

# Discussion of Tiered Water Rate Structure Scenarios

February 9, 2022

Semitropic Water Storage District



# Tiered Water Rate Structure

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- The District as established Total Consumptive Use Budgets for each landowner:
  - Aggregates all parcels under each unique landowner
  - Provides for a starting Total Consumptive Use Budget of 4.2 AF per acres in 2020
  - Establishes the Consumptive Use Allowance as groundwater available to meet consumptive use above other supplies
  - The Consumptive Use Allowance reduces to 0 AF in 2040.





# Tier Water Rate Structure

## (Management Action 2)

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- Establish a volumetric rate structure that imposes fees for landowner exceedance of annual Total Consumptive Use Budgets (Et).
  - Incentivize landowners to avoid consumptive use above Total Consumptive Use Budget
  - Generate revenue to replace water use above budgets and maintain the District's overall water budget
- Working with M.Cubed, economic consultant, to establish a tiered fee structure.



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Subject to Revisions*

# Tiered Water Rate Structure

- Tier 1: \$321 per AF.
- Tier 2: \$595 per AF.
- Tier 3: \$1,678 per AF.





# Tier Triggers

- Establish Tier Triggers for consumptive use above Total Consumptive Water Use Budget
- Preliminary Tier Triggers analysis extends 2020 landowner consumptive use constant through 2030.
- Allows for analysis of incentive pressures on landowners and fee generation to support acquisition of replacement water



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## Example Tiered Water Rate Structure

	Trigger	Charge
Tier 1:	0 to 5%	\$321
Tier 2:	5 to 10%	\$595
Tier 3:	Above 10%	\$1,678

	Total of All Tiers					Cost per AF: \$321 Tier 1			Cost per AF: \$595 Tier 2			Cost per AF: \$1,678 Tier 3		
	Count	Volume	Total \$\$	\$/AF	Max	Count	AF	Charges	Count	AF	Charges	Count	AF	Charges
2020	0	0	0	\$0	0.99	0	0	\$0	0	0	\$0	0	0	\$0
2021	2	4	1,180	\$320	1.02	2	4	\$1,180	0	0	\$0	0	0	\$0
2022	6	75	25,740	\$340	1.07	5	70	\$22,470	1	5	\$3,270	0	0	\$0
2023	16	439	194,076	\$440	1.11	11	280	\$89,880	4	150	\$89,250	1	9	\$14,946
2024	31	1,320	954,900	\$720	1.16	18	330	\$105,930	8	750	\$446,250	5	240	\$402,720
2025	46	3,060	3,320,860	\$1,090	1.21	21	770	\$247,170	12	710	\$422,450	13	1,580	\$2,651,240
2026	66	6,030	6,897,779	\$1,140	1.27	22	1,040	\$333,840	19	1,670	\$993,650	25	3,320	\$5,570,289
2027	81	9,870	12,954,040	\$1,310	1.33	15	440	\$141,240	24	2,780	\$1,654,100	42	6,650	\$11,158,700
2028	99	14,620	22,226,100	\$1,520	1.41	21	670	\$215,070	14	1,290	\$767,550	64	12,660	\$21,243,480
2029	131	21,570	31,865,220	\$1,480	1.48	35	1,650	\$529,650	19	1,930	\$1,148,350	77	17,990	\$30,187,220
2030	149	30,100	45,488,960	\$1,510	1.57	24	1,400	\$449,400	24	2,880	\$1,713,600	101	25,820	\$43,325,960

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## Example Tiered Water Rate Structure

### Scenario 1

Tier 1: 0 to 5% - \$321  
Tier 2: 5 to 10% - \$595  
Tier 3: greater than 10% - \$1678

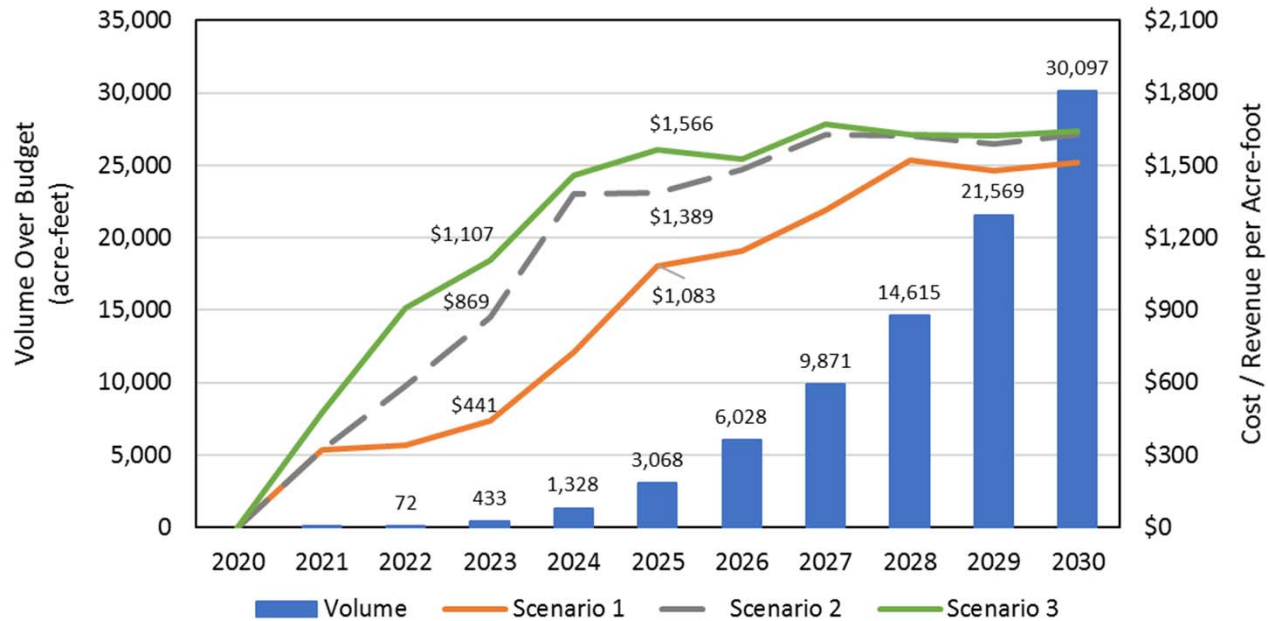
### Scenario 2

Tier 1: 0 to 2.5% - \$321  
Tier 2: 2.5 to 5% - \$595  
Tier 3: greater than 5% - \$1678

### Scenario 3

Tier 1: 0 to 2% - \$321  
Tier 2: 2 to 4% - \$595  
Tier 3: greater than 4% - \$1678

**Estimated Tiered Water Rate Performance**





# Tier Triggers

- Additional analysis can adjust tier triggers to change landowner incentive pressure and fee generation to support water replacement
- Evaluation of District's potential exposure:
  - If all landowners exceeded their budgets by 5%, that would equal to 30,000 AF that the District would need to replace.
  - Approximates 2030 projected conditions with a total fee generation equal to \$1,500 per AF.





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# Tiered Water Rate Structure

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*Discussion*

