

**REQUEST FOR QUALIFICATIONS  
for  
Madera County Groundwater Sustainability Agency  
RFQ 2026-01-GSA Meter Inspection**

**ANNOUNCEMENT**

It is the objective of this Request for Qualifications (RFQ) for Madera County GSAs (County) to develop a list of qualified professionals available to inspect and confirm calibration of agricultural irrigation meters. This list will be available for growers within the County Groundwater Sustainability Agency (GSA) for independent third-party inspection of meters as part of a GSA appeals process for growers to use meter data rather than GSA-determined evapotranspiration of applied water from remote sensing, and private meters used as a primary measurement method for tracking allocation. The list may be updated yearly and may include an additional requirement for meter inspectors to attend a training class in meter certification by an outside educational entity.

**DEADLINE FOR SUBMITTAL:** On Going

**1. PROJECT INFORMATION**

Madera County GSA currently has a multi-year contract with Hydrosat/Irrisat to provide ETAW data derived using remote sensing, and to track and report ETAW by farm unit (i.e., a collection of parcels owned and/or managed by the same party). As an alternative to the GSA-derived determination of ETAW through Irrisat, the GSA has established an appeals process and private meter measurement method. This particular RFQ is for professionals qualified to perform in-field meter inspections and calibrations.

The appeals process allows a party to refute the Irrisat data using flow meter data providing the meter has been inspected, is within 10% accurate with in-field verification, and is correctly installed, maintained (calibrated every two years), operated, inspected, and monitored as described by the manufacturer's specifications.

The private meter measurement method allows growers to install and maintain privately owned meters as a measurement pathway for tracking allocation for their farm units. Aligning with the appeals process, private meters used as a primary measurement method must be correctly installed, maintained (calibrated every two years), operated, inspected, per the manufacturer's specifications. The third-party inspectors are required to report installation inspections through an online ODK form. In addition, meter readings monthly must also be submitted through an ODK form by the grower.

Growers wishing to use the GSA appeal process or private meters for their measurement method must use a qualified inspector from the GSA list of qualified professionals for meter inspections and/ or for in-field calibration.

Attachment A, Resolution No. 2024-121, Exhibit A, provides the required elements for an appeal. Qualified inspectors would be able to provide Item 2 and Item 3 listed in the exhibit.

Attachment B, Resolution No. 2025-044, Exhibit A, provides a rule refinement for using private meters as a primary measurement method for tracking allocation. Qualified inspectors would be able to provide documentation for Calibration (Meter Accuracy) and Installation (Meter Accuracy).

Growers will independently contract with the qualified inspector and will be responsible for all costs for meter inspections and/or calibrations.

For installation inspection, a report from the inspector must be provided to growers that contains:

- Photos and descriptions of each meter installation per manufactures specifications
- Include GPS coordinates, make, model, and serial numbers
- A test for each meter accuracy
- Any other relevant data
- Submit information through Madera County ODK form

Additionally, for in-field calibration, a report from the inspector must be provided to growers that contains:

- Photos and descriptions of each meter calibration
- Include GPS coordinates, make, model, and serial numbers
- Accuracy of flow meters and demonstrating they meet manufacture range of tolerance. (or the meters are within 10% accuracy of in-field verification equipment)
- List serial # and the last calibration data for the field-testing equipment (field testing equipment must be calibrated, within the last two years)

Information about allocations for the Madera County GSA:

<https://www.maderacountywater.com/allocations/>

Information about the measurement of ETAW:

<https://www.maderacountywater.com/measurement/>

Information about the appeals process:

