

TO: BOARD OF DIRECTORS

FROM: MARIO IGLESIAS  
GENERAL MANAGER



DATE: May 20, 2022

## AGENDA ITEM

### E-1

MAY 25, 2022

## RECEIVE DANA RESERVE RATE IMPACT STUDY

### ITEM

Receive the Dana Reserve rate impact study [RECOMMEND RECEIVE AND FILE].

### BACKGROUND

As part of the Dana Reserve Annexation Application process, the Nipomo Community Services District ("District") must evaluate the development's potential impacts on the District's technical, managerial, and financial ability to operate. The District conducts these technical reports and studies to provide the District's Board of Directors (Board) with critically necessary information that enables the Board to evaluate a project when reviewing an application.

The District engaged Clayton Tuckfield ("Consultant") to conduct a Financial Impact Study ("Study") for the Dana Reserve Project ("DRP"). The Study looked at the DRP's impact on the District's water and wastewater enterprises. The Consultant used the most recent water and wastewater rate studies to compare the impact using several assumptions.

The Study relied on water and wastewater customer additions and water consumption information provided in the MKN Dana Reserve Development Water and Wastewater Service Evaluation Report (MKN Report). With the addition of DRP residential and commercial customers and infrastructure, these changes include higher costs but also higher revenues. Additionally, estimates of increased operation and maintenance expense and replacement (OM&R) costs from connecting the DRP have been determined using historical unit cost information from past rate studies.

Key takeaway points are provided in the Study, summarizing the findings using the available information and citing other relevant studies and reports. Because the Consultant had to assume full buildout early in the project schedule for comparison to the most recent water and wastewater rate studies, some of the key takeaway points will be realized sooner than others.

### FISCAL IMPACT

The cost of the Consultant's work to draft the Study was paid for by the project's owner. District staff's time was limited to providing information to the Consultant and some minimal time to prepare the staff report.

### STRATEGIC PLAN

Goal 1. WATER SUPPLIES. Actively plan to provide reliable water supply of sufficient quality and quantity to serve both current customers and those in the long-term future.

Goal 2. FACILITIES THAT ARE RELIABLE, ENVIRONMENTALLY SENSIBLE AND EFFICIENT. Plan, provide for and maintain District facilities and other physical assets to achieve reliable, environmentally sensible, and efficient District operations.

Goal 4. FINANCE. Maintain conservative, long-term financial management to minimize rate impacts on customers while meeting program financial needs.

**RECOMMENDATION**

Staff recommends your Board receive and file the Dana Reserve Rate Impact Study.

**ATTACHMENT**

A. May 17, 2022 Draft Dana Reserve Project Impact Study: Tuckfield and Associates

MAY 25, 2022

ITEM E-1

ATTACHMENT A

# Tuckfield & Associates

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May 17, 2022

Mr. Mario Iglesias  
General Manager  
Nipomo Community Services District  
148 South Wilson Street  
Nipomo, CA 93444

Dear Mr. Iglesias:

The Nipomo Community Services District (District) engaged Tuckfield & Associates to perform a Water and Wastewater Rate Impact Analysis Study (Study) that analyzes the impact of connecting the proposed Dana Reserve Project (DRP) to the District's water and wastewater systems. The Study is intended to provide an estimate of the changes in the District's rates and customer bills that may occur with connecting the DRP at its build-out, however, the rates calculated herein are not intended to be implemented through a Proposition 218 public hearing. The Study uses fiscal year (FY) 2025-26 costs and rates from each of the most recent water and wastewater rates studies as a baseline for which to compare rates calculated with the DRP.

## Method

The impact to water and wastewater rates is analyzed by identifying the changes in revenue and costs that occur from including the DRP into the District's enterprise systems. The Study relied on water and wastewater customer additions and water consumption information provided in the MKN Dana Reserve Development Water and Wastewater Service Evaluation Report (MKN Report). With the addition of DRP residential and commercial customers and infrastructure, these changes include higher costs but also higher revenues. Additionally, estimates of increased operation and maintenance expense and replacement (OM&R) costs from connecting the DRP have been determined using historical unit cost information from past rate studies.

