	14	14	13	13	13	15	15	15
	54	52	53	51	51	52	51	54	54	52



Source: North Marin Water District Overheaded Payroll Worksheets for Pay Periods Ending June 30
Note: Excludes temporary employees

**North Marin Water District
Other Operating and Capacity Indicators
Last Ten Fiscal Years**

Schedule 14

Other Operating and Capacity Indicators				
Fiscal Year	District Area (Square Miles)	Miles of Pipeline	Number of Fire Hydrants	System Storage Capacity (MG)
2010	100	345	2,773	38
2011	100	346	2,785	38
2012	100	348	2,785	38
2013	100	356	2,797	39
2014	100	356	2,805	39
2015	100	357	2,808	39
2016	100	358	2,814	39
2017	100	364	2,824	39
2018	100	364	2,842	40
2019	100	364	2,854	40

Source: North Marin Water District - Engineering Department

Report on Internal Controls and Compliance

Working Draft Subject to Review

**Independent Auditor's Report on Internal Control Over Financial Reporting
and on Compliance and Other Matters Based on an Audit of Financial Statements
Performed in Accordance with *Government Auditing Standards***

Board of Directors
North Marin Water District
Novato, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audit contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the North Marin Water District (District) as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprises the District's basic financial statements, and have issued our report thereon dated November 19, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

**Independent Auditor's Report on Internal Control Over Financial Reporting
and on Compliance and Other Matters Based on an Audit of Financial Statements
Performed in Accordance with *Government Auditing Standards*, continued**

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Fedak & Brown LLP
Cypress, California
November 19, 2019

**North Marin Water District
Management Report
June 30, 2019**

North Marin Water District

Management Report

Table of Contents

<u>Item</u>	<u>Page No.</u>
General Introduction	1
Summary of Current Year and Prior Year Comments	2-3
Recommendations	
Appendix:	
Audit/Finance Committee Letter	1-4
Schedule of Audit Adjusting Journal Entries	5-10

Board of Directors
North Marin Water District
Novato, California

Dear Members of the Board:

In planning and performing our audit of the financial statements of North Marin Water District (District) as of and for the years ended June 30, 2019, in accordance with auditing standards generally accepted in the United States of America, we considered the District's internal control over financial reporting (internal control) as a basis for designing auditing procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of District's internal control. Accordingly, we do not express an opinion on the effectiveness of District's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses. In addition, because of inherent limitations in internal control, including the possibility of management override of controls, misstatements due to error or fraud may occur and may not be detected by such controls. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

This communication is intended solely for the information and use of management, the board of directors and others within the organization, and is not intended to be, and should not be, used by anyone other than these specified parties. This restriction is not intended to limit the distribution of this letter, which is a matter of public record.

Our observations, comments and recommendations, all of which have been discussed with the appropriate members of management, are summarized as follows:

Summary of Current Year Observations, Comments and Recommendations

Disclosure of Audit Adjustments and Reclassifications

As your external auditor, we assume that the books and records of the District are properly adjusted before the audit begins. In many cases, however, audit adjustments and reclassifications are made in the normal course of the audit process to present the District's financial statements in conformity with accounting principles generally accepted in the United States of America or for comparison purposes with the prior year. For the Board of Directors to gain a full and complete understanding and appreciation of the scope and extent of the audit process we have presented these audit adjustments and reclassifications as an attachment to this letter. There can be very reasonable explanations for situations of having numerous adjustments as well as having no adjustments at all. However, the issue is simply disclosure of the adjustments and reclassifications that were made and to provide the Board of Directors with a better understanding of the scope of the audit.

Summary of Current Year Observations, Comments and Recommendations, continued

Management's Response

We have reviewed and approved all of the audit adjustment and reclassification entries provided by the auditor and have entered those entries into the District's accounting system to close-out the District's year-end trial balance at June 30, 2019.

Summary of Prior Year Observations, Comments and Recommendations

Employer Assistance Housing Loan Policy

The District is a local government agency which is in the business of providing water, sewer, and recycled water utility services to its customers. Based on the demographics and market conditions living near the District can make it difficult to attract, hire and retain qualified employees. As a result the District provides the Employer Assistance Housing Loan ("EAHL") program.

During our prior year June 30, 2017 engagement, we inquired about the status of the EAHL receivables outstanding balance. We were notified that a management employee (the "borrower") loan would be coming due upon his retirement near June 30, 2018. During our June 30, 2018 engagement we requested that the District confirm the total amount due which included principal of \$250,000 and calculated interest (using the District's portfolio rate of interest) due from the borrower at an amount of \$70,040. In response to the District's confirmation, the borrower notified the District that only the principal of \$250,000 would be repaid as the borrower used offsetting borrowing costs to reduce any interest under the shared appreciation method per agreement.

Upon review of the EAHL secured promissory note between the District and borrower, the District had expected to receive the principal of \$250,000 plus 27.5% of appreciation accruing from the date of purchase (August 13, 2004) until sale or refinancing the property upon the borrower's termination as a full-time employee of the District. According to the legal response provided by the District's attorney Bold, Polisner, Maddow, Nelson & Judson, under California Civil Code Section 1917.006, shared appreciation loans allow the borrower to offset appreciation with down payment, payments of mortgage principal, escrow fees, transfer taxes, recording fees, brokerage commissions and amounts paid for capital improvements, plus interest at the legal rate of interest, before the shared appreciation. This effectively brought any interest due to the District under the shared appreciation terms to zero.

Summary of Prior Year Observations, Comments and Recommendations, continued

Employer Assistance Housing Loan Policy, continued

Based on our review of the original EAHL secured promissory note, it is reasonable to determine that the District had expected some form of interest due from the borrower as a result in providing the \$250,000 loan fourteen years prior. Any arrangement to provide a benefit in the form of the loan should be an equitable arrangement not only for the borrower but for the District and its rate payers. A loan arrangement where interest can be eliminated; is in effect, an interest-free loan which the District should avoid providing in any situation as it constitutes a gift of public funds/resources. Therefore, as your external auditor we strongly recommend that the District consider revising its EAHL policy to define the interest due option at an identified rate and remove the shared appreciation option. In addition, we recommend that the EAHL policy be revised to include qualifications for the program based on the types of employee position and/or salary level who the District intends to assist.

Management's Response

We are in agreement with the auditor's recommendation to have a policy that is equitable for both the borrower and the District and are currently in the process of amending the Employer Assistance Housing Program policy.

Disclosure of Audit Adjustments and Reclassifications

As your external auditor, we assume that the books and records of the District are properly adjusted before the audit begins. In many cases, however, audit adjustments and reclassifications are made in the normal course of the audit process to present the District's financial statements in conformity with accounting principles generally accepted in the United States of America or for comparison purposes with the prior year. For the Board of Directors to gain a full and complete understanding and appreciation of the scope and extent of the audit process we have presented these audit adjustments and reclassifications as an attachment to this letter. There can be very reasonable explanations for situations of having numerous adjustments as well as having no adjustments at all. However, the issue is simply disclosure of the adjustments and reclassifications that were made and to provide the Board of Directors with a better understanding of the scope of the audit.

Management's Response

We have reviewed and approved all of the audit adjustment and reclassification entries provided by the auditor and have entered those entries into the District's accounting system to close-out the District's year-end trial balance at June 30, 2018.

This communication is intended solely for the information and use of management, the board of directors and others within the organization, and is not intended to be, and should not be, used by anyone other than these specified parties. This restriction is not intended to limit the distribution of this letter, which is a matter of public record.

We appreciate the courtesy and cooperation extended to us during our examination. We would be pleased to discuss the contents of this letter with you at your convenience. Please do not hesitate to contact us.

Fedak & Brown, LLP
Cypress, California
November 19, 2019

APPENDIX

**North Marin Water District
Audit/Finance Committee Letter
June 30, 2019**

Board of Directors
North Marin Water District
Novato, California

We have audited the basic financial statements of the North Marin Water District (District) for the year ended June 30, 2019 and have issued our report thereon dated November 19, 2019. Generally accepted auditing standards require that we provide the Governing Board and management with the following information related to our audit of the District's basic financial statements.

Auditor's Responsibility under United States Generally Accepted Auditing Standards

As stated in our Audit Engagement Letter dated March 26, 2019, our responsibility, as described by professional standards, is to express an opinion about whether the basic financial statements prepared by management with oversight of the Governing Board are fairly presented, in all material respects, in conformity with United States generally accepted accounting principles. Our audit of the financial statements does not relieve the Governing Board or management of its responsibilities of oversight in the District's external financial reporting process or any other processes.

In planning and performing our audit, we considered the District's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the basic financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the District's internal control over financial reporting.

As part of obtaining reasonable assurance about whether the District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under *Governmental Auditing Standards*.

We are responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures specifically to identify such matters.

Planned Scope and Timing of the Audit

We performed the audit according to the planned scope and timing requirements previously communicated to the board and management in our Communication to Those Charged with Governance through our Audit Engagement Letter dated March 26, 2019.

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the District are described in Note 1 to the basic financial statements.

We noted transactions entered into by the District during fiscal year 2019 for which there is a lack of authoritative guidance or consensus. Please see our Summary of Current Year Observations, Comments and Recommendations. There are no significant transactions that have been recognized in the financial statements in a different period than when the transaction occurred.

Management's Judgments, Accounting Estimates and Financial Disclosures

Accounting estimates play an integral part in the preparation of basic financial statements by management and are based upon management's knowledge, experience and current judgment(s) about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the basic financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the position in the basic financial statements are:

Management's estimate of the fair value of cash and investments is based on information provided by financial institutions. We evaluated the key factors and assumptions used to develop the fair value of cash and investments in determining that it is reasonable in relation to the financial statements taken as a whole.

Management's estimate of capital assets depreciation is based on historical estimates of each capitalized item's useful life expectancy or cost recovery period. We evaluated the key factors and assumptions used to develop the capital asset depreciation calculations in determining that they are reasonable in relation to the financial statements taken as a whole.

Management's estimate of the other post-employment benefits plan; deferred outflows or resources, total OPEB liability, and deferred inflows of resources are based on an actuarial evaluation of this liability that was conducted by a third-party actuary. We evaluated the basis, actuarial methods and assumptions used by the actuary to calculate the annual required contribution for the District to determine that it is reasonable in relation to the financial statements taken as a whole.

Management's estimate of the defined benefit pension plan: deferred outflows of resources, net pension liability, and deferred inflows of resources are based on an actuarial evaluation of these amounts which was conducted by a third-party actuary. We evaluated the basis, actuarial methods and assumptions used by the actuary to calculate these amounts for the District to determine that it is reasonable in relation to the financial statements taken as a whole.

The disclosures in the basic financial statements are neutral, consistent and clear. Certain basic financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the basic financial statements are:

The disclosure of fair value of cash and investments in Note 2 to the basic financial statements represents amounts susceptible to market fluctuations.

The disclosure of capital assets, net in Note 6 to the basic financial statements is based on historical information which could differ from actual useful lives of each capitalized item.

The disclosure of the District's other post-employment benefits plan in Note 10 to the basic financial statements is based on actuarial assumptions which could differ from actual costs.

The disclosure of the District's defined benefit pension plan in Note 11 to the basic financial statements is based on actuarial assumptions which could differ from actual costs.

Corrected and Uncorrected Misstatements

Generally Accepted Auditing Standards require us to accumulate all known and likely misstatements identified during the audit, except those that are considered trivial, and communicate them to the appropriate level of management as follows:

There were thirteen (13) total audit adjustments to the original trial balance presented to us. Four (4) of the adjustments related to the fifth year implementation of GASB Pronouncement No. 68 which were proposed by both the auditor and the District. Three (3) of the adjustments related to the second year implementation of GASB Pronouncement No. 75 which were proposed by both the auditor and the District. Two (2) of the audit adjusting entries were proposed by the auditor. Four (4) of the audit adjusting entries were proposed by the District. The audit adjustments are noted in the schedule of audit adjusting entries attached to the end of this report.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves the application of an accounting principal to the District's basic financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the District's auditor. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit processes and testwork.

Disagreements with Management

For the purpose of this letter, professional standards define a disagreement with management as a financial accounting, reporting or auditing matter, whether or not resolved to our satisfaction that could be significant to the basic financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit of the District.

Management Representations

We have requested certain representations from management that are included in the Management Representational Letter to the Auditor dated November 19, 2019.

Conclusion

We appreciate the cooperation extended us by Drew McIntyre, General Manager, Julie Blue, Auditor-Controller, Nancy Holton, Senior Accountant, Nancy Williamson, Senior Accountant, and the rest of the District staff in the performance of our audit testwork.

We will be pleased to respond to any question you have about the foregoing. We appreciate the opportunity to continue to be of service to the District.

This report is intended solely for the information and use of the Board of Directors and management and is not intended to be and should not be used by anyone other than the specified parties. This restriction is not intended to limit the distribution of this letter, which is a matter of public record.

Fedak & Brown, LLP
Cypress, California
November 19, 2019

North Marin Water District
Schedule of Audit Adjusting Journal Entries
June 30, 2019

Account	Description	Debit	Credit
Adjusting Journal Entries			
Adjusting Journal Entries JE # 1			
AJE - To reclassify debit balance in AP for Ferguson Waterworks credit memo (CM124578) included in accounts payable aging from accounts payable to accounts receivable at June 30, 2019.			
13720.01	Accounts Receivable - Miscellaneous	155,155.00	
22201.01	Accounts Payable - Vouchers		155,155.00
Total		155,155.00	155,155.00
Adjusting Journal Entries JE # 2			
CPE - To reclassify the employee housing loan for Jeff Sjoblom to current and record interest receivable for loan payoff in FY19/20 at June 30, 2019. (Batch 9991/9992)			
13720.01	Accounts Receivable - Miscellaneous	39,200.00	
13749.01	Interest Receivable - Employee Housing Loan	3,317.00	
13744.01	Accounts Receivable-District Housing Loans		39,200.00
49200.01	Interest Earned - General Funds		3,317.00
Total		42,517.00	42,517.00
Adjusting Journal Entries JE # 3			
CPE - To reclass debit amounts recorded to accounts payable which were paid in June for July to prepaid expense and reclass Alphagraphics additional accrual from AP Vouchers to Accrued Expense at June 30, 2019. (Batch 9993)			
14400.01	Prepaid Expense	15,954.00	
14400.01	Prepaid Expense	907.94	
14400.01	Prepaid Expense	124.43	
14400.01	Prepaid Expense	732.00	
14400.01	Prepaid Expense	422.00	
14400.01	Prepaid Expense	73,640.74	
22201.01	Accounts Payable - Vouchers	6,585.16	
22200.01	Accounts Payable - Accrued		6,585.16
22201.01	Accounts Payable - Vouchers		15,954.00
22201.01	Accounts Payable - Vouchers		907.94
22201.01	Accounts Payable - Vouchers		124.43
22201.01	Accounts Payable - Vouchers		732.00
22201.01	Accounts Payable - Vouchers		422.00
22201.01	Accounts Payable - Vouchers		73,640.74
Total		98,366.27	98,366.27
Adjusting Journal Entries JE # 4			
GASB 68 Entry #1 - To reclassify 2018 contributions to NPL at June 30, 2019.			
21502.01	Net Pension Liability	1,017,325.00	
16100.01	Deferred Outflows - Pension		1,017,325.00
Total		1,017,325.00	1,017,325.00

North Marin Water District
Schedule of Audit Adjusting Journal Entries
June 30, 2019

Account	Description	Debit	Credit
Adjusting Journal Entries JE # 5			
GASB 68 Entry #2 - To reclassify 2019 contributions to Deferred Outflows of Resources at June 30, 2019.			
13509.02	Unrestricted Cash:West Marin:GM	49,912.00	
13509.05	Unrestricted Cash	7,047.00	
13509.08	Unrestricted Cash	11,900.00	
16100.01	Deferred Outflows - Pension	1,155,358.00	
13509.01	Unrestricted Cash		68,859.00
51400.01	GASB68 Adjustment - Source		7,278.00
51400.02	GASB68 Adjustment - Source		1,040.00
52309.01	GASB68 Adjustment - Pumping		10,398.00
52309.02	GASB68 Adjustment - Pumping		3,119.00
52700.01	GASB68 Adjustment - Operations		95,548.00
52700.02	GASB68 Adjustment - Operations		8,088.00
52700.05	GASB68 Adjustment - Operations		3,235.00
53800.01	GASB68 Adjustment - Water Treatment		211,662.00
53800.02	GASB68 Adjustment - Water Treatment		15,597.00
53800.05	GASB68 Adjustment - Water Treatment		1,155.00
54598.01	GASB68 Adjustment - T&D		394,093.00
54598.02	GASB68 Adjustment - T&D		19,641.00
54598.05	GASB68 Adjustment - T&D		2,657.00
54699.08	GASB68 Adjustment - Sewage Collection		7,394.00
54799.08	GASB68 Adjustment - Sewage Treatment		2,426.00
54899.08	GASB68 Adjustment - Disposal-OMSewer-Admin		2,080.00
55999.01	GASB68 Adjustment - Consumer Accounting		58,115.00
55999.02	GASB68 Adjustment - Consumer Accounting		1,618.00
57000.01	GASB68 Adjustment - G&A		276,708.00
58100.01	GASB68 Adjustment - Water Conservation		32,697.00
58100.02	GASB68 Adjustment - Water Conservation		809.00
Total		<u>1,224,217.00</u>	<u>1,224,217.00</u>

North Marin Water District
Schedule of Audit Adjusting Journal Entries
June 30, 2019

Account	Description	Debit	Credit
Adjusting Journal Entries JE # 6			
GASB 68 Entry #3 - To record changes in pension liability and related deferred outflows and inflows during FY17/18 at June 30, 2019.			
13509.01	Unrestricted Cash	83,317.00	
16100.01	Deferred Outflows - Pension	624,888.00	
21502.01	Net Pension Liability	0.01	
23100.01	Deferred Inflows - Pension	267,071.00	
23100.01	Deferred Inflows - Pension	210,531.00	
51400.01	GASB68 Adjustment - Source	8,807.00	
51400.02	GASB68 Adjustment - Source	1,258.00	
52309.01	GASB68 Adjustment - Pumping	12,581.00	
52309.02	GASB68 Adjustment - Pumping	3,774.00	
52700.01	GASB68 Adjustment - Operations	115,609.00	
52700.02	GASB68 Adjustment - Operations	9,786.00	
52700.05	GASB68 Adjustment - Operations	3,914.00	
53800.01	GASB68 Adjustment - Water Treatment	256,101.00	
53800.02	GASB68 Adjustment - Water Treatment	18,872.00	
53800.05	GASB68 Adjustment - Water Treatment	1,398.00	
54598.01	GASB68 Adjustment - T&D	476,835.00	
54598.02	GASB68 Adjustment - T&D	23,765.00	
54598.05	GASB68 Adjustment - T&D	3,215.00	
54699.08	GASB68 Adjustment - Sewage Collection	8,947.00	
54799.08	GASB68 Adjustment - Sewage Treatment	2,936.00	
54899.08	GASB68 Adjustment - Disposal-OMSewer-Admin	2,516.00	
55999.01	GASB68 Adjustment - Consumer Accounting	70,316.00	
55999.02	GASB68 Adjustment - Consumer Accounting	1,957.00	
57000.01	GASB68 Adjustment - G&A	0.62	
57000.01	GASB68 Adjustment - G&A	334,805.00	
58100.01	GASB68 Adjustment - Water Conservation	39,561.00	
58100.02	GASB68 Adjustment - Water Conservation	979.00	
13509.02	Unrestricted Cash:West Marin:GM		60,391.00
13509.05	Unrestricted Cash		8,527.00
13509.08	Unrestricted Cash		14,399.00
16100.01	Deferred Outflows - Pension		0.63
16100.01	Deferred Outflows - Pension		217,642.00
16100.01	Deferred Outflows - Pension		210,531.00
16100.01	Deferred Outflows - Pension		267,071.00
16100.01	Deferred Outflows - Pension		510,259.00
21502.01	Net Pension Liability		802,761.00
23100.01	Deferred Inflows - Pension		117,157.00
23100.01	Deferred Inflows - Pension		375,001.00
Total		<u>2,583,739.63</u>	<u>2,583,739.63</u>

North Marin Water District
Schedule of Audit Adjusting Journal Entries
June 30, 2019

Account	Description	Debit	Credit
Adjusting Journal Entries JE # 7			
GASB 68 Entry #4 - To record changes in pension liability during FY17/18 at June 30, 2018.			
13509.01	Unrestricted Cash	16,546.00	
16100.01	Deferred Outflows - Pension	129,059.00	
23100.01	Deferred Inflows - Pension	377,381.00	
51400.01	GASB68 Adjustment - Source	1,749.00	
51400.02	GASB68 Adjustment - Source	250.00	
52309.01	GASB68 Adjustment - Pumping	2,498.00	
52309.02	GASB68 Adjustment - Pumping	750.00	
52700.01	GASB68 Adjustment - Operations	22,957.00	
52700.02	GASB68 Adjustment - Operations	1,943.00	
52700.05	GASB68 Adjustment - Operations	777.00	
53800.01	GASB68 Adjustment - Water Treatment	50,856.00	
53800.02	GASB68 Adjustment - Water Treatment	3,748.00	
53800.05	GASB68 Adjustment - Water Treatment	278.00	
54598.01	GASB68 Adjustment - T&D	94,689.00	
54598.02	GASB68 Adjustment - T&D	4,719.00	
54598.05	GASB68 Adjustment - T&D	638.00	
54699.08	GASB68 Adjustment - Sewage Collection	1,777.00	
54799.08	GASB68 Adjustment - Sewage Treatment	583.00	
54899.08	GASB68 Adjustment - Disposal-OMSewer-Admin	500.00	
55999.01	GASB68 Adjustment - Consumer Accounting	13,963.00	
55999.02	GASB68 Adjustment - Consumer Accounting	389.00	
57000.01	GASB68 Adjustment - G&A	66,485.00	
58100.01	GASB68 Adjustment - Water Conservation	7,856.00	
58100.02	GASB68 Adjustment - Water Conservation	194.00	
13509.02	Unrestricted Cash:West Marin:GM		11,993.00
13509.05	Unrestricted Cash		1,693.00
13509.08	Unrestricted Cash		2,860.00
16100.01	Deferred Outflows - Pension		512,043.00
16100.01	Deferred Outflows - Pension		96,442.00
23100.01	Deferred Inflows - Pension		175,554.00
Total		800,585.00	800,585.00
Adjusting Journal Entries JE # 8			
AJE - To remove asset addition below \$5,000 capitalization threshold per policy at June 30, 2019.			
54001.01	Supervision & Engineering	438.96	
11180.01	Transmission Lines		438.96
Total		438.96	438.96

North Marin Water District
Schedule of Audit Adjusting Journal Entries
June 30, 2019

Account	Description	Debit	Credit
Adjusting Journal Entries JE # 9			
GASB 75 Entry #1 - To reclassify 2019 contributions to Deferred Outflows of Resources at June 30, 2019.			
13509.02	Unrestricted Cash:West Marin:GM	10,814.00	
13509.05	Unrestricted Cash	1,527.00	
13509.08	Unrestricted Cash	2,579.00	
21503.01	OPEB Liability	250,340.00	
13509.01	Unrestricted Cash		14,920.00
51401.01	GASB75 Adjustment - Source of Supply		1,577.00
51401.02	GASB75 Adjustment - Source of Supply		225.00
52310.01	GASB75 Adjustment - Pumping		2,253.00
52310.02	GASB75 Adjustment - Pumping		676.00
52701.01	GASB75 Adjustment - Operations		20,703.00
52701.02	GASB75 Adjustment - Operations		1,752.00
52701.05	GASB75 Adjustment - Operations		701.00
53801.01	GASB75 Adjustment - Water Treatment		45,862.00
53801.02	GASB75 Adjustment - Water Treatment		3,380.00
53801.05	GASB75 Adjustment - Water Treatment		250.00
54596.01	GASB75 Adjustment - T&D		85,391.00
54596.02	GASB75 Adjustment - T&D		4,256.00
54596.05	GASB75 Adjustment -T&D		576.00
54698.08	GASB75 Adjustment - Sewage Collection		1,602.00
54798.08	GASB75 Adjustment - Sewage Treatment		526.00
54802.08	Operating Labor		451.00
55998.01	GASB75 Adjustment - Consumer Accounting		12,592.00
55998.02	GASB75 Adjustment - Consumer Accounting		350.00
57001.01	GASB75 Adjustment - G&A		59,957.00
58101.01	GASB75 Adjustment - Water Conservation		7,085.00
58101.02	GASB75 Adjustment - Water Conservation		175.00
Total		265,260.00	265,260.00
Adjusting Journal Entries JE # 10			
GASB 75 Entry #2 - To record changes in OPEB liability during FY18/19 in the current year.			
13509.01	Unrestricted Cash	17,174.00	
16200.01	Deferred Outflows - OPEB	195,564.00	
16200.01	Deferred Outflows - OPEB	163,205.00	
23200.01	Deferred Inflows:OPEB	158,611.00	
51401.01	GASB75 Adjustment - Source of Supply	1,815.00	
51401.02	GASB75 Adjustment - Source of Supply	259.00	
52310.01	GASB75 Adjustment - Pumping	2,594.00	
52310.02	GASB75 Adjustment - Pumping	778.00	
52701.01	GASB75 Adjustment - Operations	23,832.00	
52701.02	GASB75 Adjustment - Operations	2,017.00	
52701.05	GASB75 Adjustment - Operations	807.00	
53801.01	GASB75 Adjustment - Water Treatment	52,793.00	
53801.02	GASB75 Adjustment - Water Treatment	3,890.00	
53801.05	GASB75 Adjustment - Water Treatment	288.00	
54596.01	GASB75 Adjustment - T&D	98,295.00	
54596.02	GASB75 Adjustment - T&D	4,899.00	
54596.05	GASB75 Adjustment -T&D	663.00	
54698.08	GASB75 Adjustment - Sewage Collection	1,844.00	
54798.08	GASB75 Adjustment - Sewage Treatment	605.00	
54898.08	GASB75 Adjustment - Sewage Disposal	519.00	
55998.01	GASB75 Adjustment - Consumer Accounting	14,495.00	
55998.02	GASB75 Adjustment - Consumer Accounting	403.00	
57001.01	GASB75 Adjustment - G&A	69,017.00	
58101.01	GASB75 Adjustment - Water Conservation	8,155.00	
58101.02	GASB75 Adjustment - Water Conservation	202.00	
13509.02	Unrestricted Cash:West Marin:GM		12,448.00
13509.05	Unrestricted Cash		1,758.00
13509.08	Unrestricted Cash		2,968.00
16200.01	Deferred Outflows - OPEB		158,611.00
21503.01	OPEB Liability		646,939.00
Total		822,724.00	822,724.00

North Marin Water District
Schedule of Audit Adjusting Journal Entries
June 30, 2019

Account	Description	Debit	Credit
Adjusting Journal Entries JE # 11			
GASB 75 Entry #3 - To record changes in the deferred outflows and deferred inflows (amortization) at June 30, 2019.			
13509.01	Unrestricted Cash	1,655.00	
16200.01	Deferred Outflows - OPEB	2,469.00	
51401.01	GASB75 Adjustment - Source of Supply	174.00	
51401.02	GASB75 Adjustment - Source of Supply	25.00	
52310.01	GASB75 Adjustment - Pumping	250.00	
52310.02	GASB75 Adjustment - Pumping	75.00	
52701.01	GASB75 Adjustment - Operations	2,295.00	
52701.02	GASB75 Adjustment - Operations	194.00	
52701.05	GASB75 Adjustment - Operations	78.00	
53801.01	GASB75 Adjustment - Water Treatment	5,085.00	
53801.02	GASB75 Adjustment - Water Treatment	375.00	
53801.05	GASB75 Adjustment - Water Treatment	28.00	
54596.01	GASB75 Adjustment - T&D	9,467.00	
54596.02	GASB75 Adjustment - T&D	472.00	
54596.05	GASB75 Adjustment -T&D	64.00	
54698.08	GASB75 Adjustment - Sewage Collection	178.00	
54798.08	GASB75 Adjustment - Sewage Treatment	58.00	
54898.08	GASB75 Adjustment - Sewage Disposal	50.00	
55998.01	GASB75 Adjustment - Consumer Accounting	1,396.00	
55998.02	GASB75 Adjustment - Consumer Accounting	39.00	
57001.01	GASB75 Adjustment - G&A	6,647.00	
58101.01	GASB75 Adjustment - Water Conservation	785.00	
58101.02	GASB75 Adjustment - Water Conservation	19.00	
13509.02	Unrestricted Cash:West Marin:GM		1,199.00
13509.05	Unrestricted Cash		170.00
13509.08	Unrestricted Cash		286.00
16200.01	Deferred Outflows - OPEB		30,223.00
Total		31,878.00	31,878.00
Adjusting Journal Entries JE # 12			
CPE - District Cash Allocation after GASB 68 - JE-022571 (Batch 10009).			
12627.01	Designated Cash - Operating Reserve	31,004.00	
13509.01	Unrestricted Cash		31,004.00
Total		31,004.00	31,004.00
Adjusting Journal Entries JE # 13			
CPE - District Cash Allocation after GASB 75 - JE-022608 (Batch 10046).			
12627.01	Designated Cash - Operating Reserve	3,909.00	
13509.01	Unrestricted Cash		3,909.00
Total		3,909.00	3,909.00
Total Adjusting Journal Entries		7,077,118.86	7,077,118.86
Total All Journal Entries		7,077,118.86	7,077,118.86

Legend:

AJE	Audit Adjusting Journal Entry
CPE	District Prepared Audit Adjusting Journal Entry
GASB 68 Entry	GASB 68 Implementation Journal Entry
GASB 75 Entry	GASB 75 Implementation Journal Entry

11

MEMORANDUM

To: Board of Directors
 From: Terrie Kehoe, District Secretary 
 Subj: Records Management Scanning Contract with BMI Imaging Systems, Inc. (BMI)

November 15, 2019

RECOMMENDED ACTION: Approve the Records Management Scanning Contract of Engineering Files with BMI Imaging Systems, Inc.