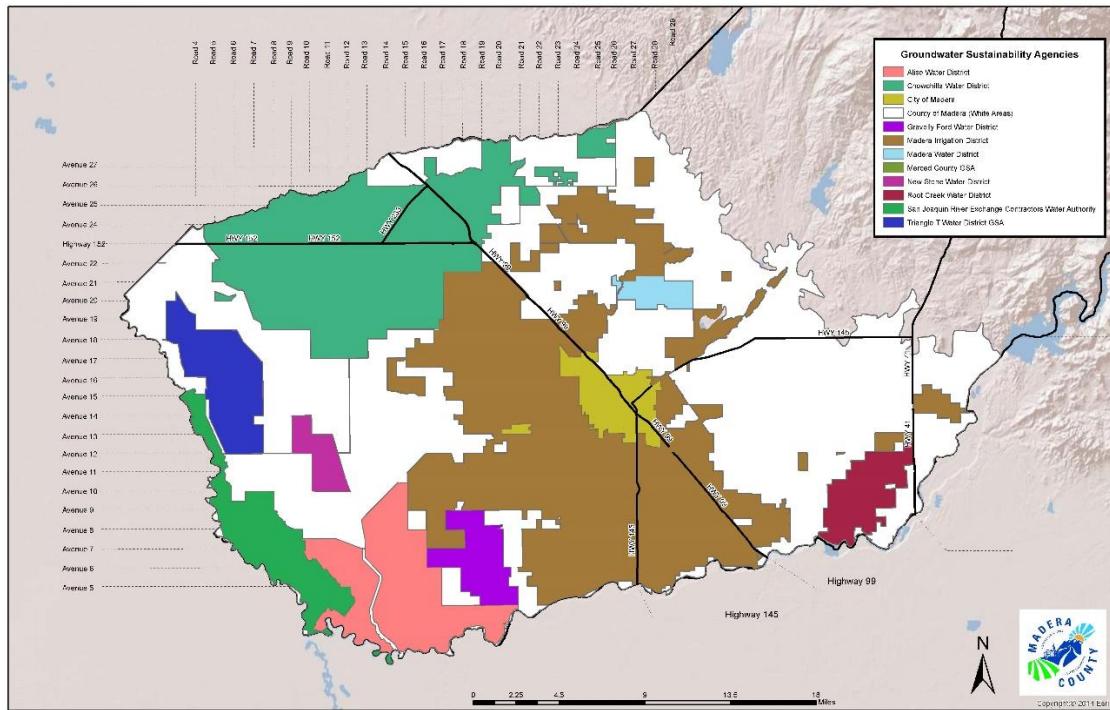
<https://www.maderacountywater.com/wp-content/uploads/2024/11/RES-NO.-2024-121-1.pdf>

Information about rule refinements for groundwater flow meters used as a measurement method:

<https://www.maderacountywater.com/wp-content/uploads/2025/05/RES-NO.-2025-044.pdf>

## 2. PROJECT LOCATION – Madera County GSA

The Madera County GSAs are the “white areas” on the map shown below, and includes areas in the Madera, Chowchilla and Delta-Mendota Subbasins. It does not include those lands shown in color, which are part of other GSAs. This RFQ is for work only within the Madera County GSAs.



### 3. ELIGIBILITY

1. In addition to other requirements stated in this document, to be eligible to respond to this RFQ, the Consultant must be trained in the use of field-testing equipment and have experience with similar projects and services to those in this RFQ. Each Consultant shall meet all legal, technical and professional requirements necessary to provide the requested services with the exception of being a registered engineer, which may be waived.
2. The County reserves the right to investigate the Consultants' qualifications or any identified sub-consultants, and to contact referenced clients to confirm qualifications as it deems appropriate.
3. Many consulting firms may be described as qualified. Sub-consultants can join any number of Primary consultants submitting a Response to this RFQ.

### 4. QUESTIONS AND CLARIFICATIONS

1. Include the project number with each question. Send all questions to: [etmeasurement@maderacounty.com](mailto:etmeasurement@maderacounty.com)

## 5. QUALIFICATIONS SUBMITTAL

1. All qualifications packages must be submitted to the Department of Water and Natural Resources at: [etmeasurement@maderacounty.com](mailto:etmeasurement@maderacounty.com)
2. All costs for preparation of proposals shall be borne by the proposer.

## 6. EVALUATION AND SELECTION

1. The County will include firms on the list that score at least 25 of 30 points. The County will review and evaluate proposals against the following criteria:

#	Description	Points
1	Qualifications: Do the qualifications of key personnel to be assigned to working on the Project Scope demonstrate sufficient experience and expertise?	10
2	Project Experience and Success: Has the proposing firm demonstrated that they, or the staff assigned to the engagement, successfully completed services, similar to those specified in the Project Scope section of this RFQ?	10
3	References: Are the firm's references from past clients and associates favorable?	10

6. This request does not constitute an offer of employment or to contract for services.

### Attachments

Attachment A: No. 2024-121

Attachment B: No. 2025-044

## Attachment A

BEFORE  
THE BOARD OF DIRECTORS  
OF THE COUNTY OF MADERA, STATE OF CALIFORNIA  
GROUNDWATER SUSTAINABILITY AGENCY

In the Matter of ) Resolution No.: 2024 - 121  
 )  
THE SUSTAINABLE GROUNDWATER ) RESOLUTION REVISING RULES FOR  
MANAGEMENT ACT ) APPEAL OF DETERMINATION OF USE  
 ) OF GROUNDWATER ALLOCATION  
 )  
\_\_\_\_\_ )

**WHEREAS**, the Sustainable Groundwater Management Act, Water Code sections 10720-10737.8 ("SGMA") was signed into law on September 16, 2014; and

**WHEREAS**, SGMA requires that each groundwater basin be managed by a Groundwater Sustainability Agency ("GSA"), or multiple GSAs, and that such management be pursuant to an approved Groundwater Sustainability Plan ("GSP"), or multiple GSPs; and