The revenue and cost additions that occur from connecting the DRP are included into the FY 2025-26 baseline costs which are then used to calculate rates with the DRP. The rates with the DRP were calculated using similar cost allocation methodologies from previous rate studies to design fixed and variable rates. Several tables and figures are provided in this report to illustrate the changes in customer bills at various usage levels and the percentage of customers that will experience various percentage impacts.

## Water Rates Impact

Table 1 provides the District's FY 2025-26 number of customers from the most recent water rate study and shows the number of customers with the DRP connected to the water system. The number and type of customers connecting to the system was identified from the MKN Report. The table shows 1,270 single-family residential (SFR) and multifamily residential (MFR) dwelling units, 45 commercial customers, and 15 irrigation customers will connect with the DRP. It is assumed that all new MFR units are individually metered with a 1" meter.

Table 1  
Historical and Projected Water Customers by Classification

Customer Class	Rate Study	With Dana	Difference
	FY 25-26	Reserve	
<b>Number of Accounts</b>			
Single-family Residential	3,845	4,657	812
Multifamily Residential	449	907	458
Commercial	102	147	45
Agriculture	1	1	0
Construction/Hydrant	9	9	0
Irrigation	87	102	15
<b>Total Accounts</b>	<b>4,493</b>	<b>5,823</b>	<b>1,330</b>
<b>Number of Dwelling Units</b>			
Single-family Residential	3,845	4,657	812
Multifamily Residential	948	1,406	458

Water consumption estimates by customer classification are provided in Table 2. Estimates for FY 2025-26 consumption are from the most recent water rate study are provided in the first column of numbers. Consumption estimates with the DRP connected are provided in the second column of numbers. The difference in the two columns is the additional water consumption of the DRP from the MKN Report. Appendix A-1 provides the derivation of the estimated DRP water consumption.

Table 2  
Historical and Projected Water Sales Volume (in HCF)

Description	Rate Study	With Dana	Difference
	FY 25-26	Reserve	
Single-family Residential	546,231	637,049	90,818
Multifamily Residential	47,261	75,624	28,363
Commercial	38,232	55,198	16,966
Agriculture	6,797	6,797	0
Construction/Hydrant	1,310	1,310	0
Irrigation	101,496	118,680	17,184
<b>Total Projected Consumption</b>	<b>741,327</b>	<b>894,658</b>	<b>153,331</b>

Table 3 provides the District's FY 2025-26 water revenue and costs from the most recent water rate study as well as the impact to the District's revenue and costs from the addition of the DRP. By applying the current water rates to the number of customers and consumption volumes from Tables 1 and 2 respectively, the additional revenues from the DRP are determined and are included under the heading "With Dana Reserve".

**Table 3**  
**Water Financial Plan**

Description	Rate Study	With Dana	
	FY 25-26	Reserve	Difference
<b>Proposed Revenue Increase (January 1)</b>	<b>8.9%</b>	<b>0.0%</b>	
<b>Revenue</b>			
Revenues from Existing Water Rates [1]	\$5,847,949	\$7,307,820	\$1,459,871
Total Additional Water Sales Revenue [2]	3,001,743	3,432,462	430,719
Miscellaneous Income	165,500	165,500	-
Transfer from Property Tax Fund	731,504	731,504	-
Interest Income [3]	46,203	54,916	8,713
<b>Total Revenues</b>	<b>\$9,792,899</b>	<b>\$11,692,202</b>	<b>\$1,899,303</b>
<b>Revenue Requirements</b>			
O&M and Capital Outlay	\$4,134,389	\$4,134,389	\$0
Replacement Transfer to Fund 805	707,000	973,200	266,200
Supplemental Water Purchases [4]	4,509,668	4,509,668	0
Supplemental Water O&M	491,814	618,338	126,524
Supplemental Water Overhead	73,772	92,751	18,979
Supplemental Water Replacement	149,439	149,439	0
2013 COPs Debt Service	530,200	530,200	0
2013A Revenue Refunding Bonds Debt Service	221,300	221,300	0
<b>Total Revenue Requirements</b>	<b>\$10,817,582</b>	<b>\$11,229,285</b>	<b>\$411,703</b>
<b>Net Funds Available</b>	<b>(\$1,024,683)</b>	<b>\$462,917</b>	
<b>Available Reserves</b>			
Beginning available reserves [5]	\$5,260,133	\$5,260,133	
Additions (reductions)	(1,024,683)	462,917	
Ending available reserves	\$4,235,450	\$5,723,050	
Target Reserves [6]	\$4,134,400	\$4,134,000	
Above (below) Target	\$101,050	\$1,589,050	
<b>Debt Service Coverage</b>			
Net Revenues [7]	\$1,212,003	\$2,967,141	
Annual Debt Service	\$751,500	\$751,500	
Coverage [8]	161%	395%	