FINANCIAL IMPACT: \$52,835 plus \$5,283 contingency reserve
 (Included in FY 19 Budget)

We currently have money in the budget (\$70,000) for Records Management. I reached out to three companies, two of which were referred and one that had contacted us in the past. I met with both Ray Morgan Company and BMI (referred to us by MMWD). I never heard back from the third vendor (Pacific Doc) which was referred to us by NFPD.

The quotes came in as follows:

Vendor	Meter Books	Job Files	Total cost
BMI	\$6,275.00	\$46,560.00	\$52,835.00
Ray Morgan	\$24,875.00	\$34,983.00	\$59,858.00

The 2000 series developer jobs and the meter books were chosen as the most important documents in the warehouse and should be scanned first since these are the records we use to identify historical water use entitlement. The scanning project will be done in phases, the first being the meter books. When scanning the developer job files, this will also be done in phases. We will have a list of all jobs that go out for scanning and what box they are filed in. This is in case we need to have them send back a file or email us the scanned document.

Part of this project includes staff time to pull the 2000 series job files for scanning, identify the box number and put the files back in the cabinets when they return. We have approximately 2,400 jobs and estimate about 40 hours of staff labor. It is noteworthy to say that this is just an estimate especially since the early job files were quite small and the recent files are fairly large.

RECOMMENDATION:

The Board authorize the General Manager to execute a contract with BMI for records management scanning in the amount of \$52,835 with a contingency of \$5,985 (10%).

12

MEMORANDUM

To: Board of Directors

November 15, 2019

From: Rocky Vogler, Chief Engineer *RW*

Subject: PRE Tank 4A - Reject Bid

R:\Folders by Job No\6000 jobs\6263.20 PRE Tank 4A\BOD Memo\6263.20 PRE Tank 4A Reject Bid BOD Memo 11-15-19_rev1.doc

RECOMMENDED ACTION: Reject Piazza Construction Bid for \$1,087,810**FINANCIAL IMPACT:** Estimated \$1,000 for in-house labor and advertisingBackground

The Board authorized advertisement for bids on the above referenced project on October 1, 2019. The advertisement date for this project was October 11, 2019 with a bid opening on November 5, 2019. The District advertised the project in the Marin IJ and posted the project on www.ebidboard.com. Two (2) contractors attended the mandatory pre-bid meeting on October 22, 2019. The bid period was for approximately four (4) weeks; there was one addendum. One bid was received (see below).

	CONTRACTOR	BID
1.	Piazza Construction, Penngrove, CA	\$1,087,810

The Engineer's Estimate was \$383,000. The sole bid by Piazza Construction was \$1,087,810 or \$704,810 (284%) above the engineer's estimate.

Options

There are two options before the Board:

Option 1 – Award the contract to Piazza Construction or

Option 2 – Reject Piazza Construction's bid

Staff is recommending that the bid be rejected (Option 2).

RECOMMENDATION



That the Board reject Piazza Construction's Bid for \$1,087,810.

13

MEMORANDUM

To: Board of Directors

November 15, 2019

From: Terrie Kehoe, District Secretary 
Ryan Grisso, Water Conservation Coordinator Subject: Public Communications Plan – Photo Shoot for Website Update
v:\memos to board\public communications plan photo shoot.doc**Recommended Action:** Information Only**Financial Impact:** None

The purpose of this memo is to advise the Board of an upcoming photo shoot session on December 9, 2019 to obtain portraits of Directors. Future action and lifestyle photographs will also be taken at the District to humanize the organization with more people-based imagery and provide more visual content for the new website. This photography work is being conducted as part of a contract with Kiosk to implement the Communications Strategy and Plan for the FY 2019/2020 approved at the October 15th meeting.

The tentative photo session date has been scheduled for December 9, 2019 between 12:30 and 3:30 p.m. at the Downtown Novato Recreation Center (950 7th Street). Individual times will be scheduled with each Board member during the time allotment. A recommended dress code will be communicated to the Board at the time of scheduling the photo time slot.

14

MEMORANDUM

To: Board of Directors

From: Tony Arendell, Construction/Maintenance Superintendent

November 13, 2019

Subj: Increase in Facility Location Underground Service Alerts (USA)

K:\CONST SUP\2020\BOD Memo re USAs 2019.docx

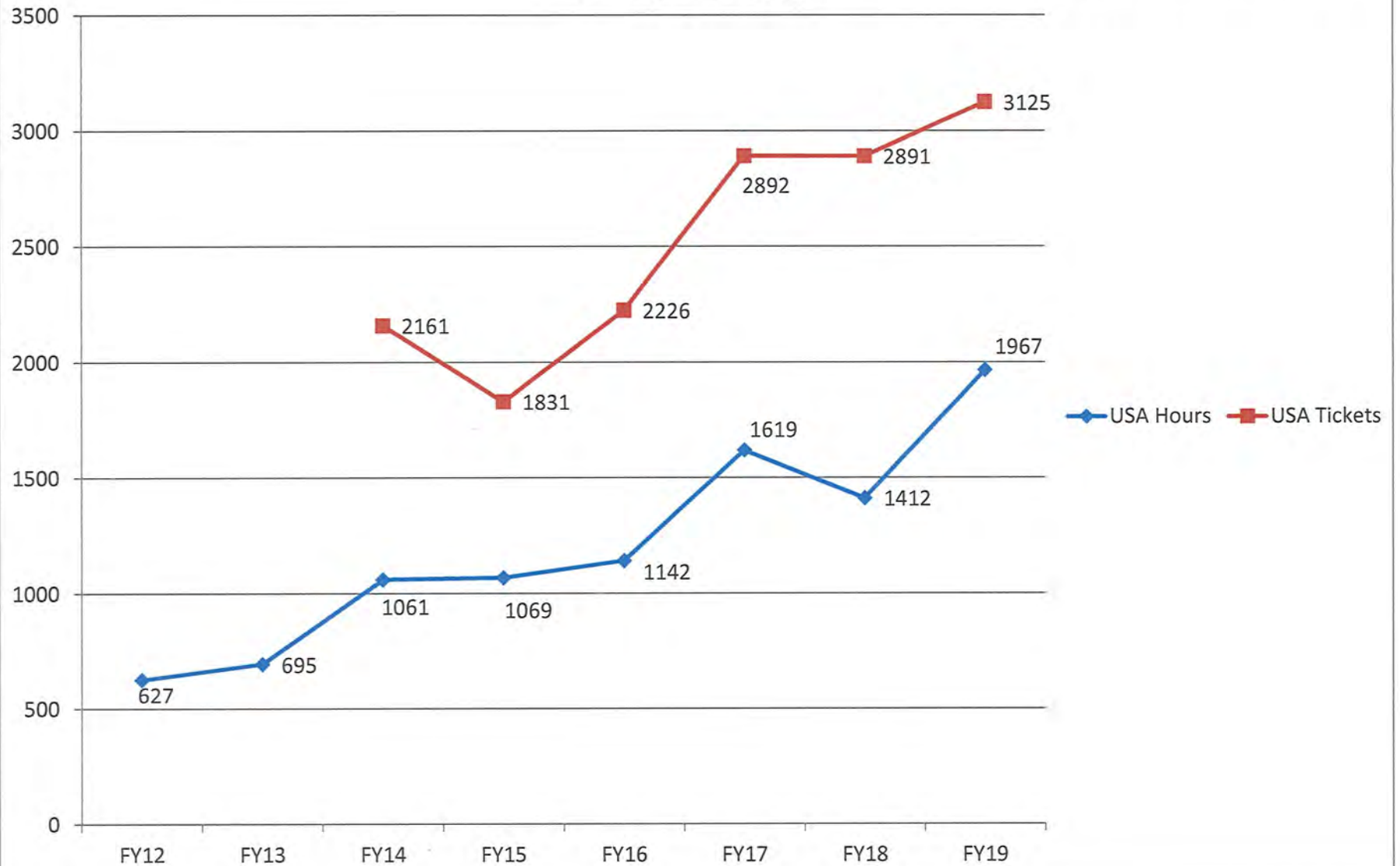
RECOMMENDED ACTION: Information Only

FINANCIAL IMPACT: Unknown

Over the past several years the time that the District has spent on facility location markings related to the statewide Underground Service Alert (USA) program has increased significantly (see Attachment). This is due in part to the safety campaign that PG&E has undertaken resulting in a much greater number of requests for facility location coupled with increased location requests from homeowners and property managers. NMWD must have a positive response to all requests by marking the ground (NO/NMWD) to indicate whether or not we have facilities in the area marked for excavation. With all the USA requests of late I expect this trend will continue to go up.

USA Hours & Tickets

k:\const sup\[usa hours & tickets chart.xlsx]chart



15

MEMORANDUM

To: Board of Directors Date: November 15, 2019

From: Robert Clark, Operations / Maintenance Superintendent *RC*
 Julie Blue, Auditor Controller *JB*

Subject: Enterprise Fleet Management Program for Fleet Vehicles – Six Month Update
 x:\maint sup\2020\bod\efm yr 2.docx

RECOMMENDED ACTION: Information

FINANCIAL IMPACT: Expected annual savings of \$12,000

Cost Analysis

In May the Board authorized the General Manager to enter into a fleet agreement with Enterprise Fleet Management for the lease of the first five of a planned 27 vehicle fleet replacement plan. The first five vehicles were acquired near the end of the 2018/19 fiscal year at an annual cost \$28,667, about 14% below what was forecast during our evaluation process. These first five vehicles included two Nissan Rouges, a Nissan Frontier, a Ford F150 4x2 and a Ford F150 4x4. Each vehicle has met our requested requirements and is a better value than expected. In addition to the vehicle cost being less than planned as stated above, the aftermarket equipment (tool racks, tool boxes and emergency lights) have been included in the annual cost which were not part of the original estimated costs.

In the second half of the program's first year, it is planned to lease a Chevrolet Colorado 4x2, Ford F150 4x2, Ford 4x4, and two Ford F250 4x4's. The Enterprise staff used their most recent vehicle pricing (\$62,259) and compared it to the March 2019 forecast evaluation (\$63,719) which creates an additional savings of \$1,460 from the original estimate. We have found that the EFM vehicles are comparable in price to the state bid pricing.

Maintenance

As we transition to a leased fleet, it will continue to be cost-effective to maintain the fleet in-house for the next two years. We plan to evaluate the EFM maintenance program after the third year when the fourth round of vehicles are leased. The EFM maintenance program would have a local shop provide service for oil changes, brakes (one per life, and tire repair/replacement. Dealerships would cover any warranty items for either an EFM or NMWD maintenance plan.

Summary

The program will continue to transition the NMWD fleet of 1-ton and smaller vehicles, over the next four years, with five vehicles being changed out each of the first three years and six vehicles changed out the fourth and fifth years of the program for a total of 27 vehicles. When we compared the past six years of the Districts total cost of ownership (\$169,821) to the fleet managed in the EFM program (\$143,968) we showed that we could save as much as \$12,000 per year in overall fleet operations and have seen in the first six months that we are well on track to accomplish this goal. If for any reason we want to discontinue the program we can stop leasing additional vehicles and let the existing leases run there five year course. The next update to the Board will be after the close of FY 19/20.

16

MEMORANDUM

To: Board of Directors November 15, 2018

From: Robert Clark, Operations / Maintenance Superintendent *RKC*

Subject: Stafford Lake Spill/Rainfall History
X:\MAINT SUP\2020\BOD\STP Spill - Rain History.doc

RECOMMENDED ACTION: Information

FINANCIAL IMPACT: None

Over the past 20 years, Stafford Lake has reached full capacity and has spilled over in 15 of the 20 years presented. Stafford Lake did not reach full capacity in 2018 with a maximum elevation on April 23 at 191.4', 2014 with a maximum elevation on April 25 at 188.8', 2012 with a maximum elevation on April 25 at 189.4', in 2009 with a maximum elevation on March 30 at 195.3' and again in 2001 with a maximum elevation on March 22nd at 192.5'. Our current water year lake elevation reached a maximum elevation of 199.5' with nearly one and a half full lake volumes having spilled over between February 7 and April 26, 2019.

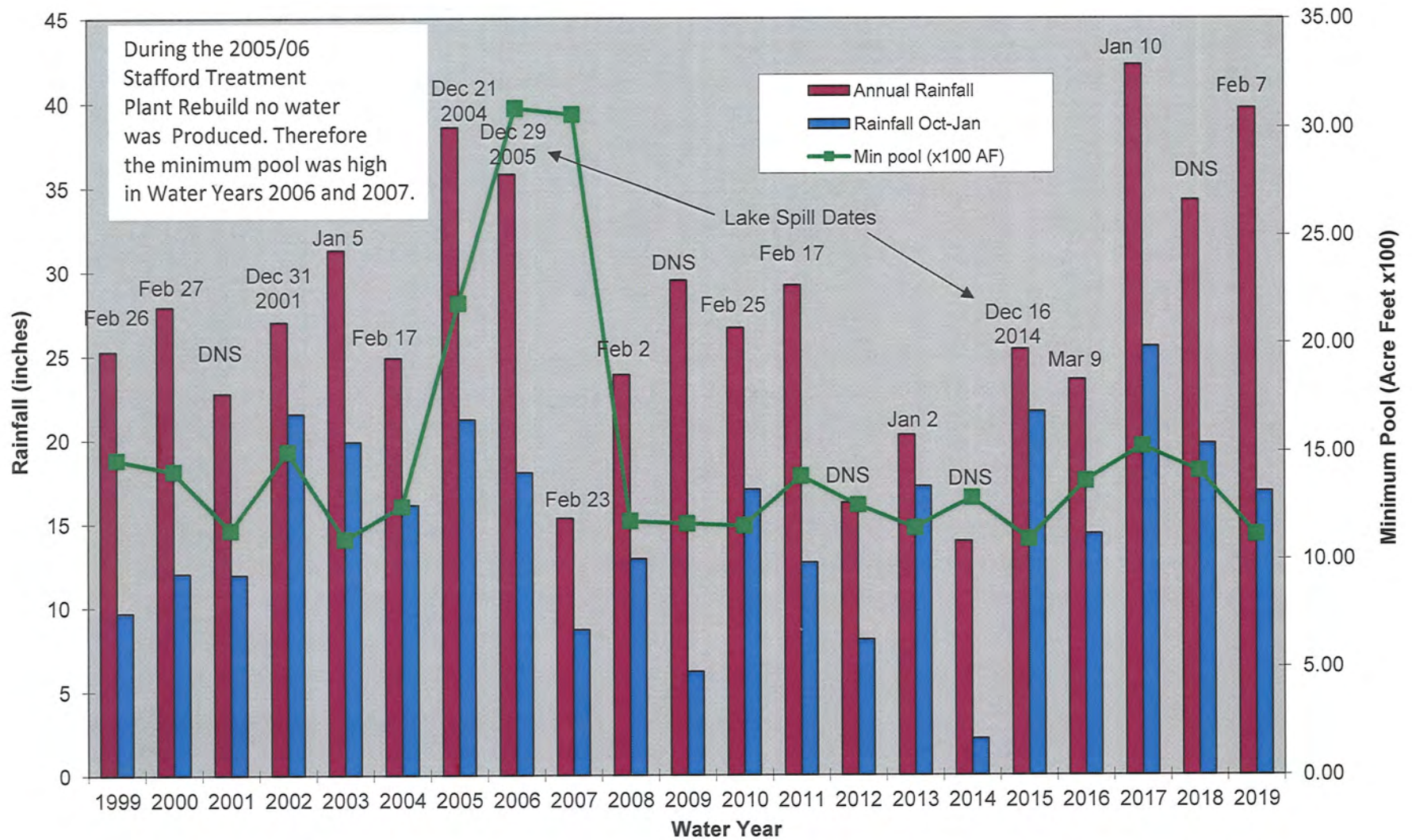
To help illustrate the annual Stafford Lake capacity fluctuations, I have attached two charts. First is the Stafford Lake Spill History chart (Attachment 1) that includes two columns for rainfall data and a line for minimum pool storage with the date when the lake reached full capacity.

- The Annual Rainfall (indicated by the Red column) is based on a Water Year (from the beginning of October of the previous year indicated, through the end of September of the year indicated). This is measured in inches of rain along the left side of the chart.
- The Rainfall Oct – Jan (indicated by the Blue column) is a water year to date from the beginning of October of the previous year through the end of January of the year indicated. This is measured in inches of rain along the left side of the chart.
- The Minimum Pool (indicated by the green line) is the lowest level of Stafford Lake measured in the fall of the previous year. This is measured in acre-feet along the right side of the chart (the number must be multiplied by 100).
- The dates above the annual rainfall (red) column data indicate the day the lake reached full capacity and spilled during that water year or did not spill (DNS).

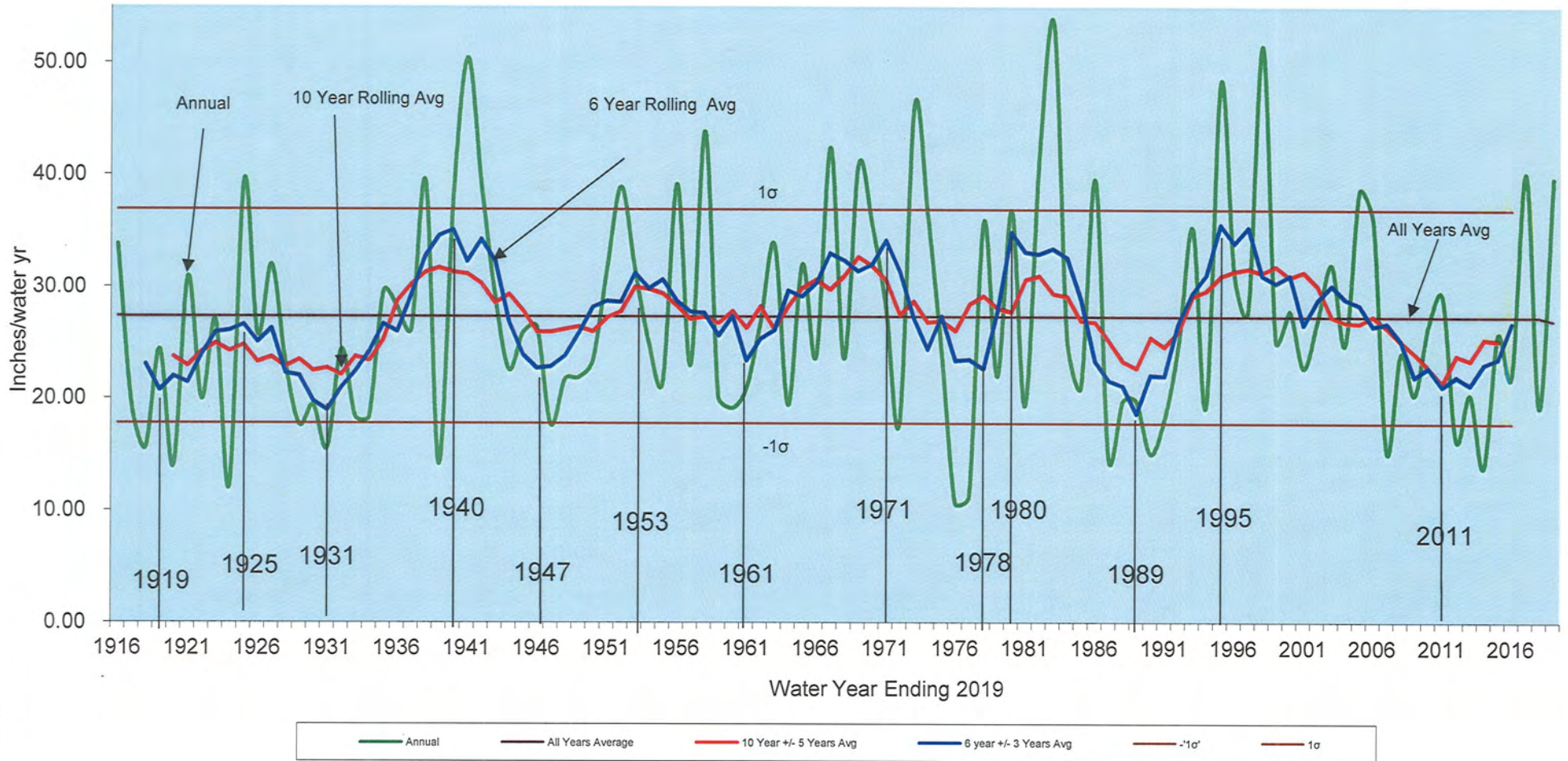
A chart of historical Water Year Rainfall data for the Novato area is provided in Attachment 2. This chart has the annual rainfall data in green, a 6 year rolling average

shown in blue and a ten year rolling average in red. There is also an all year average line at 27" of rain with a standard deviation of 9.7 inches which indicates a high variability in the annual rainfall data.

Stafford Lake Spill History



Water Year Rainfall Novato, Ca.



17

MEMORANDUM

To: Board of Directors

Date: November 15, 2019

From: Rocky Vogler, Chief Engineer *RV*

Subject: FY19-20 Quarterly Progress Report – Engineering Department

R:\CHIEF ENG\VOGLER\BUDGETS\FY 19-20\Eng Dept Perf Recap-1st Qtr 19-20.doc

The purpose of this memo is to provide a first quarter status report to the Board on the District's performance in completing budgeted FY19-20 Capital Improvements Projects (CIP) with a primary emphasis on planned (i.e., baseline) versus actual performance. The following information supplements the progress report summary provided to the Board each month.

SUMMARY

Service Areas	Project Costs (\$)		% Complete		Earned Value (\$)	
	Budget (\$)	Forecast (\$)	Planned	Actual	Planned	Actual
Novato Water	4,308,000	3,786,000	22	17	1,204,500	389,050
Novato Recycled	120,000	122,500	25	25	5,000	5,625
West Marin	1,285,000	1,579,700	21	32	321,250	178,700
TOTAL	5,713,000	5,488,200	23	25	1,530,750	573,375

The table above summarizes the detailed tabulation of CIPs for both Novato and West Marin (including Oceana Marin) systems provided in Attachment A. In summary, CIP expenditures for Novato Water are anticipated to be 12% less, Novato Recycled Water will remain approximately unchanged, and West Marin is forecasted to be approximately 23% higher compared to the approved FY19-20 budget. The primary drivers contributing to the changes are the Novato Office/Yard Building Renovation (reduction of \$400,000) and the West Marin Lagunitas Creek Slope Stabilization (addition of \$450,000). With respect to planned versus actual completion for the first quarter, the Novato Water, Novato Recycled Water and West Marin service areas (including Oceana Marin) are trending at levels commensurate with planned progress.

Performance Status for Improvement Projects

As shown on the following table (Page 3), a total of 34 projects (versus 31 in FY18-19) were originally budgeted in FY19-20 for the Novato, West Marin and Oceana Marin service areas. Four new projects have been added, four have been carried over, and none have been deleted/deferred, resulting in a new total of 42 projects. Of the 34 Capital Improvement Projects budgeted, 22 (versus 22 in FY18-19) are under the lead responsibility of the Engineering Department for completion (15 in Novato, 6 in West Marin and 0 in Oceana Marin). The remaining 12 (versus 9 in FY18-19) CIP projects are under the responsibility of the other departments (i.e., 8 – Operations, 1 – Maintenance and 3 – Admin) (Refer to the tabulation in Attachment A for a complete line item listing).

Novato Service Area Project Costs Variances

As shown in Attachment A, all of the FY19-20 Novato CIPs are currently projected to be completed at or below original budget.

Two new projects have been added: Quick Connects – Generator, and Recycled Water Retrofits – Taco Bell. Three projects have been carried over: PB Replacements – Lanham Village; Novato Fair Shopping Center Backflow; and AMI Retrofit. No projects have been deleted or deferred.

West Marin Service Area (including Oceana Marin) Project Costs Variances

As shown in Attachment A, all but one of the FY19-20 West Marin CIPs expenditures are currently projected to be within the original budget. The West Marin Brominated TTHM Reduction project is estimated to cost \$400,000 (vs. \$300,000 originally budgeted). Two projects have been added: Olema Pump Station Pump Replacement and Lagunitas Creek Slope Stabilization. One project has been carried over: PB Replacements – Drakes View Dr. No projects have been deleted or deferred.

Engineering Department Labor Hours

The Engineering Department provides a multitude of functions supporting overall operation, maintenance and expansion of water facilities. The major work classifications are: (1) General Engineering, (2) Developer Projects and (3) District (i.e., CIP) Projects. Out of the approximately 14,900 engineering labor hours available annually (less Conservation), the FY19-20 labor budget for Developer Projects and District Projects is 1,540 (10% of total) and 3,293 (22% of total), respectively. A chart of actual hours expended versus budgeted hours for both Developer and District projects during FY19-20 is provided in Attachment B. At the end of the first quarter, actual engineering labor hours expended for Developer work was 26% (400 hours) versus 25% (385 hours) budgeted. With respect to District Projects, 428 engineering labor hours (13% of budget) have been expended on Capital Improvement Projects which is below the first quarter estimate (25%).

