NIPOMO COMMUNITY SERVICES DISTRICT

WEDNESDAY, FEBRUARY 19, 2014

10:00 A.M.

SPECIAL MEETING NOTICE & AGENDA

FINANCE AND AUDIT COMMITTEE

COMMITTEE MEMBERS
CRAIG ARMSTRONG, CHAIRMAN
LARRY VIERHEILIG, MEMBER

PRINCIPAL STAFF
MICHAEL S. LEBRUN, **GENERAL MANAGER**
LISA BOGNUDA, **FINANCE DIRECTOR**
PETER SEVCIK, **DIRECTOR OF ENG AND OPS**

MEETING LOCATION - District Board Room
148 S. Wilson Street, Nipomo, California

1. **CALL TO ORDER, FLAG SALUTE AND ROLL CALL**

2. **RECEIVE PRESENTATION ON WORK PRODUCT NO. 1 – WATER SYSTEM FINANCIAL PLAN AND CAPACITY CHARGES**

   ACTION RECOMMENDED: Discuss work product and provide direction to Staff

3. **DISCUSS PROCESS AND APPROACH TO SETTING DROUGHT RATE STRUCTURES**

   ACTION RECOMMENDED: Provide staff direction to Staff

4. **ADJOURN**

TO: FINANCE AND AUDIT COMMITTEE

FROM: MICHAEL S. LEBRUN MSL
GENERAL MANAGER

DATE: FEBRUARY 14, 2014

AGENDA ITEM 2

FEBRUARY 19, 2014

RECEIVE PRESENTATION ON WORK PRODUCT NO. 1 – WATER SYSTEM FINANCIAL PLAN AND CAPACITY CHARGES

ITEM

Receive presentation on Work Product No. 1. [RECOMMEND PROVIDE DIRECTION]

BACKGROUND

On July 10, 1013, your Board authorized circulation of a request for water rate and capacity charge study proposals. A seven-page request for proposal outlined a comprehensive study of the District water enterprise rates, charges, and fees.

On September 25, 2013, your Board awarded a contract to Tuckfield & Associates to conduct a water rate and capacity charge study.

Mr. Clayton Tuckfield will present the attached Work Product No. 1 and provide an overview of the process.

FISCAL IMPACT

Proper rate setting is critical to the operational solvency of all District enterprises.

STRATEGIC PLAN

Strategic Plan Goal 6.1 – Operate all enterprise funds to be financially sound

RECOMMENDATION

Receive the presentation and provide direction to staff.

ATTACHMENT

A. Final draft, Work Product No. 1 – Water System Financial Plan and Capacity Charges, January 27, 2014

FEBRUARY 19, 2014

ITEM 2

ATTACHMENT A

Tuckfield & Associates 2549 Eastbluff Drive, Suite 450B, Newport Beach, CA 92660

Email ctuckfield@tuckfieldassociates.com Phone (949) 760-9454 Fax (949) 760-2725

Work Product No. 1 – Water System Financial Plan and Capacity Charges

Project: Water Rate and Capacity Charge Study

Date: January 27, 2014

INTRODUCTION

As part of our work effort for the Water Rate and Capacity Charge Study for the Nipomo Community Services District's (District), presented in this Work Product No. 1 is our review, evaluation, and projection of the District's revenue and revenue requirements for the Water Fund (Fund 125), and our update of the District's Water Capacity and Supplemental Water Capacity Charges.

The financial plan for the Water Fund includes identifying and projecting revenues, expenses, and obligations of the Water Fund for a five-year planning period. Estimates of revenue from various sources are compared with the projected revenue requirements to determine impacts to the fund from (1) financing decisions of capital improvements, (2) future estimates of operation and maintenance expense, and (3) and changes in obligations of the fund. From this comparison, the sufficiency of revenues to meet future obligations may be determined.

The Water Capacity and Supplemental Water Capacity Charges are updated with this Work Product No. 1 following similar methodology developed with the last update. Cost estimates for various capital projects are updated as well as current information regarding the Supplemental Water Project.

Included below is a discussion of the assumptions and major components of the financial plan and capacity charges discussed above.

WATER FUND (FUND 125) FINANCIAL PLAN

Revenue

Customer Growth and Water Consumption. The District's 2010 Urban Water Management Plan (UWMP) developed future estimates of population growth and daily per capita water use. The UWMP annual growth rate of 1.2 percent was used in the projection of water system customers to provide consistency as well as anticipating that a similar growth rate would used for the 2015 UWMP update. This growth rate was applied to all water customers, however in some cases the customer counts do not increase due to rounding. Table 1 presents the projection of the number of water customers.

Table 1
Projection of Number of Customers and Dwelling Units

Line No.	Description	Actual 2012-13 [1]	Projected 2013-14	2014-15	2015-16	2016-17	2017-18
	Number of Customers [2]						
1	Single Family	3,768	3,813	3,859	3,905	3,952	3,999
2	Multifamily	524	530	536	542	548	555
3	Commercial	101	102	103	104	105	106
4	Irrigation	95	96	97	98	99	100
5	Agriculture	1	1	1	1	1	1
6	NCSD	6	6	6	6	6	6
7	Private Fire Lines	43	43	43	43	43	43
8	Total	4,538	4,591	4,645	4,699	4,754	4,810
	Number of Dwelling Units [2]						
9	Single Family	3,768	3,813	3,859	3,905	3,952	3,999
10	Multifamily	922	933	944	955	966	978
11	Total	4,690	4,746	4,803	4,860	4,918	4,977

[1] From District billing system information.
[2] Assumes 1.2% growth rate for all customers except fire protection.

Additionally, the UWMP indicated that future reduction in use per capita is not necessary because the current daily per capita water use will meet the 2015 and 2020 targets. However, future water consumption assumes a 1 percent reduction in annual use per customer for the first three years as a response to higher water rates that will occur from the District's future rate changes approved in the last Proposition 218 public hearing. The reduction in annual consumption provides a conservative approach to estimating future water consumption. Table 2 presents the projected water sales volumes.

