



# DIABLO GRANDE | WESTERN HILLS WATER DISTRICT RATE STUDY

May 10, 2025



# WATER RATES HISTORY

**Agreement provides 800 AF/year, but community uses only ~400 AF/year**

**Developer previously subsidized rates by ~\$2M annually (now bankrupt)**

**Golf club memberships once subsidized water rates through high golf course usage fees. Both courses are now closed, and memberships no longer exist.**

**The Commercial Owners Association (COA) once covered a portion of rates but is now defunct**



# SEWER RATE HISTORY

**Sewer rates have never covered onsite maintenance or repairs**

**City of Patterson increased sewer rates several years ago**

**Developer-City of Patterson Agreement for treatment**

**The Diablo Grande Community Protested Sewer Rate Increases**

**Sewer rate only covers wastewater treatment by the City of Patterson**

**Patterson treatment costs will now be included in the property tax bill**

# PURPOSE OF RATE CHANGE



Buys Water  
Supplies from  
Kern County  
Water Agency



Water  
Treatment Plant  
Operational  
Expenses



Provides Water  
Service to the  
Community



Provides  
Sewer Service  
to Community



Potential  
connection to  
Alternative  
water supply

COVERS...



# RATES DO NOT COVER

Moneys Owed  
to Patterson

Moneys Owed  
to Kern County  
Water Agency

Short Falls  
Associated with  
Mello Roos Tax

*DOES NOT ADDRESS...*

# RULES OF A RATE STUDY

**Revenues Don't Exceed Cost of Services**

**Each Parcel Pays No More than Proportional Cost**

**Charges Only Fund Community Services**

**Public Notice + Hearing Required Before Adoption**

**If Most Affected Property Owners Protest, Rate Cannot Be Adopted**

# WHAT DO THE RATES COVER

Water +  
Wastewater  
Facilities O+M

Water District  
Employee  
Salaries

Water  
Purchase from  
Kern County  
Water Agency

Water  
Treatment

Wastewater  
Collection +  
Disposal (not  
Treatment)

Legal

General +  
Administrative



# SYSTEM OPERATING COSTS

ANNUAL EXPENSES FOR WATER & SEWER 2021 - 2025 <sup>A</sup>						
	2021	2022	2023	2024	2025	Notes
Payroll & Related	\$ 628,435	\$ 660,368	\$ 626,880	\$ 694,680	\$ 737,850	
Operating Expenses	\$ 1,467,790	\$ 1,467,790	\$ 1,467,790	\$ 1,467,790	\$ 1,300,000	Cost to purchase water
Pump Stations	\$ 248,160	\$ 248,160	\$ 257,560	\$ 257,560	\$ 336,600	
Water Treatment	\$ 359,723	\$ 359,723	\$ 500,223	\$ 540,223	\$ 608,238	
Transmission, Dist, & Lines	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 15,000.00	
Wastewater	\$ 584,000	\$ 584,000	\$ 583,700	\$ 583,700	\$ 734,500	
General & Administrative	\$ 424,393	\$ 400,660	\$ 547,400	\$ 394,005	\$ 592,355	
Capital Repairs	\$ 95,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	
<b>Total Annual Expenses</b>	<b>\$ 3,813,501</b>	<b>\$ 3,826,701</b>	<b>\$ 4,089,553</b>	<b>\$ 4,043,958</b>	<b>\$ 4,424,543</b>	
ANNUAL REVENUE FOR WATER & SEWER 2021 - 2025 <sup>A</sup>						
Sales	\$ 2,319,243	\$ 2,416,707	\$ 2,074,400	\$ 2,074,400	\$ 2,063,900	Storm drain revenue is subtracted from sales
Services	\$ -	\$ -	\$ -	\$ -	\$ 2,500	
<b>Total Annual Revenue</b>	<b>\$ 2,319,243</b>	<b>\$ 2,416,707</b>	<b>\$ 2,074,400</b>	<b>\$ 2,074,400</b>	<b>\$ 2,066,400</b>	
<b>Operating Deficit</b>	<b>\$ (1,494,258)</b>	<b>\$ (1,409,993)</b>	<b>\$ (2,015,153)</b>	<b>\$ (1,969,558)</b>	<b>\$ (2,358,143)</b>	
<sup>A</sup> Based on approved budgets published on the Western Hills Water District Website with slight corrections						



# SYSTEM COSTS BREAKDOWN BY %

BREAKDOWN OF SYSTEM COSTS BY PERCENTAGE						
	2021	2022	2023	2024	2025	Notes
<i>Cost to Purchase Water</i>	\$ 1,407,790	\$ 1,407,790	\$ 1,407,790	\$ 1,407,790	\$ 1,300,000	For reference
<i>Sewer Treatment Cost</i>	\$ 570,000	\$ 570,000	\$ 570,000	\$ 570,000	\$ 720,000	For reference
All Water System Costs	\$ 673,883	\$ 673,883	\$ 823,783	\$ 863,783	\$ 959,838	Cost to purchase water removed from total water system costs
All Sewer System Costs	\$ 14,000	\$ 14,000	\$ 13,700	\$ 13,700	\$ 14,500	Cost to treat sewer removed from total sewer system costs
Percent of Water System Cost	98%	98%	98%	98%	99%	
Percent of Sewer System Costs	2%	2%	2%	2%	1%	