FY 19-20
CAPITAL IMPROVEMENTS PROJECTS

PROJECTS BUDGETED	NOVATO SERVICE AREA	WEST MARIN/ OCEANA MARIN	TOTAL
Original Budget	25	9	34
Added	2	2	4
FY 18-19 Carryover	3	1	4
Deferred/Dropped	0	0	0
Adjusted Budget	30	12	42

FY18-19 CARRYOVER

Date Brought to Board

Novato

PB Replacements – Lanham Village
Novato Fair Shopping Center Backflow
AMI Retrofit

First Quarter Report
First Quarter Report
First Quarter Report

West Marin

PB Replacement – Drakes View Dr.

First Quarter Report

DEFERRED/DROPPED

Novato

West Marin

PROJECTS ADDED

Novato

Quick Connects – Generator
Recycled Water Retrofits – Taco Bell

First Quarter Report
First Quarter Report

West Marin

Olema Pump Station Pump Replacement
Lagunitas Creek Slope Stabilization

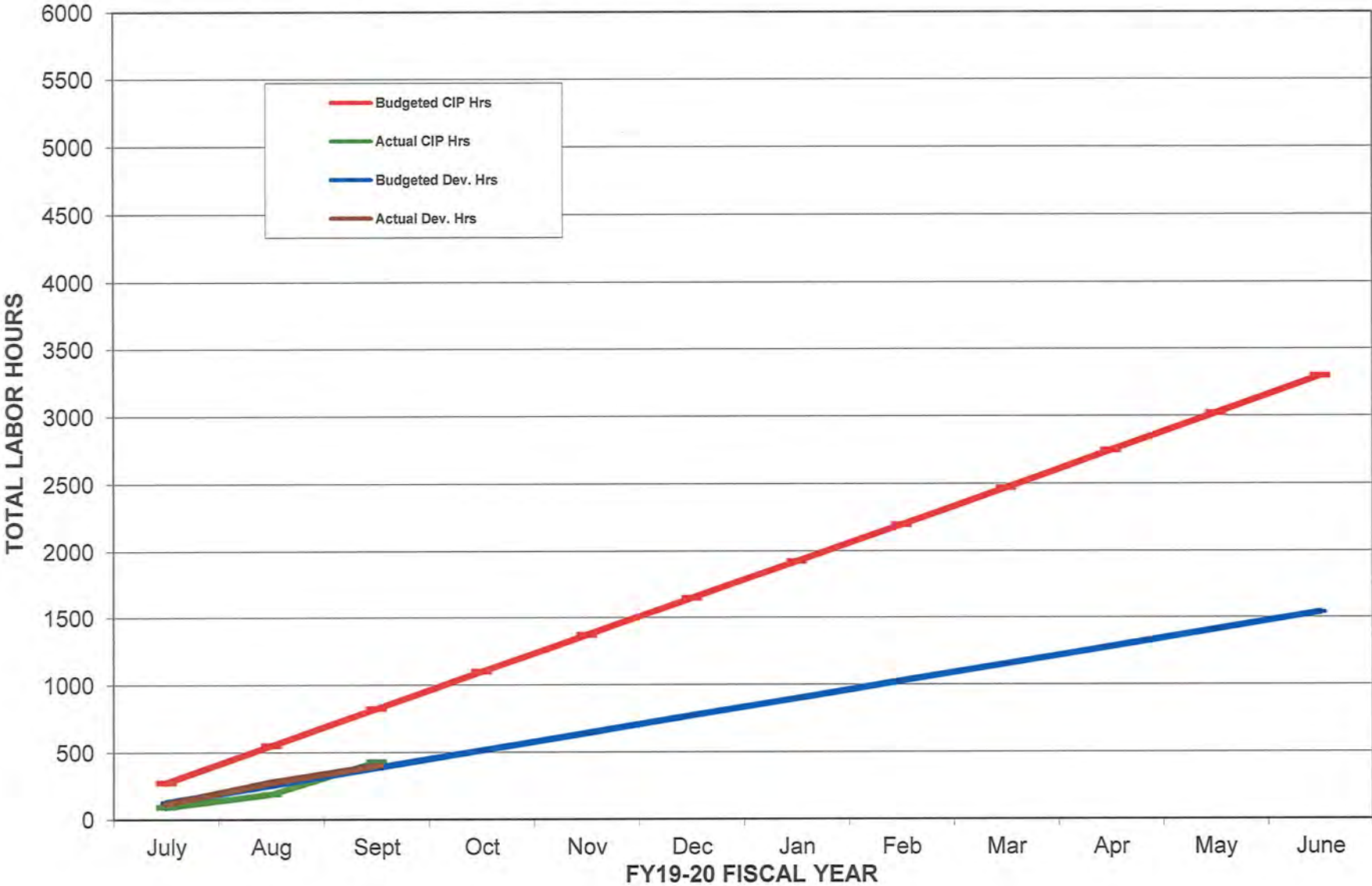
First Quarter Report
First Quarter Report

NOVATO SYSTEM CAPITAL IMPROVEMENT PROJECTS SUMMARY FY19-20										
AS OF SEPTEMBER 30, 2019										
STATUS	DEPT	ITEM #	PROJECT NO.	DESCRIPTION	PROJECT COSTS		% COMPLETE		EARNED VALUE	
					Budget	Forecast	Baseline	Actual	Planned	Actual
1. PIPELINE REPLACEMENTS/ADDITIONS										
PC	Eng	1	1.a.2	Replace Plastic Thin Walled Pipe <4-Inches (Scown Ln)	\$150,000	\$150,000	25	5	\$37,500	\$7,500
	Eng	2	1.a.3	Other Main Replacements (60+ yrs old)	\$200,000	\$200,000	25	0	\$50,000	\$0
PC	Eng	3	1.b.1	San Mateo 24" Inlet/Outlet Pipe	\$50,000	\$50,000	25	15	\$12,500	\$7,500
C	Eng	4	1.c.1	Replace PB - Lanham Village (32)	\$0	\$32,000	25	100	\$0	\$32,000
PC	Eng	5	1.c.2	Replace PB in Sync w/City Paving - MCCE (23)	\$70,000	\$70,000	25	10	\$17,500	\$7,000
	Eng	6	1.c.3	Other PB Replacements	\$80,000	\$80,000	0	0	\$0	\$0
	Eng	7	1.d.1	Other Relocations to Sync w/City & County CIP	\$70,000	\$70,000	0	0	\$0	\$0
SubTotal					\$620,000	\$652,000				
2. SYSTEM IMPROVEMENTS										
PC	Eng	8	2.a	DCDA Repair/Replace	\$100,000	\$100,000	25	10	\$25,000	\$10,000
	Eng	9	2.b	Anode Installations	\$10,000	\$10,000	0	0	\$0	\$0
PC	Eng	10	2.c	Asset Mgmt Software Procure/Implement	\$163,000	\$163,000	25	25	\$40,750	\$40,750
	Ops	11	2.d	Facilities Security Enhancements	\$25,000	\$25,000	25	0	\$6,250	\$0
PC	Eng	12	2.e	Novato Fair Shopping Center Backflow		\$40,000	25	5	\$0	\$2,000
PC	Admin	13	2.f	AMI Retrofit		\$40,000	50	50	\$0	\$20,000
SubTotal					\$298,000	\$378,000				
3. BUILDINGS, YARD, & S.T.P. IMPROVEMENTS										
PC	Admin	14	3.a.1	Electronic Document Management System	\$70,000	\$70,000	25	5	\$17,500	\$3,500
PC	Admin	15	3.a.2	Office/Yard Building Renovation	\$900,000	\$500,000	25	5	\$225,000	\$25,000
	Ops	16	3.b.1	Other Yard Improvements	\$30,000	\$30,000	25	0	\$7,500	\$0
	Eng	17	3.c.1	Dam Concrete Repair (Apron)	\$50,000	\$50,000	25	0	\$12,500	\$0
PC	Eng	18	3.c.2	Leveroni Creek Embankment Repair	\$191,000	\$191,000	25	5	\$47,750	\$9,550
PC	Ops	19	3.c.3	Other TP Improvements - Replace Ferric Tank	\$114,000	\$50,000	25	60	\$28,500	\$30,000
	Ops	20	3.c.4	Efficiency Improvements	\$100,000	\$100,000	25	0	\$100,000	\$0
PC	Ops	21	3.c.5	STP Generator	\$400,000	\$200,000	25	45	\$200,000	\$90,000
SubTotal					\$1,855,000	\$1,191,000				
4. STORAGE TANKS & PUMP STATIONS										
PC	Eng	22	4.a	Old Ranch Rd Tank No. 2	\$150,000	\$150,000	25	15	\$37,500	\$22,500
	Maint	23	4.b.1	Hydropneumatic Tank Repairs	\$30,000	\$30,000	0	0	\$0	\$0
PC	Eng	24	4.b.2	Cherry Hill Tank No. 2 Recoat & Rehabilitation	\$400,000	\$400,000	25	5	\$100,000	\$20,000
	Eng	25	4.c	Lynwood PS Motor Control Center	\$320,000	\$320,000	25	0	\$80,000	\$0
PC	Eng	26	4.d	Crest PS (design/const)/Reloc School Rd PS	\$635,000	\$635,000	25	5	\$158,750	\$31,750
PC	Ops	27	4.e	Quick Connects - Generator	\$0	\$30,000	25	100	\$0	\$30,000
SubTotal					\$1,535,000	\$1,565,000				
Novato Water Total					4,308,000	\$3,786,000	22	17	\$1,204,500	\$389,050
5. RECYCLED WATER FACILITY										
PC	Admin	28	5.a	NBWRA Grant Program Administration	\$20,000	\$20,000	25	25	\$5,000	\$5,000
PC	Eng	29	5.b	Recycled Water Retrofits - Taco Bell	\$0	\$2,500	25	25	\$0	\$625
	Eng	30	5.c	Other Recycled Water Expenditures	\$100,000	\$100,000			\$0	\$0
Novato Recycled Total					\$120,000	\$122,500	25	25	\$5,000	\$5,625
Total Novato					\$4,428,000	\$3,908,500	24	21	\$1,209,500	\$394,675
C - Completed										
PROJECT FORECAST REVISED										
Baseline projects with revised forecast budget increases (indicated by shaded box)										
Baselined projects to be deferred (indicated in strikeout)										
New projects added (indicated in bold)										
Prior year projects carried over indicated in italics and brackets <>										

WEST MARIN CAPITAL IMPROVEMENT PROJECT SUMMARY FY19-20
AS OF SEPTEMBER 30, 2019

STATUS	DEPT	ITEM #	PROJECT NO.	DESCRIPTION	PROJECT COSTS		% COMPLETE		EARNED VALUE	
					Budget	Forecast	Baseline	Actual	Planned	Actual
				6. West Marin Water System						
				System Improvements						
	Eng	31	6.a	Replace PRE Tank #4A	\$550,000	\$250,000	25	25	\$137,500	\$62,500
	Eng	32	6.b	New Gallagher Well #2	\$75,000	\$75,000	25	30	\$18,750	\$22,500
	Eng	33	6.c	PB Replace in Sync w/County Paving	\$50,000	\$50,000	25		\$12,500	\$0
	Eng	34	6.d	WM Brominated - TTHM Reduction	\$300,000	\$400,000	25	5	\$75,000	\$20,000
	Eng	35	6.e	Lagunitas Creek Bridge Pipe Replacement (Caltrans)	\$200,000	\$200,000	25	5	\$50,000	\$10,000
	Eng	36	6.f	Olema Creek Bridge Pipe Replacement (County)	\$35,000	\$35,000	25	0	\$8,750	\$0
	Ops	37	6.g	Olema PS Wireless to Tank	\$20,000	\$20,000	25	10	\$5,000	\$2,000
	Ops	38	6.h	Olema PS Pump Replacement	\$0	\$7,200	0	100	\$0	\$7,200
	Eng	39	6.i	<i>PB Repl: Drakes View Dr (22)</i>	\$0	\$43,000	25	100	\$0	\$43,000
	Admin	40	6.j	Lagunitas Creek Slope Stabilization	\$0	\$450,000	0	0	\$0	\$0
				SubTotal	\$1,230,000	\$1,530,200				
				7. Oceana Marin Sewer System						
	Ops	41	7.a	Infiltration Repair	\$40,000	\$40,000	25	5	\$10,000	\$2,000
	Ops	42	7.b	Tahiti Way Lift Pump 1 Assembly	\$15,000	\$9,500	25	100	\$3,750	\$9,500
				SubTotal	\$55,000	\$49,500				
				Total West Marin	\$1,285,000	\$1,579,700	21	32	\$321,250	\$178,700
				FY19-20 TOTAL	\$5,713,000	\$5,488,200	23	25	\$1,530,750	\$573,375
1C - Completed				PROJECT FORECAST REVISED						
PC - Partially completed				Baseline projects with revised forecast budget increases (indicated by shaded box)						
				Baselined projects to be deferred (indicated in strikeout)						
				New projects added (indicated in bold)						
				Prior year projects carried over indicated in italics						

ENGR. DEPT DEVELOPER & DISTRICT CAPTIAL IMPROVEMENT PROJECTS (CIPs)



18

MEMORANDUM

To: Board of Directors
 From: Ryan Grisso, Water Conservation Coordinator *RG*
 Subject: FY19-20 Quarterly Progress Report – Water Conservation
 (July-September)

November 15, 2019

V:\Memos to Board\Quarterly Reports\Water Conservation FY 2018_2019 QTR1 Summary Report.doc

RECOMMENDED ACTION: Information**FINANCIAL IMPACT:** NoneWater Conservation:

This memo provides an update on water conservation and public outreach activities implemented during the first quarter of Fiscal Year 2019/2020 (FY 20). Water Conservation participation numbers for the first quarter of the current and previous two fiscal years are summarized in Table 1 below.

Table 1: Water Conservation Program Participation (July through September: FY 2018 - 2020)

Program	FY 18	FY 19	FY 20
Water Smart Home Surveys (WSHS)	86	103	24
Water Smart Commercial Surveys	2	0	2
High Efficiency Toilet Rebates (Residential)	30	32	34
High Efficiency Toilet Rebates (Commercial)	0	3	1
Retrofit on Resale (Dwellings Certified)	78	52	58
High Efficiency Washing Machine Rebates	4	4	1
Cash for Grass Rebates	5	6	5
Water Smart Landscape Rebates	1	0	6
Weather Based Irrigation Controller Rebates	6	1	3
New Development Sign-offs (Residential)	8	1	7
New Development Sign-offs (Commercial)	6	6	5

Water conservation participation has continued a downward trend in participation this fiscal year in the post drought period (consistent with other utilities in northern California), although the drop in participation has appeared to level out in most programs. Cash for Grass, toilet and washer rebate participation levels remain extraordinarily low along (well below historical participation levels). The Water Smart Home Survey (WSHS) Program, which has remained fairly consistent even during the drought recovery period, has also dipped this quarter, mainly due to a staffing transition at Sonoma County Water Agency and the streamlining of the bill adjustment WSHS's during that period. Staff expects participation in WSHS and other programs to increase during the remaining three quarters of the fiscal year due to increased visibility from the District's new website and enhanced public communications actions.

Public Outreach and Conservation Marketing

In the first quarter, the District initiated the process of developing a new website and is in the beginning stages of implementing the communication actions as directed in the approved Communications Strategy and Plan for FY 2019/2020. To kick-off these actions, the Fall 2019 issue of the Novato "Water Line" (which was distributed in early November 2019) was completely redesigned by Kiosk and was the first action in the Communications Plan to be implemented. Near future actions will include (among other action items to be completed by the end of the fiscal year), redevelopment of the District "Brand", new photography of District staff and the Board, refreshment and redesign of District communications materials, and increased frequency and quality of social media posts. The District currently maintains a Facebook, Nextdoor and Instagram page with regular updates on water use efficiency, construction projects and other appropriate District outreach material. During the recent power shutoff event, the District was able to communicate our efforts to provide uninterrupted water service to our customers through our social media platforms and received an excellent and favorable response from our customer base. Staff is also using the WaterSmart AMI dashboard and customer portal as a public outreach tool to help inform customers on water use patterns and leaks.

Budget and Staffing

Table 2 summarizes the first quarter expenditures between the three fiscal years for (July-September). FY20 expenditures are consistent with FY19 and higher than FY18, although they continue to be below historical levels due to reduced program participation (mainly Cash for Grass). Expenditures are expected to increase over the next three quarters with the new website development project and implementation of the communications plan actions.

Table 2: Water Conservation and Outreach Expenditures (July through September: FY 2018 - 2020)

	FY 18	FY 19	FY 20
Total FY Budget	\$440,000	\$380,000	\$390,000
July-September Expenditures	\$60,480	\$76,293	\$76,310

Water Conservation continues to be staffed by one full time Water Conservation Coordinator. The District also has a partnership with Sonoma County Water Agency through the Sonoma-Marín Saving Water Partnership to implement and staff some of the District Water Conservation Programs including the WSHS program (estimated at 250 hours per quarter).

19

DISBURSEMENTS - DATED NOVEMBER 7, 2019**Item #19**

Date Prepared 11/5/19

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

<u>Seq</u>	<u>Payable To</u>	<u>For</u>	<u>Amount</u>
*90224	US Bank Card	ACWA Conference Regist (Dir Baker) (\$725) (12/3-12/6), Tec Help Fleeting Training Classes (2) (\$800) (Watkins), AWWA Reference Book (\$124) (Lab), Costco-Kitchen Supplies & Lanterns for Lab (\$167), DE-9 & 941 Tax Forms (\$50), SSL for Website (\$120), CWEA Membership & Testing (\$382) (Ielmorini), ACWA Webinar-"Keeping Current-Navigating Social Media" (\$50) (Grisso), Legal Ad on 10/11- Replacement Pre-Tank 4A (\$392), Business Safety Lunch w/ Marin Co Sheriff (\$66), Regist "Conference for Women" on 11/15 (Accounting Dept) (\$447) & Conference Regist (\$425), Airfare (\$226) & Lodging (\$285) "CA Society of Municipal Finance Officers" on 1/29-1/30 (Blue)	\$4,295.14
1	Automatic Sprinkler Testing & Inspection Services	Annual Fire Service Testing (10)	1,110.00
2	AT&T	Telephone (\$66), Fax (\$83), Data (\$278) & Leased Lines (\$140)	567.43
3	Bay Area Air Quality Mgmt Dist	Annual Permit Renewal Fee (To Operate Fuel Pumps)	379.00
4	Billings, Dana	Refund Overpayment on Closed Account	65.56
5	Calif Dept of Fish & Wildlife	Application for a Lake & Streambed Alternation 1600 Permit to DF&W for the Leveroni Creek Embankment Repair (\$2,241) & San Mateo Tank Inlet/Outlet Projects (\$2,241)	4,482.00
6	Charles Custom Welding	Welding Services (Blue Barn)	520.00
7	Clark, Robert E.	Exp Reimb: Lodging for ACWA-CA-NV Annual Conference in San Diego 10/20-10/24/19	799.48
8	DeGabriele, Chris	Progress Billing #6: Consulting Services: Office Renovation (Balance Remaining on Contract \$9,086)	816.00

Seq	Payable To	For	Amount
9	Diesel Direct West	Diesel (352 gals) (\$1,400) & Gasoline (400 gals) (\$1,588)	2,988.09
10	Environmental Express	Chlorate Standard (Lab)	58.06
11	Goodpaster, Stacie	Exp Reimb: Airfare (\$272), Transportation (\$105), Lodging (\$570) & Food (\$71) for AWWA Conference in San Diego (10/20-10/23)	1,018.45
12	Grainger	Wasp & Hornet Killer (12-20 oz cans), Hole Saw, 19" Machetes (2), Disinfecting Wipes (12) (\$59), Strap Wrench (\$94), Parts for On-Call Van (\$50), Utility Knives (2), Blades (2) & Roll Down Waders (\$80) (STP)	403.23
13	InfoSend	September Processing Fee for Water Bills (\$1,293), Postage (\$3,669) & September Monthly Support Fee (\$731)	5,693.10
14	LeBrun, Kent	Exp Reimb: 6-20 lbs Bags of Ice for Crew Until Replacement Machine Has Arrived (2 of 2)	38.99
15	Lincoln Life	Deferred Compensation 10/31/19	10,447.81
16	Maltby Electric	Meter Main for Nunes P.S.	163.55
17	McMaster-Carr Supply	Resin Seal for Telemetry Splicer	303.99
18	Nationwide Retirement Solution	Deferred Compensation 10/31/19	1,995.00
19	Nerviani's Backflow	Annual Backflow Tests (68)	4,080.00
20	City of Novato	Street Excavation Moratorium Fee (1205 Lynwood Dr)	500.00
21	Novato Sanitary District	Sewer Service Charges for Stafford Lake Facility	986.30
22	Pace Supply	6" Hydrant (\$1,590), Reducers (4), Corp Stops (79) (\$2,120), Meter Spuds (20) (\$277), Valves (12), Elbows (24) (\$358), Couplings (2) (\$89) & Plugs (10)	4,612.09
23	Pape Machinery	Filter ('09 John Deere Backhoe)	43.80
24	Peterson Trucks	Service Parts Service Parts ('06 Int'l 4300 Crew Truck)	289.44
25	R & B	Steel Pipe (40')	1,953.00
26	Safe Air Fast Environmental	Mold Inspection for District Apartment	595.00

Seq	Payable To	For	Amount
27	SF Bay Regional Water Quality Control	Application for Clean Water Act 401 Certification to SFRWQCB for the Leveroni Creek Embankment Repair (\$2,173) & San Mateo Inlet/Outlet Projects (\$1,638)	3,811.00
28	Staples Business Credit	Binders (10) (\$64), Dry Eraser, Classification Folders (20) (\$53) & Toner (\$235)	420.76
29	Tamagno Green Products	Sludge Removal @ STP (68 yds) (Balance Remaining on Contract \$18,180)	2,040.00
30	Thatcher of California	Ferric Chloride (9 tons) (STP)	7,048.97
31	Underground Service Alert	Annual Membership (Arendell) (7/19-6/20)	3,077.36
32	U.S. Postal Service	Meter Postage	1,000.00
33	USA BlueBook	Eyewear Lanyards (6)	37.27
34	Verizon Wireless	Cellular Charges: Data (\$1,810), Airtime (\$69) & Equipment (\$271)	2,149.68
35	VWR International	Zinc & Iron Standards (Lab)	77.71
36	Winzer	Cut Off Wheels (50) (\$214), Flap Wheels (10), Hardware for Fleet/Equipment (\$90) & Concrete Blades (2) (\$79)	468.60
TOTAL DISBURSEMENTS			<u>\$69,335.86</u>

The foregoing payroll and accounts payable vouchers totaling \$69,335.86 are hereby approved and authorized for payment.

	<u>11/6/19</u>
Auditor-Controller	Date
	<u>11/6/19</u>
General Manager	Date

DISBURSEMENTS - DATED NOVEMBER 14, 2019

Date Prepared 11/12/19

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 10/31/19	\$161,572.70
EFT*	Internal Revenue Service	Federal & FICA Taxes PPE 10/31/19	66,731.14
EFT*	State of California	State Taxes & SDI PPE 10/31/19	15,168.13
EFT*	CalPERS	Pension Contribution PPE 10/31/19	39,081.12
1	Able Tire & Brake	Tires (4) ('07 Int'l)	1,551.56
2	Alpha Analytical Labs	Lab Testing	170.00
3	American Water Works Assoc	Membership Renewals (McIntyre, Stompe, Clark, Ramudo, Vogler & Chandrasekera) (1/20-12/20) (Budget \$4,250)	4,269.00
4	Asbury Environmental Services	Used Oil Disposal for Fleet	65.00
5	Athens Administrators	October Replenishment for Checks Written	1,398.68
6	Backflow Distributors	Repair Parts for DC & Fire Services	901.84
7	Bay Club Stonetree	Refund Overpayment on Open Account-Stonetree SRF Loan	40,325.26
8	Battle Born Media	Annual Novato Advance Subscription Renewal (McIntyre) (Budget \$50) (12/19-12/20)	59.00
9	Buck's Saw Service	Parts for String Trimmer (\$102), Echo Headgear Attachment (\$258) & Echo Powerhead Tool (\$295)	654.86
10	Butler Auto Glass	New Windshield ('02 Int'l 5 Yd Dump Truck)	425.00
11	Callahan, Steve	Novato "Toilet Rebate" Program	100.00
12	Calzaretta, Richard	Novato "Cash for Grass" Rebate Program	400.00
13	Cilia, Joseph	Retiree Exp Reimb (Nov Health Ins)	333.79
14	Comcast	November Internet Connection	143.29
15	Crivello, Vincent	Refund Overpayment on Open Account	54.64

Seq	Payable To	For	Amount
16	DataTree	October Subscription to Parcel Data Info	100.00
17	Debarrows, M.A.	Refund Overpayment on Open Account	69.60
18	Direct Line	November Telephone Answering Service	355.39
19	Enterprise Fleet Management Trust	November Monthly Lease Charges for Nissan Rouges (2), Frontier & F150 Vehicles (2)	2,388.91
20	Environmental Science Assoc	Prog Pymt#2: Environmental Engineering Assistance for San Mateo Tank Permitting (Balance Remaining on Contract \$28,825)	7,418.75
21	Eurofins Eaton Analytical	Lab Testing for UCMR4 Monitoring	305.00
22	Fishman Supply	Bug Repellent Toilettes (100) (\$84), Safety Gloves (300) (\$63), Ear Plugs (600) (\$76), Anti-Fog Wipes (800) & Ibuprofen (1000) (\$88)	371.29
23	GHD	Prog Pymt#1: Engineering Services for Oceana Marin Pond Rehab Project (Balance Remaining on Contract \$126,772)	2,228.50
24	Grainger	Welding Shop Supplies (\$480), Resin Seal for Wire Splicers, Soap for Maintenance Building (\$54) & Disposable Respirator Masks (200) (\$254)	845.59
25	Jackson, David	Retiree Exp Reimb (Nov Health Ins)	986.81
26	Latanyshyn, Roman	Retiree Exp Reimb (Nov Health Ins)	333.79
27	LeBrun, Kent	Exp Reimb: Safety Boots	200.00
28	Lemos, Kerry	Retiree Exp Reimb (Nov Health Ins)	986.81
29	Marin Landscape Materials	Wood Chips (16 yds) (25 Giacomini Rd \$291 & Front Office \$317) & Weed Barrier	787.71
30	Marin County Ford	Service Parts ('12 F250) (\$58), Battery Cable ('15 Ford Escape) (\$51), Pedal Pad & Steering Wheel Assembly ('12 F250) (\$270), Tail Gate Retainer & Tailgate Latch ('08 F250 4X4) (\$60)	437.51
31	Marin County Clerk	File Notice of Exemption for the Leveroni Creek Embankment Repair Project (\$50) & File Notice of Intent for the Old Ranch Road Tank 2 Project (\$50)	100.00

Seq	Payable To	For	Amount
32	McMaster-Carr Supply	Splice Kits for West Marin Telemetry (\$67) & Switch for Olema Tank (\$127)	194.95
33	McPhail Fuel	Propane for Tahiti Way Lift Station Generator (\$676) & Propane Tank Lease (\$65) (25 Giacomini Rd)	741.01
34	North Marin Auto Parts	Service Parts ('16 Nissan Frontier), Pinter Hitch (\$134), Hose Clamps for Equipment (4), Fuel Stabilizer for Small Equipment, Transmission Filter ('06 Int'l Crew Truck), Grease for Equipment (\$69), 5 Gal Buckets (19) (\$76), Spark Plugs (4), Battery ('15 Ford Escape) (\$134), Motor Oil (3 gal), Spray Paint (6) (\$62), Light Bulbs for Vehicles (8), Battery ('01 Portable Generator) (\$481), Starter ('13 Vac Excavator) (\$255), Transmission Fluid (12) (\$65), Wiper Blades for Fleet & 5 Gal Gas Cans (4) (\$93)	1,647.92
35	North Bay Gas	Nitrogen (\$724) (STP) & October Cylinder Rental (\$151)	875.55
36	Novato Builders Supply	Landscape Materials (25 Giacomini Rd & Front Office \$210), Engineering/Surveying Materials, PVC Pipe, Masks (80) (\$116) & Concrete Nails (2 lbs)	400.83
37	Novato Sanitary District	Personnel Charges (\$76) & Lab Invoice for Pre-Treatment (\$430)	506.44
38	Office Depot	Poster Frames (4) (\$43), Pens (12), Bank Deposit Bags (200) (\$45), Notebooks & Wastebasket	120.45
39	Pace Supply	Copper Disks (5), 12" Clamps (2) (\$479), Adaptors (10) (\$229), Gaskets (10) & Nipples (10) (\$300)	1,042.44
40	Pearlman, Avram	Exp Reimb: Safety Boots	200.00
41	Peterson Trucks	Service Parts ('12 Int'l 5 Yd Dump Truck)	374.68
42	PG&E CFM/PPC Department	PGE Service Upgrade to Meet Crest Pump Station Power Requirements	30,104.68
43	Pini Hardware	Misc Hardware & Maintenance Supplies (\$185) & Key ('19 Chevy Colorado) (\$77)	262.03

Seq	Payable To	For	Amount
44	R & B	Meter Boxes (2) (\$267), Meter Box Lids (2) (\$210) & Check Valve	508.59
45	Darlene D. Rhodes	Prog Pymt#3: HR Consulting Services (Balance Remaining on Contract \$6,650)	1,968.75
46	Rodriguez, Christopher	Exp Reimb: Safety Boots	163.48
47	State Water Resources Control	D1 Certification Fee (Williamson) & D2 Renewal Certification (\$80) (Castellucci) (Budget 0)	150.00
48	Sweeney, Marilyn	Novato "Toilet Rebate" Program	200.00
49	Syar Industries	Asphalt (6 tons)	993.53
50	Synectic Technologies	Quarter Phone System Maintenance	446.70
51	Uline	41" Cable Ties (100)	118.00
52	Van Bebber Bros	5/8" Steel Plates (2)	200.20
53	Verizon Wireless	SCADA & Novato CIMIS Stations	97.27
54	VWR International	Powder Reagent (\$106) & Bottles (24) (Lab)	160.16
55	Warner, S.	Refund Overpayment on Closed Account	70.53
TOTAL DISBURSEMENTS			<u>\$392,868.86</u>

The foregoing payroll and accounts payable vouchers totaling \$392,868.86 are hereby approved and authorized for payment.

