EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY

CONSUMED SURFACE WATER AND RECHARGE CREDIT CALCULATION POLICY

Adopted on January 22, 2026

TURLOCK GROUNDWATER

East Turlock Subbasin GSA

Background and Objectives

East Turlock Subbasin Groundwater Sustainability Agency's ("ETSGSA") Groundwater Demand Reduction Plan ("Demand Reduction Plan") is included as Appendix K of the Turlock Subbasin Groundwater Sustainability Plan ("GSP") and includes a strategic set of Projects and Management Actions ("P&MAs") to achieve the reduction in net overdraft needed to bring the subbasin into a state of long-term sustainability. These P&MAs focus on reducing groundwater use and increasing recharge when possible. Specifically, Project Numbers 12 to 18 in the GSP focus on developing additional surface water supplies when possible, to replace groundwater use (in lieu recharge), or to promote the deep percolation of surface water into the aquifer system to replenish groundwater storage. These projects rely on implementation of regional supply development and conveyance projects by ETSGSA, combined with local, on-farm surface water irrigation and/or recharge projects by growers.

ETSGSA has adopted initial Rules and Regulations (hereinafter referred to as the Rules and Regulations or ETSGSA's Rules and Regulations) that define Consumptive Surface Water Credits and Recharge Credits that may be available to a Water Account Holder to offset Consumptive Groundwater Use.

This Policy is intended to supplement Section 4.05 "Consumed Surface Water Credit" and Section 4.06 "Recharge Credit" of ETSGSA's Rules and Regulations but does not alter any other provisions of the Rules and Regulations. This Policy further defines the amount of Consumed Surface Water Credit and/or Recharge Credit available to a Water Account Holder that uses surface water for irrigation in lieu of groundwater, or that operates a Recharge Facility to supply direct recharge to the aquifer. The amount of credit available depends on the apportionment of project costs and benefits between the Water Account Holder and ETSGSA as established by ETSGSA's Board of Directors and in recognition of the relative proportion of funding for the project provided by ETSGSA and the investment made by a Water Account Holder through installation of a surface water supply and/or recharge project.

The approach used to determine the percentage of applied surface water that is used for irrigation or recharge that is available as a credit to Water Account Holders is further discussed in the Rules and Regulations and the following sections of this Policy. The procedures used for reporting data regarding surface water applied for irrigation and recharge, and for calculating Consumed Groundwater Use (including the consideration of credits) are further discussed in Section IV of ETSGSA's Rules and Regulations (Groundwater Accounting).

ETSGSA reserves the right to amend its Rules and Regulations and/or this Policy as it deems necessary and as new information becomes available, and to meet the objectives of the Demand Reduction Plan and achieve the sustainable management goals of the GSP.

Definitions

The definitions contained in ETSGSA's Rules and Regulations are incorporated herein by reference and are capitalized herein. The following definitions apply to additional key terms that are used in this Policy.

Leave Behind – The minimum estimated amount of recharge to be retained in the aquifer system to avoid potential damage from extraction of the recharged groundwater.

MID Transfer Water – Surface water delivered for use outside Merced Irrigation District (MID) service area boundaries under an agreement with a Water Account Holder or one of ETSGSA's member agencies.

TID Replenishment Water – Surface water delivered for use outside Turlock Irrigation District (TID) service area boundaries under the Water Accounting Framework Agreement between ETSGSA, West Turlock Subbasin Groundwater Sustainability Agency (WTSGSA), and Turlock Irrigation District (TID).

Member Agency – A member of the ETSGSA Joint Powers Authority that pays for surface water or surface water conveyance project construction and operation on behalf of its constituents.

Eligibility

The following conditions must be met for an Applicant to be eligible to receive Consumed Surface Water or Recharge Credit, in addition to compliance with the Rules and Regulations:

- A Water Account must be in good standing with ETSGSA and up to date on payments of all SGMA Operational Assessments and Groundwater Use Fees for credits to be applied to the Water Account.
- If the Water Account Holder's Consumed Surface Water and/or Recharge Credits are generated using surface water and/or by utilizing a project that is funded in whole or in part by ETSGSA, the Water Account Holder will be required to enter an Agreement with ETSGSA and must comply with the terms of the applicable Agreement(s).
- All applicable reporting and documentation requirements specified in ETSGSA's Rules and Regulations must be timely submitted for the Reporting Period in which credits are to be applied, including the following:
    - The reporting and documentation requirements for parcels using surface water for irrigation outlined in Section 4.05 Consumed Surface Water Credit;

and/or

- The requirements for registration of Recharge Facilities, and the reporting and documentation requirements for the delivery of water to approved, registered Recharge Facilities outlined in Section 4.06 Recharge Credit.

