

North San Joaquin Water Conservation District

Sustainable Groundwater Management Rules and Regulations

1. Purpose

- 1.1. The District elected to be a Groundwater Sustainability Agency (GSA) under the Sustainable Groundwater Management Act (SGMA) to maintain local control of groundwater, achieve groundwater sustainability within the District and greater Eastern San Joaquin Subbasin, and protect the environment and economy of our area.
- 1.2. These rules and regulations will:
 - 1.2.1. Allow the District to collect data to make better groundwater management decisions
 - 1.2.2. Inform decision making by individual landowners regarding groundwater use
 - 1.2.3. Ensure landowners are charged fairly for using groundwater and resulting impacts
 - 1.2.4. Enable the District to implement demand management actions to reduce groundwater use to avoid SGMA defined “Undesirable Results,” such chronic lowering of groundwater levels, which can adversely impact domestic and agricultural wells, groundwater dependent ecosystems and interconnected surface waters.

2. Measuring Groundwater Extraction

2.1. Land Use Code Estimates

- 2.1.1. The District currently estimates groundwater extraction for each parcel, for purposes of the District’s groundwater charge, through the use of tax assessor land use codes and estimated groundwater extraction for each land use code. This practice will continue for the time being.
- 2.1.2. Landowners may submit an appeal to the District and request that the District base their groundwater charges on either (1) landowner provided metered extraction data or (2) the District calculated ET Based Measurement, in lieu of the land use code estimate. The District will evaluate each appeal to ensure the most accurate method is selected based on the given circumstances. If the District accepts the appeal and agrees to use the alternate measurement method, the landowner may not request a different method for three years.

2.2. ET Based Measurement

- 2.2.1. ET Based Measurement is a method to estimate groundwater use on a parcel that relies on satellite imagery to compute evapotranspiration (ET) and identify crop type, accounts for precipitation, surface water use, and assumed irrigation efficiency.

2.2.2. Beginning October 1, 2026, the District will measure groundwater use for each irrigated parcel **5 acres or greater** using ET Based Measurement. This measurement will be performed by an outside consultant. Landowners can register with the District to receive a report of their ET Based Measurement. Reports will be provided electronically only.

2.2.3. Landowners may elect to use their ET Based Measurement of total pumped groundwater for purposes of computation of their groundwater charge, in-lieu of the current method for computing the annual groundwater charge which relies on the Land Use Code Estimate Method. Landowners may only change this election once every three years.

2.3. Meters

2.3.1. Landowners are encouraged, but not required to, install and use meters to measure pumped groundwater and to provide this information to the District for purposes of computing groundwater charges, and for improving the District's data-sets and ET Based Measurement methods. Meter data submitted should be in the form of data generated by a data-recorder and/or pictures of the meter totalizer before and after the irrigation season (preferably by month). All data shall be submitted under penalty of perjury and subject to District review and approval.

2.3.2. The District may require meters in the future for all groundwater extraction or categories of extraction. Landowners are encouraged to plan for this potential future requirement when redeveloping irrigation systems.

2.3.3. Meters used to measure groundwater extraction should meet the following minimum criteria:

2.3.3.1. Installed pursuant to manufacturer's recommendations

2.3.3.2. Accuracy within +/- 10%

2.3.3.3. [other to be provided by District Engineer]

3. Penalties for Extraction that Exceeds Groundwater Allocations

3.1. **Authority.** SGMA provides that a GSA may impose civil penalties not to exceed \$500 per acre-foot extracted in excess of the amount that the GSA sets by rule. Water Code section 10732.

3.2. Rationale.

3.2.1. There are currently approximately **80,000 groundwater irrigated acres in the District that pump an average of approximately 2 af/ac of groundwater per year, for an average of 160,000 acre-feet of groundwater extraction [SUBJECT TO CONFIRMATION BY TECHNICAL CONSULTANT].** The subbasin is in a state of overdraft and groundwater levels have generally declined over time.