Table 2
Projection of Water Sales Volume

Line No.	Description	Actual 2012-13 [1]	Projected 2013-14	2014-15	2015-16	2016-17	2017-18
		Ccf	Ccf	Ccf	Ccf	Ccf	Ccf
	Water Sales Volume						
1	Single Family	781,128	782,600	784,000	785,500	794,900	804,400
2	Multifamily	71,918	72,100	72,200	72,300	73,100	74,000
3	Commercial	39,363	39,400	39,400	39,300	39,600	40,000
4	Irrigation	131,090	131,100	131,200	131,200	132,600	133,900
5	Agriculture	7,837	7,800	7,800	7,800	7,800	7,800
6	NCSD	1,815	1,800	1,800	1,800	1,800	1,800
7	Total	1,033,151	1,034,800	1,036,400	1,037,900	1,049,800	1,061,900

[1] From District billing system information.

Revenue from Water Rates. The Districts current water rate structure consists of fixed charges by meter size and volume charges by rate block which varies among the customer classes. Table 3 below summarizes the fixed charges including dedicated private fire protection service charges.

Table 3
Existing Bi-Monthly Water Fixed Charges [1]

Meter Size	Bi-Monthy Fixed Charge	Bi-Monthy Fire Service
5/8"	$ 32.19	$ -
3/4"	$ 32.19	$ -
1"	$ 32.19	$ -
1 1/2"	$ 91.39	$ -
2"	$ 144.75	$ -
3"	$ 269.35	$ -
4"	$ 447.29	$ 13.13
6"	$ 891.78	$ 15.76
8"	$ 1,425.35	$ 23.63
10"	$ -	$ 32.83
12"	$ -	$ 39.39

[1] Effective November 1, 2013

Table 4 summarizes the District's current volume charges. The volume charges include a four-block conservation rate structure for residential customers and a two-block rate structure for Commercial and Irrigations customers. All other customers, such as Agriculture, are charged a uniform volume charge.

Table 4
Existing Bi-Monthly Water Service Volume Rates [1]

Volume Charge [2]

Tier	Rate ($/Ccf)	Single Family / Multifamily All Meter Sizes	
		Ccf	Ccf
Tier 1	$1.97	0 to 24	0 to 8
Tier 2	$2.46	24 to 40	8 to 12
Tier 3	$3.45	40 to 100	12 to 25
Tier 4	$5.91	Over 100	Over 25

Tier	Rate ($/Ccf)	All Other
		Rate ($/Ccf)
All Ccf	$2.84	

		Commercial					
Tier	Rate ($/Ccf)	5/8"	3/4"	1"	1 1/2"	2"	3"
		Ccf	Ccf	Ccf	Ccf	Ccf	Ccf
Tier 1	$2.46	0 to 35	0 to 50	0 to 55	0 to 290	0 to 165	0 to 82
Tier 2	$3.45	Over 35	Over 50	Over 55	Over 290	Over 165	Over 82

		Irrigation					
Tier	Rate ($/Ccf)	5/8"	3/4"	1"	1 1/2"	2"	3"
		Ccf	Ccf	Ccf	Ccf	Ccf	Ccf
Tier 1	$2.46	0 to 50		0 to 75	0 to 350	0 to 350	0 to 3000
Tier 2	$3.45	Over 50		Over 75	Over 350	Over 350	Over 3000

[1] Effective November 1, 2013
[2] Charge per hundred cublic feet (Ccf) of water consumed.

Fixed charge revenue accounts for about 25 percent of the total revenue from user charges. Current Best Management Practices (BMPs) of the California Urban Water Conservation Council (CUWCC) states that revenue from fixed charges should be no more than 30 percent of total user charge revenue. Therefore, the District's current rates meet this best management practice. Table 5 presents the projected revenue from water rates from application of the current rates to projections of the number of customers and water sales volumes.

Table 5
Projection of Water Sales Revenue Using November 1, 2013 Rates

Line No.	Description	Estimated Actual 2012-13 [1]	Budget 2013-14 [1]	Projected 2014-15	2015-16	2016-17	2017-18
	Water Sales Revenue [2]						
1	Single Family			$2,800,200	$2,813,000	$2,846,500	$2,880,300
2	Multifamily			307,300	308,500	311,900	315,300
3	Commercial			159,900	159,200	160,700	162,900
4	Irrigation			420,900	421,100	425,200	429,200
5	Agriculture			23,000	23,000	23,000	23,000
6	NCSD			6,300	6,300	6,300	6,300
7	Private Fire Lines			5,600	5,600	5,600	5,600
8	Total	$3,399,000	$3,792,500	$3,723,200	$3,736,700	$3,779,200	$3,822,600

[1] From FY 2013-14 Budget.
[2] Revenue projected using water rates effective November 1, 2013.

Other Revenue. The District generates other revenue from meter installations, water service charges, miscellaneous sources, and interest income. For projection purposes, meter installation revenue follows customer additions while other revenue is expected to remain at their current levels in future years.

Interest Income. The District invests available funds in the Local Agency Investment Fund (LAIF). The District's recent income earnings rate is about 0.35 percent and will be used in this study for interest income calculations.

Revenue Requirements

Revenue requirements of the District's Water Fund include operation and maintenance (O&M) expense, annual fixed asset purchases (minor capital), and Transfers to other funds. The revenue requirement projections presented herein reflect the District's FY 2013-14 Budget for the first year, and then are escalated into the future based on known conditions regarding proposed operating and capital improvement plans, and expected changes to system operations.

O&M Expense. O&M expense includes the cost of personnel, utilities, chemicals, and miscellaneous materials and supplies needed to operate the water system on an annual basis. Projections are based upon an analysis of historical expenses and take into account anticipated future system growth and cost increases in labor, contractual services, electric power, chemicals, materials, and supplies.

Several inflation factors by expense category were used to refine the projection of future operation and maintenance expense. The assumptions for future cost escalation include separate inflation factors for salaries, benefits, electric power, chemicals, and all other expenses as described below and included in the historical and projected O&M expenses presented in Table 6.