- It is the Water Account Holder's sole responsibility to ensure that use of the water sources described herein for purposes of seeking Surface Water and/or Recharge Credits from ETSGSA is in compliance with all applicable federal, state, and local laws and any applicable policies, rules, regulations, permits, and/or agreements that may govern use of such water (i.e. surface water district policies, contracts, etc.) The Water Account Holder shall attest that it is compliance with this requirement to be eligible to receive credits under this policy.

Approach

The amount of Credit for Consumed Surface Water Credit and/or Recharge available to a Water Account Holder is based on consideration of how project development and operational costs and benefits are apportioned between the Water Account Holder and ETSGSA, including the following:

- **Projects Funded in whole or in part by ETSGSA**. If a surface water infrastructure project or Recharge Facility utilized by the Water Account Holder received funding from ETSGSA, the amount of credit available to a Water Account Holder will be less during an initial "Recovery Period" specified in the applicable Agreement between ETSGSA and the Water Account Holder, as depicted in Figures 1 and 2, below. This credit split represents the estimated amount of time it will take for ETSGSA to recover its initial investment in such project(s) for the benefit of the entire GSA. After the Recovery Period, a lesser portion of credit will be retained by ETSGSA.

- **Source of Surface Water Supply**. If a Water Account Holder utilizes surface water that is paid for in whole or in part by ETSGSA, there will be a portion of credit retained by ETSGSA as depicted in Figures 1 and 2, below, and as specified in the Agreement between ETSGSA and the Water Account Holder. To determine amount of credit adjustment based on the source of the water supply, the following is considered:

  - Water provided and paid for by ETSGSA includes Turlock Irrigation District (TID) Replenishment Water;

  - Water provided by or to the Water Account Holder that is not paid for by ETSGSA, includes:

    - Merced Irrigation District (MID) Transfer Water paid for by a Member Agency or a Water Account Holder; and/or

- Water from a source paid for, or developed by, the Water Account Holder (e.g., water provided by a surface water district and paid for by the Water Account Holder, local diversions, or stormwater).

All projects claiming **Consumed Surface Water Credit** that utilize TID or MID-supplied surface water must provide the delivery statements. For Consumed Surface Water from other surface water sources, the following methods of calculation or data sources or combination thereof are required:

- Statements of diversion submitted to the SWRCB;
- Dairy water delivery manifests;
- Meter Data that records inflow. Meters must be installed in compliance with manufacturer and AWWA specifications, calibrated within the last five years, subject to approval by ETSGSA prior to use;
- Electrical Consumption, derived from records of energy used to operate pumps for irrigation coupled with a pump performance test conducted in the last five years by a qualified pump and well contractor to calculate inflow;
- Run-Time Data combined from an installed run-time meter coupled with production rates from a pump test conducted in the last five years by a qualified pump and well contractor;
- An ETSGSA-approved Water Balance Calculation; and/or
- Other suitable means reviewed and approved by ETSGSA staff.

ETSGSA intends to pursue volumetric metering as the preferred choice for the quantification of surface water applied for irrigation and reserves the right to amend its policies and implement metering as a requirement for purposes of receiving credit in future Reporting Years.

All projects claiming **Recharge Credit** must provide documentation as follows. Recharge Facilities that utilize TID or MID-supplied surface water must provide the delivery statements. For recharge facilities that receive deliveries from diverted surface water sources, statements of diversion submitted to SWRCB shall be provided. One or more of the following measurements will be accepted, as applicable:

- Meter Data, that records inflows (and outflows, if applicable). Meters must be installed in compliance with manufacturer and AWWA specifications, calibrated within the last five years, subject to approval by ETSGSA prior to use;
- Electrical Consumption, derived from records of energy used to operate pumps for

conveying water to and/or from the basin coupled with a pump performance test conducted in the last five years by a qualified pump and well contractor;

- Run-Time Data combined from an installed run-time meter coupled with production rates, to operate pumps for conveying water to and/or from the basin, from a pump test conducted in the last five years by a qualified pump and well contractor;
- Runoff calculations for stormwater flowing from Recharge Facility catchment areas; and/or
- Other suitable means reviewed and approved by ETSGSA staff.