Category-Based Allocation of Water System Expenses						
	2021	2022	2023	2024	2025	Notes
Payroll & Related	\$ 615,644.53	\$ 646,927.91	\$ 614,121.55	\$ 680,541.67	\$ 722,833.06	
General & Administrative	\$ 415,755.63	\$ 392,505.31	\$ 536,259.15	\$ 385,986.09	\$ 580,299.21	
Capital Repairs	\$ 93,066.53	\$ 97,964.77	\$ 97,964.77	\$ 97,964.77	\$ 97,964.77	
Category-Based Allocation of Sewer System Expenses						
Payroll & Related	\$ 12,790.09	\$ 13,440.00	\$ 12,758.45	\$ 14,138.33	\$ 15,016.94	
General & Administrative	\$ 8,637.37	\$ 8,154.34	\$ 11,140.85	\$ 8,018.91	\$ 12,055.79	
Capital Repairs	\$ 1,933.47	\$ 2,035.23	\$ 2,035.23	\$ 2,035.23	\$ 2,035.23	

# PROPOSED SEWER RATE



Sewer Rate (Based on Fixed Monthly Cost)

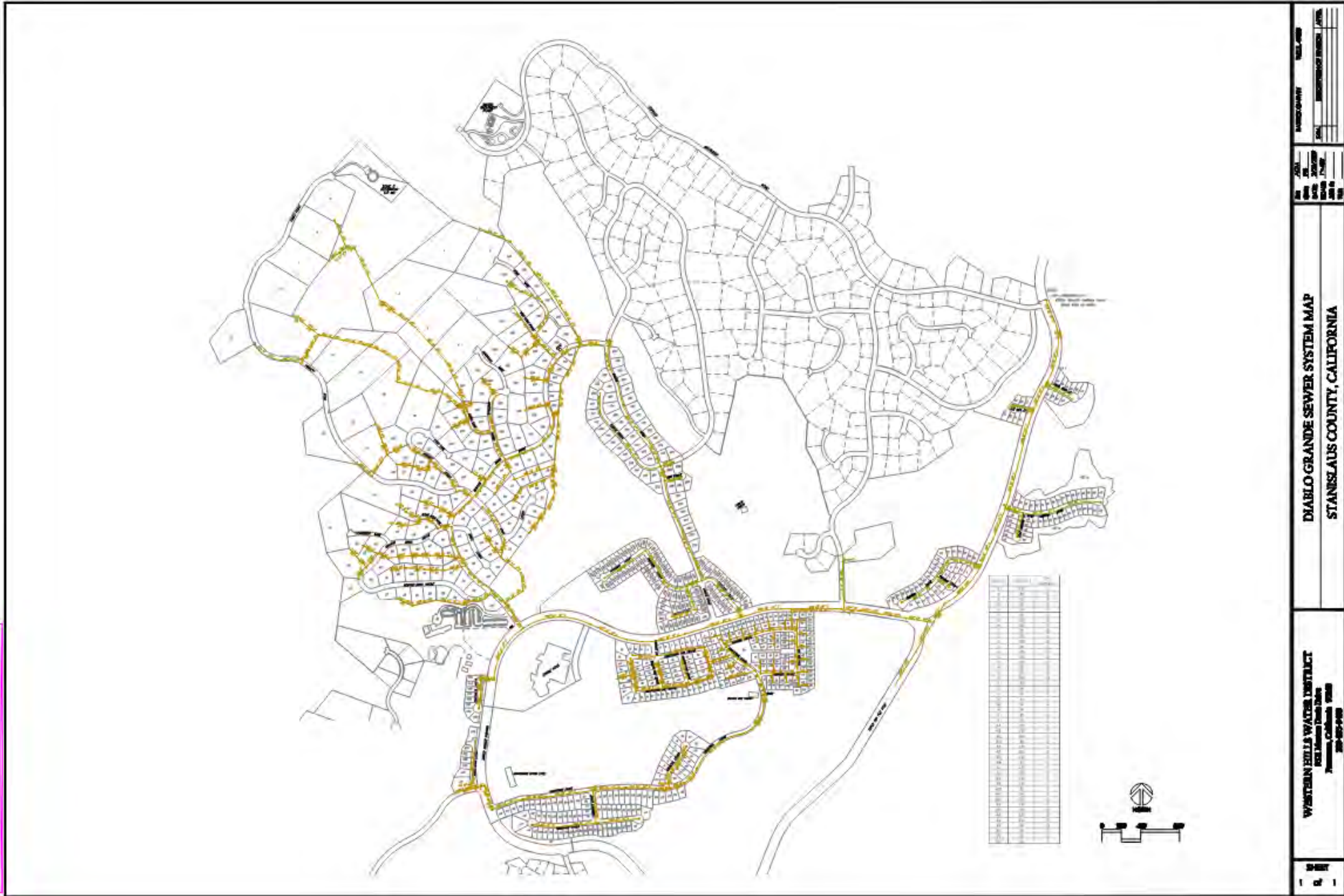
Covers:

- Wastewater system meters
- Collection System + conveyance facilities to the City of Patterson

Does NOT cover:

- Wastewater treatment provided by the City of Patterson, which will not be moved to the County Annual Tax Bill





