



WATER RATE FEE STUDY FOR TRANQUILLITY IRRIGATION DISTRICT

PROPOSITION 218 PROCEDURES FOR WATER RATE INCREASES

November 2023

Prepared for:

Tranquillity Irrigation District
P.O. Box 487, Tranquillity, CA 93668

Prepared by:



Date Signed: 11/9/2023



Provost & Pritchard Consulting Group
455 W. Fir Ave, Clovis, CA 93611

REPORT SUMMARY

Historically, the Tranquillity Irrigation District (TID or District) has levied volumetric agricultural water charges, monthly municipal charges, and land-based assessments to recover the District's expenses. Additionally, non-operating revenues, District reserves, and outside water sales were used to make up any shortfall. In October 2019, landowners in the District approved rate increases to decrease the District's reliance on revenue from outside water sales. Further, in 2021, the irrigation water rate was separated to recognize the source of water (surface vs. groundwater) and the different costs associated with providing each of those sources.

Beginning in 2024, due to increased electric and fuel costs, declining water levels, flood impacts, and inflationary impacts, the District proposes to raise these rates again to reflect the true cost of providing water.

Under the current irrigation rate structure, the District charges a rate of \$98/acre-foot (AF) for surface water and \$200/AF for groundwater. The District proposes to increase the surface water rate to \$120/AF and the groundwater rate to \$250/AF.

Table 1. Current Water Charges vs Proposed

Classification	Current Rate	Proposed Maximum Rate
Irrigation - Surface Water	\$98/acre-foot	\$120/acre-foot
Irrigation - Groundwater	\$200/acre-foot	\$250/acre-foot

The maximum rates identified above were developed by taking the proposed 2024 budget, apportioning the amount to be met by irrigation water sales, and then evaluating the budget under the following scenarios:

1. Normal years, where surface water meets most of the District's water needs; and
2. Dry years, where surface water supplies are reduced by roughly 22% and more groundwater must be pumped.

The amount charged by the District in any year can be lower than the maximum, but will not exceed the rate proposed herein unless another rate study is adopted and the District holds a public hearing to consider whether or not there is a majority protest to the rate increase. If there is not a majority protest, then another rate increase could be considered by the TID Board. That is the same process being followed to consider this rate increase. The proposed rates will be implemented at the discretion of the TID Board of Directors, up to the maximum rate identified herein. The proposed rates allow the District to pay the actual District operating costs without relying on revenue from outside water sales and reserves.

The water rate increase proposal process is being conducted in accordance with provisions of Proposition 218, as reflected in Article XIII D of the California Constitution and Sections 53750 through 53753.5 of the California Government Code. These

constitutional and statutory provisions implement Proposition 218, which established mandatory procedures that local agencies must follow in order to levy certain property related charges or fees. The District has made the decision to follow the provisions of Proposition 218, in part, because its procedures act to fully inform the District's water users, while simultaneously giving them a direct say in the matter.

Under the Proposition 218 process, once the Board determines the need to increase the water charges, the District must evaluate whether or not the increases are in line with the benefits provided by the District and how to allocate the charges. This Fee Study discusses the benefits of the District's organization and its water entitlements and contracts, as well as services provided by TID.

Following the acceptance of this Fee Study by the Board of Directors, the District will mail a notice to water users of the proposed rate increase on the agricultural water rates. The District's Board of Directors will hold a public hearing to determine whether or not there is a majority protest against these rate increases. If there is not a majority protest, then the Board of Directors may increase the agricultural water rates up to the maximum amount identified on the notice and in this Fee Study.

1. PURPOSE OF THE REPORT

1.1. General

In November 1996, the California voters approved Proposition 218, the "Right to Vote on Taxes Act", which added Article XIII D to the California Constitution. Proposition 218 imposes certain requirements relative to the imposition of any new or increasing any existing property-related fees and charges by local agencies. The District has made the decision to follow the provisions of Proposition 218, in part, because its procedures act to fully inform the District's landowners while simultaneously giving them a direct say in the matter.