 Auditor-Controller	11/12/19 Date
 General Manager	11/12/19 Date

BOARD OF DIRECTOR'S 10/31/19 PPE

t:\finance\pay\[bod payroll chart.xlsx]103119

OCTOBER MEETINGS

		Baker	Fraites	Grossi	Joly	Petterle
Reg Meeting	10/1/2019	235.00	\$235.00	235.00	\$235.00	\$235.00
Reg Meeting	10/15/2019	235.00	\$235.00	235.00	\$235.00	\$235.00
*Extra Meeting		235.00	\$235.00			
Total		705.00 ✓	705.00 ✓	470.00 ✓	470.00 ✓	470.00 ✓

*WAC Meeting on
10/7/19

*North Bay
Watershed Assoc
on 10/4/19

November 1, 2019

To: Susan Harvey, Chair Water Advisory Committee
Drew McIntyre, Chair Technical Advisory Committee

From: Jay Jasperse, Sonoma Water

Re: Informational Item – 2018 Update of Water Supply Strategies Action Plan

The 2018 Water Supply Strategies Action Plan (Action Plan) is a key planning document for Sonoma County Water Agency (Sonoma Water). The Action Plan is an update of a 2013 plan originally developed in 2010 in cooperation with Sonoma Water Contractors that addresses immediate and long-term challenges in providing a reliable regional water supply, including aging infrastructure vulnerable to natural hazards, and water supply uncertainties due to regulatory issues, drought, and climate change. The Action Plan focuses on water supply projects and programs.

Background

In April 2009, Sonoma Water's Board of Directors (Board) held a workshop to discuss the challenges Sonoma Water faces in providing a reliable regional water supply, including the economy, aging infrastructure, regulatory concerns, drought, and climate change. The Board directed staff to seek input from the Water Contractors and the community. Staff completed this outreach and reported to the Board in September 2009. The Board directed staff, with input from the Water Contractors and other interested parties, "to commence and continue the development of new water supply projects, plans, and strategies to meet the reasonable expected future water demands of Sonoma Water's Contractors, taking into account the National Marine Fisheries Service Russian River Biological Opinion constraints and reduced Potter Valley Project flows, and incorporating the water supply strategies, climate change analysis, maximum levels of water conservation and efficiency measures, recycled water, conjunctive use and low impact development strategies."

In response to this Board direction, staff developed a draft Action Plan, conducted additional public outreach, received comments, and refined the draft Action Plan. On September 21, 2010, the Board approved the strategies and directed Sonoma Water's General Manager to finalize the Action Plan. The 2010 Action Plan described how each of the nine strategies was

being carried out through specific activities and projects, identified involved parties, provided the status of each item, included a prioritization (Immediate, Near- or Long-term), and provided funding information. The Action Plan was updated in 2011 and 2013.

2018 Water Supply Strategies Action Plan Update

The 2018 Action Plan describes accomplishments, progress made, and actions reprioritized from the 2013 Action Plan. New activities initiated since 2018 have also been added. The original nine strategies have been updated to seven strategies, shown below, which directly align with Sonoma Water's 2017 internal Strategic Plan.

Strategy 1: Protect Drinking Water Supply & Promote Water-Use Efficiency

Strategy 2: Maintain & Improve the Reliability of the Water Transmission System

Strategy 3: Utilize Regional Planning to Increase Water Supply Resiliency

Strategy 4: Respond & Adapt to Climate Change

Strategy 5: Improve the Energy Efficiency of the Water Transmission System & Increase Renewable Power Use

Strategy 6: Increase Emergency Preparation & Improve Response to Natural Disasters

Strategy 7: Seek Federal & State Funding

Sonoma Water staff coordinated with Water Contractor staff in developing the updated Action Plan. The updated Action Plan contains: (1) an executive summary; (2) a list of acronyms; (3) descriptions of the seven strategies with prioritized actions, projects and activities; (4) a summary of changes to the updated plan relative to the 2013 plan; (5) FY18-19 Long Range Financial Plan Project List; and (6) a summary of Water Contractor's water supply and reliability projects projected for the next 10 years.

The 2018 Action Plan describes in detail, important projects and activities which were completed since 2013, including Dry Creek Habitat Enhancement Demonstration Project Mile 1 and tributary restoration, as required by the Biological Opinion, hazard mitigation projects to mitigate damage from liquefaction and earthquakes, and launching Community Choice Aggregation in partnership with Sonoma Clean Power.

In addition, significant progress has been achieved on critical programs and projects, including formation of Groundwater Sustainability Agencies and implementation of the Sustainable Groundwater Management Act, development of Storm Water Resource Plans, and Forecast Informed Reservoir Operations.

Looking forward, several projects have been reprioritized or added to the Action Plan. Dry Creek Habitat Enhancement Demonstration Project Miles 4, 5 and 6 has moved to an immediate activity; increased coordination with upper Russian River Water Managers has been added. Other new actions include the grant funded Advanced Quantitative Precipitation Information Project, implementation of Sustainable Groundwater Management Act, fire response activities, and development of a comprehensive climate adaptation plan.

Important considerations of the Action Plan are, that: (1) coordination and partnerships are essential to achieving reliable, efficient and sustainable water resource management; (2) the strategies are interconnected; (3) the Action Plan is a living document and should be updated as progress is made and conditions change; and (4) transparency is critical to success.

This Action Plan continues Sonoma Water's commitment to an open, transparent, and inclusive water supply planning process. Staff continues to coordinate with the Water Contractors' Technical Advisory Committee to develop the updated Action Plan. The draft Action Plan was presented at the January 7, 2019 Technical Advisory Committee meeting. Comments were received and the Action Plan was revised. The Action Plan was also presented to the Board on September 30, 2019.



2018 WATER SUPPLY STRATEGIES ACTION PLAN



**Sonoma
Water**





2018 WATER SUPPLY STRATEGIES ACTION PLAN

EXECUTIVE SUMMARY

The Water Supply Strategies Action Plan (WSSAP) is a regional planning document intended to increase water supply system reliability, resiliency and efficiency in the face of limited resources, regulatory constraints and climate change uncertainties within Sonoma County Water Agency (Sonoma Water) service area.

In September 2010, following extensive community outreach and involvement, the Sonoma Water Board of Directors approved nine Water Supply Strategies. These strategies were developed with significant input from the Water Contractors¹ and Marin Municipal Water District.

Under Board direction, the 2010 Water Supply Strategies Action Plan described how each strategy was being carried out through specific actions and projects planned to achieve each action. For each project the parties involved were identified, and the current status and budget information were provided. The Board recognized that the plan was a living document and requested regular updates. The first update was provided in 2011 with an additional update in 2013.

Over the last 5 years, many project activities identified in the 2013 WSSAP have progressed or been completed. The 2018 WSSAP provides a progress report on project activities and identify those that have been completed and reprioritized. The 2018 WSSAP has been reorganized, as necessary, to be consistent with Sonoma Water's internal strategic plan such that the strategies and goals have been modified from earlier versions of the WSSAP.

As in prior plans, the 2018 WSSAP recognizes the importance of specific stakeholder and general community involvement in successfully carrying out the strategies. Stakeholders who are working with Sonoma Water on implementation of a particular action item are specifically mentioned as Involved Parties. Where community involvement is occurring or anticipated during all or part of the process, "community groups" are indicated as Involved Parties. In addition, many Action Plan activities will be reviewed or approved at Water Advisory Committee, Flood Control Zone, Sonoma Water's Board of

¹ Water Contractors include the Cities of Cotati, Petaluma, Rohnert Park, Santa Rosa, and Sonoma; North Marin and Valley of the Moon Water Districts; and the Town of Windsor.

Directors and other public meetings. Members of the general public will have the opportunity to review and comment on the activities at all such forums. Major accomplishments and changes from the 2013 WSSAP are summarized below and in the attached Appendix 1.

Actions Successfully Completed

Several actions described in the 2013 WSSAP have been completed. Details on each of these completed actions can be found in Appendix 1.

- Dry Creek Habitat Enhancement Demonstration Project Miles 1
- 2015 Urban Water Management Plan
- Fish Ladder/ Viewing Gallery
- Tributary Restoration
- Development of Hydrologic Index
- Groundwater Banking Feasibility Study
- Community Choice Aggregation
- Hazard Mitigation Projects:
 - Rodgers Creek Fault Crossing Mitigation
 - Isolation valves
 - River Diversion Structure liquefaction mitigation
- Preventative maintenance projects:
 - In-line meter replacements

Significant Progress

Significant progress was made on several 2013 WSSAP items that will continue to be listed in the 2018 WSSAP, including:

- Formation of Groundwater Sustainability Agencies- Building on the non- regulatory foundation of the Sonoma Valley Groundwater Management Plan, participation and support of the three Groundwater Sustainability Agencies continue as the Groundwater Sustainability Plans are being developed and additional basins are being considered.
- Forecast Informed Reservoir Operations- New science based finding continue to support opportunities to improve reservoir management.
- Storm Water Resource Plans- Successful regional planning has resulted in two SWRP's which increase the regions ability to leverage grant funding and prioritize multi beneficial projects.
- Water Use Efficiency - Following a multi-year drought where water demands were significantly reduced, the region has committed to extend the Sonoma Marin Saving Water Partnership MOU for an additional 10 years.
- Dry Creek Habitat Enhancement – Successful implementation of habitat improvements continue to progress as required by the Biological Opinion.
- Fish Habitat Flows and Water Rights EIR- The Draft EIR was released in 2016, comments are being reviewed and updating project documentation, as appropriate.

Reprioritization

Several items listed in the 2013 WSSAP have been reprioritized, based on changed conditions, funding opportunities or loss, or other circumstances. Projects falling into this category include:

- Dry Creek Habitat Enhancement Miles 4, 5 and 6 was moved to an immediate activity with pre construction engineering and design beginning in 2019.
- Ralphine tanks flow through conversion is substantially designed has been moved to an

immediate activity.

New Actions

Several items were added to the 2018 WSSAP to reflect new Sonoma Water initiatives, areas of focus or funding opportunities, including:

- Advanced Quantitative Precipitation Information- Prop 84 funding for radar units has resulted in a system that can provide critical information on location, timing and intensity of rainfall throughout the Bay Area.
- Upper River Coordination- Increased coordination with Lake Mendocino water users including Potter Valley Project relicensing activities.
- SGMA Implementation- Participation and support of the three GSA's continue as the GSP are being developed and additional basins are being considered.
- Fire Response Actions- Numerous new initiatives have been launched since October 2017 including: evaluation of potential impacts from post-wildfire burn areas, flood warning network to detect flooding conditions, implement FireSmart Lake Sonoma to increase community engagement and watershed resiliency, and facilitating the installation of high-definition cameras to provide early fire detection and situational awareness throughout the region.
- Climate Adaptation Planning- The CAP will identify strategies to address climate risks and vulnerabilities to ensure an increased understanding of water supply reliability impacts.

2018 WATER SUPPLY STRATEGIES ACTION PLAN

Table of Contents

EXECUTIVE SUMMARY	1
ACRONYMS USED IN PLAN	1
STRATEGY 1: PROTECT DRINKING WATER SUPPLY AND PROMOTE WATER-USE EFFICIENCY.....	3
STRATEGY 2: MAINTAIN AND IMPROVE THE RELIABILITY OF THE WATER TRANSMISSION SYSTEM	13
STRATEGY 3: UTILIZE REGIONAL PLANNING TO INCREASE WATER SUPPLY RESILIENCY	17
STRATEGY 4: RESPOND AND ADAPT TO CLIMATE CHANGE	22
STRATEGY 5: IMPROVE THE ENERGY EFFICIENCY OF THE WATER TRANSMISSION SYSTEM AND INCREASE RENEWABLE POWER USE	26
STRATEGY 6: INCREASE EMERGENCY PREPARATION AND IMPROVE RESPONSE TO NATURAL DISASTERS	29
STRATEGY 7: SEEK FEDERAL AND STATE FUNDING	32
APPENDIX 1: 2013 WSSAP COMPLETED ACTIVITIES.....	A-1
APPENDIX 2: SUMMARY OF COMPLETED, IMMEDIATE, AND NEAR TERM ACTIVITIES	A-9
APPENDIX 3: LONG RANGE FINANCIAL PLAN PROJECT LIST FY 18-19	A-17
APPENDIX 4: WATER CONTRACTOR LOCAL SUPPLY AND RECYCLED WATER PROJECTS	A-19

This plan used identifies 3 levels of activity:

Immediate Activity: Ongoing or to be initiated within the next year because:

1. Required by regulatory or other deadlines;
2. Other strategies or actions are dependent on outcome;
3. Achievable in the near-term;
4. Funding and resources are available.

Near Term Activity: To be initiated within one to three years because:

1. Anticipated, yet not immediate, deadline;
2. Funding is proposed;
3. Necessary for planning and development of long-term actions.

Long-term Activity: No defined start date for action, likely longer than three years, because:

1. Not enough information to proceed at this time;
2. Lower priority;
3. Funding is not available.

Acronyms Used in Plan

AMP	Adaptive Management Plan
AMI	Advanced Metering Infrastructure
AQPI	Advanced Quantitative Precipitation Information
ASR	Aquifer Storage and Recovery
CASGEM	California Statewide Groundwater Elevation Monitoring
CCA	Community Choice Aggregation
CDFW	California Department of Fish and Wildlife
CIP	Capital Improvement Project
CSD	County Sanitation District
DWR	Department of Water Resources
EIR	Environmental Impact Report
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRO	Forecast Informed Reservoir Operations
GCM	Global-Climate Models
GHG	Greenhouse Gas
GI	General Investigation
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
IRWMP	Integrated Regional Water Management Plan
ISRP	Independent Science Panel
LBNL	Lawrence Berkley National Laboratory
LHMP	Local Hazard Mitigation Plan
MMWD	Marin Municipal Water District
MOU	Memorandum of Understanding
NBCAI	North Bay Climate Adaptation Initiative
NBWRA	North Bay Water Reuse Authority
NEPA	National Environmental Policy Act
NGO	Non-governmental Organization
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NSCAPCD	Northern Sonoma County Air Pollution Control District
NWS	National Weather Service
PG&E	Pacific Gas & Electric
PUC	Public Utilities Commission
PVP	Potter Valley Project
PWRPA	Power and Water Resources Pooling Authority
RCD	Resource Conservation District

RCPA	Regional Climate Protection Authority
RDS	River Diversion Structure
RESCO	Renewable Energy Secure Communities
RFO	Request for Offer
RFP	Request for Proposal
RFQ	Request for Qualifications
RPA	Reasonable and Prudent Alternatives
RRWA	Russian River Watershed Association
RWQCB	Regional Water Quality Control Board
SCADA	Supervisory Control and Data Acquisition
SCP	Sonoma Clean Power
Scripps	Scripps Institute of Oceanography
SGMA	Sustainable Groundwater Management Act
SVCSD	Sonoma Valley County Sanitation District
SWRCB	State Water Resources Control Board
SWRP	Storm Water Resource Plan
TAC	Technical Advisory Committee
TCR	The Climate Registry
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VOMWD	Valley of the Moon Water District
WAC	Water Advisory Committee
WREGIS	Western Renewable Energy Generation Information System
WSD	Water Smart Development
WSSAP	Water Supply Strategies Action Plan

Strategy 1: Protect drinking water supply and promote water- use efficiency

Action: Increase the water supply reliability of Lake Mendocino and Lake Sonoma

Project: Support Forecast Informed Reservoir Operations (FIRO) research and implementation

Activity: Continue to support FIRO research. As new data becomes available and new science-based findings are documented, Sonoma Water will work to incorporate them into reservoir management in coordination with USACE.

Status: Through the FIRO Steering Committee (a group of state, federal and Sonoma Water representatives), USACE, Scripps, NOAA and other federal agencies are collaborating to evaluate and implement new management tools for Lake Mendocino. These tools would allow decisions about reservoir operations to be based on weather forecasts rather than historic data and rules written when the reservoir was constructed and are called forecast informed reservoir operations. A preliminary viability assessment (PVA) was released in 2017 which demonstrated that changing to forecast-based tools would improve water supply reliability without increasing flood risk to downstream communities. The Steering Committee, co-chaired by Sonoma Water, has submitted a request to USACE to modify the USACE water control manual, written in the 1950s, which governs reservoir operations. The modification (called a “major deviation”) was approved by the USACE and will allow the application of forecast-based tools to supplement USACE reservoir operations for Water Year 2019. The Steering Committee is also currently working on several technical studies identified in the PVA. The studies, combined with the results of operations during at least two major deviations from the water control manual, will form the basis for the final viability assessment, and subsequently may result in a request for a change to the water control manual. In addition, several research projects are underway to develop future tools and improve forecasting skills that can be incorporated into future versions of FIRO.

Involved Parties: USACE, Scripps, NOAA (NWS, NMFS, and Office of Atmospheric Research), USGS, BOR, DWR

Timing: Immediate

Project: Complete and implement actions to establish new hydrologic index

Activity: Adopt a hydrologic index, which informs the water year designation, with assistance from the USACE’s Hydrologic Engineering Center and the Hydrologic Index Technical Advisory Group, comprised of representatives from state and federal agencies.

Status: A new, proposed hydrologic index has been developed as part of the Fish Habitat Flows and Water Rights Project (Fish Flow Project). A draft EIR has been prepared for the Fish Flow Project. Petitions were filed with the SWRCB requesting Sonoma Water’s water rights be amended to include the proposed hydrologic index, as well as proposed new minimum

instream flow requirements; once the EIR is certified and the Fish Flow Project approved by Sonoma Water's Board of Directors, the process will move to SWRCB for approval of the petitions.

Involved Parties: SWRCB, USACE, NMFS, CDFW, North Coast RWQCB

Timing: Immediate

Project: Continue to monitor and evaluate issues related to the reliability of Lake Mendocino

Activity: Facilitate upper river water managers' quarterly meetings to collaborate, share information, and build relationships that may result in water use agreements and regional partnerships.

Status: Ongoing.

Involved Parties: Mendocino County, City of Ukiah, City of Cloverdale, City of Healdsburg, several Mendocino and Sonoma County water districts, agricultural representatives, Farm Bureaus, Russian River water users

Timing: Immediate

Activity: Conduct workshops with land managers to discuss results of drought scenarios and receive feedback on potential mitigation measures developed in partnership with Scripps and USGS.

Status: In partnership with Scripps and USGS, evaluate the Russian River Valley's future risk to drought and make the region more resilient to droughts via studies carried out through funding provided by NOAA. The project has three main tasks: (1) perform analysis to understand how extreme precipitation events and atmospheric rivers will change in the future and their role in ending droughts (2) produce extreme drought scenarios to understand how the urban and natural landscapes will respond; and (3) work with stakeholders to understand drought mitigation measures that are currently being executed and what can be done to make the region more resilient to drought in the future. Scripps, County of Sonoma, and Sonoma Water held workshop with land managers to discuss the results of the drought scenarios and receive feedback on potential mitigation measures. The Final Report is expected in December 2018.

Involved Parties: NOAA, USGS, Water Contractors, County of Sonoma, other stakeholder and community groups

Timing: Immediate

Project: Monitor and participate in PG&E's Potter Valley Project hydroelectric relicensing and Request for Offers (RFO) process

Activity: Engage in PVP re-licensing proceeding.

Status: On January 25, 2019 PG&E notified the Federal Energy Regulatory Commission (FERC) that it was withdrawing its Notice of Intent (NOI) and Preliminary Application Document (PAD) and discontinuing the Integrated Licensing Process initiated to prepare a license application. PG&E also notified FERC that it was terminating its efforts transfer and sell the project. On March 1, 2019 FERC issued a notice soliciting applications from any party interested in filing an application for a new license for the project. The notice set a deadline of 120 days from the date of the notice to file an NOI and PAD. In the event that no other party files an application

for a license by April 14, 2020, PG&E will be provided with written notice that no timely application for the project has been filed and will be required to file a schedule for filing a surrender application for the project within 90 days.

Involved Parties: FERC, PG&E, NMFS, United States Forest Service, United States Fish and Wildlife Service, CDFW, SWRCB, Round Valley Tribes, Wiyot Tribe, Humboldt County, Lake County, Mendocino County, Sonoma County, Water Contractors, Russian River water users, Friends of the Eel River, CalTrout, Trout Unlimited, community groups

Timing: Immediate

Activity: Participate in Congressman Jared Huffman's PVP Ad Hoc Committee through the two working groups that have been established: Fish Passage and Water Supply.

Status: In 2017, Congressman Huffman convened an ad hoc committee of interested parties to work toward a Two-Basin Solution for the future of the PVP that addresses issues and concerns in both the Eel River and Russian River watersheds. Sonoma Water staff are participating in leadership roles for each of the Working Groups. The Fish Passage Working Group will identify existing information and best available science, develop objectives for fish passage and identify viable solutions (near term, longer term). The Water Supply Working Group will identify water supply issues on Eel and Russian Rivers, develop objectives for water supply, identify viable solutions (near term, longer term), and assess consequences, opportunities, and challenges of potential futures for the PVP. Throughout 2018, the Fish Passage and Water Supply Working Groups will examine these issues and then report their findings to the full Ad Hoc Committee for consideration.

Involved Parties: PG&E, CalTrout, Potter Valley Irrigation District, City of Ukiah, Round Valley Indian Tribes, Congressman Jared Huffman's Office, Russian Riverkeeper, Coyote Valley Band of Pomo Indians, County of Sonoma, Friends of the Eel River, Humboldt County, SWRCB, Lake County, Trout Unlimited, Mendocino County, U.S. Fish and Wildlife Service, NMFS, U.S. Forest Service, Pacific Coast Federation of Fishermen's Association, Wiyot Tribe, CDFW, SWRCB

Timing: Immediate

Project: Continue quagga mussel quarantine program and pursue funding for monitoring

Activity: Pursue funding to support mussel inspections at Lake Sonoma and Lake Mendocino.

Status: In September 2018, SB 790 passed, which allows entities other than USACE to apply for and receive grant funding to prevent the spread of invasive quagga and zebra mussels. The USACE manages recreation at both lakes and is responsible for implementing mandatory inspections. Sonoma Water has invested in annual voluntary inspections using mussel dogs at each lake. Sonoma Water intends to apply to the Department of Boating and Waterways for grant funds as they become available in 2019.

Involved Parties: USACE, CA Department of Boating and Waterways

Timing: Immediate

Action: Ensure compliance with the Russian River Biological Opinion

Project: Estuary Adaptive Management

Activity: Modify Sonoma Water's Russian River estuary management program as required by the Biological Opinion, including managing the estuary as a summer lagoon for steelhead rearing habitat between May 15 and October 15.

Status: The Jetty Study, required by RPA 2 in the Biological Opinion, was completed in March 2017. Sonoma Water staff completed annual updates to the Russian River Estuary Management Project Outlet Adaptive Management Plan, as well as annual biological and water quality monitoring in the estuary. Staff will continue to prepare annual updates to the Plan through the term of the Biological Opinion. Sonoma Water staff will began a flood risk feasibility study effort required by RPA 2 in 2018 with work continuing into 2019. Sonoma Water received funding from the NOAA Habitat Blueprint for salmonid habitat water quality modeling in the Russian River estuary and to evaluate changes to coastal storm and sea level rise on the Sonoma Coast and in the estuary.

Involved Parties: NMFS, CDFW, North Coast RWQCB, UC Davis Bodega Marine Lab, NOAA agencies, Stewards of the Coast and Redwoods, California State Parks, University of Washington

Timing: Immediate

Project: Habitat Enhancement Resulting in Adequate Dry Creek Flows

Activity: Construct Miles Two and Three of Dry Creek Habitat Enhancement by 2018, as required by the Biological Opinion.

Status: A total of 3.14 miles of habitat enhancement have been constructed from 2012 to 2018. As of November 2018, Sonoma Water and the Army Corps have led 2.51 and 0.63 miles of construction respectively. Most recently, the Army Corps successfully completed the Dry Creek Continuing Authorities Program Section 1135 (CAP 1135) project. Monitoring per the Dry Creek Adaptive Management Plan (AMP) is ongoing. Actions to repair two sites damaged in high winter flows between December 2016 and February 2017 were implemented during summer 2017 and are performing well.

Involved Parties: Dry Creek property owners, NMFS, CDFW, USACE, Dry Creek Tribe of Pomo Indians

Timing: Immediate

Activity: Construct Miles Four, Five and Six of Dry Creek Habitat Enhancement, as required by the Biological Opinion.

Status: Sonoma Water is coordinating with USACE for funding of miles four, five, and six through the USACE Ecosystem Restoration General Investigation (GI) process. The GI feasibility study is nearing completion and the project is advancing to the Preconstruction Engineering and Design (PED) phase in early 2019. In support of the GI process, Sonoma Water is reaching out to landowners and working with consultants to develop project designs. Project construction is being planned in three phases from 2021-2023.