[1] Projected using the existing rates.

[2] Additional revenue from proposed rate adjustments.

[3] Interest earnings on the average fund balance calculated at 1.00%.

[4] Includes 2,500 AFY of supplemental water purchases with or without Dana Reserve Project.

[5] Includes Operating Reserve and Rate Stabilization Reserve.

[6] Target reserve estimated at 12 months of operation and maintenance expense.

[7] Includes water revenues, capacity charge revenue, property tax revenue, miscellaneous, and interest income.

[8] Minimum coverage is 125 percent.

With connection of the DRP, additional costs will be incurred that include increased supplemental water supply costs from the higher water consumption volumes to supply the DRP, and a higher annual replacement transfer from ownership of the DRP distribution lines. Water supplied to the DRP customers is entirely from supplemental water at the rates the District pays to supply customers within its boundaries. The replacement transfer shown in Table 3 is increased by half of the estimated annual depreciation determined in Appendix A-2 which is current District policy for funding replacement. The “Difference” column in Table 3 provides the additional revenue and costs that are expected to occur by connecting the DRP to the water system.

A cost allocation was performed in a similar manner as for the most recent water rate study using the annual revenues and costs with the DRP from Table 3. Costs were allocated following American Water Works Association method and guidelines. As with the rate study, certain costs are included in fixed cost recovery (fixed charge) and others in the variable cost recovery (variable rate). Table 4 presents the calculated rates with the DRP compared with the January 1, 2026 rates from the most recent rate study. The differences are also provided in the table. Note that a new variable rate is created for supplying DRP customers only as shown at the bottom of the table.

Table 4  
Comparison of Bi-Monthly Fixed and Variable Charges

Meter Size	Rate Study Jan 1, 2026		With Dana Reserve		Monthly Difference	Bi-Monthly Difference
	Monthly Fixed Charge	Bi-Monthly Fixed Charge	Monthly Fixed Charge	Bi-Monthly Fixed Charge		
5/8 thru 1 inch	\$41.56	\$83.12	\$39.04	\$78.07	(\$2.52)	(\$5.05)
1-1/2 inch	\$57.19	\$114.38	\$54.20	\$108.39	(\$2.99)	(\$5.99)
2 inch	\$79.45	\$158.90	\$74.58	\$149.15	(\$4.87)	(\$9.75)
3 inch	\$167.88	\$335.75	\$147.18	\$294.36	(\$20.70)	(\$41.39)
4 inch	\$232.95	\$465.89	\$207.27	\$414.53	(\$25.68)	(\$51.36)
6 inch	\$459.74	\$919.47	\$424.45	\$848.90	(\$35.29)	(\$70.57)
8 inch	\$718.93	\$1,437.85	\$672.67	\$1,345.33	(\$46.26)	(\$92.52)
Variable Charge (\$ per HCF)						
District		\$8.45		\$8.45		\$0.00
Dana Reserve				\$9.72		