Salaries – Salaries and wages expense was analyzed using Full-Time Equivalent's (FTE) related to the water system, meaning that these expenses were correlated with the percentage of personnel expenses allocated to the Water Fund. The analysis showed that historical salaries and wages per FTE increased at a rate of about 7 percent annually between FY 2008-09 and FY 2012-13. However, this included several personnel changes and reallocations during that time. Going forward, the District plans to hire two new employees in FY 2013-14 and another two employees in FY 2014-15 with partial allocations to the Water Fund. The employee additions for FY 2013-14 are reflected in the District's Budget. Inflation in future salaries and wages is estimated to increase at 3 percent annually per FTE.

Benefits – Analysis of Benefits expense on a Full-Time Equivalent (FTE) basis indicates that historical benefits expense per FTE has increased at the rate of about 3 percent annually from FY 2008-09 through FY 2012-13. The Bureau of Labor Statistics Employment Cost Index for Benefits for State and Local Government Workers indicates an average change in benefit costs of 2.25 percent annually from June 2008 through June 2013. Future cost escalations in employee benefits of 3 percent annually are assumed, matching the escalations in Salaries and Wages annual increases.

Electricity – The unit cost of electricity in terms of dollars per hundred cubic feet (Ccf) of water pumped shows an average annual increase of approximately 8 percent from FY 2008-09 to FY 2012-13. However, actual total electricity expense increased by about 6.2 percent over the same time period. While the unit cost of electricity is projected to increase at the rate of 3 percent annually, the overall electricity expense is planned to decrease following delivery of supplemental water beginning around May 2015.

Chemicals – Calculated in a similar manner as for electricity unit cost, historical unit chemical cost shows an average annual increase of approximately 5 percent over the last 4 years. Future increases in unit chemical cost are projected at 3 percent annually with total chemicals expense decreasing when the delivery of supplemental water begins around May 2015.

Table 6
Historical and Projected Operation and Maintenance Expense and Capital Outlay

		Fiscal Year Ending June 30									
		Historical (Actual)					Budget	Projected			
Line No.	Description	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
	Operation and Maintenance Expense [1]										
	Operation and Maintenance										
1	Salaries & Wages	$249,012	$290,427	$287,752	$248,992	$244,037	$430,400	$512,500	$528,000	$543,800	$560,200
2	Benefits	134,786	154,606	180,774	149,854	148,694	235,700	280,700	289,100	297,800	306,700
3	Power	359,049	420,488	353,606	440,880	411,021	455,000	444,400	381,200	398,400	416,300
4	Chemicals	4,868	9,259	18,311	17,171	17,984	21,500	21,000	18,000	18,800	19,700
5	Operating Supplies	51,926	75,714	70,934	35,437	19,985	31,000	31,900	32,900	33,900	34,900
6	Outside Services	33,380	36,137	41,820	51,549	75,260	90,000	92,700	95,500	98,400	101,400
7	Repairs and Maintenance	178,995	112,930	162,920	96,816	137,999	135,000	139,100	143,300	147,600	152,000
8	Engineering	12,481	12,286	28,526	15,936	19,868	20,000	20,600	21,200	21,800	22,500
9	Meters	15,026	13,885	62,633	40,833	18,460	50,000	67,300	68,800	71,100	73,500
10	Other	111,258	111,020	106,054	96,474	97,558	144,900	141,100	145,300	149,500	154,000
11	Total Operation and Maintenance	$1,150,781	$1,236,752	$1,313,330	$1,193,942	$1,190,866	$1,613,500	$1,751,300	$1,723,300	$1,781,100	$1,841,200
	General and Administration										
12	Salaries & Wages	$156,000	$231,835	$232,640	$217,943	$293,806	$258,500	$331,500	$341,500	$351,700	$362,300
13	Benefits	157,310	172,000	170,397	172,568	214,818	207,194	265,700	273,800	282,000	290,400
14	Legal General & Special Counsel	50,000	46,384	31,221	23,290	32,105	42,000	43,300	44,600	45,900	47,300
15	Legal - Water Counsel	60,000	43,383	32,366	3,630	34,879	169,000	174,100	179,300	184,700	190,200
16	Professional Services	195,000	163,484	164,425	109,721	70,895	145,000	140,700	144,900	149,200	153,700
17	Operating Transfer Out - Admin	226,072	269,785	270,016	278,442	241,932	264,809	272,800	281,000	289,400	298,100
18	Other	145,852	154,427	157,532	157,507	161,848	202,220	208,500	214,700	221,200	228,000
19	Total General and Administration	$990,234	$1,081,298	$1,058,597	$963,101	$1,050,283	$1,288,723	$1,436,600	$1,479,800	$1,524,100	$1,570,000
20	**Total Operation and Maintenance Expense**	$2,141,015	$2,318,050	$2,371,927	$2,157,043	$2,241,149	$2,902,223	$3,187,900	$3,203,100	$3,305,200	$3,411,200
	Capital Outlay [1]										
21	Operating Transfer Out - Replacement	$687,500	$700,000	$700,000	$566,000	$566,000	$276,000	$566,000	$566,000	$566,000	$566,000
22	Fixed Asset Purchases Operation and Maintenar	63,202	443,355	89,168	57,619	516,779	16,500	17,000	17,500	18,000	18,500
23	Fixed Asset Purchases Gen & Admin	100,850	63,117	21,621	34,805	0	69,000	71,100	73,200	75,400	77,700
24	**Total Capital Outlay**	$851,552	$1,206,472	$810,789	$658,424	$1,082,779	$361,500	$654,100	$656,700	$659,400	$662,200
25	**Total O&M and Capital Outlay**	$2,992,567	$3,524,522	$3,182,716	$2,815,467	$3,323,928	$3,263,723	$3,842,000	$3,859,800	$3,964,600	$4,073,400

[1] Operation and Maintenance expenses are inflated at the following annual rates: Salaries - 3.0%; Benefits - 3%; Chemicals (per Ccf) - 3%, and Electricity (per Ccf) - 3%. All other expenses are inflated at 3% annually.