Involved Parties: Dry Creek property owners, NMFS, USACE, CDFW, Dry Creek Tribe of Pomo Indians

Timing: Immediate

Project: Fish Habitat Flows and Water Rights Project EIR

Activity: Prepare EIR to modify Decision 1610 minimum instream flow requirements as required in the Russian River Biological Opinion. The proposed Fish Flow Project also includes technical water rights adjustments, including a proposed new hydrologic index, extension of time to use existing water rights to the year 2040, and additional points of diversion.

Status: The Draft EIR was released for public review in 2016. Sonoma Water staff are reviewing comments received and updating project documentation as appropriate.

Involved Parties: Water Contractors, MMWD, SWRCB, USACE, NMFS, CDFW, North Coast RWQCB, community groups

Timing: Immediate

Project: Continue to implement the Reasonable and Prudent Alternatives for the Russian River Biological Opinion

Activity: Develop contingency plan for funding and construction of Dry Creek bypass pipeline if, contrary to expectations, habitat enhancement efforts fail.

Status: A feasibility study for the bypass pipeline study was completed in 2011. The need for further budget, environmental impact analysis, and design development will be evaluated following completion of habitat enhancement efforts. Monitoring results of habitat work are completed along with the completion of construction activities in 2018 are anticipated to result in a letter of support from NMFS to continue enhancement work on miles 4, 5, and 6 projects. Successful implementation of habitat enhancement efforts have resulted in the bypass pipeline being a low priority.

Involved Parties: NMFS, USACE, CDFW, Water Contractors, MMWD

Timing: Near Term

Activity: If habitat enhancement efforts are unsuccessful, build Dry Creek bypass pipeline.

A. Project: Conduct necessary financial and environmental studies and identify timing of projects

Status: To be determined.

B. Project: Construct bypass pipeline

Status: To be determined.

Involved Parties (A and B): NMFS, USACE, CDFW, Water Contractors, MMWD, community groups

Timing: Long Term

Action: Support science-based management of groundwater and surface water resources

Project: Support the implementation of the Sustainable Groundwater Management Act

Activity: Participate in and support Sonoma Valley GSA

Status: The basin is being managed by the Sonoma Valley GSA under SGMA. Activities and information developed as part of the non-regulatory Groundwater Management Plan approved by the Sonoma Water Board of Directors informs the foundation for the

development of the GSA's Groundwater Sustainability Plan (GSP). The Sonoma Valley GSA has contracted with Sonoma Water to provide technical, grant writing, outreach, and administrative support. Work on the GSP is underway, with the financial assistance of \$1 million from DWR, through a competitive Proposition 1 grant.

Involved Parties: Sonoma Valley GSA, Sonoma Valley GSA Advisory Committee, City of Sonoma, VOMWD, North Bay Water District, County of Sonoma, Sonoma RCD, other water purveyors, community stakeholders, private well owners

Timing: Immediate

Activity: Participate in and support Santa Rosa Plain GSA

Status: Activities and information developed as part of the non-regulatory Groundwater Management Plan approved by the Sonoma Water Board of Directors informs the foundation for the development of the GSA's Groundwater Sustainability Plan (GSP). Santa Rosa Plain GSA a public agency was formed to sustainably manage groundwater in the Santa Rosa Plain groundwater basin in June 2017. The Santa Rosa Plain GSA has a Board of Directors, an administrator and an advisory committee. The Santa Rosa Plain GSA has contracted with Sonoma Water to provide technical, grant writing, and outreach. Work on the GSP is underway, with the financial assistance of \$1 million from DWR, through a competitive Proposition 1 grant.

Involved Parties: Santa Rosa Plain GSA, Santa Rosa Plain GSA Advisory Committee, Santa Rosa Water, City of Rohnert Park, City of Cotati, Town of Windsor, Sonoma RCD, Gold Ridge RCD, County of Sonoma, Mutual Water Companies and Investor Owned Utilities, Graton Rancheria Tribe, private well owners, community groups

Timing: Immediate

Activity: Participate in and support Petaluma Valley GSA

Status: Petaluma Valley GSA, a public agency was formed to sustainably manage groundwater in the Petaluma Valley groundwater basin in June 2017. The Petaluma Valley GSA has a Board of Directors, an administrator and an advisory committee. The Petaluma Valley GSA has contracted with Sonoma Water to provide technical, grant writing, outreach, and administrative support. Work on the groundwater sustainability plan is underway, with the financial assistance of \$1 million from DWR, through a competitive Proposition 1 grant.

Involved Parties: Petaluma Valley GSA, Petaluma Valley GSA Advisory Committee, County of Sonoma, City of Petaluma, Sonoma RCD, North Bay Water District and community members

Timing: Immediate

Activity: Implement CASGEM Program

Status: Ongoing. Sonoma Water has coordinated and reported the required monitoring for 13 designated basins in county's 14 basins. Sonoma Water is responsible for two basins and through an agreement with the County is monitoring the 11 basins under County responsibility. The City of Petaluma will remain the reporting agency for the Petaluma Valley basin until the Petaluma Valley GSA assumes responsibility. Semi-annual water level measurements have been collected since fall 2011, and will be an ongoing activity. For the

basins required to comply with SGMA the CASGEM program will transition to the GSP monitoring program following development of GSPs.

Involved Parties: County of Sonoma, cities, RCDs, GSAs, community groups

Timing: Immediate

Project: Support the continued evaluation of conjunctive water use

Activity: Implement Aquifer Storage and Recovery Pilot Studies. Based on the results of the Groundwater Banking Feasibility Study, Sonoma Water and City of Sonoma initiated an ASR Pilot Study in the City of Sonoma in 2018.

Status: The ASR Pilot Study was initiated in March 2018 following permitting by the San Francisco Bay RWQCB and involves the recharge, storage and recovery of approximately 12 acre-feet of Russian River drinking water through a test well in the City of Sonoma. The results of the pilot study will provide: (1) information on the technical feasibility for ASR in the region to other local agencies, including Sonoma Water's contractors and the GSAs (2) could be used to inform site selection and implement other pilot studies and (3) to complete environmental documentation and design for a full scale or permanent ASR project in the region.

Involved Parties: City of Sonoma, Sonoma Valley GSA, community groups

Timing: Immediate

Activity: Work with interested parties to share information and coordinate activities upstream of the confluence of Dry Creek and the Russian River

Status: Russian River Science Forum, begun May 2018, hosts science related information exchange twice a year. The objectives of the Forum are to continue to coordinate on the various science and monitoring activities in the watershed and help inform and reduce data gaps identified in the Independent Science Review Panel. Topics include: hydrometeorology and climate change, surface water hydrology, groundwater, habitat and restoration, monitoring.

Involved Parties: California Land Stewardship Institute, Sonoma County Agricultural Preservation & Open Space District, Fish Friendly Farming, NMFS, resource agencies, community groups

Timing: Immediate

Project: Continue to evaluate the capacity and performance of the riverbank filtration system

Activity: Research on surface water/groundwater interaction.

Status: Continue studies and modeling of surface water/groundwater interactions in collaboration with LBNL, USGS and other research institutions to better understand flow mechanics and natural filtration processes as they relate to production and water quality at Sonoma Water's riverbank filtration facilities. Recent research activities include evaluation of potential impacts from post-wildfire burn areas. Recent work was presented by Sonoma Water staff and partners at various conferences and periodically publish results of research in peer-reviewed journals.

Involved Parties: Water Contractors, LBNL, USGS

Timing: Immediate

Action: Monitor and protect Sonoma Water's water rights

Project: Maintain reliability of Sonoma Water's water rights

Activity: Submit annual Temporary Urgency Change Petitions to the SWRCB as required by the Biological Opinion. Upon SWRCB approval, compliance with orders approving the petitions requires monitoring and reporting.

Status: Since 2010, Sonoma Water has petitioned the SWRCB for temporary changes in minimum instream flow requirements on the Russian River during the salmon rearing season, as required by the Russian River Biological Opinion. In several years, Sonoma Water has petitioned for temporary urgency changes due to drought conditions (2013-2015). The orders approving the petitions require monitoring and reporting on a variety of items including water quality in the Russian River, fisheries monitoring and water conservation activities.

Involved Parties: SWRCB, Water Contractors, MMWD, NMFS, CDFW, Russian River water users, community groups

Timing: Immediate

Activity: Prepare annual water rights reports, detailing total water use including local supplies, water conservation savings and recycled water which offsets Russian River supplies.

Status: Sonoma Water submitted its annual water rights permit progress and licensee reports for each Water Year.

Involved Parties: Water Contractors, MMWD, SWRCB, other Russian River water users under contract with Sonoma Water

Timing: Immediate

Project: Continue monitoring water rights-related activities in the watershed that could affect Sonoma Water's water rights

Activity: Actively participate in water right filings with the SWRCB in the Russian River Watershed to ensure Sonoma Water's water rights are protected.

Status: Ongoing. Amended rights Request terms be added to new and amended rights in the Russian River Watershed.

Involved Parties: SWRCB

Timing: Immediate

Action: Improve the efficient use of water in Sonoma Water's service area

Project: Increase recycled water storage, distribution, and use

Activity: Pursue expansion of recycled water projects involving Sonoma Water including Windsor and Santa Rosa (Airport Service Area) and Sonoma Valley (Sonoma Valley County Sanitation District)

Status: Windsor and Sonoma Water are working on prioritizing users and determining how to proceed with determining the most cost effective way to supply recycled water to the Airport

Service Areas currently relying on potable water from Windsor. Santa Rosa Water, working with Town of Windsor and Sonoma Water, is evaluating options for maximizing recycled water in the Airport Service Area. Other reuse opportunities are being considered, in addition to, the collaborations with Santa Rosa and Windsor.

In Sonoma Valley, SVCSD constructed pipeline and storage facilities to offset potable water use with recycled water based on current inflows. As effluent flows increase over time, SVCSD will evaluate the potential to expand the recycled water system. Recycled water may play a role in complying with the requirements of SGMA in the Sonoma Valley (and other basins required to implement SGMA).

Involved Parties: In Airport area: Windsor, Santa Rosa Water. In Sonoma Valley: City of Sonoma, NBWRA, SVCSD, VOMWD, Sonoma Valley GSA, and community groups

Timing: Immediate

Project: Monitor and prevent water loss

Activity: Evaluate the development of an operational tool to assess near real time meter zone water balance for AMI meters.

Status: Utilizing software currently available and operational data to construct a daily water balance tool.

Involved Parties: Internal

Timing: Immediate

Activity: Support Water Contractors in implementation of Water Loss Management Reporting.

Status: Monitor, collect and disseminate system data for Water Contractors required annual water loss reporting.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Activity: Track state regulations for wholesaler water supplier water loss reporting.

Status: SWRCB is developing and enacting water loss reporting requirements for wholesale water suppliers. Sonoma Water staff are providing feedback to the SWRCB on the methodology and will continue to voluntarily report on water loss.


Involved Parties: Water Contractors

Timing: Near Term

Project: Continue to promote water-use efficiency and the Sonoma-Marin Saving Water Partnership through outreach and education

Activity: Encourage water use efficiency through outreach and education while supporting the Partners through grant submittals, regional program implementation, tracking of impactful legislation, and influencing state framework standards. Ensure engagement with the community and water contractors to reduce demands through long term conservation strategies.

Status: Ongoing. In June 2018 the Sonoma Marin Saving Water Partnership MOU was extended for 10 additional years to assist the Partners in meeting statewide efficiency targets,



ensure the region continues to increase water awareness and pursue demand reduction opportunities that are cost effective.

Involved Parties: Water Contractors, MMWD, community groups

Timing: Immediate

Strategy 2: Maintain and improve the reliability of the Water Transmission System

Action: Assess, maintain and upgrade Water Transmission System infrastructure

Project: Assessment of collector well capacities

Activity: Evaluate the performance and condition of collector wells under standardized hydrologic and operational conditions, and if needed, develop a plan to increase reliability of these facilities.

Status: Ongoing. Collector capacity program started in 2008 and is ongoing. Collector wells 3, 4, and 5 have had two rounds of analysis utilizing standardized conditions. Collector wells 1, 2, and 6 had the second round of analysis completed in October 2018.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Project: Evaluate condition of Water Transmission System aqueducts particularly in areas with limited accessibility

Activity: Develop an implementation plan for pipeline assessment.

Status: An RFQ will be issued in 2018 to develop an implementation plan to assess the condition of the transmission system pipelines.

Involved Parties: Internal

Timing: Immediate

Activity: Implement condition assessment on priority pipelines based on implementation plan.

Status: Pending development on implementation plan.

Involved Parties: Internal

Timing: Near Term

Project: Develop a plan and schedule for replacing inflatable rubber dam

Activity: Replace inflatable rubber dam.

Status: Inflatable dam replacement is currently being designed with 60% design completed. Construction scheduled for completion in 2020.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Project: Identify and replace obsolete Water Transmission System equipment, hardware, and software

Activity: Continue planning new Water Transmission System projects to increase reliability of existing system.

Status: Develop scope, cost, and schedule of transmission system projects required to meet Sonoma Water's portion of UWMP-identified projected demands through the Urban Water

Management planning horizon. Projects identified using Sonoma Water's transmission system hydraulic model.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Activity: SCADA upgrade

Status: New SCADA software has been selected and training has been provided to appropriate staff. A pilot project is in development utilizing the new software prior to any production implementation.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Activity: Develop and maintain a prioritized Water Transmission System equipment replacement/upgrade list and a CIP priority list to inform the Long Range Financial Plan.

Status: Appendix 3 contains the current projects in the Long Range Financial Plan.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Project: Evaluate and construct operational reliability and preventative maintenance projects

Activity: Reservoir Recoat Program

Status: System-wide assessment of all tanks was completed Fall 2018 to determine the priority reservoirs for recoating. Forestville and Kastania tanks are the top priorities, followed by Cotati Tank 3. Forestville and Kastania are scheduled for 2019 and 2020, respectively.

Timing: Immediate

Activity: Petaluma Aqueduct Cathodic Protection Upgrade

Status: In construction, scheduled completion Fall 2018.

Timing: Immediate

Activity: Santa Rosa Aqueduct Cathodic Protection Upgrade

Status: Design in progress. Phase 1 construction anticipated in 2019.

Timing: Immediate

Activity: Upgrade Sonoma Booster Pump Station

Status: Design in progress with construction in Fall 2019.

Timing: Immediate

Activity: Wilfred Booster Station Electrical Upgrade

Status: Design in progress

Timing: Immediate

Activity: Mirabel Infiltration Pond Fishery Improvements

Status: Grade Ponds 2 and 3 at a slant to provide a refuge for fish captured in ponds during extreme high flow events.

Timing: Immediate

Activity: Mirabel Infiltration Ponds Rehabilitation

Status: Springtime pond prep is conducted each year in Pond 2 and 3 to ensure productive infiltration.

Timing: Immediate

Activity: Ralphine Tanks flow-through conversion

Status: The Ralphine Tanks Flow-Through Conversion was substantially designed but is now being further evaluated for the WQ benefits. Currently conducting water quality modeling.

Timing: Immediate

Project: Improve efficiency in managing the water metering system including full implementation of advanced metering infrastructure (AMI)

Activity: Implement AMI

Status: Over 110 billing meters have been converted to AMI reading. A new billing software program has been developed to interface with the AMI system. Sonoma Water is waiting on the availability of County of Sonoma Sheriff's Telecommunication Division to assist in the deployment of a fourth base station. This will allow the conversion of all but the most remote meters to AMI. A radio path study or alternate technology may be necessary for those remaining 10 remote meters.

Involved Parties: County of Sonoma

Timing: Immediate

Activity: Develop Water Transmission System Monitoring Master Plan

Status: Evaluate the existing monitoring network and develop guidelines for design, operation and maintenance of the equipment in the monitoring network. The master plan would assess how operations are monitored at production facilities, pipelines, turnouts, booster stations, valve stations, and potable storage tanks.

Involved Parties: Internal

Timing: Immediate

Project: Evaluate opportunities at Mirabel/Wohler facility to develop additional diversion facilities on existing footprint that increases and provides greater flexibility to divert water

Activity: Evaluate opportunities to increase efficiency of diversions.

Status: Due to the reduction in demands, alternate diversion systems are not needed in the near future. Initial planning for refined hydrogeologic characterization/modeling is the first phase to evaluate where opportunities exist to increase the efficiency of diversions within the existing footprint of Wohler/Mirabel.

Involved Parties: Internal only

Timing: Near Term

Action: Plan for funding improvements to ensure Water Transmission System is maintained and reliable

Project: Develop Asset Management Program

Activity: Develop an asset management program to manage facility infrastructure and provide document control functions related to asset management.

Status: Sonoma Water currently uses Maximo to track preventative/ corrective maintenance within Sonoma Water's water transmission, wastewater, fleet, facilities, and hydroelectric enterprises. Initial planning/scoping for a comprehensive asset management process is anticipated by the end of 2019. Mobile tracking pilot began Fall 2018 to facilitate preventative/ corrective maintenance in the field.

Involved Parties: Internal

Timing: Immediate

Project: Continued Refinement of Long Term Financial Plan to Support Water Supply Planning and Budgeting

Activity: Update and utilize of the Water Transmission System Long Range Financial Plan to inform the budget process each budget cycle.

Status: The Water Transmission System Long Range Financial Plan model is designed to allow scenarios - combinations of 1) delivery levels, 2) capacity projects, 3) hazard mitigation projects, 4) large non-recurring maintenance projects and 5) Biological Opinion implementation projects and their associated costs - to be analyzed and optimized. It accounts for bond-financing, rising construction costs, and operations and maintenance costs. The timeframe is from the current fiscal year to up to 30 years in the future. The basis for all calculations is the Restructured Agreement for Water Supply between Sonoma Water and its contractors. Sonoma Water staff will continue using model on an annual basis to conduct long-term financial analysis to support evaluation and development of water supply, conservation, demand management, and recycled water projects and programs.

Involved Parties: Water Contractors

Timing: Immediate

Strategy 3: Utilize regional planning to increase water supply resiliency

Action: Strengthen an integrated watershed management approach

Project: Update and maintain Integrated Regional Water Management Plans (IRWMP)

Activity: Actively participate in programming, policy development, funding, and planning of the two regional IRWMPs: North Coast Resource Partnership and Bay Area Integrated Regional Water Management Program.

Status: Implementation of several funded projects and programs from both IRWMPs is ongoing.

Involved Parties: Water Contractors, MMWD, DWR

Timing: Immediate

Project: Update and maintain the Urban Water Management Plans (UWMP)

Activity: Prepare an UWMP every 5 years.

Status: Urban Water Management Plans (UWMPs) are prepared by urban water suppliers every 5 years. Sonoma Water and most of the Water Contractors prepare UWMPs. These plans support the suppliers' long-term resource planning to ensure that adequate water supplies are available to meet existing and future water needs. The UWMP assess the reliability of water sources over a 20-year planning time frame, describes demand management measures and water shortage contingency plans, and discusses the use and planned use of recycled water. The 2015 UWMP was developed, submitted and deemed accepted by DWR. The 2020 UWMP is due July 1, 2021.

Involved Parties: Water Contractors, MMWD, DWR

Timing: Near Term

Project: Support implementation of the Sustainable Groundwater Management Agencies (SGMA)

Activity: Support administration of existing Sonoma County GSAs and development of GSPs. Provide support for the administration of the three GSAs formed in Sonoma County in 2017 and lead development of GSPs.

Status: Sonoma Water is providing administrative services to the GSAs through service agreements with Petaluma Valley GSA and Sonoma Valley GSA. Sonoma Water is also providing community engagement, grant writing and management, and technical services for development of GSPs through service agreements with all three GSA. (Related work in Strategy 1.)

Involved Parties: GSAs, GSA-member agencies, community groups

Timing: Immediate

Activity: Actively participate in the DWR Draft 2018 Basin Prioritization, which identifies three new basins as medium priority basins which, if finalized, will be required to comply with SGMA.

Status: Sonoma Water coordinated with GSAs, the County, cities and other potentially impacted entities related to the potential reprioritization of the Alexander Area, Healdsburg Area and Wilson Grove Formation Highlands basins/subbasins, including evaluating DWRs ranking methodology, developing comments, and evaluating options. DWR finalized prioritization of Alexander Area and Healdsburg Area as 'low priority' and it is anticipated that DWR will release the final reprioritization for Wilson Grove in spring 2019. Once the Basin Prioritization is final, Sonoma Water will coordinate with other agencies to evaluate next steps and approaches for complying with SGMA in any newly-added basins.

Involved Parties: DWR, GSAs, GSA-member agencies, community groups

Timing: Immediate

Activity: Participate in Technical Advisory Committee to Ukiah Valley GSA. The Ukiah Valley GSA formed in 2017 to manage the Ukiah Valley Groundwater Basin in compliance with SGMA.

Status: Sonoma Water is responsible for making releases from Coyote Valley Dam to meet minimum instream flow requirements and downstream demands in the Russian River which flows through the Ukiah Valley, significantly interacting with the groundwater basin. Consequently, Sonoma Water is coordinating with the Ukiah Valley GSA and is participating in the TAC through an MOU. In this role Sonoma Water will advise the GSA on technical matters related to development of the GSP for the Ukiah Valley Groundwater Basin to foster the sustainable management of surface water and groundwater resources.

Involved Parties: Ukiah Valley GSA, Mendocino RCD, California Land Stewardship Institute, community groups

Timing: Immediate

Project: Support and strengthen partnerships with Water Contractors and community

Activity: Continue ongoing collaboration and input from the Water Contractors and the community.

Status: Ongoing collaboration through Water Supply Coordinating Council, Water Operations Regional Team meetings, UWMP, IRWMP, Regional Resiliency Study, TAC/WAC, SGMA, and other regional collaborations.

Involved Parties: Water Contractors, MMWD, community groups

Timing: Immediate

Activity: Negotiate and develop a new Agreement for Water Supply between Sonoma Water and the Water Contractors to reflect current conditions and identify future transmission system improvements.

Status: To be determined.

Involved Parties: Water Contractors

Timing: Long Term

Project: Continue to collaborate on Russian River Integrated Watershed Modeling

Activity: Participate in the development of an integrated surface water-groundwater model (GSFlow) coupled with a water demand/reservoir routing model (MODSIM).

Status: Serve as local sponsor for the development of an integrated surface water-groundwater model (GSFlow) coupled with a water demand/reservoir routing model (MODSIM). This model will support several planning and assessment activities including SGMA, PVP relicensing, and climate change.

Involved Parties: USGS, SWRCB, Mendocino County, City of Ukiah, Russian River Flood Control District

Timing: Immediate

Project: Work with Water Contractors to reduce peak demand on transmission system via conservation, groundwater banking, local supply, and recycled water

Activity: Implement programs to reduce peak demand.

Status: Peak demand reduction is an ongoing activity for the Sonoma-Marín Saving Water Partnership and the water use efficiency team.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Activity: Local supply provided by the Water Contractors is a regional solution to reducing peak demand on the Water Transmission System.

Status: Appendix 4 contains the Water Contractor local supply projects are currently underway.

Involved Parties: Water Contractors, MMWD

Timing:

Activity: Recycled water projects which offset potable demand, specifically irrigation projects, alleviate peak demand on the Water Transmission System.

Status: Appendix 4 contains the Water Contractor recycled water projects are currently underway.

Involved Parties: Water Contractors, MMWD, land use planning entities, sanitation districts

Timing: Immediate

Project: Develop a water shortage resiliency plan

Activity: Update the Water Shortage Allocation methodology.

Status: A Water Shortage Allocation methodology, per the Restructured Agreement for Water Supply, has been developed to apportion water during peak demand periods when Water Contractor water demands exceed Sonoma Water's allowable diversions. The methodology has been approved by the WAC to address summer months when diversions from the Russian River may be constrained due to reduced flows or water availability. Water Contractors accepted the methodology in 2014 allowing the model to be in place through 2016. A model needs further update, approval by Water Contractors and Board of Directors approval.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Project: Conduct assessment of local and sub-regional water supply projects in conjunction with Sonoma Water projects

Activity: Compare actual gross demand, conservation, and source of water use with the UWMP projection to ensure projections represent actual conditions.

Status: Ongoing

Involved Parties: Water Contractors, MMWD, land use planning entities

Timing: Immediate

Project: Participate in integrated, multi-benefit water management plans and projects with conservation partners, including updating and maintaining Storm Water Resource Management Plans

Activity: Prepare and update a comprehensive, watershed based Storm Water Resource Plans (SWRPs) which represents watershed resource planning and storm water runoff management through a collaborative effort with stakeholders and public to address specific needs and issues of effective storm water management, including dry weather runoff.

Two SWRPs have been developed covering the watersheds of Russian River and Southern Sonoma County (Petaluma River and Sonoma Creek). The main purpose of the SWRP is to identify and prioritize storm water and dry weather capture projects using shared data and based on input from water and resource managers and collaborating entities including NGOs and public.

A. Russian River Storm Water Resource Plan

Status: Russian River Storm Water Resources Plan is complete. Proposition 1 Storm Water Implementation funding will be available in early 2019. Sonoma Water will continue to study feasibility of projects for implementation and seek partnerships to implement multiple benefit projects with flood protection and other benefits, as determined. Additional geotechnical field investigations may be performed to determine feasibility.

Involved Parties: RRWA, County of Mendocino, County of Sonoma, Sonoma Water, City of Cloverdale, City of Cotati, City of Healdsburg, City of Rohnert Park, Santa Rosa Water, City of Sebastopol, City of Ukiah, and Town of Windsor, San Francisco Estuary Institute, Sonoma Land Trust, Pepperwood Preserve, LBNL, Laguna de Santa Rosa Foundation, NOAA, Mendocino County Flood Control and Water Conservation Improvement District, North Coast RWQCB, SWRCB and the North Coast Resource Partnership.

B. Southern Sonoma Storm Water Resource Plan

Status: Southern Sonoma County Storm Water Resource Plan Public Draft was issued August 2018. Completed SWRP anticipated December 2018. Proposition 1 Storm Water Implementation funding will be available in early 2019. Sonoma Water will continue to study feasibility of projects for implementation and seek partnerships to implement multiple benefit projects with flood protection and other benefits, as determined. Additional geotechnical field investigations may be performed to determine feasibility.

Involved Parties: County of Sonoma, City of Petaluma, City of Sonoma, VOMWD, Sonoma County Agricultural Preservation & Open Space District, Sonoma RCD, Sonoma Land Trust, LBNL, Sonoma Ecology Center, San Francisco Bay RWQCB, SWRCB, Daily Acts, private landowners

Timing (Both A and B): Immediate

Activity: Maintain and operate the installed flood warning network to assist County of Sonoma and NWS in detecting flooding conditions.

Status: A complete ALERT2™ flood warning network was designed and installed from the ground-up to assist County of Sonoma and NWS in detecting flooding conditions following the October 2017 fires. OneRain, a new fully functional ALERT2™ flood warning network was operational by the end of February 2018 providing real-time rainfall, river-stream and reservoir data.

Involved Parties: NWS, County of Sonoma, County of Napa

Timing: Immediate

Project: Integrate flood protection and storm water management strategies with sustainable groundwater management plans and low impact development standards

Activity: Improve hydrometeorologic forecasting

Status: A collaborative effort with state, federal agencies and Scripps to improve drought/flood prediction and response strategies for our local communities with decision support tools, monitoring networks, and early warning systems. Various projects with NOAA, DWR and Scripps are focused on improved observational networks and modeling capabilities to improve reservoir operations and drought/flood response and planning.

Involved Parties: NOAA (NWS and Office of Atmospheric Research), Scripps, USGS, and DWR

Timing: Immediate

Activity: Maintain the Storm Water Resource Plans and conduct storm water management/groundwater recharge feasibility studies in the three groundwater basins: Santa Rosa Plain, Sonoma Valley, and Petaluma Valley.