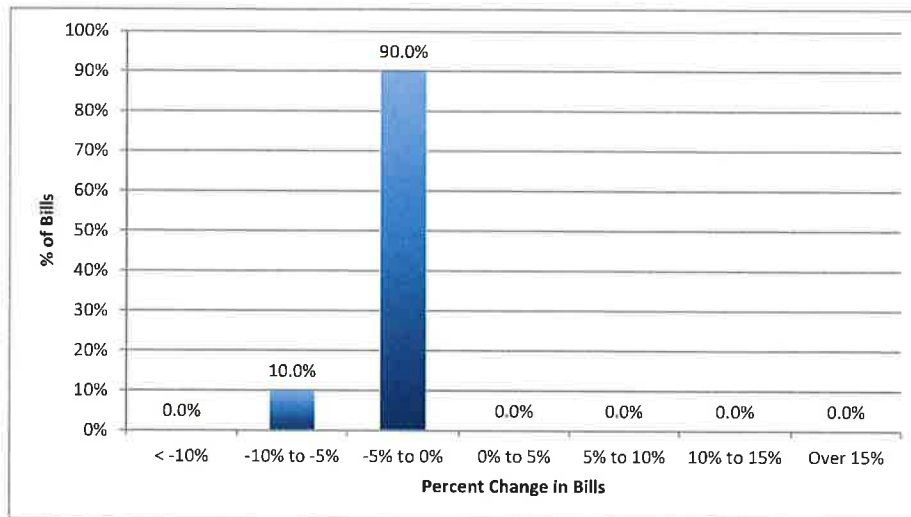
The impact to customer bills from the addition of the DRP to the District’s water system are illustrated in Table 5 and Charts 1 and 2. Table 5 provides the dollar and percentage impact to water bills of Single-family Residential (SFR) customer at various consumption levels with the DRP as compared to water bills without the DRP. The table shows that the average SFR customer with a 5/8” through 1” meter will experience a decrease in their bi-monthly bill of \$5.05, or -1.8 percent, regardless of usage.

**Table 5**  
**Comparison of Single-family Residential Bi-Monthly Water Bills Using 24 HCF**  
**With 5/8" through 1" Meter with and without Dana Reserve Project**

Description	Use (Kgal)	Rate Study Jan 1, 2026			With Dana Reserve Jan 1, 2026			Dollar Difference	Percent Change
		Service Charge	Volume Charge	Current Bill	Service Charge	Volume Charge	Proposed Bill		
	0	\$83.12	\$0.00	\$83.12	\$78.07	\$0.00	\$78.07	(\$5.05)	-6.1%
Very Low	5	\$83.12	\$42.25	\$125.37	\$78.07	\$42.25	\$120.32	(\$5.05)	-4.0%
Low	10	\$83.12	\$84.50	\$167.62	\$78.07	\$84.50	\$162.57	(\$5.05)	-3.0%
Median	17	\$83.12	\$143.65	\$226.77	\$78.07	\$143.65	\$221.72	(\$5.05)	-2.2%
Average	24	\$83.12	\$202.80	\$285.92	\$78.07	\$202.80	\$280.87	(\$5.05)	-1.8%
	30	\$83.12	\$253.50	\$336.62	\$78.07	\$253.50	\$331.57	(\$5.05)	-1.5%
High	40	\$83.12	\$338.00	\$421.12	\$78.07	\$338.00	\$416.07	(\$5.05)	-1.2%
	50	\$83.12	\$422.50	\$505.62	\$78.07	\$422.50	\$500.57	(\$5.05)	-1.0%
Very High	100	\$83.12	\$845.00	\$928.12	\$78.07	\$845.00	\$923.07	(\$5.05)	-0.5%

Chart 1 shows the percentage of SFR bills that are affected from the rate change and by what percentage. Chart 1 shows that 90 percent of the SFR bills will receive a reduction in their bi-monthly bill between 0 to -5 percent and that 10 percent will experience a decrease in their bill between -5 percent and -10 percent.

**Chart 1**  
**Single-family Residential Bi-Monthly Water Bill Percentage Impacts**  
**with Dana Reserve Project**





## Wastewater Rates Impact

Table 6 provides the District’s FY 2025-26 number of wastewater customers from the most recent wastewater rate study and provides the number of customers with the DRP connected to the wastewater system. The number and type of customers connecting to the system was identified from the MKN Report. The table shows the addition of a total of 1,270 SFR and MFR units and 45 commercial customers with the DRP connected.