All Other – All other expenses not discussed above are projected to increase by 3 percent annually to reflect the future Consumer Price Index (CPI). Historically, the CPI for all items for San Francisco/Oakland/San Jose and CPI and for Los Angeles/Anaheim/Riverside indicated an annual average increase from June 2008 to June 2013 ranging between 1.8 and 0.8 percent respectively. However, the most recent year-over-year annual inflation rate of the San Francisco CPI index was 2.5 percent.

Fixed Asset Purchases (Minor Capital Outlay). Minor (routine) annual capital outlays, which are financed from annual system revenues, include estimates for relatively small additions of fixed asset purchases, utility vehicles, office/technical equipment, and other assets. The amount included reflects budgeted capital in FY 2013-14 of $204,000 to estimated expenditures of $50,000 in FY 2014-15, increasing at the rate of 3 percent annually through the study period.

Transfers. There are four transfers from the Water Fund during the study period. These include a Transfer to the Replacement Fund, a Transfer for Capital Improvement Financing, a Transfer to the Property Tax Fund, and an additional transfer to aid in replacement funding.

The District's FY 2013-14 Budget includes a Transfer to the Replacement Fund of $276,000. However, the District's preference and historical policy has been a transfer of $566,000 annually. This transfer amount has been restored in the projections for future years of the Water Fund.

Also in the District's 2013-14 Budget, a one-time transfer from operating reserves is made towards financing of the Waterline Intertie Project in the amount of $1,500,000.

In FY 2014-15, the Water Fund will transfer $290,000 to the Property Tax Fund. This transfer is necessary because the Property Tax revenue that is received by the District is insufficient to pay the total annual debt service related to the 2013 and 2013A COPs. This future deficiency will be made from sources outside of the Water Fund.

Additionally, where the Water Fund's projected reserves exceeds the target reserve balance to be maintained in the fund, a transfer is made to the Water Replacement Fund to be used for replacement expenditures. By following this method, the District will carry no more than the target operating reserve amount in each year. Any amount over the target reserve is transferred to the Water Replacement Fund.

Financial Plan

A pro forma flow of funds statement has been prepared for the Water Fund that includes all revenues and all revenue requirements that were identified for the fund. Additionally, the statement incorporates specific financial planning criteria for the Water Fund to provide guidance to maintain the health of the fund on an on-going basis. The criteria includes maintaining a Water Fund operating

reserve balance equal to 360 days (of 360 days, or 100 percent) of O&M expense, making the appropriate transfers described above, and maintaining required debt service coverage ratios required in the Series 2013 and Series 2013A Certificates of Participation (COPs) debt covenants.

Water Fund Operating Reserve. The target amount to be maintained as an operating reserve varies among publicly-owned utilities, however, is generally expressed as a percentage, or as the number of days of operation and maintenance expense (O&M) of the enterprise. The District's historical policy has been to maintain an operating reserve of about 180 days of O&M or 50 percent (of O&M expense) in the Water Fund.

For this study, the operating reserve target is being increased to 360 days to reflect that the District may be requested to significantly reduce groundwater basin pumping, and additionally because of the near-term startup of the Waterline Intertie Project, both of which present revenue stability challenges in the near future. The increase in the reserve target provides conservative financial planning.

Revenue Adjustments. The pro forma statement for the Water Fund is presented in Table 7. Lines 2 and 3 of the table show the adopted revenue increases from the District's last Proposition 218 public hearing. These revenue increases of 9.5 percent will occur annually on November 1 of 2014 and 2015. The impact of these increases on the Water Fund indicates that they are sufficient to maintain the health of fund for the next five years. No other adjustments in water rates need to be made at this time.

A graphical depiction of the Water Fund is presented in Figure 1 below. The figure shows that the Water Fund balance is initially below the revised target reserve level however reaches the target level in FY 2017-18. The fund meets the planning criteria by the end of the study period assuming the proposed increases shown on lines 2 and 3 of Table 7 are implemented.