# SEWER COLLECTION SYSTEM COST

No.	Description	Unit	Quantity	Cost	Subtotal
<b>Sewer Collection System</b>					
1	6" Sanitary Sewer	LF	35,433	\$69	\$2,457,581
2	8" Sanitary Sewer	LF	14,595	\$83	\$1,214,745
3	10" Sanitary Sewer	LF	7,092	\$97	\$688,647
4	15" Sanitary Sewer	LF	967	\$153	\$147,553
5	18" Sanitary Sewer	LF	4,428	\$214	\$945,928
6	Manholes	EA	25	\$4,855	\$121,377

CCCI July 2020 - April 2025 =	1.39
Estimated Base Construction Cost	\$5,576,000
Total Construction Cost (20% Contingency)	\$6,691,200
Estimated Percentage of System Requiring O&M, Repairs, or Replacement	4%
<b>Projected Annual Cost for Maintenance, Repairs, and Replacements</b>	<b>\$267,648.00</b>

## Key Points:

- Sewer system was assessed to determine its current value
- Standard practice sets aside 4-6% of system value annually for maintenance
- District has never charged rates to fund this maintenance
- Cost estimate prices based on 2020 Technical Studies for Angels Crossing



# SEWER RATE BREAKDOWN

Estimated Annual Expenses for Sewer System							
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Notes
Payroll & Related	\$ 14,069	\$ 16,039	\$ 16,680	\$ 17,348	\$ 18,041	\$ 18,763	Assumes an annual increase of 4%
Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Eliminated the cost previously charged by the City of Patterson for wastewater treatment, as this expense will now be incorporated into the property tax bill.
General & Administrative	\$ 8,637	\$ 8,983	\$ 9,342	\$ 9,716	\$ 10,105	\$ 10,509	Assumes an annual increase of 4%
Capital Repairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Eliminated the cost previously charged for capital repairs as it will now be part of the sewer maintenance reserve
Sewer Maintenance Reserve	\$ -	\$ 267,648	\$ 278,354	\$ 289,488	\$ 301,068	\$ 313,110	Assumes an annual increase of 4%
<b>Estimated Annual Expenses</b>	<b>\$ 22,706</b>	<b>\$ 292,670</b>	<b>\$ 304,376</b>	<b>\$ 316,551</b>	<b>\$ 329,214</b>	<b>\$ 342,382</b>	
Sewer Rates							
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Notes
Sewer Rate Residential	-	<b>\$41.88</b>	\$44.12	\$46.48	\$48.96	\$51.57	The flat rate has been established to fully cover the annual costs of operating and maintaining the sewer collection system
Sewer Rate Commercial (a)	-	\$51.94	\$55.57	\$56.96	\$58.39	\$59.85	There are currently no commercial revenues. Number shown is current rate (\$49.94) with a 4% cost of living adjustment.
Commercial Consumption Charge							
Monthly Consumption Charge	-	\$2.95	\$3.07	\$3.19	\$3.32	\$3.46	Charged for water used over 100 ccf. Number shown is current rate (\$2.84) with a 4% cost of living adjustment.
Sewer System Revenue							
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Notes
Residential Rate Revenue	\$ -	\$292,513.83	\$304,214.38	\$316,382.95	\$329,038.27	\$342,199.80	
Commercial Rate Revenue	\$ -	\$ 155.81	\$ 162.05	\$ 168.53	\$ 175.27	\$ 182.28	
Commercial Consumption Rate Revenue	\$ -	\$0.00	\$ -	\$ -	\$ -	\$ -	
<b>Estimated Annual Revenue</b>	<b>\$ -</b>	<b>\$292,669.64</b>	<b>\$304,376.42</b>	<b>\$316,551.48</b>	<b>\$329,213.54</b>	<b>\$342,382.08</b>	Annual revenue for Fiscal Year 2025 was excluded, as it is allocated toward the expense paid to the City of Patterson for wastewater treatment
<b>Net Operating Surplus/Deficit</b>	<b>\$(22,706.47)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	

- US Bureau of Labor & Statistics Consumer Price Index assumes a 4.8% increase annually for water & sewer maintenance
- Fiscal Year Starts July 1<sup>st</sup>, 2025

# PROPOSED WATER RATES

Residential Fixed  
Costs (Base Rate)

Usage Charge  
(Volume of Water  
Used)

Tiered Rate Structure





# WATER RATE (WHAT'S COVERED)

Purchase of Raw Water from  
Kern County Water Agency

Conveyance Facilities (Lift Water  
from the CA Aqueduct to the  
Treatment Plant-Includes 4 Pump  
Stations + Pipelines)