Table 6  
Wastewater Accounts by Classification

Customer Class	Rate Study	With Dana	
	FY 2025-26	Reserve	Difference
<b>Residential</b>			
Single Family	2,867	3,679	812
Multi-family	674	1,132	458
<b>Non-Residential</b>			
Commercial - Low Strength	30	60	45
Commercial - Medium Strength	8	8	0
Commercial - High Strength	11	11	0
<b>Mixed Use</b>			
Mixed Use - 0% High Strength	11	11	0
Mixed Use - 10% High Strength	1	1	0
Mixed Use - 20% High Strength	3	3	0
Mixed Use - 30% High Strength	2	2	0
Mixed Use - 40% High Strength	2	2	0
Mixed Use - 50% High Strength	1	1	0
Mixed Use - 60% High Strength	0	0	0
Mixed Use - 70% High Strength	1	1	0
Mixed Use - 80% High Strength	0	0	0
Mixed Use - 90% High Strength	0	0	0
<b>Total Accounts/Dwelling Units</b>	<b>3,611</b>	<b>4,911</b>	<b>1,315</b>

Water consumption estimates of wastewater customers by customer classification are provided in Table 7. Estimates for FY 2025-26 consumption are from the most recent wastewater rate study are shown in column 1. Column 2 of Table 7 provides estimates of water consumption by customer classification with the DRP connected which were derived from the MKN Report. The water consumption that was determined in Appendix A-1 is included into the water consumption of wastewater customers except for irrigation landscape customers.

Table 7  
Historical and Projected Water Sales Volume (in HCF)  
of Wastewater Customers

Description	Rate Study	With Dana	Difference
	FY 25-26	Reserve	
<b>Residential</b>			
Single Family	701,974	792,792	90,818
Multi-family	53,164	81,527	28,363
<b>Non-Residential</b>			
Commercial - Low Strength	13,728	30,694	16,966
Commercial - Medium Strength	3,892	3,892	0
Commercial - High Strength	6,678	6,678	0
<b>Mixed Use</b>			
Mixed Use - 0% High Strength	2,315	2,315	0
Mixed Use - 10% High Strength	421	421	0
Mixed Use - 20% High Strength	1,023	1,023	0
Mixed Use - 30% High Strength	605	605	0
Mixed Use - 40% High Strength	640	640	0
Mixed Use - 50% High Strength	4,166	4,166	0
Mixed Use - 60% High Strength	0	0	0
Mixed Use - 70% High Strength	78	78	0
Mixed Use - 80% High Strength	0	0	0
Mixed Use - 90% High Strength	0	0	0
<b>Total Projected Consumption</b>	<b>788,684</b>	<b>924,831</b>	<b>136,147</b>

Table 8 provides the District's FY 2025-26 wastewater revenue and costs from the most recent wastewater water rate study as well as the impact from the addition of the DRP to the District's revenue and costs. Applying the current wastewater rates to the number of customers and consumption volumes from Tables 6 and 7 respectively, the additional revenues from the DRP was determined and are included under the heading "With Dana Reserve".

Additional costs will be incurred that include increased electrical and chemical expenses from operation of lift stations and treatment facilities, and a higher annual replacement transfer from ownership of the DRP sewer collection lines and other facilities that serve DRP. The electrical and chemical costs were estimated from historical unit costs (\$/HCF) of such costs to the estimated consumption with the DRP. The replacement transfer in Table 8 is increased by 50 percent of the estimated annual depreciation determined in Appendix A-3 which is current District policy for funding replacement. Table 8 provides the additional costs that is expected to occur by connecting the DRP to the wastewater system.