**WHEREAS**, the County of Madera ("County") is the exclusive GSA for the portions of the Madera Subbasin (Basin No. 5-22.06) in the San Joaquin Valley Groundwater basin, as defined by Bulletin 118 from California's Department of Water and Natural Resources ("DWR"), that are in unincorporated areas of Madera County and not otherwise covered by another public agency (hereinafter "County GSA"), and the County Board of Supervisors is the Board of Directors (hereinafter "Board") for the County GSA; and

**WHEREAS**, on December 15, 2020, the Board of Directors adopted Resolution No. 2020-166 adopting an approach to allocating groundwater (the "Allocation Approach") in the Subbasins, which provides parcels meeting certain criteria (hereafter "eligible parcels") access to groundwater classified using two designations:

- a. The SY of native groundwater; and
- b. "Transitional water" (TW) that is continued overdraft of the Subbasins but will incrementally decrease during the GSP implementation period; and

**WHEREAS**, in furtherance of the Allocation Approach, the County GSA Board of Directors adopted Resolution 2021-069, providing for a per-acre allocation of SY and TW for enrolled eligible parcels within each County GSA based on best available data, to be limited to the use within the eligible parcel, or within a County GSA approved farm unit, that represents a combination of eligible parcels; and

**WHEREAS**, on August 17, 2021, the County GSA Board of Directors adopted Resolution 2021-113, which established certain refinements to the groundwater allocations. Among the refinements was the establishment of an appeal process for the County GSA's determination of the evapotranspiration of applied water ("ETAW") for the annual allocation, which reads as follows:

12. If a participant in the Allocation Approach intends to appeal the County GSA-determined ETAW, such appeal shall be based upon use of a flow meter, and the participant shall: (1) demonstrate that the flow meter was installed and maintained per the manufacturer's specifications, and (2) provide an engineer-certified calibration report where such calibration occurred within the last two calendar years of the appeal. The flow meter volume shall be recorded at least monthly, and a photograph of the meter reading shall be taken and submitted to the County GSA for verification purposes. An independent third party will evaluate the flow meter installation and records to determine if the flowmeter records will be accepted as measurement for determining if a grower exceeded the allocation. The third party's acceptance or denial

of the appeal will be final. The appellant shall pay the cost of the appeal if the appeal is denied; and

**WHEREAS**, on November 7, 2023, the Board adopted Resolution 2023-150 revising rules for appeal of determination of use of groundwater allocation and now desires to further amend the appeal process; and

**WHEREAS**, this Resolution is exempt from the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines sections 15307 (action of a regulatory agency to protect natural resources), 15308 (action of a regulatory agency to protect the environment), and 15061(b)(3) (the "common sense" exemption where a project is exempt if can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment), as well as Executive Order N-7-22 from the Governor of the State of California.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Supervisors of the County of Madera, State of California, sitting as Board of Directors for the County of Madera GSA for the Madera, Chowchilla, and Delta-Mendota Subbasins, as follows:

1. The recitals above are hereby incorporated by reference in this Resolution.
2. Resolution No. 2023-150 and the appeal process it approved is hereby rescinded.
3. The rules governing appeals for the County GSA's determination of ETAW for the annual allocation are attached hereto as Exhibit A.
4. The Director of the Department of Water and Natural Resources is hereby authorized and directed to take all necessary actions in the furtherance of this Resolution.

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The foregoing Resolution was adopted this 1st day of October,  
2024, by the following vote.

Director Wamhoff voted: YES  
Director Rogers voted: YES  
Director Poythress voted: YES  
Director Gonzalez voted: YES  
Director Macaulay voted: YES

Muriel Poythress  
Chairman, Board of Directors

ATTEST:

Sarah R. Anderson

Clerk, Board of Directors

Approved as to Legal form:  
COUNTY COUNSEL

Dale E.  
By: Bacigalupi

Digitally signed by: Dale E. Bacigalupi  
DN: CN = Dale E. Bacigalupi email =  
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O = Lozano Smith  
Date: 2024.09.12 09:27:57 -0700'

## **EXHIBIT A**



Pursuant to Resolution 2021-113, specifically Paragraph 12, if a participant in the Allocation Approach intends to appeal the County GSA determined ETAW, the following process will be followed:

1. The appellant shall provide: The following two reports for all flow meters associated with all wells used to pump groundwater delivered to the irrigated areas subject to the Allocation Approach:
  - 1.1. Installation Inspection Report documenting that the meter is installed and has been maintained per the manufacturer's specifications.
  - 1.2. Certified Calibration Report consistent with the calibration options detailed at <https://www.maderacountywater.com/measurement/>:
    - 1.2.1. Laboratory Certified Calibration Report
    - 1.2.2. Field Certified Calibration Report
2. The appellant shall provide detailed numerical volume data recorded at least monthly during the period being appealed, documenting the totalized volume of groundwater pumped at that location, and shall provide a legible photograph of the flow meter reading associated with each documented measurement period (e.g. a picture each month of the meter's totalized value). This requires a photograph at the start of the year, and a photograph each month throughout the year, even if the volume produced since the prior photograph is zero.
  - 2.1. For any month where a flow meter reading photograph is not available to document zero flow for that period, the following options are accepted:
    - 2.1.1. For electric pumps: the appellant shall provide a copy of the electrical power supplier bill indicating zero power usage during the period not documented by a photograph. An electric bill showing power usage greater than zero is not an acceptable alternative for the flow meter photograph.