- 3.2.2. Due to economic factors, many landowners are removing winegrape vineyards and replanting their land to orchards, which require more water. This trend is expected to increase total groundwater extraction in the District during a time when the District needs to be reducing overall groundwater use to correct overdraft conditions.
- 3.2.3. The District is building projects to use and recharge more surface water to offset and reduce groundwater extraction and improve groundwater levels. However, these projects may take several years to complete and also may not be sufficient to prevent Undesirable Results, depending on hydrology and landowner groundwater extraction trends in the interim.
- 3.2.4. For these reasons, the District is establishing rules for allocating groundwater credits and may impose penalties on landowners who extract groundwater in excess of allocated credits. The penalties are designed to encourage landowners to account for groundwater overdraft costs in their crop selection and plan accordingly.
- 3.2.5. The District will only use revenue generated from penalties to fund activities that offset groundwater overdraft, such as purchasing land or easements to reduce groundwater use, purchasing surface water for groundwater recharge, or operating groundwater recharge projects.

3.3. Allocated Credits

- 3.3.1. **Introduction.** Beginning October 1, 2027, the District will allocate three types of credits: (1) Native Yield Credits; (2) District Recharge Credits; and (3) Transitional Credits. The allocation method will vary between the different types of credits as described below.
- 3.3.2. **Farm Unit Aggregation.** On or before August 15, 2027, and each August 15th thereafter, Landowners may apply to the District, on form provided by the District, to aggregate one or more parcels of Irrigated Land, owned or leased by the applicant, into a Farm Unit for purposes of determining if the total average groundwater extraction per acre of the Farm Unit exceeds the aggregated Total Credits for the parcels in the Farm Unit. The District may refuse to approve a Farm Unit, or withdraw Farm Unit approval, if the District determines that the parcel aggregation may result in concentrated groundwater extraction that causes undesirable results.
- 3.3.3. **Native Yield Credits.** The District will allocate Native Yield Credits to all Irrigated Acres in the District as follows:
- 3.3.3.1. The District estimates that the Native Yield in the District is **[CURRENTLY BEING ESTIMATED – LIKELY TO BE 80,000 AFA +/- 20%]**. Native Yield for purposes of this rule is an estimate of the District overlying landowners' share of the natural recharge that occurs, on average, in the Eastern San Joaquin Subbasin, accounting for a variety of factors. The

Native Yield estimate is subject to change based on new information or changed conditions.

3.3.3.2. “Irrigated Acres” (also called “Irrigated Land”) for purposes of allocation of the Native Yield Credit refers to the gross acres in each Assessor’s Parcel Number, for parcels greater than five acres, that has a County Tax Assessor land use code for irrigated agriculture, as of the 2026-27 County Tax Roll. The District may also allocate or elect not to allocate Native Yield to parcels based on whether the ET data shows that the parcel is or is not irrigated.

3.3.3.2.1. Beginning July 1, 2027, Landowners may apply to the District to add “Irrigated Acres” for purposes of receiving a Native Yield Credit for the next water year (beginning October 1st). Applications must be submitted by August 15th of each year for the upcoming water year beginning October 1st following the submittal. The District will approve, deny or approve in part applications based on evidence of actual acres of land irrigated.

3.3.3.3. For example, if the Native Yield is 80,000 AFA and the total number of Irrigated Acres for a given year is 85,000 acres, the Native Yield Credit allocated to each Irrigated Acre for that year will be .941 AF.

3.3.4. This rule regarding the allocation of estimated native yield in the form of Native Yield Credits is a management tool only. It is not a determination of rights and does not prohibit or permit the use of groundwater. Landowners make their own decisions regarding whether or not to irrigate their land with groundwater. Increases in the total number of Irrigated Acres in the District will reduce the allocated Native Yield credit for all Irrigated Acres. Decreases in the total number of Irrigated Acres in the District will increase the allocated Native Yield credit for all Irrigated Acres.

3.3.5. **District Recharge Credits.** The District will allocate District Recharge Credits to all Groundwater Acres, as follows:

3.3.5.1. The District will calculate the Average District Recharge each Water Year based on the running 5-year average of the total number of acre-feet of water the District directly recharged to underground storage during the last five-years.