## Table 8 Wastewater Financial Plan

Includes Fund 130, Fund 135, Fund, 710, and Fund 810

Description	Rate Study	With Dana	
	FY 2024-25	Reserve	Difference
<b>Proposed Rate Increase (July 1)</b>	<b>3.8%</b>	<b>0.0%</b>	
<b>Revenues</b>			
Sewer Revenues, Existing Rates [1]	\$2,257,600	\$3,060,200	\$802,600
Total Additional Sewer Rate Revenue	454,400	492,400	38,000
Interest Earnings [2]	24,000	28,000	4,000
Miscellaneous Revenues	500	500	0
<b>Total Revenues</b>	<b>\$2,736,500</b>	<b>\$3,581,100</b>	<b>\$844,600</b>
<b>Revenue Requirements</b>			
Operation and Maintenance Expense	\$1,824,500	\$1,864,000	\$39,500
Replacement Capital	395,000	739,900	344,900
Capital Outlay	33,200	33,200	0
Existing Debt Service [3]	596,800	596,800	0
<b>Total Revenue Requirements</b>	<b>\$2,849,500</b>	<b>\$3,233,900</b>	<b>\$384,400</b>
<b>Net Funds Available Before Capital</b>	<b>(\$113,000)</b>	<b>\$347,200</b>	<b>\$460,200</b>
<b>Wastewater Capital</b>			
<b>Capital Sources of Funds</b>			
Replacement Capital	\$395,000	\$739,900	\$344,900
Capacity Charges [4]	58,000	58,000	0
<b>Total Uses of Funds</b>	<b>\$453,000</b>	<b>\$797,900</b>	<b>\$344,900</b>
<b>Capital Uses of Funds</b>			
Capital Improvement Plan	\$763,846	\$763,846	\$0
<b>Total Uses of Funds</b>	<b>\$763,846</b>	<b>\$763,846</b>	<b>\$0</b>
<b>Net Capital Spending</b>	<b>(\$310,846)</b>	<b>\$34,054</b>	<b>\$344,900</b>
<b>Net Funds Available After Capital</b>	<b>(\$423,846)</b>	<b>\$381,254</b>	<b>\$805,100</b>
<b>Available Reserves (including capital funds)</b>			
FY beginning available cash [5]	\$2,641,181	\$2,641,181	
Additions (reductions)	(\$423,846)	\$381,254	
FY ending available reserves	<b>\$2,217,335</b>	<b>\$3,022,435</b>	
Target Reserves [6]	\$2,250,000	\$2,250,000	
Above (below) Target	(\$32,665)	\$772,435	
<b>Debt Service Coverage</b>			
Net Revenues [7]	\$936,800	\$1,741,900	
Annual Debt Service [8]	\$596,800	\$596,800	
Coverage	157%	292%	

[1] Projected using the existing rates.

[2] Interest earnings on the average fund balance calculated at 1.00%.

[3] Debt service on the 2012 Certificates of Participation.

[4] Assumption from rate study.

[5] The available FY 2020-21 cash balance includes Fund 130, Funds 135, 710, and 810.

[6] Target reserve includes Operating, Capital Replacement, and Rate Stabilization reserves.

[7] Includes capacity charge revenue and interest income.

[8] Includes 2012 COPs.

Using the revenues and costs with the DRP shown in Table 8, a cost allocation was performed in a similar manner as for the most recent wastewater rate study. Costs are allocated following Water Environment Federation method and guidelines. Certain costs are included in fixed cost recovery (fixed charge) and others in the variable cost recovery (variable rate), however, all costs allocated to residential customers are recovered through a fixed charge. Table 9 presents the calculated rates with the DRP compared with the January 1, 2026 rates from the most recent rate study. The differences are also provided in the table.