# WATER RATE (WHAT'S COVERED)

Water Treatment

Storage Tanks

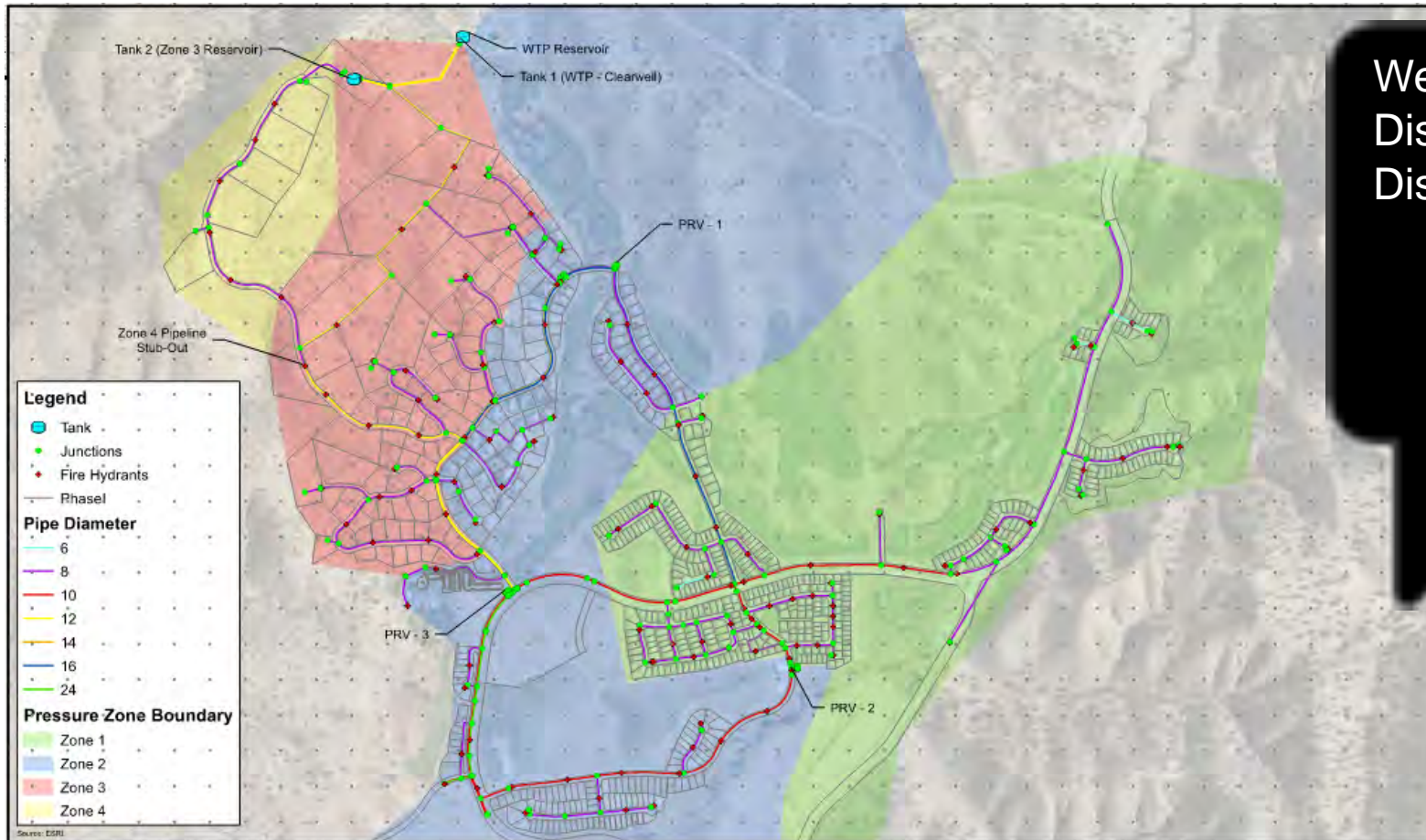
Water Distribution System

Fire Hydrants

Treated Water Pump Stations



# TREATED WATER SYSTEM DISTRIBUTION



Western Hills Water District | Phase 1 Water Distribution Network.



# BASIS FOR RESIDENTIAL TIERS

Basis for Residential Usage Rate Determination <sup>A</sup>			
Description	Value	Units	Notes
<b>Capacity Calculation</b>			
Water Use	55	gallons per person per day (GPCD)	<i>Per the State of California - indoor use only</i>
Household	3	Persons	
Indoor use budget	165	gallons/day	
Indoor use budget	4950	gallons/month	<i>Average monthly indoor water use</i>
<b>Tier Limits</b>			
Tier 1 Max	5,000	gallons or 6.68 units (1 unit = 748 gal) per month	<i>Based on row 8, rounded</i>
Tier 2 Max	10,000	gallons or 6.68 units (1 unit = 748 gal) per month	
Tier 3	Above 10,000	gallons or 6.68 units (1 unit = 748 gal) per month	<i>no limit</i>
<b>Residential Tier Calculations</b>			
Tier 1	<del>\$4</del>	Per Unit	<i>Based on 3 person household's efficient/essential indoor use</i>
Tier 2	<del>\$6</del>	Per Unit above Tier 1	
Tier 3	<del>\$9</del>	Per Unit above Tier 2	<i>Excessive Use</i>

Low Tier (**55 Gal. Day/per Person-5k Gal.** Month/per Household)

Rates Applied to Number of Units (Each @ 748 Gallons)

The 55 GPCD standard is mandated for urban water suppliers by California's SB 606 and AB 1668 for indoor residential water use.

- Tiered values were observed from averages taken from CA water districts, then rounded up and increased to reduce flat rate
- Adhering to this standard helps the district conserve water and ensure long-term sustainability.