1.2. Proposition 218 Requirements

In general, before a local agency can levy new or increased water rates, the following procedures are required:

1. Noticing Requirement – The District must mail a notice of the proposed rate increases to all affected property owners or ratepayers. The notice must specify the amount of the fee, the basis upon which it was calculated, the reason for the fee, and the date/time/location of the public rate hearing at which the proposed rates will be considered.
2. Public Hearing – The District must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
3. Rate increases subject to Majority Protest – At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of the affected property owners or ratepayers submit written protests against the proposed rate increases, the increases cannot be adopted.

1.3. Limitations of the Fee Study

This report is limited to the proposed increase to agricultural water rates to fully fund the District's costs. Although the District is seeking to increase its rates, the increase is necessary only to replace the amount currently subsidized by outside water sales and the use of reserve accounts and does not reflect an increase in the budgeted expenses of the District (excluding inflationary increases).

1.4. Revenue Objectives

The main revenue objective for the District is to collect funds to fully fund the variable costs of the District to operate its agricultural water system for the benefit of its landowners and to replenish the District's reserve fund through increased water rates, without utilizing outside water sales.

2. CURRENT AND PROJECTED WATER SUPPLIES

2.1. General

The District last conducted a Proposition 218 public hearing regarding volumetric agricultural water charges on January 19, 2022. The volumetric water charges were subject to majority protest and the amount of submitted written protests did not exceed the threshold to adequately raise a majority protest. The volumetric water charges were calculated based on the District supplementing revenues through outside water sales and other non-operating revenues.

2.2. Irrigation Water Demand

The District encompasses approximately 10,750 acres in the west central portion of Fresno County, in California's Central San Joaquin Valley. District farmland has historically produced a variety of commodities including cotton, canning tomatoes, alfalfa (seed and hay), sugar beets, small grains, pistachios, and almonds. Irrigation water demand met by the District's surface and groundwater supplies is typically 25,000 AF/year.

2.3. Surface Water Supply

Normal surface water supplies of the District include Schedule 2 CVP water, South of Delta CVP water, and Kings River water.

Schedule 2 CVP Water (Riparian Water or Rights Water) is delivered without charge as a settlement of the District's water right claims in Fresno Slough; the settlement amount is 20,200 AF of water. The contract (Contract 14-06-200-701-A) requires that the District take delivery of this water according to the schedule shown in **Table 1**.

The District's South-of-Delta CVP water and its Kings River water (because the District is the last member agency on the Kings River) are unreliable sources of water, especially in dry periods when the District is heavily reliant on groundwater supplies.

Table 2. USBR Scheduled Water Deliveries to TID (AF)

Hydrologic Year Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Normal	0	400	1,300	2,900	4,700	6,900	3,400	400	200	0	0	0	20,200
Dry	0	400	1,300	2,100	3,800	5,200	2,500	300	100	0	0	0	15,700

2.4. Groundwater Supply

The District owns and operates many wells to supplement irrigation demand that is not met by the surface water supplies described above. The amount of groundwater needed to be pumped for each hydrologic year type is shown in **Table 3**. **Figure 1** illustrates irrigation demand being met by the two water sources under various water year type scenarios.

Table 3. Well Water Requirements by Year Type (AF)

Hydrologic Year Type	Groundwater (AF)	Surface Water (AF)	Total Irrigation Demand (AF)
Normal	4,800	20,200	25,000
Dry	9,300	15,700	25,000