Figure 1 - Water Fund Summary

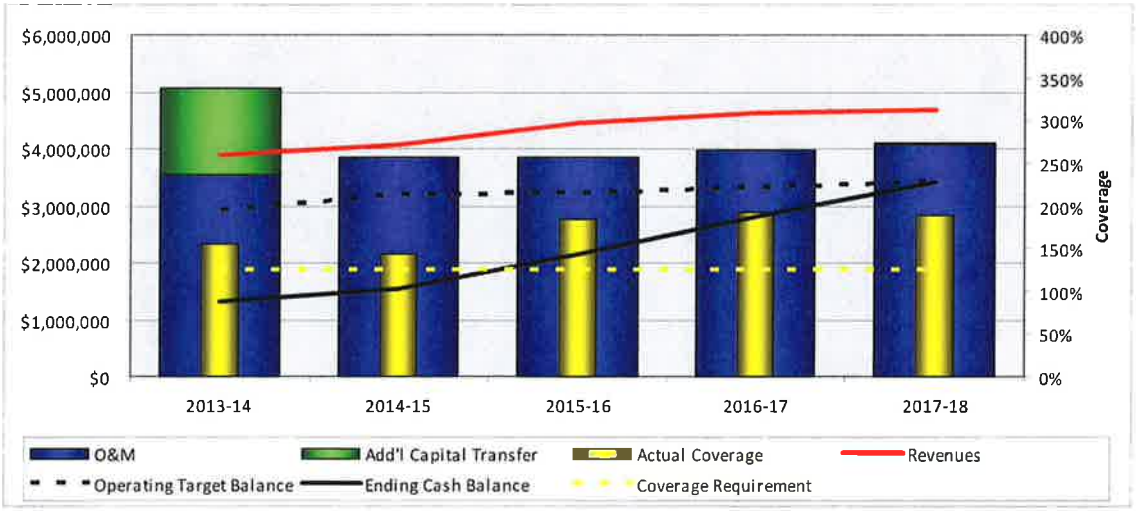

Table 7
Water Fund (Fund 125) Flow of Funds Statement

Line No.	Description	Budget 2013-14	Fiscal Year Ending June 30 2014-15	2015-16	2016-17	2017-18
	Revenue					
1	Water Sales Revenue Under Existing Rates [1]	$3,792,500	$3,723,200	$3,736,700	$3,779,200	$3,822,600
	Additional Water Sales Revenue					
	Annualized Revenue Increase / Date of Increase / Fiscal Year					
2	9.5% Nov 1, 2014-15		235,800	355,000	359,000	363,100
3	9.5% Nov 1, 2015-16			259,100	393,100	397,600
4	Total Additional Water Sales Revenue	0	235,800	614,100	752,100	760,700
5	Total Water Sales Revenue	$3,792,500	$3,959,000	$4,350,800	$4,531,300	$4,583,300
6	Water Meter Installations [2]	4,900	16,100	16,500	17,200	17,900
7	Water Service Charges [2]	46,000	46,000	46,000	46,000	46,000
8	Miscellaneous Income [2]	38,000	38,000	38,000	38,000	38,000
9	Interest Income [3]	7,200	5,000	6,400	8,700	10,900
10	**Total Revenue**	$3,888,600	$4,064,100	$4,457,700	$4,641,200	$4,696,100
	Revenue Requirements					
11	Operation and Maintenance Expense [2] [4]	$2,902,200	$3,187,900	$3,203,100	$3,305,200	$3,411,200
12	Fixed Asset Purchases [2] [4]	85,500	88,100	90,700	93,400	96,200
13	Transfer to Replacement Fund [5]	276,000	566,000	566,000	566,000	566,000
14	Transfer to Capital Improvement Financing	1,500,000	0	0	0	0
15	Transfer to Property Tax Fund	290,000	0	0	0	0
16	Additional Transfer to Replacement Fund [6]	0	0	0	0	27,500
17	**Total Revenue Requirements**	$5,053,700	$3,842,000	$3,859,800	$3,964,600	$4,100,900
18	Net Funds Available	($1,165,100)	$222,100	$597,900	$676,600	$595,200
19	Beginning Water Fund Balance	2,484,500	1,319,400	1,541,500	2,139,400	2,816,000
20	**Cumulative Water Fund Balance**	$1,319,400	$1,541,500	$2,139,400	$2,816,000	$3,411,200
21	**Target Operating Reserve Balance** [7]	$2,902,200	$3,187,900	$3,203,100	$3,305,200	$3,411,200
	Annual Debt Service Coverage					
	Gross Revenue [8]					
22	Water Fund Gross Revenue	$3,888,600	$4,064,100	$4,457,700	$4,641,200	$4,696,100
23	Water Capacity Charge Revenue	30,500	72,800	126,600	25,400	28,000
24	Supplemental Water Charge Revenue	135,100	322,800	561,600	112,600	152,200
25	Fund 128, 500, 600, 700, and 805 Interest Income	33,700	23,700	24,300	25,900	28,200
26	Property Tax Fund Revenue	499,800	504,800	509,800	514,900	520,000
27	Total Gross Revenue [8]	$4,587,700	$4,988,200	$5,680,000	$5,320,000	$5,424,500
28	Water Fund O&M	2,902,200	3,187,900	3,203,100	3,305,200	3,411,200
29	Total Net Revenue with Capacity Charges	$1,685,500	$1,800,300	$2,476,900	$2,014,800	$2,013,300
30	Total Net Revenue without Capacity Charges	$1,519,900	$1,404,700	$1,788,700	$1,876,800	$1,833,100
31	Series 2013 Certificates Max Annual Debt Service	747,500	747,500	747,500	747,500	747,500
32	Series 2013A Bonds Max Annual Debt Service	226,200	226,200	226,200	226,200	226,200
33	Maximum Annual Debt Service	$973,700	$973,700	$973,700	$973,700	$973,700
34	**Debt Service Coverage with Capacity Charges** [9]	173%	185%	254%	207%	207%
	Minimum Coverage	125%	125%	125%	125%	125%
35	**Debt Service Coverage without Capacity Charges**	156%	144%	184%	193%	188%
	Minimum Coverage	110%	110%	110%	110%	110%

[1] FY 2013-14 as budgeted. Future years projected revenues using water rates effective November 1, 2013.
[2] FY 2013-14 budget amount.
[3] Assumes an interest rate of 0.35% on the average fund balance.
[4] Operation and Maintenance expenses are inflated at the following annual rates: Salaries - 3.0%; Benefits - 3%; Chemicals (per Ccf) - 3%, and Electricity (per Ccf) - 3%. All other expenses are inflated at 3% annually.
[5] Transfer to Replacement Fund for annual capital replacement based on District Policy.
[6] Transfer of funds above the amount established as an operating reserve balance. Funds used for future capital replacement/improvements.
[7] Target reserve amount to be maintained, estimated at 360 days of operation and maintenance expense.
[8] Includes all income, rents, rates, fees, charges, or other moneys derived including all Ad Valorem Tax Revenue, standby or water availability charges, development fees, connection charges, moneys recevied from other public or private entities, proceeds from sale, lease, or disposition of part of the Enterprise, and earnings on and income derived from invesetments in District Funds.
[9] Total Net Revenue with Capacity Charges (line 29) divided by Maximum Annual Debt Service (line 33).

WATER CAPACITY CHARGES

Introduction

The District's water capacity charges include two separate charges consisting of the Water Capacity Charge and the Supplemental Water Capacity Charge. The former charge is related to the existing water distribution system while the latter is related to delivery of supplemental water from the City of Santa Maria and the future desalinization water project. The capacity charges were last updated in 2008.

It is appropriate to update the charges about every 5 years to recognize that (1) water distribution system capital improvements have been made to the water system, (2) refinements in the cost estimates of future capital improvements may have occurred, and (3) financing cost may now be known for certain facilities that can be included in the charges.

Since the charges were last updated, the District has made additions to fixed assets and has refined cost estimates of facilities related to the Supplemental Water Project. Additionally, the District issued COPS in 2013 to partially finance the Waterline Intertie Pipeline Project Phase 1. The update to both the Water Capacity Charge and the Supplemental Water Capacity Charge will recognize these changes and will also adjust them for other known elements in the calculations.

Therefore, the purpose of this update to the water capacity charges is to address the following.