# BASIS FOR HOA TIERS

HOA Tier Calculations			
Tier 1	<b>\$6</b>	Per Unit	0-100% of allowance (efficient use)
Tier 2	<b>\$8</b>	Per Unit above Tier 1	100-130% (acceptable variance or minor inefficiency)
Tier 3	<b>\$10</b>	Per Unit above Tier 2	>130% (wasteful)
Home Owners Association - Landscaping Tiers by Month <sup>B</sup>			
Month	Tier 1	Tier 2	Tier 3
January	182	55	>
February	289	87	>
March	577	173	>
April	790	237	>
May	1,018	305	>
June	1,185	355	>
July	1,291	387	>
August	1,154	346	>
September	835	251	>
October	516	155	>
November	243	73	>
December	167	50	>
<sup>B</sup> Water use is based on actual usage data from years 2024-2025			

Based on allowed water budget

Rates Applied to Number of Units (Each @ 748 Gallons)

- Tiered values are based off of rates determined for residential tier, then increased as there is no flat rate charge
- Allowance is based on the Maximum Applied Water Allowance (MAWA)
- Percentages are based on common practice for water utilities using MAWA-based rate structures

# BASIS FOR HOA TIERS

HOA Metered Uses Year 2024 - 2025						
Month	Meter 02-0002 (gal)	Meter 02-0006 (gal)	Meter 02-0003 (gal)	Meter 02-0005 (gal)	Meter 02-0001 (gal)	Total Estimated Usage
January	49,878	17,380	0	42,559	170,326	280,143
February	34,068	22	0	141	151,614	185,845
March	37,410	22	51	0	5,238	42,721
April	0	0	0	0	0	0
May	72,672	73,132	81,591	284,949	394,025	906,369
June	74,142	82,960	78,427	259,257	403,385	898,171
July	73,115	83,335	79,336	275,344	454,560	965,690
August	74,066	75,891	72,974	260,494	417,016	900,441
September	65,041	68,662	65,714	0	405,000	604,417
October	84,646	91,190	87,521	301,686	611,588	1,176,631
November	58,242	62,228	58,724	149,535	464,457	793,186
December	26,203	0	16,126	64,129	211,690	318,148
<b>Total Uses =</b>	<b>649,483</b>	<b>554,822</b>	<b>540,464</b>	<b>1,638,094</b>	<b>3,688,899</b>	<b>7,071,762</b>
			Peak Month Water Budget (gal)			965,690
			Evapotranspiration (Eto)			8.5
			Evapotranspiration Adjustment Factor (ETAF)			0.7
			HOA Landscaped Area (sf)			261,776

Based on real meter data from  
Year 2024-2025



# BASIS FOR HOA TIERS

HOA - Water Allowance Calculation vs Actual Use				
Month	Eto (in)	Allowance (gal)	Actual Use (gal)	% of Allowance
January	1.2	136,333	280,143	205%
February	1.9	215,860	185,845	86%
March	3.8	431,720	42,721	10%
April	5.2	590,775	0	0%
May	6.7	761,191	906,369	119%
June	7.8	886,163	898,171	101%
July	8.5	965,690	965,690	100%
August	7.6	863,440	900,441	104%
September	5.5	624,858	604,417	97%
October	3.4	386,276	1,176,631	305%
November	1.6	181,777	793,186	436%
December	1.1	124,972	318,148	255%
<b>Total Uses =</b>	<b>34,068</b>	<b>6,169,055</b>	<b>7,071,762</b>	

Tier 1 – 100% of Budget

Tier 2 – From 100% to 130% of budget

Tier 3 – Any use after Tier 2

# BASIS FOR COA TIERS

Basis for Commercial Usage Rate Determination			
Description	Value	Units	Notes
Tier 1	<b>\$6</b>	Per Unit	0-100% of allowance (efficient use)
Tier 2	<b>\$8</b>	Per Unit above Tier 1	100-130% (acceptable variance or minor inefficiency)
Tier 3	<b>\$10</b>	Per Unit above Tier 2	>130% (wasteful)
Commercial Owners Association - Landscaping Tiers by Month <sup>B</sup>			
Month	Tier 1	Tier 2	Tier 3
January	69	21	>
February	109	33	>
March	218	65	>
April	298	90	>
May	385	115	>
June	448	134	>
July	488	146	>
August	436	131	>
September	316	95	>
October	195	59	>
November	92	28	>
December	63	19	>
<sup>B</sup> Water use is based on actual usage data from years 2024-2025			

Based on allowed water budget

Rates Applied to Number of Units (Each @ 748 Gallons)

- Tiered values are based off of rates determined for residential tier, then increased as there is no flat rate charge
- Allowance is based on the Maximum Applied Water Allowance (MAWA)
- Percentages are based on common practice for water utilities using MAWA-based rate structures