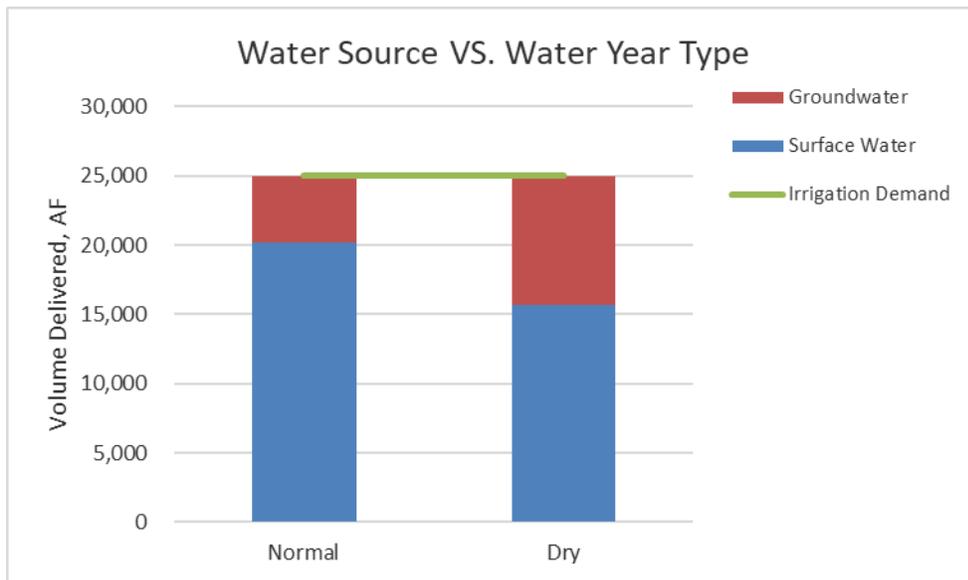


Figure 1. Water Supply and Demand

3. DISTRICT FINANCIAL INFORMATION

In 2024, the District projects to deliver 20,200 AF of surface water and 4,800 AF of groundwater. At the current rates of \$98/AF and \$200/AF, respectively, this is projected to generate \$2.9 million in revenue. The District projects variable agricultural water expenses of \$3.0 million in 2024 (**Table 5**), which does not include any contributions to reserves. The balance of the expenses will be recovered through District reserves that

were generated from outside water sales and other non-operating revenue of roughly \$100,000, should rates not increase.

3.1. Reserve Account Depletion

The District has relied on reserve accounts to offset operation costs in the District. This practice is unsustainable. **Figure 2** demonstrates that at the current reliance on reserves, the account will be depleted by 2032 (or sooner depending on the water year). To reverse this decline, a line item has been included in the budget to recoup reserve account losses.

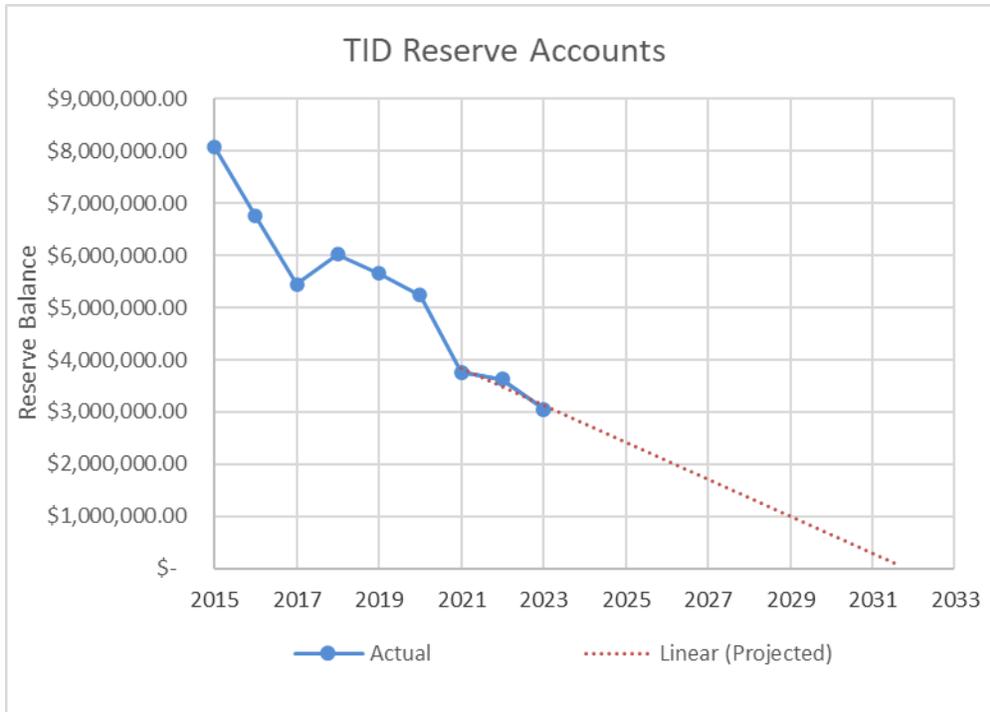


Figure 2. Reserve Account Depletion

3.2. Increase Energy Reliance

The 2021 water rate increase did not accurately account for the increases in energy costs. The current energy cost to extract groundwater is roughly \$155/AF. This cost will increase as groundwater levels decline, pump and well efficiencies degrade, and energy costs from the utility company increase. **Table 5** accounts for this variable cost of service.