- Account for recent additions of capital improvements to the water facilities
- Update the cost estimates of facilities related to delivery of supplemental water
- Make appropriate adjustments to water system value including those related to financing of certain facilities
- Establish charges to new development that are reasonable, easy to understand, and simple to implement.

The Water Capacity and Supplemental Water Capacity Charges are updated as described below.

Water Capacity Charges

Method. The methodology to determine the water capacity charge is based on the premise that new development should pay its fair share of the investment in water facilities from which it receives a benefit. The benefit that new development receives is the use of the existing water distribution system.

New development will share in the existing facilities by paying a "buy-in" fee, which is the basis for the water capacity charge. The buy-in component is designed to derive from the new customer an amount

per connection equal to the "equity" in the system contributed by existing customers. The equity in the existing system is determined by first establishing the value of the water system assets and making appropriate adjustments. The District has fixed asset data readily available to determine the value of the existing water system facilities.

Water System Fixed Asset Value. Table 8 summarizes the determination of the value of the existing water system assets. The current value of the facilities is based on replacement cost less depreciation, developed from information and records provided by the District. The replacement cost of the existing water facilities was determined by trending the original cost of facilities from their acquisition date to December 2013 using the Engineering News Record (ENR) Construction Cost Index (CCI) for this same month. This replacement cost was then depreciated recognizing the remaining service life of each asset.

Table 8
Distribution System Buy-in Capacity Charge

Line No.	Description	Original Cost	OCLD [1]	Replacement Cost	RCLD [2]
	Water System Assets				
1	Land (1560)	$310,800	$310,800	$496,800	$496,800
2	Pumping (1520)	1,874,700	693,200	3,226,700	959,100
3	Transmission (1525)	4,982,700	3,850,200	7,845,900	5,259,800
4	Distribution (1530)	746,400	433,400	1,489,500	567,700
5	Buildings (1540)	493,700	396,500	606,800	471,200
6	**Subtotal Water System Assets** [1]	$8,408,300	$5,684,100	$13,665,700	$7,754,600
7	Less COP Financed Facilties [3]	(1,460,050)	(1,172,258)	(2,014,492)	(1,605,160)
8	**Total Water System Assets** [1]	$6,948,250	$4,511,842	$11,651,208	$6,149,440
9	**Adjustments to Valuation**				
10	Add Water Replacement Fund (Fund 805)				$4,914,700
11	Add Water Capacity Fund (Fund 700)				3,180,000
12	Add Interest on 1978 Bonds Long-Term Debt				332,950
13	Less Outstanding Principal on 1978 Bonds Long-Term Debt				0
14	**Total Water System Value**				$14,577,090
15	Total FY 2012-13 Equivalent 1" Meters				4,830
16	Water System Buy-in Capacity Charge (1" meter and less)				$3,018

[1] Original cost less depreciation as of June 30, 2013. Excludes wells.
[2] Replacement cost less depreciation.
[3] Related to 2003 COPs.

Adjustments. Several adjustments are made to the value of the water system assets for capacity charge purposes. These adjustments are similar to those that were used in the current charges. The calculation excludes value for groundwater wells, short-lived assets, contributions, and facilities financed from the

2003 COPs. Additions to value include Replacement Fund and Capacity Fund capital fund balances and interest costs related debt financing of certain facilities.

Calculation

The proposed Water Capacity Charge is calculated using the water system value with adjustments as discussed above, divided by the current number of equivalent 1" meters. Table 8 shows the District's total water system value (line 14) divided by the current number of equivalent 1" meters (line 15). The result is a Water Capacity for a 1" meter of $3,018 shown on line 16 of the table.

The Water Capacity Charge for the 1" meter forms the basis for capacity charges by meter size. As shown in Table 9, the charge for the 1" meter is escalated by the meter capacity ratios developed in the last update to determine the "buy-in" Water Capacity Charge for each meter size.

Table 9
Proposed Water Capacity Charges

Line No.	Meter Size	Meter Capacity Ratio [1]	Water Capacity Charge Existing Charge	Water Capacity Charge Proposed Charge
1	Up to 1 inch	1.0	$3,385	$3,018
2	1 1/2 inch	3.0	10,155	9,054
3	2 inch	4.8	16,247	14,487
4	3 inch	9.0	30,463	27,162
5	4 inch	15.0	50,772	45,270
6	6 inch	30.0	$101,544	$90,541

[1] Meter capacity ratios developed in the 2008 capacity charge study.

SUPPLEMENTAL WATER CAPACITY CHARGES

The Supplemental Water Capacity Charge consists of three capital cost components related to delivery of supplemental water. These include capital costs related to the City of Santa Maria Memorandum of Understanding (MOU), the Waterline Intertie Pipeline Project, and future water supply from

desalination. The cost estimates of each of these three components have been revised as discussed below to update the Supplemental Water Capacity Charge.

Santa Maria MOU

Table 10 summarizes the update of the capital cost estimate related to the Santa Maria MOU. The water rate per the MOU has been updated from the previous estimate of $1,250 per AF to the current estimate of $1,718.23 per AF. The current estimate is the result of discussions between the District and the City of Santa Maria. All other assumptions remain as previously determined.

Table 10
Santa Maria MOU Capital Cost Estimate

Line No.	Description	
	Supplemental Water from City of Santa Maria	
1	Water Rate per MOU ($ per AF current estimate)	$1,718.23
2	Portion of Rate Associated with Capital Cost [1]	69%
3	Amortized Capital Cost of Water Supply ($ per AF)	$1,185.58
4	Term of Water Deliveries Under Contract [2]	55
5	Assumed Discount Rate on Future Costs	5%
6	Net Present Value of Capital Costs for 1 AF	$22,091

[1] From 2005 supplemental water capacity charge analysis.
[2] Assumes water deliveries begin in FY 2014-15.

Waterline Intertie Pipeline Project

Table 11 summarizes the current project cost estimate for the Waterline Intertie Pipeline project. The pipeline is currently under construction and current plans include delivery of supplemental water beginning in May of 2015. The Phase 1 project costs listed in the table were presented before the Board of Directors in Agenda Item 2 on May 10, 2013. The total cost of Phase 1 includes all District costs and equity contributions in the form of District funds on hand that were used since July 2004 to bring about the development of the Supplemental Water Project.