# BASIS FOR COA TIERS

COA Metered Uses Year 2024 - 2025										
Month	Meter 02-0007 (gal)	Meter 02-0010 (gal)	Meter 02-0011 (gal)	Meter 02-0012 (gal)	Meter 02-0014 (gal)	Meter 02-0016 (gal)	Meter 02-0019 (gal)	Meter 02-0008 (gal)	Meter 02-0009 (gal)	Total Estimated Usage
January	61,375	3	0	0	8350	3158	0	0	0	69,728
February	46,724	0	0	0	6828	955	0	0	0	53,552
March	54,622	0	0	0	7,713	0	0	0	0	62,335
April	1,927	0	0	0	0	0	0	0	0	1,927
May	53,721	31,467	0	0	36,749	0	0	0	0	121,937
June	55,651	27,184	11,827	129,954	49,597	48,935	345	0	0	274,213
July	80,623	36,406	20,235	166,984	60,638	45,165	583	0	0	364,886
August	85,789	32,052	9,987	138,136	48,157	0	2	0	0	314,121
September	57,807	28,350	4,807	154,536	38,955	4,531	0	9,176	0	284,455
October	77,866	28,648	0	156,172	52,131	0	0	0	0	314,817
November	64,394	19,012	1	87,453	26,186	1,894	0	0	0	197,046
December	35,704	0	0	0	7655	0	0	0	0	43,359
<b>Total Uses =</b>	<b>676,203</b>	<b>203,122</b>	<b>46,857</b>	<b>833,235</b>	<b>342,959</b>	<b>104,638</b>	<b>930</b>	<b>9,176</b>	<b>0</b>	<b>2,102,376</b>
							Peak Month Water Budget (gal)			364,886
							Evapotranspiration (Eto)			8.5
							Evapotranspiration Adjustment Factor (ETAF)			0.7
							COA Landscaped Area (sf)			98,912



# BASIS FOR COA TIERS

COA - Water Allowance Calculation vs Actual Use

Month	Eto (in)	Allowance (gal)	Actual Use (gal)	% of Allowance
January	1.2	51,513	69,728	135%
February	1.9	81,563	53,552	66%
March	3.8	163,126	62,335	38%
April	5.2	223,224	1,927	1%
May	6.7	287,616	121,937	42%
June	7.8	334,837	274,213	82%
July	8.5	364,886	364,886	100%
August	7.6	326,251	314,121	96%
September	5.5	236,103	284,455	120%
October	3.4	145,954	314,817	216%
November	1.6	68,684	197,046	287%
December	1.1	47,221	43,359	92%
<b>Total Uses =</b>	<b>34,068</b>	<b>2,330,978</b>	<b>2,102,376</b>	

Tier 1 – 100% of Budget

Tier 2 – From 100% to 130% of budget

Tier 3 – Any use after Tier 2

# ESTIMATED WATER USAGE

Month	Indoor (gal)	Outdoor (gal)	Total Estimated Usage	% of Annual Total
January	4,950	0	4,950	5%
February	4,950	0	4,950	5%
March	4,950	2,000	6,950	7%
April	4,950	3,000	7,950	8%
May	4,950	5,000	9,950	10%
June	4,950	6,000	10,950	11%
July	4,950	8,000	12,950	13%
August	4,950	8,000	12,950	13%
September	4,950	5,000	9,950	10%
October	4,950	2,000	6,950	7%
November	4,950	1,000	5,950	6%
December	4,950	0	4,950	5%
<b>Total Uses =</b>	<b>59,400</b>	<b>40,000</b>	<b>99,400</b>	
<b>Percent of outdoor water use annually =</b>				<b>40%</b>

- Indoor Use is still based on 55 gpcd
- Outdoor use is based on average % of indoor use
- Outdoor use totals is assumed to be 40% of household's annual water consumption

- Unit and CCF used Interchangeably as one unit = one ccf = 748 gallons

*Based on typical residential irrigation patterns in California, which assumes outdoor water use is typically 30% to 60% of a households annual water consumption.*

Residential Use	January	February	March	April	May	June	July	August	September	October	November	December	Estimated Tiered Use per Household		
Monthly Use Per House (gal)	4,950	4,950	6,950	7,950	9,950	10,950	12,950	12,950	9,950	6,950	5,950	4,950		Gal	Units
<b>Tier 1</b>	4,950	4,950	5000	5000	5000	5000	5000	5000	5000	5000	5000	4,950	Est. Tier 1 Usage =	59,850	80.01
<b>Tier 2</b>	0	0	1,950	2,950	4,950	5000	5000	5000	4,950	1,950	950	0	Est. Tier 2 Usage =	32,700	43.71
<b>Tier 3</b>	0	0	0	0	0	950	2,950	2,950	0	0	0	0	Est. Tier 3 Usage =	6,850	9.16

# ESTIMATED WATER USAGE

HOA - Estimated Annual Usage per Tier

Month	Tier 1 (gal)	Units	Tier 2 (gal)	Units	Tier 3 (gal)	Units	Actual Use (gal)	Actual Use (units)
January	136,333	182	40,900	55	102,910	138	280,143	375
February	185,845	248	0	0	0	0	185,845	248
March	42,721	57	0	0	0	0	42,721	57
April	0	0	0	0	0	0	0	0
May	761,191	1,018	137,566	184	7,612	10	906,369	1,212
June	886,163	1,185	3,147	4	8,862	12	898,171	1,201
July	965,690	1,291	0	0	0	0	965,690	1,291
August	863,440	1,154	28,366	38	8,634	12	900,441	1,204
September	604,417	808	0	0	0	0	604,417	808
October	386,276	516	112,020	150	678,335	907	1,176,631	1,573
November	181,777	243	52,715	70	558,694	747	793,186	1,060
December	124,972	167	36,242	48	156,935	210	318,148	425
<b>Estimated Tiers Usage</b>	<b>5,138,824</b>	<b>6,870</b>	<b>410,956</b>	<b>549</b>	<b>1,521,982</b>	<b>2,035</b>	<b>7,071,762</b>	<b>9,454</b>