Status: Coordination with the GSAs and Storm Water Resource Plans will continue to identify projects and seek partnerships to implement multiple benefit projects with flood protection and other benefits, as determined. Additional geotechnical field investigations may be performed to determine feasibility.

Involved Parties: Government agencies and municipalities, RRWA, GSAs, community groups, land use planning entities

Timing: Immediate

Strategy 4: Respond and adapt to climate change

Action: Invest in climate science and technology

Project: Work with federal and state partners such as the United States Geological Survey, Scripps Institution of Oceanography, and National Oceanic and Atmospheric Administration to develop climate models for floods and droughts

Activity: Support development of Hydrometeorology Test bed for the Russian River basin.

Status: This demonstration project will enhance precipitation monitoring and forecasting through data collected by deploying additional on-the-ground weather stations soil moisture probes, and other observational equipment. It will also improve temperature forecasting in Alexander Valley by improving NOAA's models. NOAA and Sonoma Water are working on the demonstration program. Current activities primarily consist of operations and maintenance of equipment that was installed under previous phases of the project.

Involved Parties: NOAA, USACE, USGS, NWS

Timing: Immediate

Project: Incorporate downscale climate models into surface and groundwater models

Activity: Develop a predictive model for Sonoma Valley and Russian River watersheds to downscale large climate models to local watershed scale. Model to provide hydrology input to Sonoma Water's model (ResSim) and to Sonoma Valley and Santa Rosa Plain groundwater models.

Status: Downscaled global-climate models (GCMs) developed by the USGS have been incorporated into future scenarios modeled by integrated surface water/groundwater flow models developed for the Sonoma Valley and Santa Rosa Plain. Twenty GCM scenarios are being incorporated into the Russian River ResSim model to evaluate potential impacts of climate change to the water supply reliability of Lake Mendocino and Lake Sonoma. Analysis of model results will be incorporated in the climate vulnerability assessment and climate adaptation plan that is currently being prepared. As new GCMs are developed they will be incorporated into the scenarios modeled by integrated surface water/groundwater flow models developed for the Sonoma Valley and Santa Rosa Plain.

Involved Parties: USGS

Timing: Immediate

Project: Assess potential impacts to water quality and hydrology from wildfires in the Russian River Watershed

Activity: In coordination with USGS, participate in quantifying watershed response to wildfires.

Status: Partnering with the County, the Open Space District, Pepperwood Foundation, and United States Geological Survey to conduct soil hazard analysis and mapping, and measure watershed response to fire-damaged landscapes to help public agencies plan ongoing recovery efforts.

Involved Parties: County of Sonoma, Pepperwood Preserve, Sonoma County Agricultural Preservation & Open Space District, USGS

Timing: Immediate

Activity: Implement FireSmart Lake Sonoma to address climate adaptation, community and watershed resiliency.

Status: Activities include community engagement workshops and planning to build community resilience around fire hazards, fire protection and adapting climate change. PG&E funded capacity building grant, led by Ag Innovations, with Sonoma Water as a partner.

Involved Parties: Ag Innovations, PG&E, USACE, CalFire and local Fire Districts, County of Sonoma, Sonoma County Agricultural Preservation & Open Space District, UCCE, Sonoma and Mendocino County RCDs, NSCAPCD, NGOs, Yorkville Community Benefit Association, landowners

Timing: Immediate

Action: Evaluate climate risk and vulnerabilities to our operations and infrastructure

Project: Assess regional opportunities to increase resiliency

Activity: Facilitate construction of a network of high-definition cameras that will provide early fire detection and situational awareness to protect the region's key water source from the threat of wildfire.

Status: An eight-camera network of high-definition pan-tilt-zoom cameras for early fire detection of the Lake Sonoma watershed is underway. The state-of-the-art system uses near-infrared technology for night vision, and allows fire officials to take over control of the fire cameras during wildfire emergencies to monitor fire and weather activity.

Involved Parties: County of Sonoma, Pepperwood Preserve, Fairfield Osborn Preserve, Sonoma State University, The Regents of the University of California, Scripps, County of Lake, County of Mendocino, County of Marin and the AlertWildfire consortium of universities

Timing: Immediate

Activity: Evaluate Water Contractor's water supply and distribution systems in conjunction with Sonoma Water's diversion and transmission system to prepare a workplan for developing a Decision Support Tool for regional planning of the interconnected water supply systems.

Status: A Regional Resiliency Study will be developed; a consulting firm was selected through an RFP process in summer 2018. A workplan is anticipated to be completed by early 2019. Upon completion of the work plan, it is anticipated that the Decision Support Tool will be developed and used evaluate both operational improvements and capital projects to improve the reliability of the water supply regionally.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Project: Assess climate risks/vulnerabilities and identify adaptation strategies

Activity: Develop a Climate Adaptation Plan.

Status: Climate Adaptation Plan is in development to address climate change impacts on water supply reliability based on advances in scientific understanding of climate processes and predictive modeling. The Plan is anticipated to be complete by mid 2019.

Involved Parties: USGS, USACE, RCPA, County of Sonoma, Water Contractors, CalFire, community groups

Timing: Immediate

Action: Implement climate adaptation strategies

Project: Incorporate climate adaptation projects into LHMP

Activity: Ensure the Climate Adaptation Plan initiatives are incorporated into the LHMP.

Status: 2018 update to LHMP is complete and was adopted by the Board of Directors in October 2018.

Involved Parties: Water Contractors, County of Sonoma, FEMA

Timing: Immediate

Action: Participate in and form collaborative partnerships focused on climate science and adaptation

Project: Continue to participate in the North Bay Climate Ready Program and NBCAI and coordinate with RCPA

Activity: Solicit input from key partners are on the Climate Adaptation Plan.

Status: Collaboration with key partners is ongoing. Input was received for Climate Adaptation Plan results, NBCAI provided peer review, while RCPA acted as an information sharing platform.

Involved Parties: RCPA, County of Sonoma, Pepperwood Preserve, NBCAI

Timing: Immediate

Project: Continue to participate in the Partnership for Resilience and Preparedness

Activity: Develop a Sonoma County Climate Resiliency Dashboard to explain the impacts of climate change in the North Bay Region to decision makers and the public.

Status: With the support of several federal agencies and the White House Office of Science, Technology, and Policy, a beta-version dashboard was developed and profiled in September 2016 at the UN Climate Week in New York City. Due to the change in the White House administration, this project has been delayed. An evaluation of options for business models is ongoing and anticipated to be complete by early-mid 2019. Being able to communicate the impacts of increased weather variability to the broader community is critically important as both extreme wet years and extreme dry years are likely to become more frequent.

Involved Parties: RCPA, Pepperwood Preserve, USGS, Earth Knowledge, NBCAI

Timing: Immediate

Project: Work with Groundwater Sustainability Agencies to evaluate climate change impacts to groundwater

Activity: Incorporate future climate projections into Groundwater Sustainability Plans. Incorporate downscaled Global-Climate Models (GCMs) into model simulations for GSPs.

Status: In development. Downscaled GCMs will be incorporated into model simulations performed for evaluating the water budget and potential projects and actions as part of the development of GSPs in Petaluma Valley, Santa Rosa Plain and Sonoma Valley.

Involved Parties: GSAs, community groups

Timing: Near Term

Strategy 5: Improve the Energy Efficiency of the Water Transmission System and Increase Renewable Power Use

Action: Reduce electricity costs

Project: Procure cost effective carbon free power to meet Sonoma Water electricity needs

Activity: Explore other locally available renewable energy potential including solar, wind, wave, geothermal, solid waste, pyrolysis and biomass.

Status: Ongoing.

Involved Parties: PWPRA, North Coast IRWMP, County of Sonoma, Sonoma County Agricultural Preservation & Open Space District, community groups

Timing: Immediate

Activity: Implement Floating Solar.

Status: Evaluation of 1MW of floating Solar at Oceanview Reservoir to serve 50 Sonoma Water electricity accounts for both recycled water and water accounts is complete. Currently being designed, construction anticipated in 2019. Project requires no capital investment and will result in a reduction in power costs.

Involved Parties: PG&E, PWRPA

Timing: Immediate

Activity: Refine Solar Assets.

Status: Negotiate a mutually beneficial transfer of solar assets to PWRPA to ensure Sonoma Water benefits by both the reduction in costs and PWRPA's increase of their renewable energy portfolio. Contract under consideration by Board of Directors in January 2019.

Involved Parties: PWRPA

Timing: Immediate

Project: Explore energy load shifting and energy storage opportunities to reduce net power consumption and costs

Activity: Load shifting may reduce energy costs through adjusting operations time of use.

Status: PG&E 2019 rate proposal includes this incentive option, upon PUC approval of PG&E rates Sonoma Water will determine if load shifting is feasible.

Involved Parties: PG&E

Timing: Near Term

Activity: Development of additional energy storage.

Status: Developing additional energy storage to allow operations to access a lower energy rate regardless of time of use. PG&E 2019 rate proposal includes this incentive option, upon PUC approval of PG&E rates Sonoma Water will determine if energy storage is feasible.

Involved Parties: PG&E

Timing: Near Term

Action: Pursue regional collaboration to sequester carbon and reduce GHG emissions

Project: Assist Sonoma Clean Power in developing and creating water and energy efficiency and renewable energy programs

Activity: Collaborate with SCP to leverage mutually beneficial water and energy programs.

Status: The Sonoma Marin Saving Water Partnership, Water Education Program and Energy Resources Group collaborate with SCP as new opportunities are deemed feasible.

Involved Parties: Water Contractors, SCP

Timing: Immediate

Project: Partner with local and regional organizations and agencies to implement carbon sequestration through improved land management, restoration, biomass recycling, biochar, and/or other methods and implement feasible projects

Activity: Evaluate the effectiveness of biochar for drought resilience and carbon sequestration.

Status: Carbon sequestration is a natural or artificial process by which carbon dioxide is removed from the atmosphere and held in solid or liquid form, such as biochar. Sonoma County Biochar Demonstration Project was funded with USDA NRCS for drought resilience and carbon sequestration. The biochar production unit worked well and produced high quality char. Limited field trials were held in three Sonoma County locations where soil type and agricultural production varied using USDA NRCS protocols. Results at one site proved promising with increased plant yield and significant reduction in water needs of the test plots using biochar mixed with compost soil amendment. Cost of labor impacts the feasibility of using this as a commercial enterprise. The unit is ideal for demonstration purposes for study or research, and is highly recommended for use in education of biomass utilization and carbon cycling. Education programs will be ongoing based on additional regional interest.

Involved Parties: Sonoma Ecology Center, Gold Ridge RCD, North Coast Resource Conservation & Development Council, USDA Natural Resources Conservation Service, New England Biochar, Sonoma Biochar Initiative, Sonoma, Mendocino and Napa county communities

Timing: Immediate

Project: Begin exploring what it would take to achieve Carbon Negative Water

Activity: Verify carbon free status and assess opportunities to become Carbon Negative.

Status: Sonoma Water achieved Carbon Free Water in 2015 by cost effectively sourcing power from various sources including hydropower, solar power, geothermal power, and biogas power. Carbon Negative Water would require carbon sequestration efforts such as reforestation or producing biochar. Sonoma Water is exploring carbon sequestration

approaches as part of the climate adaptation plan development. Continue annual voluntarily report carbon emissions to TCR.

Involved Parties: Internal Activity, TCR

Timing: Immediate

Activity: Register Renewable Energy Credits with Western Renewable Energy Generation Information System (WREGIS).

Status: Ongoing, annual reporting

Involved Parties: Internal Activity, WREGIS

Timing: Immediate

Activity: Participate in the development of the Water Energy Nexus Registry.

Status: TCR began working with CalEPA on a 3-year program to develop the voluntary registry and protocols for quantifying GHG emissions related to water management. TCR will be coordinating this work with water agencies and other stakeholders to design the protocols and methodologies, which may then be used to estimate GHG reductions. Registry membership will be open to water agencies and other entities doing business in California. Staff are participating in the Water-Energy Nexus Registry Working Group which will play a key role in shaping the Registry's reporting methodologies by resolving key technical questions, providing detailed feedback on draft protocols and guidance, and helping to frame discussion topics for public stakeholder meetings.

Involved Parties: Internal Activity, TCR

Timing: Immediate

Strategy 6: Increase emergency preparation and improve response to natural disasters

Action: Update or create critical emergency preparedness planning documents

Project: Develop a system to provide critical information on location, timing and intensity of expected rainfall.

Activity: Utilize Advanced Quantitative Precipitation Information system to provide more precise rainfall forecasting for atmospheric rivers which can be coupled with a modeling system that will provide decision support for a variety of stakeholders such as flood control managers, water supply managers, emergency responders, transportation officials, and media outlets by providing more precise information on location, timing and intensity of expected rainfall.

Status: DWR awarded \$19.84 million from Proposition 84 to Sonoma Water for the San Francisco Bay Area AQPI system. Four X-band and one C-band radar units will be installed throughout the Bay Area. The project is currently being implemented. It is anticipated that by late 2019, two X-band radar units will be installed: one in Santa Clara County and one on Sonoma Mountain. An additional mobile X-band unit may be placed in the East Bay by 2019. A temporary c-band radar unit may be placed at a location yet to be determined in the Bay Area with a permanent location anticipated to be installed before December 2021.

Involved Parties: DWR, NOAA, Colorado State University, Scripps, USGS, Cooperative Institute for Research in the Atmosphere, Contra Costa Water District, Contra Costa Flood Control and Water Conservation District, San Francisco Public Utilities Commission, Santa Clara Valley Water District, Zone 7 Sonoma Agency, County of Alameda, County of Santa Cruz, East Bay Municipal Utilities District

Timing: Immediate

Project: Update Emergency Operations Plan (EOP)

Activity: Revise and update Sonoma Water's planned response to all hazards. Implement annual review and revision process following a hazard which triggers the use of the EOP.

Status: Update is 95% complete.

Involved Parties: Internal activity

Timing: Immediate

Project: Update existing emergency response and action plans regarding releases of pollutants into the Russian River that could impact water supply operations

Activity: Develop a Source and Treated Water Contamination Response Plan.

Status: Source and Treated Water Contamination Response Plan was developed to address specific steps that will be taken if pollutants impact water supply operations. The Plan was approved by SWRCB in October 2017. An annual review of the plan will align with SWRCB Reporting.

Involved Parties: SWRCB

Timing: Immediate

Activity: Participate in a collaborative pilot project to refine response actions if a petroleum spill were to occur on the Russian River.

Status: The pilot project will provide a Russian River Geographic Response Plan in 2018 and outcomes will be added to the Source and Treated Water Contamination Response Plan.

Involved Parties: County of Sonoma, Tribes, CDFW, EPA, County of Mendocino, SWRCB

Timing: Immediate

Action: Update Local Hazard Mitigation Plan (LHMP) and implement natural hazard mitigation projects

Project: Regularly update LHMP

Activity: Update and renew the LHMP every five years to understand risks from natural hazards and develop long-term strategies to reduce the impacts of disasters.

Status: FEMA approved Sonoma Water's LHMP update in October 2018. The LHMP provides a comprehensive planning strategy to evaluate feasible projects prior to applying for grant funding.

Involved Parties: Water Contractors, MMWD, County of Sonoma, FEMA

Timing: Immediate

Project: Implement projects to mitigate highest natural hazard risks

A. Activity: Address Wohler/Mirabel Liquefaction Mitigation

Status: The issue of liquefaction at Wohler/ Mirabel is a recognized hazard and should be addressed prior to other site improvements occurring. Consultant analyzed alternatives (infrastructure hardening and ground stabilization) to address vulnerability of the collector wells at Wohler/ Mirabel. The assessment concluded that vulnerability may remain high so alternative paths (emergency response, system redundancy, etc.) should be considered to minimize regional impacts and manage the risks. Seismic ground improvements at the new fish screen/ladder and RDS were completed in 2014.

Timing: Immediate: Develop and implement a seismic risk mitigation strategy for Collectors 3 and 5 to address the liquefaction and lateral spread hazard. Evaluate additional response measures to decrease vulnerability of the collector wells. Long Term: Develop and implement a seismic risk mitigation strategy for Collectors 6 against liquefaction and lateral spread hazard.

B. Activity: Construct Russian River Crossing

Status: In design, waiting for FEMA's completion of NEPA review and obligation of the funds. Pending progress with FEMA construction anticipated 2020.

Timing: Immediate

C. Activity: Construct Santa Rosa Creek Crossing (Santa Rosa Aqueduct)

Status: In design, waiting for FEMA's completion of NEPA review and obligation of the funds. Pending progress with FEMA construction anticipated 2021.

Timing: Immediate

D. Activity: Construct Mark West Creek Crossing

Status: In design, waiting for FEMA's completion of NEPA review and obligation of the funds. Pending progress with FEMA construction anticipated 2020.

Timing: Immediate

E. Activity: Construct Bennett Valley Fault Crossing (Sonoma Aqueduct)

Timing: Long Term

F. Activity: Construct Petaluma River Crossing (Petaluma Aqueduct)

Timing: Long Term

G. Activity: Construct Sonoma Creek Crossing (Lawndale/Madrone)

Timing: Long Term

F. Activity: Construct Sonoma Creek Crossing (Verano Ave)

Timing: Long Term

H. Activity: Construct Calabazas Creek Crossing

Timing: Long Term

Action: Improve emergency management implementation skills

Project: Continue multi-agency and multi-jurisdictional planning, outreach and training activities, and include partner agencies in field-level training with water contractors

Activity: Perform emergency drills/ exercises internally, in collaboration with Water Contractors, and other local agencies to improve response and recovery activities.

Status: Collaborative and internal exercises training are held annually. These drills/ exercises identify areas of improvements to the EOP.

Involved Parties: Internal activity, Water Contractors, MMWD and other local agencies, County of Sonoma

Timing: Immediate

Strategy 7: Seek federal and state funding

Action: Proactively pursue sustainable funding to support water supply projects and programs to offset impacts to ratepayers

Project: Implementation of the Sustainable Groundwater Management Act Funding

Activity: Pursue grant funding opportunities to support SGMA implementation.

Status: Ongoing effort. A total of \$3 million in grant funding has been awarded to the three existing GSAs in Sonoma County (\$1 million per GSA) for the development of GSPs through the Proposition 1 Groundwater Sustainability Plans and Projects Solicitation. Additionally, a \$250,000 Stressed Counties Grant under Proposition 1 was awarded to develop a data management system to be applied to each of the three SGMA medium priority basins in Sonoma County and facilitation services for the GSAs have been partially funded through successful applications through DWRs Facilitation Support Services program. Additional opportunities for grant funding will continue to be explored including DWRs Technical Support Services program and other outside funding entities.

Involved Parties: GSAs, State agencies, legislators, North Coast and San Francisco Bay IRWMP, DWR

Timing: Immediate

Activity: Support establishment of fair and equitable funding sources for GSA activities. Identify local funding sources for GSA activities not covered by outside grant funding.

Status: Ongoing effort. The initial two years of GSA activities (FY 17/18 and FY 18/19) have been supported by member agency contributions. Efforts are ongoing to identify local funding sources through establishment of GSPs in 2022. Such efforts have included performance of rate and fee studies to explore options. The Petaluma Valley and Sonoma Valley GSAs have determined to continue member agency contributions through FY 21/22 and the Santa Rosa Plain GSA is exploring options for establishing a broader fee setting mechanism to cover its anticipated costs through FY 21/22.

Involved Parties: GSAs, GSA-member agencies, community groups

Timing: Immediate

Project: Identify and secure federal, state, and grant funding for implementing water use efficiency projects

Activity: Pursue grant funding to offset current regional program as opportunities arise.

Status: Ongoing effort. The following grants are in place, benefiting the region: Prop 84 North Coast Resource Partnership – Drought Round, Prop 84 North Coast Resource Partnership – 2015 Round, and DWR Water/Energy Grant

Involved Parties: State funding agents, federal funding agents, foundation funding, various partners that can leverage matching funds

Timing: Immediate

Project: Procure funding to mitigate highest natural hazard risks, implement water supply operational reliability and preventative maintenance projects

Activity: Advocate for funding of projects and initiatives that improve Sonoma Water's planning actions, reliability of operations, and aging infrastructure.

Status: Continue to work with partners (DWR, other water agencies, academic institutions) to advocate for funding of projects and initiatives that improve the Sonoma Water's planning actions and reliability of operations including season to season forecasting research, FIRO, AQPI, seismic and climate risks.

Involved Parties: State funding agents, federal funding agents, foundation funding, various partners that can leverage matching funds

Timing: Immediate

Activity: Advocate and pursue funding of infrastructure projects and initiatives to support Sonoma Water's LHMP and pre-disaster mitigation.

Status: Continue to apply for grant funding and work with partners to obtain funding for pre-disaster mitigation, LHMP projects and infrastructure improvements.

Involved Parties: State funding agents, federal funding agents, foundation funding, various partners that can leverage matching funds

Timing: Immediate

Activity: Proactively work with Water Contractors to ensure their timely assistance in supporting funding efforts and reporting activities at WAC meetings.

Status: Biannual discussions on legislative activities will be scheduled for WAC and TAC meetings.

Involved Parties: Water Contractors, MMWD

Timing: Immediate

Project: Identify and secure federal, state, and grant funding for implementation of Russian River Biological Opinion

Activity: Pursue funding for studies and projects required by the Biological Opinion in Washington, D.C. and Sacramento.

Status: Funding has been provided for fish screen/ladder/viewing gallery and the Dry Creek Continuing Authorities Program (CAP) restoration project. Federal activities have been focused on USACE funding for Dry Creek habitat enhancement projects. USACE received \$6 million for the CAP project.

Involved Parties: NMFS, USACE, CDFW, Water Contractors, MMWD, community groups


Timing: Immediate

Project: Pursue grant funding for emergency preparedness

Activity: Advocate for emergency preparedness funding in Sacramento and Washington, D.C.

Status: Ongoing

Involved Parties: Water Contractors, MMWD, state/federal agencies, community groups



Timing: Immediate

Appendix 1: 2013 WSSAP Completed Activities

Strategy 1: Protect drinking water supply and promote water-use efficiency

Action: Increase the water supply reliability of Lake Mendocino and Lake Sonoma

Project: Support Forecast Informed Reservoir Operations research and implementation

2013 Immediate Action: Demonstration Project

Frost and Heat Event Forecast Demonstration Project: Provide funding and support to NOAA to develop improved temperature forecast modeling tools. Focus will be on Alexander Valley, with goal of improving forecasts of frost and hot spells. Study will downscale and correct models and integrate weather station data provided by the Winegrape Commission and other parties.

OUTCOME: NOAA developed a regional bias-corrected temperature forecast model that leveraged the 45-50 public and private weather stations in Sonoma and Mendocino counties to supplement the National Weather Service forecast models. These models were bias corrected, meaning that they “learned” by comparing the temperature forecasts to the actual and then correcting the errors in a continual process so that over time the model accuracy improved and was able to provide superior temperature forecasts from 72 hours compared to NWS and other more regional forecasts. The purpose of this pilot project was to determine if leveraging local data to improve regional models in anticipation of frost events and heat waves could: (1) allow farmers to use this information to better coordinate their diversions; and (2) allow Sonoma Water to better anticipate these events and manage reservoir releases to account for the spikes in diversions. NOAA and Sonoma Water provided matching funds. An outgrowth of the project was the installation of meteorological towers (10.7 m poles with temperature sensors) to determine where temperature inversion layers may form, as areas with inversions are prone to experiencing frost events. Although the project was successful, it has been discontinued due to lack of funding to convert it from research to operational.

2013 Immediate Action: Water Supply Reliability Analysis

Conduct water supply reliability analysis of the upper Russian River. Evaluate existing information regarding demand/use; gather new information from users; update demand analysis; model possible future scenarios; and evaluate impacts on reliability of Lake Mendocino

OUTCOME: Submitted the Lake Mendocino Water Supply Reliability Evaluation Report the SWRCB with the 2015 Temporary Urgency Change Order (Order 5/1/2015) reporting. The Reliability Study evaluated the long-term reliability of Lake Mendocino to meet water supply and environmental water demands, including informed perspectives on how Lake Mendocino is affected by climate change and PVP operations.

2013 Immediate Action: Formation of Science Panel

Work with interested parties to form an independent science review panel to evaluate existing data and develop a conceptual model regarding the hydrologic system upstream of the confluence of Dry Creek and the Russian River

OUTCOME: The Russian River Independent Science Panel (ISRP) was formed in collaboration with California Land Stewardship Institute, NMFS, Alexander Valley agriculture (RR Water Conservation Council), and the Mendocino Farm Bureau. ISRP held several meetings and produced a comprehensive report providing a conceptual model for surface and groundwater flow and interactions and the influence and impacts on habitat. The ISRP led to the formation of the Russian River Science Forum.

Action: Ensure compliance with the Russian River Biological Opinion

Project: Habitat Enhancement Resulting in Adequate Dry Creek Flows

2013 Immediate Action: Demonstration project

Build Mile One of Dry Creek habitat enhancement by 2014.

OUTCOME: Construction occurred over three construction seasons in 2012, 2013, and 2014.

2013 Immediate Action: Development of success measures

Develop criteria for measuring success of Dry Creek habitat enhancement program.

OUTCOME: The Dry Creek Adaptive Management Plan (AMP) was finalized in 2014. Creation of the AMP was a facilitated process to develop and implement specific success criteria for the Dry Creek habitat enhancement efforts.

2013 Immediate Action: Tributary Restoration

Construct Grape Creek, Willow Creek and Wallace Creek fish passage projects and tributary Grape Creek and Crane Creek restoration projects.

OUTCOME: Construction is complete for these five tributary restoration projects required under the Biological Opinion. The Grape Creek Habitat Improvement Project was constructed in 2009 and 2010. The Willow Creek Passage Enhancement Project was constructed in 2011. The Crane Creek Passage Project was constructed in 2011. The Grape Creek Passage Project was constructed in 2012. The fifth project was going to be the Wallace Creek Passage Project; however, due to the inability to secure the necessary right-of-way from the private property owners in the project area, Sonoma Water refocused the effort. Instead, with the permission of NMFS and CDFW, Sonoma Water contributed funding towards the Mill Creek Passage Project as the fifth tributary project. The Mill Creek Passage Project was constructed in 2016. The monitoring of the tributary restoration projects began in 2011.

2013 Immediate Action: Build enhanced fish barrier passage facilities at intake for infiltration ponds

Design and construct enhanced fish barrier passage facilities, including new screens at intake, fish ladder and viewing gallery at inflatable dam.

OUTCOME: Construction of new screens, fish ladder, and viewing gallery at the Mirabel rubber dam was completed in 2016. Grant funding from CDFW was received to fund portions of the project.

Action: Support science-based management of groundwater and surface water resources

Project: Support the implementation of the Sustainable Groundwater Management Act

2013 Immediate Action: Continue with Sonoma Valley program and initiate program in Santa Rosa Plain.

Develop non-regulatory AB 3030/SB1938 management plans that emphasize local control. Emphasize development of diversified water supply "portfolios" for each basin.

A. Implement Sonoma Valley groundwater management plan.

OUTCOME: Implementation of the non-regulatory Sonoma Valley Groundwater Management Plan has ceased, as the basin is now being managed by the Sonoma Valley Groundwater Sustainability Agency under SGMA. Activities and information developed as part of the non-regulatory GMP will form the foundation for development of the GSP being developed by the Sonoma Valley GSA.

B. Develop groundwater management plan for the Santa Rosa Plain.

OUTCOME: A non-regulatory groundwater management plan for the Santa Rosa Plain was developed in 2014, which will form the foundation for development of the GSP being developed by the Santa Rosa Plain GSA.