3.3.5.2. The District will divide the Average District Recharge by the total number of Groundwater Acres, to get the District Recharge Credit per acre.

3.3.5.3. Each Groundwater Acre, that is current with payment of District groundwater charges, will be allocated a District Recharge Credit per acre of that parcel.

3.3.5.4. For example, if the Average District Recharge was 10,000 AFA and 80,000 acres paid Groundwater Charges, the District Recharge Credit would be .125 AF per Groundwater Acre.

3.3.6. **Transitional Credits.** The District will allocate Transitional Credits to all lands that pay Groundwater Charges as follows:

3.3.6.1. The Sustainable Yield in the East San Joaquin Subbasin is currently greater than the allocated Native Yield due to several factors including: (1) many landowners have surface water and do not pump groundwater, and (2) other districts in the subbasin have significant return flows from surface water deliveries that replenish the subbasin and are not currently extracted and used in those other districts. As a result, landowners in the District can extract more than the Native Safe Yield and the District Recharge Credits without contributing to overdraft or causing undesirable results. This amount of additional extraction will be referred to as Transitional Credits and may change over time based on the operations of other landowners and other districts in the subbasin as well as observed groundwater levels and the presence or absence of undesirable results.

3.3.6.2. The District currently estimates that there are **[CURRENTLY BEING ESTIMATED – LIKELY 50,000 AFA +/- 20%]** of Transitional Credits that can be extracted in the District without creating undesirable results.

3.3.6.3. The District will annually assess and set the amount of Transitional Credits, and allocate those credits proportionally in the same manner as it allocates the District Recharge Credit.

3.3.6.4. For example, if the total Transitional Credits are 50,000 AFA and the total number of acres paying groundwater charges is 80,000 acres, the allocated Transitional Credit will be .625 AF/acre.

3.4. Penalty.

3.4.1. **Credit Accounting:** At the beginning of each Water Year, the District will sum the Native Yield Credits, Average District Recharge Credits and Transitional Credits for each parcel to get the Total Credits.

3.4.2. **Civil Penalty.** Beginning in Water Year 2028 (beginning October 1, 2027 and ending September 30, 2028), District will impose a civil penalty of at least **\$50 per acre foot and up to \$500** per acre-foot for groundwater extraction in excess of Total Credits, pursuant to the authority provided in Water Code section 10732.

3.4.3. **Method to Assess Penalty.** The District will use ET Based Measurement to determine landowner groundwater extraction for purposes of this rule, unless a landowner provides metered groundwater extraction data or other information that

the District finds more reliable. Excess extraction will be based on a rolling five-year average ET Based Measurement, except that for the first years of this rule, excess extraction will be based on the years of available data, beginning with the 2027 Water Year. For example, the Water Year 2028 penalty assessment will be based on an average of the ET Based Measurement for Water Years 2027 and 2028; the Water Year 2029 penalty assessment will be based on an average of the ET Based Measurement for Water Years 2027, 2028 and 2029, and so on.

- 3.4.4. **Due Process.** The District will provide written notice to landowners regarding proposed imposition of penalties at least thirty days before a public hearing on the imposition of the penalties. Landowners may contest the penalty at the public hearing. The decision of the District after the hearing shall be final.
- 3.4.5. **Discretion.** Whether the District decides to impose the penalty, and in what amount, will vary from year to year based on several factors including but not limited to the costs the District is incurring to correct groundwater overdraft, groundwater levels, hydrology, landowner groundwater use trends, and threatened or actual undesirable results associated with groundwater extraction in the District.
- 3.4.6. **Collection.** The penalty will be in addition to any applicable Groundwater Charges and will be collected by the District. Unpaid penalties are subject to conversion to liens on real property as allowed by law.
- 3.4.7. **Enforcement.** Failure to timely pay the penalties assessed pursuant to this rule shall be subject to enforcement in the discretion of the District including but not limited to a non-payment penalty of 10 percent of the amount due, and interest at the rate of 10% per annum on any unpaid balance, reimbursement of District collection and enforcement costs, and an action in the Superior Court to enjoin further groundwater extraction.