- Unit and CCF used Interchangeably as one unit = one ccf = 748 gallons



# ESTIMATED WATER USAGE

COA - Estimated Annual Usage per Tier								
Month	Tier 1 (gal)	Units	Tier 2 (gal)	Units	Tier 3 (gal)	Units	Actual Use (gal)	Actual Use (units)
January	51,513	69	15,454	21	2,761	4	69,728	93
February	53,552	72	0	0	0	0	53,552	72
March	62,335	83	0	0	0	0	62,335	83
April	1,927	3	0	0	0	0	1,927	3
May	121,937	163	0	0	0	0	121,937	163
June	274,213	367	0	0	0	0	274,213	367
July	364,886	488	0	0	0	0	364,886	488
August	314,121	420	0	0	0	0	314,121	420
September	236,103	316	45,991	61	2,361	3	284,455	380
October	145,954	195	42,327	57	126,536	169	314,817	421
November	68,684	92	19,918	27	108,443	145	197,046	263
December	43,359	58	0	0	0	0	43,359	58
<b>Estimated Tiers Usage</b>	<b>1,738,585</b>	<b>2,324</b>	<b>123,691</b>	<b>165</b>	<b>240,101</b>	<b>321</b>	<b>2,102,376</b>	<b>2,811</b>

- Unit and CCF used Interchangeably as one unit = one ccf = 748 gallons

# ESTIMATED REVENUE FROM WATER RATE

	Active Meter Count	Service Charge per Month	Projected Annual Service Charge Revenue	Projected Usage (CCF)	Usage Charge	Projected Annual Usage Charge Revenue
<b>TREATED WATER</b>						
Residential	582	\$ 568.51	\$ 3,970,498.20	-	-	\$ -
Tier 1	-	\$ -	\$ -	46,565	\$4	\$186,258.17
Tier 2	-	\$ -	\$ -	25,441	\$6	\$152,647.68
Tier 3	-	\$ -	\$ -	5,329	\$9	\$47,964.98
		<b>Subtotal =</b>	<b>\$ 3,970,498.20</b>		<b>Subtotal =</b>	<b>\$ 386,870.83</b>
<b>Residential HOA</b>						
1-1/2" Meter (1) & 2" Meter (4)	5	\$ -	\$ -	-	-	\$ -
Tier 1	-	\$ -	\$ -	6,870	\$6	\$ 41,220.52
Tier 2	-	\$ -	\$ -	549	\$8	\$ 4,395.25
Tier 3	-	\$ -	\$ -	2,035	\$10	\$ 20,347.35
	587	<b>Subtotal =</b>	<b>\$ -</b>		<b>Subtotal =</b>	<b>\$ 65,963.12</b>
<b>Non-Residential</b>						
Commercial Owners Assoc (COA) (2")	8	\$ -	\$ -	-	-	\$ -
Tier 1		\$ -	\$ -	2,324	\$6	\$ 13,945.87
Tier 2		\$ -	\$ -	165	\$8	\$ 1,322.89
Tier 3		\$ -	\$ -	321	\$10	\$ 3,209.90
Golf Course		\$ -	\$ -	-	-	\$ -
1" Meter	1	\$ -	\$ -	-	-	\$ -
2" Meter	1	\$ -	\$ -	-	-	\$ -
District Office	1	\$ -	\$ -	157	\$6	\$942.00
Fire Station	1	\$ -	\$ -	32	\$6	\$192.00
	12	\$ -	\$ -	2999.663102	-	\$ 19,612.66
<b>Total Treated Water</b>	<b>599</b>		<b>\$ 3,970,498.20</b>			<b>\$ 472,446.61</b>
<b>RAWWATER</b>						
Vineyard	1	\$ -	\$ -	0	\$6	\$ -
Golf Course	1	\$ -	\$ -	0	\$6	\$ -
2" Meter (COA #9)	1	\$ -	\$ -	69	\$6	\$ 414
<b>Total Raw Water</b>	<b>3</b>		<b>\$ -</b>			<b>\$ 414</b>
<b>GRAND TOTAL</b>	<b>602</b>		<b>\$ 3,970,498.20</b>			<b>\$472,860.61</b>

# ESTIMATED COST FOR ALTERNATIVE

Rate Study Info for WHWD on Patterson Irrigation District Connction	
Item/Description	Cost
Engineering Support During Project Formation	\$ 25,000
Project Financing	
Survey or Right of Way + Pump Station Site	
Land Acquisiton Farmer #1	\$ 90,909
Land Acquisiton Farmer #2	\$ 90,909
CEQA	\$ 500,000
Water Supply Assesment	\$ 45,000
Design	
Pipe	\$ 126,720
Pump Station 100 Hp	\$ 40,000
Electrical	\$ 25,000
Marshal Davis Pipeline Evaluation	\$ 30,000
Power Supply	\$ 30,000
Engineering During Construction	\$ 12,586
Bid Services	\$ 25,000
Construction	\$ 2,234,000
<b>Subtotal</b>	<b>\$ 3,275,124</b>
Contingency at 20%	\$ 655,025
Insurance Cost	\$ 130,000
<b>Total</b>	<b>\$ 4,060,149</b>
Interest rate	6%
Term of loan in years	20
Total Annual	\$ 353,982.29
<b>Annual Payment (1.25 Multiplier)</b>	<b>\$442,477.87</b>