Project: Support the continued evaluation of conjunctive water use

2013 Immediate Action: Storage - Groundwater Banking Feasibility Study

Develop Phase 1 regional study and Phase 2 site-specific work plans to implement pilot studies for each Water Contractor.

OUTCOME: The Regional Groundwater Banking Feasibility Study was completed in 2013 and provided an evaluation of the regional needs and benefits, source water availability and quality, regional hydrogeological conditions, and alternatives for groundwater banking. The study recommended the performance of Aquifer Storage and Recovery Pilot studies to further assess the feasibility and support design of future projects. Pilot project is underway in collaboration with the City of Sonoma.

Action: Improve the efficient use of water in Sonoma Water's service area

Project: Monitor and prevent water loss

2013 Immediate Action: Leak detection

Conduct research in development of advanced analytics tool to evaluate the system flow and pressure monitoring data to help detect leaks in transmission and distribution systems.

OUTCOME: The pressure management component of the project was completed in August 2012. IBM developed a web-based application tool for balancing pressures and minimizing pressure spikes. VOMWD has incorporated the pressure recommendations into its operational decision making, and has found significant benefits (including a reduction in pipe breaks).

2013 Immediate Action: Demonstration project - collaboration platform

Develop systems using advance technology to improve the interoperability and transparency of data between Sonoma Water and Contractors, with the goal of improving operations and planning.

OUTCOME: The start-up phase of the project was completed in summer 2012 in collaboration with IBM and three Water Contractors. This project was discontinued after the pilot was developed and operated on a trial basis, due to lack of funding.

2013 Near Term Action: Extend Automated Meter Infrastructure demonstration project and collaboration platform to other Water Contractors

The initial pilot project intended to integrated monitoring capabilities of SCADA systems for Cotati, Santa Rosa, Rohnert Park and Sonoma Water to improve communications, increase water and power efficiencies.

OUTCOME: Pilot demonstration was deemed not cost effective and is no longer being pursued.

Strategy 2: Maintain and improve the reliability of the Water Transmission System

Action: Assess, maintain and upgrade Water Transmission System infrastructure

Project: Evaluate and construct operational reliability and preventative maintenance projects

2013 Immediate Action: In consultation with Water Contractors, develop plan to provide consistent funding for natural hazard and operational reliability capital projects.

A. System wide in-line meter replacements

OUTCOME: Meter replacement will be complete in 2018.

Action: Plan for funding improvements to ensure Water Transmission System is maintained and reliable

2013 Immediate Action: Consult with Water Contractors to evaluate feasibility of base demand system instead of continued peak summer demand system.

Specific project was dependent on implementation of peak reduction measures such as conservation, reuse, local supplies and groundwater banking. Financial implications of base demand system will be evaluated as part of long-term financial modeling and rate study.

OUTCOME: Initial phases of study were completed, but subsequent phases have been put on hold due to the decline of annual and peak demands over past several years.

2013 Immediate Action: Evaluate alternative rate strategies

Evaluate alternative revenue models such as seasonal rates and fixed versus variable costs.

OUTCOME: A technical memo prepared and presented to TAC in 2013 outlining the alternative rate strategies based on interviews with the TAC ad hoc. Rate calculations are specified in the

Restructured Agreement for Water Supply, changes to the rate calculations may be included in a Restructured Agreement Update.

Strategy 3: Utilize regional planning to increase water supply resiliency

Action: Strengthen an integrated watershed management approach

Project: Integrate flood protection and storm water management strategies with sustainable groundwater management plans and low impact development standards

2013 Immediate Action: *Develop countywide guidance manual and support the development of individual Water Smart Development (WSD) standards.*

The goal of the countywide guidebook was to manage storm water quantity and quality while reducing potable water required by new development. The guidebook also partially addressed requirements of storm water permit jointly held by Sonoma Water, Sonoma County, and Santa Rosa.

A. Complete Countywide manual

OUTCOME: The Water Smart Development Guidebook was published in December 2013 covered three primary components: water conservation, water reuse and storm water management. The Guidebook was a reference to avoid and minimize potential water resource impacts from new development.

B. Support the development of WSD into local jurisdiction plans

OUTCOME: WSD Guidebook was developed and presented to local jurisdictions for their consideration. Project was terminated due to lack of interest by Sonoma County land use planning entities.

Project: Participate in integrated, multi-benefit water management plans and projects with conservation partners, including Storm Water Resource Management Plans

2013 Immediate Action: *Identify projects that reduce flooding and increase groundwater recharge. Determine appropriate projects in the Flood Control Zones to reduce flooding and increase groundwater recharge.*

A. Scoping and Feasibility Studies

OUTCOME: Scoping studies were completed and stakeholder meetings were held to develop flood control project concepts to reduce flooding and increase groundwater recharge. This work lead to the development of the Storm Water Resource Plans.

B. Seek funding for implementation of projects

OUTCOME: Following the development of project concepts, there was a successful grant application for the design of two detention basins. One located in Petaluma and the other in Rohnert Park.

2013 Near Term Action: *Initiate efforts to obtain property rights for project sites identified in immediate actions.*

Project Implementation

OUTCOME: Project partners were secured for design and construction of a detention basin in Rohnert Park and in Petaluma.

2013 Long Term Action: Design and construct multipurpose storm water detention facilities.

Design and Construction

OUTCOME: The Petaluma project is anticipated for completion in 2020. The Rohnert Park project reached 90% design and a construction date has not been set.

Strategy 5: **Improve the Energy Efficiency of the Water Transmission System and Increase Renewable Power Use**

Action: Reduce electricity costs

Project: Procure cost effective carbon free power to meet Sonoma Water electricity needs

2013 Immediate Action: Implement Farms to Fuels project.

Develop and implement Sonoma Water renewable energy generation projects.

OUTCOME: Project was deemed not cost effective and is no longer feasible.

2013 Immediate Action: Implement Sonoma County Efficiency Financing (SCEF) program to audit Sonoma Water pumping operations, wastewater treatment operations, and facilities for inefficiencies.

Develop and implement Sonoma Water energy efficiency projects.

OUTCOME: Audits occurred at Sonoma Water facilities in 2012 and findings deemed the project was not cost effective.

Action: Pursue regional collaboration to sequester carbon and reduce GHG emissions

Partner with local and regional organizations and agencies to implement carbon sequestration through improved land management, restoration, biochar, and/or other methods and implement feasible projects

2013 Immediate Action: Implement Sonoma Water's Energy Policy regarding development of programs and projects of regional benefit.

A. Community Choice Aggregation

OUTCOME: Sonoma Clean Power launched in 2014 providing clean energy from renewable resources—geothermal, water, wind, solar, and biomass—to residents and businesses throughout Sonoma and Mendocino counties.

B. Renewable Energy Secure Communities (RESCO)

OUTCOME: RESCO project developed a renewable energy portfolio for Sonoma County provided valuable information which assisted in the creation of Sonoma Clean Power.

C. Sonoma County Efficiency Financing (SCEF)

OUTCOME: SCEF, a program designed to bundle large energy efficiency projects for local governments and non-profits, was evaluated for our region and it was determined there was not enough interest to launch program.

D. Solar at Sonoma County Airport

OUTCOME: An airport solar project was deemed not cost effective.

E. Sonoma County Energy Independence Program (SCEIP)

OUTCOME: Successful launch and implementation of SCEIP resulted in a County program which continues to reduce energy and water use.

Strategy 6: Increase emergency preparation and improve response to natural disasters

Action: Update Local Hazard Mitigation Plan (LHMP) and implement natural hazard mitigation projects

Project: Implement projects to mitigate highest natural hazard risks

2013 Immediate Action: In consultation with Water Contractors, develop plan to provide consistent funding for natural hazard and operational reliability capital projects.

A. Rodgers Creek Fault crossing mitigation

OUTCOME: Project was successfully completed in 2013.

B. Isolation valves

OUTCOME: The highest priority valves were replaced utilizing FEMA funding with completion in 2018.

C. River Diversion System liquefaction mitigation

OUTCOME: Seismic ground improvements at the RDS and fish screen/ladder were completed in 2014.

Action: Improve emergency management implementation skills

Project: Continue multi-agency and multi-jurisdictional planning, outreach and training activities, and include partner agencies in field-level training with water contractors

2013 Immediate Action: Pursue ISO 9000 and 14000 certification

ISO 9001 and 14001 was pursued to assure a program of constant improvement in Sonoma Water's quality of work and environmental management.

OUTCOME: Pursuit of ISO certification lead to an updated and revised emergency disaster preparedness program. The draft Emergency Response Plan is due for completion in early 2019.

Appendix 2: Summary of Completed, Immediate, and Near Term Activities

Strategy 1: Protect drinking water supply and promote water-use efficiency

Action	Project	Activity	Completed	Ongoing	Reprioritized	New
Increase the water supply reliability of Lake Mendocino and Lake Sonoma	Support Forecast Informed Reservoir Operations research and implementation	FIRO technical studies, final viability assessment, major deviation demonstrations		X		
		Frost and Heat Event Forecast Demonstration Project	X			
		Water Supply Reliability Analysis	X			
		Formation of a Science Panel	X			
	Complete and implement actions to establish new hydrologic index	Modeling and development of new hydrologic index	X			
		Implement new hydrologic index with Fish Flow Project		X		
	Continue to monitor and evaluate issues related to the reliability of Lake Mendocino	Facilitate quarterly upper river water managers meeting		X		X
		Evaluate and publish the Russian River Valley's future risk to drought				X
	Monitor and participate in PG&E's PVP hydroelectric relicensing process	Engage in PVP re-licensing proceeding		X		
		Participate in PVP Ad Hoc Committee				X
Ensure compliance with the Russian River Biological Opinion	Continue quagga mussel quarantine program and pursue funding for monitoring	Pursue funding for ongoing inspections at Lake Sonoma and Lake Mendocino		X		X
	Estuary Adaptive Management	Modify estuary management program		X		
	Habitat Enhancement Resulting in Adequate Dry Creek Flows	Mile 1 of Dry Creek Demonstration Project	X			
		Development of success measures	X			
		Tributary Restoration	X			
		Build enhanced fish barrier passage facilities at intake for infiltration ponds	X			
		Construct Miles Two and Three of Dry Creek Habitat enhancement		X		
		Construct Miles Four, Five and Six of Dry Creek Habitat enhancement			X	
	Fish Habitat Flows and Water Rights Project EIR	Prepare EIR to modify Decision 1610		X		
	Continue to implement the RPA for the Russian River Biological Opinion	Develop contingency plan for funding and construction of Dry Creek bypass pipeline		X		
		Conduct engineering and water quality analysis for Dry Creek bypass pipeline				

Strategy 1: Protect drinking water supply and promote water-use efficiency

Action	Project	Activity	Completed	Ongoing	Reprioritized	New
Support science-based management of groundwater and surface water resources	Support the implementation of the Sustainable Groundwater Management Act	Implement Sonoma Valley Groundwater Management Plan	X			
		Develop groundwater management plan for the Santa Rosa Plain	X			
		Participate in and support Sonoma Valley GSA		X		X
		Participate in and support Santa Rosa Plain GSA		X		X
		Participate in and support Petaluma Valley GSA		X		X
		Implement CASGEM program		X		
	Support the continued evaluation of conjunctive water use	Groundwater Banking Feasibility Study	X			
		Implement Aquifer Storage and Recovery Pilot Studies		X		X
		Russian River Science Forum		X		X
Monitor and protect Sonoma Water's water rights	Maintain reliability of Sonoma Water's water rights	Research surface water/groundwater interaction		X		
		Submit annual interim change petitions		X		
	Prepare annual water rights reports			X		
Improve the efficient use of water in Sonoma Water's service area	Continue monitoring water rights-related activities in the watershed that could affect Sonoma Water's water rights	Monitor and track water right holders on the Russian River		X		
	Increase recycled water storage, distribution, and use	Pursue expansion of recycled water		X		
	Monitor and prevent water loss	Leak detection pilot w/ IBM	X			
		Extension of AMI demonstration project	X			
		Operational tool to assess near real time meter zone water balance		X		X
		Support Water Contractors in implementation of Water Loss Management Reporting		X		X
		Track state regulations for wholesaler water supplier water loss reporting		X		X
	Continue to promote water-use efficiency and the Sonoma-Marin Saving Water Partnership through outreach and education	Outreach and Education		X		

Strategy 2: Maintain and improve the reliability of the Water Transmission System

Action	Project	Activity	Completed	Ongoing	Reprioritized	New
Assess, maintain and upgrade Water Transmission System infrastructure	Assessment of our collector well capacities	Evaluate performance and condition of collector wells		X		
	Evaluate condition of Water Transmission system aqueducts particularly in areas with limited accessibility	Develop implementation plan for pipeline assessment		X		
		Implement condition assessment		X		X
	Develop a plan and schedule for replacing inflatable rubber dam	Mirabel dam bladder replacement		X		
	Identify and replace obsolete water transmission system equipment, hardware, and software	Continue planning new transmission system projects		X		
		SCADA upgrade		X		X
		Develop and maintain a prioritized system equipment replacement/ upgrade list, 5-yr CIP priority list and the LRFP		X		X
	Evaluate and construct operational reliability and preventative maintenance projects	System wide in-line meter replacements	X			
		Reservoir Recoat Program		X		
		Petaluma Aqueduct Cathodic Protection Upgrade		X		
		Santa Rosa Aqueduct Cathodic Protection Upgrade		X		
		Upgrade Sonoma Booster Pump Station		X		
		Wilfred Booster Station Electrical Upgrade		X		X
		Mirabel Infiltration Pond Fishery Improvements		X		X
		Mirabel Infiltration Ponds Rehabilitation		X		
		Ralphine Tanks flow-through conversion		X	X	
	Improve efficiency in managing the water metering system including full implementation of AMI	Implement AMI		X		
		Develop Meter Master Plan		X		X
	Evaluate opportunities at Mirabel/Wohler facility to develop alternate diversion system on existing footprint that provides greater flexibility to divert	Initial planning for refined hydrogeologic characterization/modeling		X		
Plan for funding improvements to ensure Water Transmission System is maintained and reliable	Develop Asset Management Program	Develop an asset management program to manage facility infrastructure and document control		X		X
	Continued Refinement of Long Term Financial Plan to Support Water Supply Planning and Budgeting	Evaluate alternative rate strategies	X			
		Evaluate feasibility of base demand system	X			
		Conduct long-term financial analysis		X		

Strategy 3: Utilize regional planning to increase water supply resiliency

Action	Project	Activity	Completed	Ongoing	Reprioritized	New
Strengthen an integrated watershed management approach	Update and maintain Integrated Regional Water Management Plans (IRWMP)	Participate in two regional IRWMPs		X		
	Update and maintain the Urban Water Management Plans (UWMP)	Prepare UWMP every 5 years		X		
	Support implementation of the Sustainable Groundwater Management Agencies (SGMA)	Support administration of GSAs and development of GSPs		X		X
		Comply with SGMA in three new basins if finalized		X		X
		Participate in TAC to Ukiah Valley GSA		X		X
	Support and strengthen partnerships with Water Contractors and community	Continue ongoing collaboration and input		X		
	Continue to collaborate on Russian River Integrated Watershed Modeling	Develop integrated surface water- groundwater model coupled with water demand/ reservoir routing model		X		
	Work with Water Contractors to reduce peak demand on transmission system via conservation, groundwater banking, local supply, and recycled water	Reduction of peak demand		X		
		Local supply projects provided by the Water Contractors		X		X
		Recycled water projects provided by the Water Contractors		X		X
	Develop a water shortage resiliency plan	Update Water Shortage Allocation methodology		X		
	Conduct assessment of local and sub-regional projects in conjunction with Sonoma Water projects	Compare actual gross demand with UWMP		X		
	Participate in integrated, multi-benefit water management plans and projects with conservation partners, including Storm Water Resource Management Plans	Identify projects that reduce flooding and increase groundwater recharge	X			
		Initiate efforts to obtain property rights for project sites	X			
		Design and construct multipurpose storm water detention facilities	X			
		Maintain website providing real-time rainfall, river-stream and reservoir data.		X		X
		Storm Water Management Plans (SWRPs)		X		X
	Integrate flood protection and storm water management strategies with sustainable groundwater management plans and low impact development standards	Countywide manual	X			
		Local jurisdiction plans	X			
		Improve hydrometeorological forecasting		X		
		Coordinate GSAs and Storm Water Resource Plans		X		

Strategy 4: Respond and adapt to climate change

Action	Project	Activity	Completed	Ongoing	Reprioritized	New
Invest in climate science and technology	Work with federal and state partners such as the United States Geological Survey, Scripps Institution of Oceanography, and National Oceanic and Atmospheric Administration to develop climate models for floods and droughts	Support development of Hydrometeorology Test bed for the Russian River basin		X		
	Incorporate downscaled climate models into surface and groundwater models	Incorporate predictive model with ResSim and to Sonoma Valley and Santa Rosa Plain groundwater models		X		
	Assess potential impacts to water quality and hydrology from wildfires in the Russian River Watershed	Quantify watershed response to wildfires		X		X
		FireSmart Lake Sonoma		X		X
Evaluate climate risk and vulnerabilities to our operations and infrastructure	Assess regional opportunities to increase resiliency	Develop a decision support tool for regional planning of interconnected water systems				X
		Facilitate construction of a network of high-definition wildfire cameras		X		X
	Assess climate risks/vulnerabilities and identify adaptation strategies	Climate Adaptation Plan		X		X
Implement climate adaptation strategies	Incorporate climate adaptation projects into LHMP	Incorporate Climate Adaptation Plan initiatives into LHMP		X		X
Participate in and form collaborative partnerships focused on climate science and adaptation	Continue to participate in the North Bay Climate Ready Program and NBCAI and coordinate with RCPA	Ongoing collaboration		X		X
	Continue to participate in the Partnership for Resilience and Preparedness	Refine Sonoma County Climate Resiliency Dashboard		X		X
	Work with Groundwater Sustainability Agencies to evaluate climate change impacts to groundwater	Incorporate downscaled Global-climate models (GCMs) into model simulations for GSPs		X		

Strategy 5: Improve the Energy Efficiency of the Water Transmission System and Increase Renewable Power Use

Action	Project	Activity	Completed	Ongoing	Reprioritized	New
Reduce electricity costs	Procure cost effective carbon free power to meet Sonoma Water electricity needs	Implement Sonoma County Efficiency Financing (SCEF) program	X			
		Implement Farms to Fuels project	X			
		Explore other locally available renewable energy potential		X		
		Implement Floating Solar				X
		Refine Solar Assets				X
	Explore energy load shifting and energy storage opportunities to reduce net power consumption and costs	Load Shifting				X
		Energy Storage				X
Pursue regional collaboration to sequester carbon and reduce GHG emissions	Assist Sonoma Clean Power in developing and creating water and energy efficiency and renewable energy programs	SMSWP, Water Ed and Energy Resources collaborate with SCP		X		X
	Partner with local and regional organizations and agencies to implement carbon sequestration through improved land management, restoration, biochar, and/or other methods and implement feasible projects	Implement Community Choice Aggregation	X			
		Implement Renewable Energy Secure Communities	X			
		Implement Sonoma County Efficiency Financing (SCEF) program	X			
		Solar at Sonoma County Airport	X			
		SCEIP Support	X			
		Sonoma County Biochar Demonstration Project				X
	Begin exploring what it would take to achieve Carbon Negative Water	Voluntarily report carbon emissions to TCR		X		
		Register Renewable Energy Credits with WREGIS		X		
		Participate in the development of the Water Energy Nexus Registry				X

Strategy 6: Increase emergency preparation and improve response to natural disasters

Action	Project	Activity	Completed	Ongoing	Reprioritized	New
Update or create critical emergency preparedness planning documents	Develop a system to provide critical information on location, timing and intensity of expected rainfall.	Advanced Quantitative Precipitation Information system (AQPI) Implementation		X		X
	Update Emergency Operations Plan (EOP)	Revise and update planned response to all hazards		X		
	Update existing emergency response and action plans regarding releases of pollutants into the Russian River that could impact water supply operations	Source and Treated Water Contamination Response Plan		X		
		Participate in collaborative petroleum response pilot project				X
Update Local Hazard Mitigation Plan (LHMP) and implement natural hazard mitigation projects	Regularly update LHMP	5-year LHMP Update		X		
	Implement projects to mitigate highest natural hazard risks	Isolation valves	X			
		River Diversion System liquefaction mitigation	X			
		Rodgers Creek Fault crossing mitigation	X			
		Wohler/Mirabel Liquefaction Mitigation		X		
		Russian River Crossing		X		
		Santa Rosa Creek Crossing (Santa Rosa Aqueduct)		X		
		Mark West Creek Crossing		X		
		Bennett Valley Fault Crossing (Sonoma Aqueduct)		X		
		Petaluma River Crossing (Petaluma Aqueduct)		X		
		Sonoma Creek Crossing (Lawndale/Madrone)		X		
		Sonoma Creek Crossing (Verano Ave)		X		
		Calabasas Creek Crossing		X		
Improve emergency management implementation skills	Continue multi-agency and multi-jurisdictional planning, outreach and training activities, and include partner agencies in field-level training with water contractors	Pursue ISO 9000 and 14000 certification	X			
		Annual emergency drills and exercises		X		

Strategy 7: Seek federal and state funding

Action	Project	Activity	Completed	Ongoing	Reprioritized	New
Proactively pursue sustainable funding to support water supply projects and programs to offset impacts to ratepayers	Implementation of the Sustainable Groundwater Management Act Funding	Pursue SGMA implementation grant funding		X		
		Support establishment of fair and equitable funding sources for GSA activities		X		
	Identify and secure federal, state, and grant funding for implementing water use efficiency projects	Pursue grant funding to offset current regional SMSWP programs		X		
	Procure funding to mitigate highest natural hazard risks, implement water supply operational reliability and preventative maintenance projects	Advocate for funding of projects and initiatives that improve planning and reliability		X		
		Advocate for infrastructure projects, LHMP and pre- disaster mitigation funding		X		
		Biannual discussions on legislative activities at WAC and Tac meetings		X		
	Identify and secure federal, state, and grant funding for implementation of Russian River Biological Opinion	Pursue funding for studies and projects required by the Biological Opinion		X		
	Pursue grant funding for emergency preparedness	Advocate for emergency preparedness funding		X		

Appendix 3: Long Range Financial Plan Project List FY 18-19

Project Name	Category	% of Project	Total Project Cost (2018 Dollars)						Project Cost	Construc - tion	Active
			Common	Storage	Santa Rosa	Petaluma	Sonoma	North Marin	Totals	FY Start	
Petaluma Aqueduct Cathodic Protection - O&M	Haz Mitigation / Reliability	100.00%	1,670,000	0	0	0	0	0	1,670,000	2018	Yes
System-wide Meter Replacements - O&M	Regulatory	100.00%	230,000	0	0	0	0	0	230,000	2018	Yes
Mirabel Chlorine Lines Replacement		100.00%	360,000	0	0	0	0	0	360,000	2018	Yes
Wohler Motor Replacements (Collectors 1&2)		100.00%	1,000,000	0	0	0	0	0	1,000,000	2018	Yes
Local Hazard Mitigation (LHM) Program Design - Common	Haz Mitigation / Reliability	100.00%	100,000	0	0	0	0	0	100,000	2018	Yes
Local Hazard Mitigation (LHM) Program Design - Storage	Haz Mitigation / Reliability	100.00%	0	50,000	0	0	0	0	50,000	2018	Yes
Local Hazard Mitigation (LHM) Program Design - SR Aq	Haz Mitigation / Reliability	100.00%	0	0	120,000	0	0	0	120,000	2018	Yes
Local Hazard Mitigation (LHM) Program Design - Pet. Aq	Haz Mitigation / Reliability	100.00%	0	0	0	160,000	0	0	160,000	2018	Yes
Local Hazard Mitigation (LHM) Program Design - Son. Aq	Haz Mitigation / Reliability	100.00%	0	0	0	0	170,000	0	170,000	2018	Yes
Russian River Embankment Repair (Riverfront Park)		100.00%	1,360,000	0	0	0	0	0	1,360,000	2018	Yes
Wohler Access Road Retaining Wall		100.00%	285,000	0	0	0	0	0	285,000	2018	Yes
WTS Equipment Storage Building	Haz Mitigation / Reliability	100.00%	378,500	0	0	0	0	0	378,500	2018	Yes
Russian River Crossing - net of \$2.9 from FEMA	Haz Mitigation / Reliability	0.00%	3,725,700	0	0	0	0	0	3,725,700	2019	Yes
Mark West Creek Crossing - net \$2.8 from FEMA	Haz Mitigation / Reliability	0.00%	1,785,375	0	0	0	0	0	1,785,375	2019	Yes
Ralphine Tanks - Flow Thru Conversion	Haz Mitigation / Reliability	0.00%	0	1,483,790	0	0	0	0	1,483,790	2019	Yes
Forestville Tanks - Exterior Recoat - O&M	Haz Mitigation / Reliability	23.02%	1,125,000	0	0	0	0	0	1,125,000	2019	Yes
Ely BPS Flood Control and Electrical Upgrade	Haz Mitigation / Reliability	82.76%	0	0	580,000	0	0	0	580,000	2019	Yes
SCADA software and hardware		47.73%	750,000	0	0	0	0	0	750,000	2019	Yes
SCADA Upgrade		50.00%	1,250,000	0	0	0	0	0	1,250,000	2019	Yes
Caisson 5 Motor & Discharge Head Replacements		0.00%	500,000	0	0	0	0	0	500,000	2019	Yes
Mirabel Chlorine Building Water Line		40.00%	250,000	0	0	0	0	0	250,000	2019	Yes
Mirabel Dam Bladder Replacement		89.41%	4,734,576	0	0	0	0	0	4,734,576	2019	Yes
pH Pump Replacement		100.00%	305,000	0	0	0	0	0	305,000	2019	Yes
RDS Pump Replacement		36.56%	506,000	0	0	0	0	0	506,000	2019	Yes
RDS MCC Replacement		82.71%	538,000	0	0	0	0	0	538,000	2019	Yes
Warm Springs Dam Hydroturbine Retrofit	Efficiency	65.08%	1,790,000	0	0	0	0	0	1,790,000	2019	Yes
Wilfred Booster Station		92.62%	0	0	745,000	0	0	0	745,000	2019	Yes
Santa Rosa Creek Crossing - net of \$3M FEMA grant (pending)	Haz Mitigation / Reliability	76.27%	0	0	4,853,923	0	0	0	4,853,923	2020	Yes
Sonoma Booster Pump Station Upgrade	Haz Mitigation / Reliability	82.90%	0	0	0	0	4,704,296	0	4,704,296	2020	Yes
Kastania Tank Recoat - O&M	Haz Mitigation / Reliability	80.18%	3,349,979	0	0	0	0	0	3,349,979	2020	Yes
Mirabel Surge Tanks	Haz Mitigation / Reliability	98.88%	2,543,385	0	0	0	0	0	2,543,385	2020	Yes
Mirabel - River Road Fiber Optic Line	Haz Mitigation / Reliability	29.15%	686,000	0	0	0	0	0	686,000	2020	Yes
Caisson 6 Valve Replacement and Vault		100.00%	305,000	0	0	0	0	0	305,000	2020	Yes
Mirabel Maintenance Building		77.27%	550,000	0	0	0	0	0	550,000	2020	Yes
Non-recurring Maintenance Projects - Phase 1		33.33%	5,306,435	0	0	0	0	0	5,306,435	2020	Yes
Wohler Road Fiber Optic Cable		24.64%	276,000	0	0	0	0	0	276,000	2020	Yes
Santa Rosa/RR-Cotati Aqueducts Cathodic Protection	Haz Mitigation / Reliability	81.84%	5,095,000	0	0	0	0	0	5,095,000	2020	Yes
Mainline Valve at Vinehill Ranch		100.00%	356,000	0	0	0	0	0	356,000	2020	Yes
Wohler-Forestville Pipeline Throttling Valve		100.00%	240,000	0	0	0	0	0	240,000	2020	Yes
Mainline Valve at Jennings		91.67%	600,000	0	0	0	0	0	600,000	2020	Yes
Marin Sonoma Narrows (MSN) Segment C-2		86.21%	0	0	5,800,000	0	0	0	5,800,000	2020	Yes
River Diversion Structure Liquefaction Mitigation - structural	Haz Mitigation / Reliability	84.51%	3,875,091	0	0	0	0	0	3,875,091	2021	Yes
Collectors 3 and 5 Liquefaction Mitigation	Haz Mitigation / Reliability	93.22%	11,795,000	0	0	0	0	0	11,795,000	2021	Yes
Dry Creek Habitat Enhancement (Corps) Mile 4 - net of Corps	Biological Opinion	74.24%	6,075,000	0	0	0	0	0	6,075,000	2021	Yes
Cotati 3 Tank Recoat - O&M	Haz Mitigation / Reliability	95.29%	4,775,000	0	0	0	0	0	4,775,000	2021	Yes