3.3. Projected Revenues

Following approval of the rate increase, revenues are projected for each water year type in **Table 4**. Expenses associated with each of the water year types are projected in **Table 5**. **Figure 3** illustrates the agricultural water budget being met with the proposed revenue structure in the various water year type scenarios.

Table 4. Projected Revenue from Agricultural Water Deliveries

<i>Revenue Source</i>	Normal Year	Dry Year
Irrigation – Surface Water (\$120/AF)	\$2,424,000	\$1,884,000
Irrigation – Groundwater (\$250/AF)	1,200,000	2,325,000
Totals	\$3,624,000	\$4,209,000

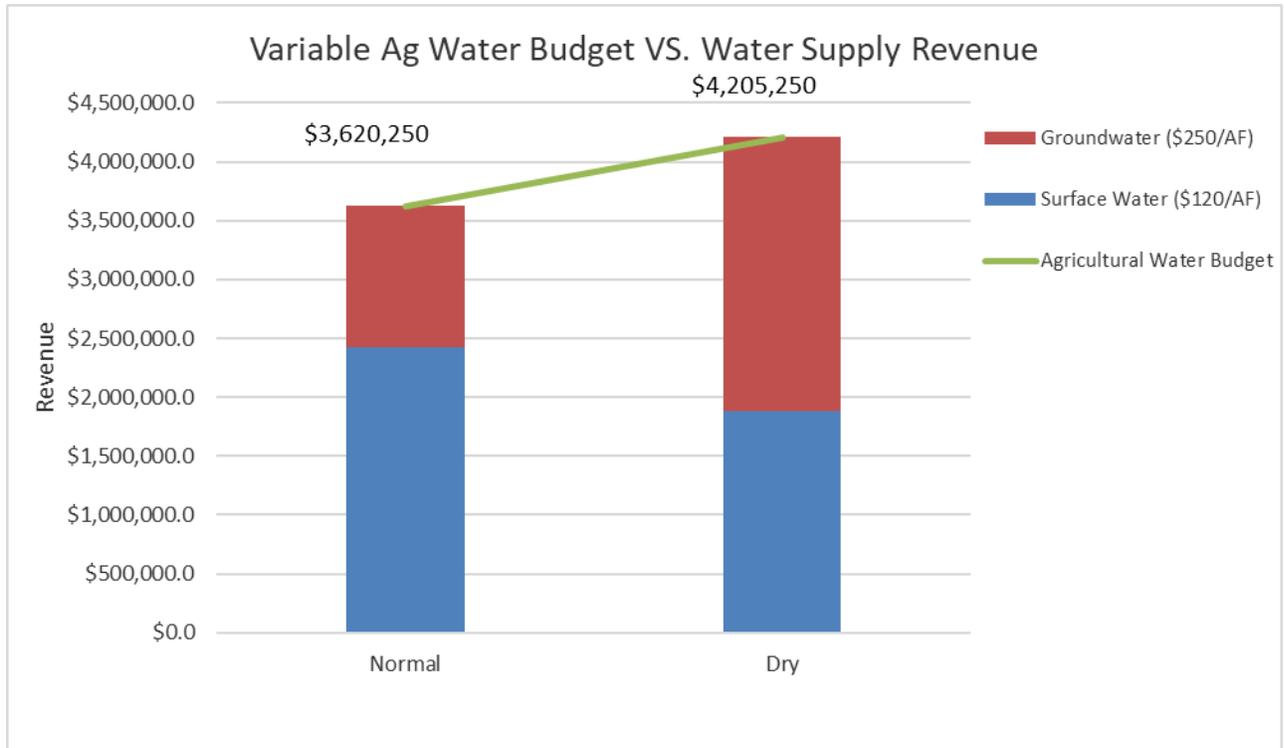


Figure 3. Revenue Breakdown by Water Year Type

Table 5. Projected Expenses Related to Agricultural Water Deliveries

<i>Expenses</i>	Total Budget	Ag Water Variable Cost Budget		Normal Year	Dry Year
		Apportionment (%)	(\$)		
Wages	\$955,000.00	75	\$716,250	\$716,000	\$716,000
Payroll Taxes & UI	\$ 15,000.00	75	\$11,250	\$11,250	\$11,250
Medical, Dental, Vision Insurance	\$340,000.00	75	\$255,000	\$255,000	\$255,000
Pension Expense (TID cont)	\$130,000.00	75	\$97,500	\$97,500	\$97,500
R/M Irrigation System (inc. meter repair)	\$ 20,000.00	100	\$20,000	\$20,000	\$20,000
Weed Control	\$ 45,000.00	100	\$45,000	\$45,000	\$45,000
<i>R/M Pumps & Wells</i>	<i>\$ 50,000.00</i>	<i>100</i>	<i>\$50,000</i>	<i>\$50,000</i>	<i>\$100,000</i>
R/M Vehicles	\$ 35,000.00	80	\$28,000	\$28,000	\$28,000
R/M Equipment	\$100,000.00	80	\$80,000	\$80,000	\$80,000
R/M City Water System	\$ 45,000.00	0	\$0	\$0	\$0
R/M Office Equipment	\$ 5,000.00	50	\$2,500	\$2,500	\$2,500
R/M Building	\$ 5,000.00	50	\$2,500	\$2,500	\$2,500
R/M Park	\$ 1,000.00	0	\$0	\$0	\$0
Equipment Rental (excavator/heavy equip)	\$ 10,000.00	100	\$10,000	\$10,000	\$10,000