ETSGSA reserves the right to request additional documentation. If ETSGSA is unable to verify the required calculations or the documentation or data above is not provided in an acceptable form, ETSGSA reserves the right to forgo application of any relevant credit to the Water Account Holder's Account.

Implementation Procedures

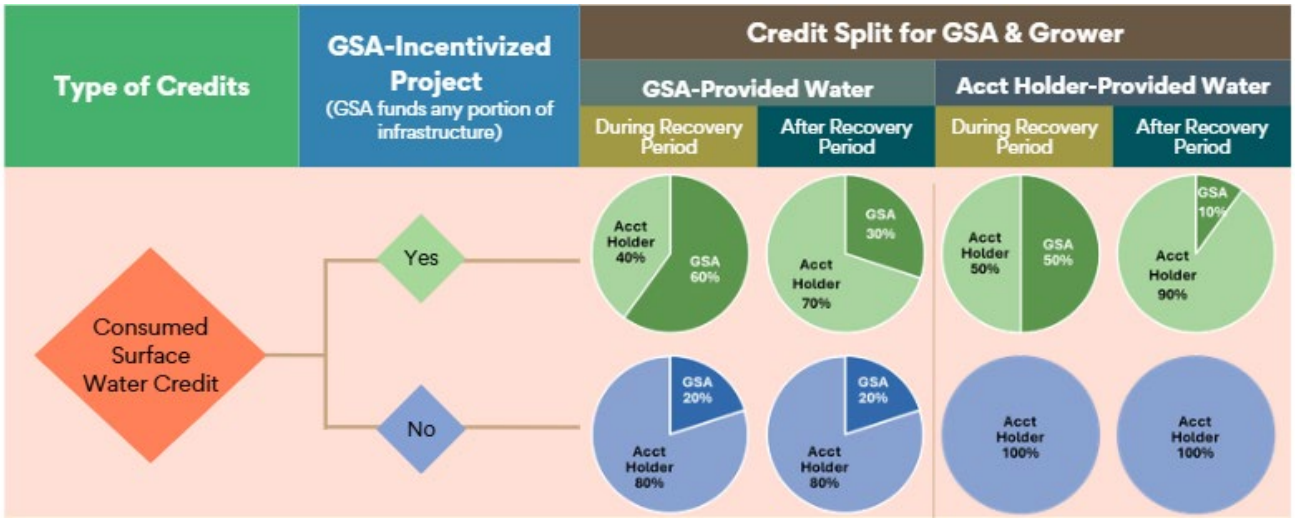
The following implementation procedures shall apply to calculation of Consumed Surface Water and Recharge Credits.

Consumed Surface Water Credit

Upon receipt of acceptable data in compliance with the Rules and Regulations, ETSGSA will calculate the total amount of Consumed Surface Water by multiplying the reported surface water delivery volume by the applicable irrigation efficiency factor for the irrigation method used (listed in the table in Section 4.05 of ETSGSA's Rules and Regulations).

The available Consumed Surface Water Credit shall be calculated by multiplying the Consumed Surface Water by the applicable percentage adjustments listed in Figure 1.

Figure 1: Consumed Surface Water Credit Splits



Recharge Credit

Upon receipt of acceptable data in compliance with the Rules and Regulations, ETSGSA will calculate the amount of Recharge from the Recharge Facility. Total Recharge will be calculated using one of the following methods:

- A water balance approach considering Recharge Facility inflow minus any outflow, multiplied by a correction factor of 95% to account for evaporation and other losses.
- Percolation calculations that utilize the most restrictive soil percolation rate for the Recharge Facility.

The Recharge Credit will then be calculated by multiplying the calculated Recharge by the applicable percentage adjustments listed in Figure 2.

Figure 2: Recharge Splits