			Total Project Cost (2018 Dollars)						Project Cost	Construc- tion	Active
Project Name	Category	% of Project	Common	Storage	Santa Rosa	Petaluma	Sonoma	North Marin	Totals	FY Start	
Petaluma River Crossing (Petaluma Aq)	Haz Mitigation / Reliability	83.64%	0	0	0	6,080,290	0	0	6,080,290	2022	Yes
Calabasas Creek Crossing	Haz Mitigation / Reliability	78.00%	0	0	0	0	3,266,663	0	3,266,663	2022	Yes
Dry Creek Habitat Enhancement (Corps) Mile 5 - net of Corps	Biological Opinion	79.28%	6,105,000	0	0	0	0	0	6,105,000	2022	Yes
Ralphine Tank 2 Recoat		95.17%	1,760,000	0	0	0	0	0	1,760,000	2022	Yes
Collector 6 Liquefaction Mitigation	Haz Mitigation / Reliability	84.01%	6,315,000	0	0	0	0	0	6,315,000	2023	Yes
Bennett Valley Fault Crossing (Son. Aq - Oakmont Pipe)	Haz Mitigation / Reliability	80.00%		2,444,293	0	0	2,444,293	0	4,888,586	2023	Yes
Dry Creek Habitat Enhancement (Corps) Mile 6 - net of Corps	Biological Opinion	61.94%	4,440,000	0	0	0	0	0	4,440,000	2023	Yes
Tank Recoating Program		100.00%	28,000,000	0	0	0	0	0	28,000,000	2023	Yes
Kawana-Ralphine-SBS Pipeline, Phase 1	Capacity / CIP Planning	90.99%	0	6,105,000	0	0	0	0	6,105,000	2024	Yes
Cotati-Kastania Pipeline Section 1 (Cotati to EBS)	Capacity / CIP Planning	90.33%	16,135,485	0	0	26,403,521	0	6,356,404	48,895,410	2024	Yes
Sonoma Creek Crossing (Verano Ave)	Haz Mitigation / Reliability	78.00%	0	0	0	0	3,266,663	0	3,266,663	2024	Yes
Kawana-Ralphine-SBS Pipeline, Phase 2		98.61%		41,040,000	0	0	0	0	41,040,000	2024	Yes
Dry Creek Bypass Pipeline	Capacity / CIP Planning	89.97%	152,098,857	0	0	0	0	26,840,975	178,939,832	2025	No
Russian River Wellfield Upgrade (Optimization)	Capacity / CIP Planning	89.60%	3,589,149	0	0	0	0	683,646	4,272,795	2025	No
Non-recurring Maintenance Projects - Phase 2		20.00%	8,844,058	0	0	0	0	0	8,844,058	2025	Yes
Cotati-Kastania Pipeline Sections 2 (EBS to Kastania)	Capacity / CIP Planning	90.00%	32,771,162	0	0	53,625,538	0	12,909,852	99,306,552	2029	No
Emergency Wells (Hazard Reliability Water Supply)	Haz Mitigation / Reliability	80.00%	5,909,798	0	0	0	0	0	5,909,798	2030	Yes
Water Production Facility (Mirabel/Wohler Wells)	Capacity / CIP Planning	89.44%	13,287,060	0	0	0	0	2,549,722	15,836,782	2030	No
Non-recurring Maintenance Projects - Phase 3		20.00%	8,844,058	0	0	0	0	0	8,844,058	2030	Yes
Non-recurring Maintenance Projects - Phase 4		20.00%	8,844,058	0	0	0	0	0	8,844,058	2035	Yes
Central Reliability Booster Pump Station (Design TDH: 35')	Capacity / CIP Planning	3.05%	0	3,423,463	0	0	0	0	3,423,463	2040	No
Santa Rosa Aqueduct Replacement		TBD			TBD				TBD	TBD	No
Petaluma Aqueduct Replacement		TBD				TBD		TBD	TBD	TBD	No
Sonoma Aqueduct Replacement		TBD					TBD		TBD	TBD	No
Local Hazard Mitigation Projects	Haz Mitigation / Reliability	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	No

365,414,726 54,546,546 4,973,923 93,394,349 15,811,91 49,340,599 583,482,056

3

Appendix 4: Water Contractor Local Supply and Recycled Water Projects

Entity	Project	Status	Initiated	Estimated Completion	Water Supply?	Reliability?	Notes	Potential Constraints
Rohnert Park	Groundwater Wells Replacement and Upgrade	Conceptual	2013	2035		Yes		Funding
Rohnert Park	Groundwater Banking	Conceptual	2011	TBD			Requires GSA leadership	Technical Feasibility
Rohnert Park	Recycled Water System Expansion	Design/Construction	2012	2030	Yes	Yes	System transferred from Santa Rosa to Rohnert Park in 2015. Extensions to serve University District and Southeast SPA complete	Timing of Development
Rohnert Park	Gravity Water Tank 8	Design/Construction	2016	2019		Yes	In construction	None
Rohnert Park	Gravity Water Tank 9	Conceptual	2022	2025		Yes	Shares site with Tank 8	Timing of Development
Rohnert Park	Multi-Benefit Stormwater Basin - Copeland Watershed	Design/Construction	2010	2022	Yes	Yes	Completed DWR grant funded study with Agency. Design optimization underway	Financial Feasibility
Rohnert Park	Multi-Benefit Stormwater Basin - Hinebaugh/Crane Watersheds	Conceptual	2020	2035	Yes	Yes	Supports Northeast SPA	Technical and Financial Feasibility
Windsor	Off River Wells Water Supply Phase 1	Feasibility	2014	2020	Yes	Yes		Funding
Windsor	Off River Wells Water Supply Phase 2	Conceptual	2014	2024	Yes	Yes		Funding
Windsor	Recycled Water Expansion	Conceptual	2011	2025	Yes	Yes		Funding
Santa Rosa	Phase 1 West Recycled Water Project	Feasibility	2020	2025	Yes			Financial
North Marin	AMI Full Scale Deployment	Design/Construction	2017	2019	Yes			None
North Marin	Stafford Lake Sediment Survey	Feasibility	2021	2022	Yes	Yes		Financing
North Marin	Aqueduct Energy Efficiency Project	Design/Construction	2011	2015		Yes		Financing/Caltrans
North Marin	Central Recycled Water Project	Design/Construction	2017	2018	Yes	Yes		
Cotati	Well 4	Conceptual	2011	2035	Yes	Yes		None
Cotati	Cypress Storage tank and Booster Station	Design/Construction	2011	2022		Yes		None
Cotati	Recycled Water to Thomas Page School	Conceptual	2012	2026	Yes	Yes		None
Cotati	Groundwater Banking Project	Feasibility	2010	2030	Yes	Yes		Feasibility
Marin Municipal	33 San Pablo Recycled Water Project	Design/Construction	2008	2012				None
Marin Municipal	Las Gallinas RW Facility Expansion	Design/Construction	2016	2020	Yes	Yes		None
Petaluma	Recycled Water Area A			2015				None
Petaluma	Recycled Water Area C			TBD				None
Petaluma	Recycled Water Area E			TBD				None
Petaluma	Recycled Water Area G			TBD				None
City of Sonoma	SDC Conjunctive Use	Feasibility	2017	2025	Yes	Yes		Agreement
City of Sonoma	SCWA Russian River Water Rights Diversion Increase	Feasibility	2015	2035	Yes	Yes		Environmental
City of Sonoma	Groundwater Well #9 (replacement of existing well)	Conceptual	2024	2027		Yes		CEQA and Financial
City of Sonoma	Groundwater Well #10 (replacement of existing well)	Conceptual	2026	2029		Yes		CEQA and Financial
City of Sonoma	Sonoma Valley Recycled Water Project		2025	2035	Yes	Yes		
City of Sonoma	Advanced Metering Infrastructure	Feasibility	2018	2021	Yes	Yes		
VOMWD	SDC Conjunctive Use	Feasibility	2017	2025	Yes	Yes		Agreement
VOMWD	Additional Ground Water Wells	Design/Construction	2017	2020	Yes	Yes		Feasibility

Entity	Project	Status	Initiated	Estimated Completion	Water Supply?	Reliability?	Notes	Potential Constraints
VOMWD	Work with GSA to get nearby vineyards on Recycled Water	Conceptual	2016	2035	Yes	Yes		Feasibility
VOMWD	SCWA Russian River Water Rights Diversion Increase	Feasibility	2015	2035	Yes	Yes		Environmental
VOMWD	Advanced Metering Infrastructure and consumer Engagement Portal	Design/Construction	2015	2020	Yes	No		
VOMWD	Additional Storage In Glen Ellen	Feasibility	2020	2025		Yes		CEQA and Financial
VOMWD	Emergency Backup Generators	Design/Construction	2018	2020		Yes		

MEMORANDUM

To: Board of Directors

November 15, 2019

From: Drew McIntyre, General Manager



Subject: Point Reyes Station Community Meeting Workshop No. 3 – October 3, 2019

t:\gm\bd misc 2019\pt reyes station county ws#3 memo 11_15_19.doc

RECOMMENDED ACTION: Information

FINANCIAL IMPACT: None

On Thursday night, October 3rd, 2019, I attended the third and final Point Reyes Station community meeting hosted by Marin County Environmental Health Services (see agenda in Attachment 1). The purpose of these workshops was to obtain input from the community regarding issues primarily related to water supply and on-site septic treatment concerns. Funding for this program is from a Prop 1 Bay Area Integrated Regional Water Management Program (IRWMP) grant. The Environmental Justice Coalition for Water (EJCW) is the Bay Area Program Manager for a portion of the IRWMP grant and Marin County is one of 10 Bay Area partners participating in outreach services in support of disadvantaged and under-represented communities. As part of this effort, the County received a \$49,000 grant last summer to study water related issues in both Dillon Beach Village and Point Reyes Station. As reported to the Board earlier, Marin County recently completed a similar process for the Dillon Beach Village area adjacent to our Oceana Marin Service Area.

Approximately 25 residents attended the meeting. County staff gave a presentation on the final survey results. The county received 105 survey responses which represents about 25% of the total number of property owners in the Point Reyes Station area. The top ranked issues from respondents were additional restrooms and development of a community wastewater system feasibility study. It was acknowledged that the survey response rate was not as high as had been hoped for. There was a general consensus from the workshop attendees that there was not sufficient local support for additional studies related to a community wastewater system at this time. The focus for the near term will be on what can be done to add additional restrooms in the community. This work will occur as part of working group convened by Supervisor Rodoni to focus on this specific task.

Based on comments received at the meeting, county staff will not be proceeding with a grant application at this time for a community wastewater system feasibility study.

Point Reyes Station

Creating a Community Water Story

Thursday, October 3, 2019

Agenda

- 6:00 Welcome and Introductions
 Recap Project Objectives
- 6:10 Summary survey results
- 6:40 More Downtown Public Restrooms Downtown
 Supervisor Dennis Rodoni, Working Group Subcommittee
 Marin County Environmental Health Services
- 6:45 Flooding Concerns -- Disaster planning and drainage
 Supervisor Dennis Rodoni
- 6:50 Recap Concerns On-site Wastewater Systems
 Becky Gondola, Environmental Health Services
- 7:00 What is a Feasibility Study?
- 7:40 Next Step?
- 8:00 Closing

Lorene Jackson
Marin County Environmental Health Services
415-473-7146
ljackson@marincounty.org

Workshops set for two Novato housing projects

Housing

DESIGNS

By Will Houston

whouston@marinij.com @Will_S_Houston on Twitter

Public workshops on the design of two large housing development projects at opposite ends of Novato are set to take place next week.

Habitat for Humanity Greater San Francisco plans to build 80 units of for-sale homes as well as a 1,600-square-foot commercial building on a commercial site at 8161 Redwood Blvd. owned by Pacific Gas and Electric Co.

The second project, the Hamilton Village by the San Francisco-based City Ventures, would construct 73 townhomes on a nearly 5-acre plot known as the Hamilton Commissary parcel at 802 State Access Road. City Ventures beat out three other developers' proposal at the start of the year to build on the parcel.

The Design Review Commission is set to hold workshops on both projects at 7 p.m. Wednesday at Novato City Hall, 901 Sherman Ave.

Both efforts are in the very beginning stages of the planning and design phase. The workshops are being held to allow local residents and city staff to weigh in on the initial proposals.

The Habitat for Humanity homes would range from one to three stories tall

at a maximum height of 38 feet. Project plans show areas dedicated as "community green space" and show pathways rather than roads running in between the homes. The commercial building would be located at the southern end of the property. An existing PG& E gas line runs underneath the property, ac-



A rendering shows how a building in the proposed Hamilton Village project might look.

PROVIDED BY CITY OF NOVATO

Workshops set for two Novato housing projects

Housing

FROM PAGE 3

a workforce housing development it was also considering for the site in January. City Ventures' \$6.16 million offer was picked over the \$8.5 million offer by the San Rafael-based EAH Housing nonprofit organization to build about

ording to the plans.

This would not be the affordable housing nonprofit's first project in Novato. The organization has also built housing on the 1100 block of Fourth Street.

City Ventures' Hamilton Village project proposes townhomes ranging from two-bedroom to four-bedroom units, with a third or fourth bedroom optional. The maximum building height proposed would be 40 feet. Each unit would also include a two-car attached garage, according to the project plans.

The Novato City Council chose City Ventures' townhome proposal over

150 units that would be marketed toward local government employees.

City Ventures told the council that their townhomes would be priced at about \$600,000 and would include \$200-per-month homeowners association dues that would fund maintenance around the property. About 16 of the units would be below market rate as required by city code.

More information on the Hamilton Village project can be found at bit.ly/2JI7e9u. Habitat for Humanity project information is at bit.ly/2JF4l9G.

District elections debut in Novato

Elections

TUESDAY BALLOT

Council races, tax measures in several cities face voters

By Richard Halstead

rhalstead@marinij.com @HalsteadRichard on Twitter

Residents in Novato, San Anselmo and Fairfax will go to the polls Tuesday to choose new council members, and voters in San Anselmo, Fairfax and Tiburon also will vote on tax initiatives.

It is in Novato, however, where the stakes appear to be the highest.

The Novato council has for some time now split along ideological lines with Mayor Eric Lucan, Mayor Pro Tem Denise Athas and former councilman Josh Fryday aligning on most issues and councilwomen Pam Drew and Pat Eklund

uniting in dissent. Fryday's sudden resignation in early September to become the state's chief of volunteer programs, and Drew's decision not to seek re-election has put the balance of power on the council up for grabs.

Add to that: Lucan's term is ending and he is seeking re-election, and Novato has just switched to district elections.

Lucan and the two candidates most likely to join his voting bloc — Susan Wernick and Amy Peele — hold a substantial advantage in the amount of campaign donations collected.

All three have raised more than \$25,000. In addition, a political action committee formed in 2017 to back the successful re-election of Athas is backing Wernick and Peele. Most of the PAC's funding has come from Novato businessman Ken Casey, who contributed \$10,000 to the PAC.

ELECTIONS >> PAGE 2

District elections debut in Novato

Elections

FROM PAGE 1

"The business community is obviously standing behind the incumbent Lucan, Wernick and Peele," said Brian Sobel, a North Bay-based political analyst.

"At the end of the day, money in a campaign is awfully important because it allows you to use more tools to reach voters," Sobel said. "Money always equates to votes."

The sale of cannabis and affordable housing are also key issues in this race. Goddard and Hellman both support the town's current ordinance, which allows two retailers in town to sell medical cannabis from a storefront and recreational cannabis to be sold by delivery. Swift said she would vote to allow the unfettered sale of recreational cannabis.

On housing, Goddard said that support for Victory Village, the 54-unit affordable housing project for seniors approved by the Fairfax Town Council in 2017, was a "moral imperative." Hellman said she would have voted against its

Wernick, who has served on Novato's planning commission since 2014, is competing with Jim Petray, a certified public accountant, to take Drew's District 1 seat on the council. Petray chose not to accept campaign donations and loaned his own campaign \$5,000.

Wernick has said Novato needs to consider raising its sales tax from a quarter-cent to a half-cent to generate more revenue for the city; Petray has said he would consider a tax hike only as a last resort.

Peele, who oversaw transplant operations at the University of California at San Francisco before retiring in 2014, is competing with Marie Hoch, a Hamilton resident and real estate agent, for the District 5 council seat.

Like Wernick, Peele has said the city needs to take a look at increasing the sales tax; Hoch has said that if elected she would call for an independent auditor to assess the city's finances, develop a revenue forecasting plan and identify ways to bolster revenues and identify areas to cut costs.

In District 3, Kevin Morrison, who describes himself as an environmental and educational nonprofit consultant, is trying to unseat the incumbent Lucan. Morrison has criticized the city's district map for being "gerrymandered to favor incumbents" and advocated for a "Green Novato" initiative under which the city would forgo taxes and fees for green development and businesses. Lucan has campaigned on his experience and a track record of getting things done, focusing on such issues as the need to build more senior housing and pay down the city's unfunded pension liability.

San Anselmo

In San Anselmo, incumbent Ford Greene, a lawyer; Kim Pipkin, a former San Anselmo planning commissioner; Steve Burdo, a public information officer for Contra Costa County and a member of the San Anselmo Parks and Recreation Commission; and Tom King, a writer; are competing for two seats on the council. King

approval; Swift said any new housing needs to fit with the town's existing character.

Measures

Fairfax voters will also weigh in on one of the three tax measures on the ballot.

Measure F would renew Fairfax's municipal services tax and extend it for 11 years. Measure F would continue the \$195 tax on each dwelling unit and business occupancy that was put in place by Measure J, while also allowing for \$5 annual increases in the tax to a maximum of \$250 per unit. Measure J generates about \$710,000 annually for the town; with the incremental increases, it is estimated that Measure F could bring in as much as \$912,500 annually.

Measure M, another high-profile initiative on the November ballot, would levy an annual tax of \$98 on each residential unit in the town of San Anselmo, or in the case of commercial properties per 1,500-square-feet of nonresidential property, for the next 30 years. It's estimated the tax would generate \$500,000 annually, which would be used to restore and perform ongoing maintenance for 93-year-old Memorial Park.

The other initiative on the November ballot, Measure E, would renew the existing \$589 annual parcel tax benefiting the Reed Union School District for the next 12 years. With a 3% annual increase, the fee would reach about \$840 by the end of 12 years. It is estimated the tax would generate about \$2.5 million annually.

Marin Registrar of Voters Lynda Roberts is projecting about a 41 percent turnout for the Nov. 5 election. The county has responded to 35,000 requests for vote-by-mail ballots and received back about 8,700 vote-by-mail ballots. Roberts said there are 43,486 registered voters in Marin.

The polls on Election Day will open at 7 a.m. and close at 8 p.m.

"The business community is obviously standing behind the incumbent Lucan, Wernick and Peele."

ran unsuccessfully for the council in 2017, and Burdo previously struck out in both 2013 and 2017. Incumbent Matt Brown did not file for re-election.

The candidates have taken different positions on whether to allow the sale of recreational cannabis in San Anselmo and whether San Anselmo should promote the building of more affordable housing.

Greene has said he favors the sale of recreational cannabis to boost the town's revenues. King said he favors allowing the sale of recreational cannabis as long as the outlets are not located in the downtown. Both Burdo and Pipkin have said they oppose any sale of cannabis in San Anselmo.

On housing, Pipkin favors rezoning and smart development to create more housing. King said he would support only the building of units for seniors and the disabled. Greene and Burdo have said granny flats are the best way to address the lack of affordable housing.

Greene, who has raised more than \$19,000 in campaign contributions, has much more money than any of his competitors.

Fairfax

In Fairfax, incumbent Councilwoman Renee Goddard, a sustainability educator who has served on the council since 2012; Cindy Swift, who heads the town's planning commission; and Stephanie Hellman, who describes herself as a nonprofit volunteer coordinator, are competing for two open seats.

— *Brian Sobel, a North Baybased political analyst.*



The Novato City Council holds a hearing on a proposed minimum wage increase Aug. 27.

JEREMY PORTJE — MARIN INDEPENDENT JOURNAL

Election bullies strike again in RP

EDITORIAL

Add Rohnert Park to the growing list of cities and school districts bullied into switching from at-large to district elections.

The city capitulated after receiving a letter from a Malibu law firm that appears to have found a profitable niche: alleging “racially polarized voting” and threatening a lawsuit under the California Voting Rights Act.

Defending a case in court can run into seven figures, but a “safe harbor” amendment to the law enacted in 2017 limits plaintiffs to collecting \$30,000 in legal fees if a city or school district agrees within 45 days to change its election system.

Since then, dozens of jurisdictions have switched without forcing attorney Kevin Shenkman and his client, the Southwest Voter Registration Education Project, to prove that minority groups are disenfranchised by their election systems.

Rohnert Park is the fourth to do so in Sonoma County, following Windsor, Santa Rosa and the Santa Rosa City Schools.

District-based elections make sense in large communities. But many of the cities receiving letters are quite small. Fort Bragg, for example, has barely 7,000 residents.

Moreover, evidence of racially polarized voting is scant in a number of the targeted cities, including Rohnert Park.

And there’s little evidence that switching to district elections is producing more diverse city councils and school boards.

California’s elected officials ought to reflect the state’s diversity, and the state needs a tool to ensure that at-large election systems don’t dilute minority votes. But there are key differences between the state and federal voting rights act.

Second, the U.S. Justice Department enforces the federal Voting Rights Act, while the state law allows lawsuits filed by individuals and organizations. There may be no one more prolific than Shenkman and the Southwest Voter Registration Education Project.

Nonpartisan at-large local elections were among the Progressive reforms adopted in California in the early 20th century. Abandoning them should involve more than weighing a long-shot trial against paying a \$30,000 toll to stay out of court.

Elections are the foundation of our democratic system. Lawmakers owe it voters to assess the impact and effectiveness of the California Voting Rights Act, perhaps through a series of oversight hearings or by assigning the state auditor to review the law.

In addition to considering conformance with federal law, lawmakers should consider establishing a threshold for plaintiffs to demonstrate that a violation has occurred before starting the 45-day clock for a city or school district to switch or risk a lawsuit.

Meanwhile, residents of Rohnert Park will have an opportunity in the coming weeks to determine the shape of the city’s government — how and where boundary lines will be drawn and whether to have five districts or four with a mayor elected citywide, as Windsor chose.

The clock also is running for Santa Rosa, which switched to district elections under duress in 2018. Residents didn’t get a say, but they should be allowed to decide whether they want to elect a mayor before new lines are drawn after the 2020 census.

First, under the federal law, a group of protected voters must live in a geographically compact or concentrated area. In other words, there needs to be an opportunity to draw a district with a concentration of minority voters. No such requirement exists under state law, which may be why no city has successfully defended itself against a California Voting Rights Act lawsuit.

Police chief gets city manager post

NOVATO

By Will Houston

whouston@marinij.com @Will_S_Houston on Twitter

The Novato City Council has appointed police chief Adam McGill to become city manager with the hope he will restore stability

to the city's administration.

After the city was thrown into what he called "crisis mode" following the sudden dismissal of city manager Regan Candelario in August, McGill was appointed acting city manager with the goal of stabilizing the city administration after the "shock."

CHIEF >> PAGE 4

In an interview after his appointment Tuesday evening, McGill said he didn't begin considering a longterm stay in the job until September after talking it over with his family and the council. The most difficult part of the decision, he said, was leaving behind a 28-year career in law enforcement, including nearly three years as Novato's police chief.

"I'm excited, yet have some real mixed emotions about leaving 909 Machin across the street and the profession in general," Mc-Gill said, referring to the police department's address. "I think they're some of the best people I've ever worked with in policing. They're entirely focused on serving others which is essential in a police officer and a profession in general. It's been my entire life since childhood. To now leave that behind was difficult for me, so I'll miss being a part of what I think is the noblest profession on earth."

Under the five-year contract the council approved in a unanimous vote on Tuesday, McGill will be paid an annual salary of \$248,000. This starting salary is significantly higher compared to his predecessors.

The city did not conduct a nationwide search for candidates. After making the appointment, all

In the past three months, McGill has already made several changes to his administrative staff, with more on the way. Next week, McGill plans to announce his successor as police chief. He strongly hinted that this will be Capt. Matthew McCaffrey, who has been serving as acting police chief and who has served in the department since 2015. The city is only searching internally for candidates, he said, and the only other captain in the department is Jim Correa.

"There won't be an outside person," McGill said. "You can figure it out."

Another major appointment will be the city's new finance director, who will run the city's newly created finance department. McGill recently appointed longtime North Marin Water District auditor-controller David Bentley to serve as interim director. Bentley is retired, however, and said he is not seeking a longer-term appointment. McGill described the appointment as his first priority, especially as the city begins its early budget discussions.

"Then as we go into 2020 we can start identifying, fulfilling the council's items that they want implemented policy-wise," McGill said.

four council members praised McGill's work during the intervening months, and also voiced their strong expectations.

"I know this isn't an opportunity you were looking for or searching for, but it found you and I'm glad that it found you," Mayor Eric Lucan said. "You've proven yourself as a leader in this community with leaders at the police department and really won over the staff there, the council here, the community as a whole."

"You have no idea what high expectations we all have for you," Councilwoman Pam Drew said.

"I'm really excited for our city under your leadership," Mayor Pro Tem Denise Athas said.

"Just the few things you have done have indicated to me that you embrace the council involvement and you are keeping us informed and engaged," Councilwoman Pat Eklund said. "My stress level has been significantly reduced."

If saying it wasn't enough, these expectations are recorded in McGill's contract.

In one section of the contract titled "City Manager's Commitments" McGill commits to avoiding "undue influence on policy development;" ensuring all council members receive the same information and that "surprises will be avoided;" treating council members fairly, respectfully and not disparaging council members either in private or in public; and providing regular updates to the council as well as timely answers to council member questions.

The city manager contracts for McGill's recent predecessors — Candelario and Michael Frank — did not contain this section.

Other benefits McGill will receive as part of his contract include the city offering up to a \$750,000 loan to McGill to help pay off the first deed of trust on his Novato residence. If McGill is dismissed without cause, he would receive 18 months of severance pay based on his salary.

"I'm very grateful for the council support and the confidence they have in me," McGill said. "I love Novato. I live here, my children are here, I'm about to have another child, raising a child here. I'm committed to Novato. I'm all Novato and I'm proud to work for this city."



McGill