Contract Water Costs/SLDMWA pu fees	\$100,000.00	100	\$100,000	\$100,000	\$100,000
Solar Power	\$400,000.00	100	\$400,000	\$400,000	\$400,000
<i>Irrigation Power - Electrical & Diesel</i>	<i>\$500,000.00</i>	<i>100</i>	<i>\$500,000</i>	<i>\$500,000</i>	<i>\$1,500,000</i>
Utilities - Office, Shop, Park	\$ 21,000.00	0	\$0	\$0	\$0
City Water Power	\$ 50,000.00	0	\$0	\$0	\$0
Telephone & Broadband	\$170,000.00	0	\$0	\$0	\$0
Office Supplies	\$ 15,000.00	0	\$0	\$0	\$0
Outside Supplies (shop parts & misc items)	\$100,000.00	50	\$50,000	\$50,000	\$50,000
Misc Operating/Office Expenses	\$ 5,000.00	0	\$0	\$0	\$0
Copier Lease	\$ 5,000.00	0	\$0	\$0	\$0
SGMA - Central Delta-Mendota GSA	\$100,000.00	100	\$100,000	\$100,000	\$100,000
Legal	\$ 50,000.00	100	\$50,000	\$50,000	\$50,000
Audit Fees	\$ 30,000.00	90	\$27,000	\$27,000	\$27,000
Gen, Liab, Property Insurance	\$ 40,000.00	0	\$0	\$0	\$0
Workers Comp Insurance	\$ 45,000.00	50	\$22,500	\$22,500	\$22,500
Employee Training	\$ 1,000.00	100	\$1,000	\$1,000	\$1,000
Employee Conferences/Meetings	\$ 27,000.00	100	\$27,000	\$27,000	\$27,000
Fuel & Oil	\$100,000.00	100	\$100,000	\$100,000	\$100,000
City Water Treatment & Misc Expense	\$ 20,000.00	0	\$0	\$0	\$0
Water Sampling	\$ 8,000.00	0	\$0	\$0	\$0
Outside Engineering (<i>doesn't include work on big projects</i>)	\$ 50,000.00	100	\$50,000	\$50,000	\$50,000
KRWA Expenses (incl. dues)	\$ 50,000.00	100	\$50,000	\$50,000	\$50,000
SLDMWA	\$ 50,000.00	100	\$50,000	\$50,000	\$50,000
Dues (all other dues)	\$150,000.00	100	\$150,000	\$150,000	\$150,000
Taxes & Permits (prop., Rights Water)	\$ 40,000.00	100	\$40,000	\$40,000	\$40,000
<i>Reserve Contribution</i>		<i>100</i>		<i>\$585,000</i>	<i>\$120,000</i>
Totals	\$3,883,000	-	\$3,035,500	\$3,620,250	\$4,204,250