# PROPOSED WATER RATE

## Water System Expenses

	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Notes
Payroll & Related	\$ 722,833	\$ 824,030	\$ 856,991	\$ 891,271	\$ 926,921	\$ 963,998	Assumes an annual increase of 4%
Operating Expenses	\$ 1,467,790	\$ 1,467,790	\$ 1,467,790	\$ 1,467,790	\$ 1,467,790	\$ 1,467,790	Cost to purchase water
Pump Stations	\$ 336,600	\$ 353,430	\$ 371,102	\$ 389,657	\$ 409,139	\$ 429,596	Assumes an annual increase of 5%
Water Treatment	\$ 608,238	\$ 638,650	\$ 670,582	\$ 704,112	\$ 739,317	\$ 776,283	Assumes an annual increase of 5%
Transmission, Dist. & Lines	\$ 15,000	\$ 15,750	\$ 16,538	\$ 17,364	\$ 18,233	\$ 19,144	Assumes an annual increase of 5%
General & Administrative	\$ 580,299	\$ 603,511	\$ 627,652	\$ 652,758	\$ 678,868	\$ 706,023	Assumes an annual increase of 4%
Capital Repairs	\$ 93,067	\$ 97,720	\$ 102,606	\$ 107,736	\$ 113,123	\$ 118,779	Assumes an annual increase of 5%
Connection to Alternative Supply	\$ -	\$ 442,478	\$ 442,478	\$ 442,478	\$ 442,478	\$ 442,478	Flat Fixed Rate
<b>Estimated Annual Expenses</b>	<b>\$ 3,823,827</b>	<b>\$ 4,443,359</b>	<b>\$ 4,555,738</b>	<b>\$ 4,673,165</b>	<b>\$ 4,795,870</b>	<b>\$ 4,924,092</b>	

## Residential Water Rates

	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Notes
Residential Flat Rate	\$ 144.99	<b>\$ 568.51</b>	<b>\$ 581.90</b>	<b>\$ 595.89</b>	<b>\$ 610.53</b>	<b>\$ 625.85</b>	
Tier 1	\$ 1.88	\$4	\$ 4.16	\$ 4.33	\$ 4.50	\$ 4.68	
Tier 2	\$ 2.57	\$6	\$ 6.24	\$ 6.49	\$ 6.75	\$ 7.02	
Tier 3	\$ 3.21	\$9	\$ 9.36	\$ 9.73	\$ 10.12	\$ 10.53	
Tier 4	\$ 5.42	\$ -	\$ -	\$ -	\$ -	\$ -	
HOA/COA - Tier 1	\$ 1.88	\$6	\$ 6.24	\$ 6.49	\$ 6.75	\$ 7.02	
HOA/COA - Tier 2	\$ 2.57	\$8	\$ 8.32	\$ 8.65	\$ 9.00	\$ 9.36	
HOA/COA - Tier 3	\$ 3.21	\$10	\$ 10.40	\$ 10.82	\$ 11.25	\$ 11.70	

## Water System Revenue

	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Notes
Treated Water Flat Rate Revenue	\$ -	\$ 3,970,498.20	\$ 4,063,962.90	\$ 4,161,718.96	\$ 4,263,965.68	\$ 4,370,911.70	
Treated Water Usage Revenue	\$ -	\$ 386,870.83	\$ 402,345.67	\$ 418,439.49	\$ 435,177.07	\$ 452,584.16	
HOA Revenue	\$ -	\$ 65,963.12	\$ 68,601.64	\$ 71,345.71	\$ 74,199.53	\$ 77,167.52	
Non-Residential Revenue	\$ -	\$ 19,612.66	\$ 20,397.17	\$ 21,213.06	\$ 22,061.58	\$ 22,944.04	
Raw Water	\$ -	\$414.00	\$ 430.56	\$ 447.78	\$ 465.69	\$ 484.32	
<b>Total Annual Revenue</b>	<b>\$ 1,665,000</b>	<b>\$ 4,443,359</b>	<b>\$ 4,555,738</b>	<b>\$ 4,673,165</b>	<b>\$ 4,795,870</b>	<b>\$ 4,924,092</b>	
<b>Total Balance</b>	<b>\$ (2,158,827.12)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	

Fiscal Year starts July  
1<sup>st</sup>, 2025

US Bureau of Labor & Statistics Consumer Price Index assumes a 4.8% increase annually for water & sewer maintenance

DIABLO GRANDE

 **Western Hills**  
Water District

# CONCLUSION



A No Vote = Likely  
the Water Will be  
Turned Off



Approach Needed to  
Help Negotiate with  
KCWA until  
alternatives can be  
pursued



Rates Approval  
Required to Secure  
Water Supply  
Funding going  
forward



If Ruled a Public  
Health Issue County  
Can Red Tag Homes  
for Evacuation

*This may be the last-ditch effort to save this development...*

# CONCLUSION

**...If you have time or an expertise that could help the community, please let WHWD know...**





THANK YOU!