Table 11
Waterline Intertie Pipeline Cost Estimates

Line No.	Description	Pipeline Cost
	Phase 1 - Western River Crossing (800 AFY)	
1	Santa Maria River Crossing	$7,197,140
2	Blosser Road Waterline and Flow Meter	2,575,710
3	Joshua Street Pump Station and Wellhead Chloramination	4,344,710
4	**Subtotal**	$14,117,560
5	Contingency (5%)	$706,000
6	**Subtotal Construction Cost**	$14,823,560
7	ROW Acquisition	250,000
8	Design Engineering	450,000
9	Construction Management	1,736,000
10	**Subtotal Non-Construction Cost**	$2,436,000
11	Non-Construction Contingency (10%)	243,600
12	**Subtotal Project Cost**	$17,503,160
13	Other Costs [1]	5,226,380
14	**Total Phase 1 Cost**	$22,729,540
15	Add Interest on 2013 COPS [2]	2,661,900
16	Less Outstanding Principal on 2013 COPS [2]	(2,898,000)
17	**Total Phase 1 Cost with Adjustments**	$22,493,440
	Phase 2 - 1,600 AFY	
18	Project Cost [3]	$3,131,000
19	**Subtotal Phase 2 Cost**	$3,131,000
20	Adjustment for Construction Cost Inflation [4]	120,000
21	**Adjusted Subtotal**	$3,251,000
22	Engineering & Construction Management (12%)	390,100
23	Contingency (15%)	487,700
24	**Total Phase 2 Cost**	$4,128,800
	Phase 3 - 3,000 AFY	
25	Project Cost [3]	$3,027,000
26	**Subtotal Phase 3 Cost**	$3,027,000
27	Adjustment for Construction Cost Inflation [4]	116,100
28	**Adjusted Subtotal**	$3,143,100
29	Engineering & Construction Management (12%)	377,200
30	Contingency (15%)	471,500
31	**Total Phase 3 Cost**	$3,991,800
32	**Total Waterline Intertie Project Cost**	$30,614,040

[1] Information provided by NCSD.

[2] Estimated principal and interest that is not paid by property tax revenue.

[3] From AECOM Draft Technical Memorandum July 19, 2012.

[4] Adjusted from July 2012 to December 2013 using the ENR 20-Cities Construction Cost Index.

In June of 2013, the District issued $9,660,000 in Series 2013 COPs that provided $9,000,000 in net proceeds to partially fund the Waterline Intertie Pipeline project. The proceeds, together with District funds on hand, fully fund this project.

The annual debt service related to the 2013 COPs and additional debt service of the 2013A COPs will be partially paid by Property Tax revenue received by the District. The Property Tax revenue stream is pledged towards the payment of the debt service along with the revenue of the Water Fund.

However, about $226,800 annually is not covered by annual Property Tax revenue, and this amount will be funded through water rates and charges. This dollar amount represents about 30 percent of the total annual debt service payment of the two debt issues. Because most of the 2013A COPs debt issue was related to prior capital expenditures other than supplemental water, 30 percent of the interest cost of only the series 2013 COPs is added to the project cost as an adjustment to value, or a cost of financing the project. Similarly, the outstanding principal that is deducted from the project cost is only that portion related to 30 percent of the 2013 COPs principal payments. The outstanding principal is deducted from project cost (and therefore the capacity charge) because it will be paid through water rates and charges by future users of the water system.

The cost estimate for Phase 2 of the pipeline project has been updated from previous estimates and a new Phase 3 is now included in the total Waterline Intertie Pipeline cost estimate shown in Table 11. Phase 2 and 3 costs estimates are based on current District plans and include construction management and contingency.

Desalinization Project

The proposed Desalinization Project is summarized in Table 12. The project cost is based on estimates provided by Boyle Engineering in 2007 which were included with the current Supplemental Water Capacity Charges developed in 2008. The desalinization cost estimates contained in Table 12 have been inflated to current dollars based on the ENR 20-Cities Construction Cost Index to December 2013. The adjusted cost to develop the project is now estimated at $99.5 million.

NCSD Capacity Requirements

The capacity requirements for the District remain unchanged since the 2008 capacity charge update. With the completion of Phase 3 of the Waterline Intertie Pipeline Project, the District plans to utilize 2,000 AF of the 3,000 AF that the project will provide. While the Desalinization Project will provide a total capacity of 6,300 AF, the District will utilize 1,181 AF of this project. The District's capacity requirements are summarized in Table 13.

Table 12
Nipomo Mesa Desalination Project Cost Estimates

Line No.	Description	Growth Related
	Nipomo Mesa Desalination Project [1]	
1	Terrestrial and Freshwater Impact Studies	$30,000
2	Phase I Marine and Impact Studies	110,000
3	Cultural Resources Studies	24,000
4	Phase I Hydrogeologic Field Study	360,000
5	Test-Scale Feasibility Study	2,320,000
6	Phase 2 Hydrogeologic Field Study	180,000
7	Preliminary Engineering	210,000
8	CEQA/NEPA	240,000
9	Public Outreach	1,310,000
10	Design and Permitting	2,870,000
11	Construction	46,090,000
12	Project Management	1,500,000
13	**Subtotal Before Contingency**	$55,244,000
14	Contingency	16,573,200
15	Cost Escalation (to September 2007)	13,540,000
16	**Total Desalination Project Cost Adjusted to July 1, 2008** [2]	$85,357,200
17	Cost Escalation (from July 2008 to December 2013)	14,150,100
18	**Total Desalination Project Cost Adjusted to December 2013** [3]	**$99,507,300**

[1] Boyle Engineering, September 24, 2007.
[2] Adjusted to July 2008 using the ENR 20-Cities Construction Cost Index.
[3] Adjusted from July 2008 to December 2013 using the ENR 20-Cities Construction Cost Index.