Table 9  
Comparison of Wastewater Bi-Monthly Fixed and Variable Charges

Meter Size	Rate Study Jan 1, 2026		With Dana Reserve		Monthly Difference	Bi-Monthly Difference
	Monthly Fixed Charge	Bi-Monthly Fixed Charge	Monthly Fixed Charge	Bi-Monthly Fixed Charge		
<b>Residential Bi-monthly Fixed Charges</b>						
Single Family	\$60.68	\$121.36	\$42.55	\$85.10	(\$18.13)	(\$36.26)
Multi-family	\$50.59	\$101.17	\$36.18	\$72.35	(\$14.41)	(\$28.82)
<b>Non-Residential Bi-monthly Meter Charges by Size</b>						
Up to 1 inch	\$31.86	\$63.71	\$23.94	\$47.87	(\$7.92)	(\$15.84)
1.5 inch	\$91.73	\$183.47	\$69.37	\$138.74	(\$22.36)	(\$44.73)
2 inch	\$145.62	\$291.24	\$110.26	\$220.52	(\$35.36)	(\$70.73)
3 inch	\$271.36	\$542.73	\$205.67	\$411.33	(\$65.70)	(\$131.39)
4 inch	\$450.99	\$901.99	\$341.96	\$683.93	(\$109.03)	(\$218.06)
6 inch	\$900.07	\$1,800.13	\$682.71	\$1,365.42	(\$217.36)	(\$434.72)
8 inch	\$1,438.96	\$2,877.91	\$1,091.60	\$2,183.21	(\$347.35)	(\$694.71)
<b>Non-Residential Usage Rates (\$ per HCF)</b>						
Low Strength		\$4.49		\$3.28		(\$1.21)
Medium Strength		\$4.95		\$3.67		(\$1.28)
High Strength		\$6.35		\$4.85		(\$1.50)
<b>Mixed Use Usage Rates (\$ per HCF)</b>						
Standard Comm with 10% High Strength		\$4.68		\$3.44		(\$1.24)
Standard Comm with 20% High Strength		\$4.86		\$3.60		(\$1.26)
Standard Comm with 30% High Strength		\$5.05		\$3.75		(\$1.30)
Standard Comm with 40% High Strength		\$5.24		\$3.91		(\$1.33)
Standard Comm with 50% High Strength		\$5.42		\$4.06		(\$1.36)
Standard Comm with 60% High Strength		\$5.61		\$4.22		(\$1.39)
Standard Comm with 70% High Strength		\$5.79		\$4.37		(\$1.42)
Standard Comm with 80% High Strength		\$5.98		\$4.53		(\$1.45)
Standard Comm with 90% High Strength		\$6.16		\$4.68		(\$1.48)

The impact to SFR customer bills from the addition of the DRP to the District’s wastewater system are provided by inspection of Table 9. A SFR customer will experience a decrease in their bi-monthly sewer bill of \$36.26, about 30.0 percent, or \$18.13 per month.

## Key Takeaways

From the results of the analyses, there are several key takeaways from the discussion above.

1. 100 percent of current SFR water customers will receive a reduction in their water bill as shown in Chart 1, and 100 percent of current SFR wastewater customers will receive a reduction in their wastewater bill as shown in Table 9.
2. Based on a legal opinion provided by the District's attorney, all of the water supplied to DRP's customers will be from supplemental water. Table 4 shows that a higher water rate will be charged to consumption of the DRP customers. DRP customers will not be beneficiaries of the less expensive groundwater.
3. No water or wastewater rate increases would be required in FY 2025-26 because of the addition of the DRP.
4. The cash balance will be increased in both the water and wastewater reserves with the addition of the DRP.
5. The District's water and wastewater debt service coverage ratios are improved from the addition of the DRP because of the higher revenues received versus expenses incurred.

It has been a pleasure to perform this Study for the District. If there are any questions or additional information is needed, please contact me at 949-760-9454.