Table 13
Supplemental Water Requirements (AF)

Line No.	Description	Total Capacity	NCSD	Other Purveyors
1	Existing Facilities (Wells)	3,000	3,000	0
2	NCSD Supplemental Water Project [1]	3,000	2,000	1,000
3	Desalinization Projet [2]	6,300	1,181	5,119
4	**Total Supplemental Water**	9,300	3,181	6,119

[1] NCSD plans to utilize 2,000 AF with 1,000 AF for other purveyors.
[2] Assumes NCSD participates in capacity to meet water needs through 2030.

Supplemental Water Capacity Charge Calculation

The cost estimates of the Santa Maria MOU, Waterline Intertie Pipeline Project, and the Desalinization Project are brought together in Table 14 to calculate the Supplemental Water Capacity Charge. The methodology used to make the calculation is the same as previously developed for the current charges.

Each project cost is converted to a unit capital cost per AF using the capacity provided by each project. The unit costs are multiplied by the capacity utilization by the District for each project to determine an overall cost (line 12). This cost is then divided by the total capacity utilization of 3,181 AF (line 13) to determine the cost of supplemental capacity. Using the basis of 0.72 AF as the water demand of a single-family residential dwelling unit with a 1" meter, the proposed Supplemental Water Capacity Charge is $18,842 (line 16).

Table 14
Supplemental Water Capacity Charge Calculation

Line No.	Description	Unit Cost	NCSD Capacity	Total Cost
	Unit Cost of Intertire Pipeline Project			
1	NCSD Intertie Pipeline Capital Project [1]			$30,614,040
2	Pipeline Capacity (AF)			3,000
3	Pipeline Cost per AF			$10,205
4	Water Supply Capital Cost per AF [2]			$22,091
5	**Unit Cost of Intertie Pipeline Project Supply per AF**			$32,296
	Unit Cost of Desalinization Project			
6	Desalinization Project Capital Cost [3]			$99,507,300
7	Project Capacity (AF)			6,300
8	**Unit Cost of Desalinization Project Cost per AF**			$15,795
9	**NCSD Supplemental Water Capacity Charge**	Unit Cost	NCSD Capacity	Capacity Cost
		$/AFY	AFY	
10	Intertie Pipeline Project	$32,296	2,000	$64,592,000
11	Desalinization Project	$15,795	1,181	18,653,670
12	Totals		3,181	$83,245,670
13	NCSD Capacity (AF)			3,181
14	Supplemental Water Capacity Charge (per AF)			$26,170
15	Water Required for Single-family residence with 1" meter (AF) [3]			0.72
16	**Supplemental Capacity Charge for 1" meter**			**$18,842**

[1] From Table 11.
[2] From Table 10.
[3] Estimated average annual production required for single-family residential customer with a 1" meter.

The calculations in Table 14 do not include financing costs associated with the Desalinization project. These financing costs have not been included because they are not yet known and the District has not committed to using financing for this project. If financing is used in the future, their costs should be included with these charges.

Table 15 presents the proposed Supplemental Water Capacity Charges by meter size for implementation by the District. The charges for the 1" meter are escalated at the meter capacity ratios developed in the previous capacity charge update study.

Table 15
Proposed Supplemental Water Capacity Charges

Line No.	Meter Size	Meter Capacity Ratio [1]	Supplemental Water Capacity Charge: Existing Charge	Supplemental Water Capacity Charge: Proposed Charge
1	Up to 1 inch	1.0	$15,015	$18,842
2	1 1/2 inch	3.0	45,045	56,526
3	2 inch	4.8	72,072	90,442
4	3 inch	9.0	135,135	169,578
5	4 inch	15.0	225,225	282,630
6	6 inch	30.0	$450,450	$565,260

[1] Meter capacity ratios developed in the 2008 capacity charge study.

Comments

From the discussion related to the Water Fund financial plan above and from inspection of Table 7, no changes are required to the water rates previously adopted from the District's last Proposition 218 hearing. The revenues currently being received plus the additional revenue from the approved 9.5 percent rate increases for November 1, 2015 and November 1, 2016 are sufficient to meet annual obligations through FY 2017-18.

Water Capacity Charges calculated in this technical memorandum are lower than the current charges presented in Table 9. This is due to the number of equivalent 1" meters increasing from 3,579 in 2008 to 4,830 presently. While total water system value has increased, the increase is not sufficient to offset the additions to the number of customers. However, Supplemental Water Capacity Charges are higher than the existing charges as shown in Table 15.

I appreciate the opportunity to serve the District in this matter. If there are any questions regarding the information presented herein, please call me at (949) 760-9454.

Very Truly Yours,

TUCKFIELD & ASSOCIATES

G. Clayton Tuckfield
Principal

TO: FINANCE AND AUDIT COMMITTEE

FROM: MICHAEL S. LEBRUN
GENERAL MANAGER

DATE: FEBRUARY 14, 2014

AGENDA ITEM 3

FEBRUARY 19, 2014

DISCUSS PROCESS AND APPROACH TO SETTING DROUGHT RATE STRUCTURES

ITEM

Review process and approach to setting drought rate structures. [RECOMMEND PROVIDE DIRECTION]

BACKGROUND

On February 12, 2014 your Board approved a Water Shortage Response and Management Plan. The Plan is a first step in outlining District response when faced with prolonged drought or other water shortage emergencies.

The District's rate Consultant will overview options for rate setting approaches the District may consider when implementing water shortage response. This is a preliminary discussion intended to provide your Committee with conceptual options and an opportunity to give the consultant some initial direction.

Proposed water shortage rate structures will be developed in the coming months and subsequently brought before your Committee for review and recommendation before going to your full Board for approval.

Once this process is completed and a water shortage rate schedule is approved, a public hearing to adopt the rates will be scheduled and a 45-day hearing notice and ballot will be mailed to all customers in accordance with State law(Proposition 218) for rate setting.

FISCAL IMPACT

Proper rate setting is critical to the operational solvency of all District enterprises.

STRATEGIC PLAN

Strategic Plan Goal 6.1 – Operate all enterprise funds to be financially sound

RECOMMENDATION

Receive the presentation and provide direction to staff.