Very Truly Yours,

TUCKFIELD & ASSOCIATES



G. Clayton Tuckfield  
President/Principal Consultant  
Tuckfield & Associates

## Appendix A-1

## Dana Reserve Project Additions of Water Consumption of Water Customers [1]

	Units	Acres	Water Use per unit AFY	Area 1,000 SF	Annual Water Use AFY	Annual Water Use gpd	Use [2] 4.365% Adjustment gpd	Annual Water Use HCF
<b>Residential</b>								
Single-family								
4,000 to 5,999 sf	463		0.21		97.23	86,795	90,584	90,818
6,000 to 7,000 sf	225		0.34		76.50	68,290	71,271	
Cluster (SFR)	124		0.21		26.04	23,245	24,260	
Condos	173		0.13		22.49	20,076	20,952	28,363
Townhomes	210		0.14		29.40	26,245	27,391	
Affordable	75		0.14		10.50	9,373	9,782	
	<u>1,270</u>				<u>262.16</u>	<u>234,024</u>	<u>244,239</u>	<u>119,181</u>
<b>Commerical</b>								
Village Center		4.4	0.17	11.62	8.69			
Flex/Commercial Light Ind		<u>14.5</u>	0.17	<u>11.61</u>	<u>28.63</u>			
		18.9			37.32	33,315	34,769	16,966
<b>Landscape</b>								
Village and Commercial		6.3	1.00		6.30			
Public Recreation		10.0	1.00		10.00			
Neighborhood Parks		15.0	1.00		15.00			
Streetscape/Parkways		<u>6.5</u>	1.00		<u>6.50</u>			
		37.8			37.80	33,743	35,216	17,184
Dana Reserve Project Total Water Use					337.28	301,082	314,224	153,331

[1] From Table 2-5 Developer Provided Projections from MKN Dana Reserve Development Water and Wastewater Service Evaluation Study.

[2] Adjustment to match recommended use of 352 AFY from Tables 2-7 and 2-8 of MKN Dana Reserve Development Water and Wastewater Service Evaluation Study.

## Appendix A-2 Estimated Annual Replacement of Water Capital Improvements

Project Description	Project Cost [1]	Life	Annual Depr
		yrs	
New 16-inch Water Main on North Oak Glen Drive and Teft Street	\$10,510,000	50	\$210,200
Willow Road End of Line Connection	\$260,000	50	\$5,200
New 1.0 MG Reservoir at Foothill Tank Site	\$3,920,000	40	\$98,000
New 0.5 MG Reservoir at Joshua Road Pumping Station	\$4,760,000	40	\$119,000
<b>Total Cost</b>	<b>\$19,450,000</b>		
 On-site Water System Improvements	 \$5,000,000	 50	 \$100,000
<b>Estimated Annual Replacement</b>			<b>\$532,400</b>

[1] From Dana Reserve Development Water and Wastewater Service Evaluation, February 7, 2022 by MKN Associates.

## Appendix A-3 Estimated Annual Replacement of Wastewater Capital Improvements

Project Description	Project Cost [1]	Overhead Allocation	Adjusted Project Cost	Life	Annual Depr
				yrs	
<b>Offsite Wastewater Collection Sewer Main System Improvements</b>	\$3,630,000		\$3,630,000	60	\$60,500
<b>Wastewater Treatment Plant Improvements</b>					
Influent Lift Station Pump Improvements	\$50,000	\$44,195	\$94,195	45	\$2,093
New Grit Chamber System	443,000	391,569	834,569	20	41,728
New Aeration Basins #2 and #3	2,676,000	2,365,322	5,041,322	40	126,033
New Blower Building and Blower System Improvements	1,505,000	1,330,273	2,835,273	40	70,882
New Clarifier and RAS Pumping Improvements	2,044,000	1,806,696	3,850,696	50	77,014
New Sludge Thickening System	613,000	541,832	1,154,832	40	28,871
New Screw Press	1,136,000	1,004,113	2,140,113	15	142,674
Mobilization	475,000	(475,000)	0		
General Site Grading	294,000	(294,000)	0		
General Site Civil	733,000	(733,000)	0		
Construction Contingency	2,991,000	(2,991,000)	0		
Engineering, Administration, and Management	2,991,000	(2,991,000)	0		
<b>Total Cost</b>	<b>\$19,581,000</b>	<b>\$0</b>	<b>\$19,581,000</b>		
 <b>On-Site Wastewater System Improvements</b>			 \$7,000,000	 50	 \$140,000
<b>Estimated Annual Replacement</b>					<b>\$689,795</b>

[1] From Dana Reserve Development Water and Wastewater Service Evaluation, February 7, 2022 by MKN Associates.