2.1.2. For diesel pumps: the appellant shall provide a copy of a valid Rule 1160 emissions report sent to San Joaquin Valley Air Pollution Control District, which confirms that the diesel engine was not operated during subject period. An emissions report showing engine operation hours greater than zero is not an acceptable alternative for the flow meter photograph.

2.2. Data files from telemetry services will be accepted in place of monthly photos, if the following requirements are met:

2.2.1. Access Requirements for Appealed Areas:

Madera County GSA personnel must have complete and direct access to all flow data for all groundwater wells serving the appealed areas by providing Madera County GSA personnel with a direct telemetry service interface link and password(s).

2.2.2. Telemetry Service Data Requirements for All Groundwater Wells Serving Appealed Area:

- Map showing locations of all groundwater wells serving all the parcels listed in the most recent Madera County GSA Master Account Groundwater Allocation Report.
- Date and Time: Measurements should be recorded with date and time stamps, at daily intervals or higher frequency.
- Flow Rate: Measurements should be reported in cubic feet per second (cfs) or gallons per minute (gpm).
- Cumulative Volume: Data must include cumulative volume in acre-feet.
- Daily Averages and Monthly Totals: Provide at least daily average measurements for each day and cumulative monthly acre-feet values by month for the entire year.
- Ensure there are no significant gaps in the data.

3. The appellant shall provide:

3.1. A detailed and legible map of the area irrigated by the volume of water being measured by the flow meter. The map can be submitted in hard copy or digital format (e.g., PDF, Google Earth KMZ, or shapefile), with a preference for digital. The map shall make clear:

- 3.1.1. Which fields are irrigated by water produced by which well and measured by which associated flow meter.
- 3.1.2. Irrigated area of each field in acres.
- 3.1.3. Crop in each field and age of permanent crop, if present.

3.2. Description of the irrigation system type on each field.

4. The appellant shall provide Madera County GSA personnel access to physically inspect all wells and supporting measuring devices and all lands of the appealed areas.
5. If water sources other than groundwater are used to irrigate the area, such sources shall be accurately measured and such accounting provided by the appellant to the County GSA. Documentation from certified flow meters measuring surface diversions or records from the water supplier should be included. Importantly, there cannot be any other unmeasured water applied to the irrigated area.
6. The appellant will electronically submit their documentation for appeal to an independent third party:
  - 6.1. All of the aforementioned requirements will be submitted as a single, complete submission no later than March 1 for the prior year.
  - 6.2. Submission will be sent via Email to both:
    - 6.2.1. [MaderaCountyGSAppeals@GEIconsultants.com](mailto:MaderaCountyGSAppeals@GEIconsultants.com) and
    - 6.2.2. [wnr@maderacounty.com](mailto:wnr@maderacounty.com).
7. The independent third-party will:
  - 7.1. Inventory the information received.
  - 7.2. Evaluate the submitted data.
  - 7.3. Reply via email to the appellant with a copy to [wnr@maderacounty.com](mailto:wnr@maderacounty.com) with a technical memorandum indicating approval or non-approval and providing a basis for the decision.
8. The third party's acceptance or denial of the appeal will be final.

# Attachment B

BEFORE  
THE BOARD OF DIRECTORS  
FOR THE COUNTY OF MADERA  
GROUNDWATER SUSTAINABILITY AGENCY

In the Matter of ) Resolution No.: 2025-044  
 )  
THE SUSTAINABLE )  
GROUNDWATER MANAGEMENT ) RESOLUTION ADOPTING  
ACT ) GROUNDWATER FLOW METER RULE  
 ) REFINEMENTS FOR A  
 ) MEASUREMENT METHOD  
 )

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**WHEREAS**, the Sustainable Groundwater Management Act, Water Code sections 10720-10738 ("SGMA"), was signed into law in September 2014;

**WHEREAS**, SGMA requires that each groundwater basin be managed by a Groundwater Sustainability Agency ("GSA"), or multiple GSAs, and that such management be pursuant to an approved Groundwater Sustainability Plan ("GSP"), or multiple GSPs;

**WHEREAS**, Madera County encompasses the Madera Subbasin (Basin No. 5-022.06), the Chowchilla Subbasin (Basin No. 5-022.05), and, in part, the Delta-Mendota Subbasin (Basin No. 5-022.07) in the San Joaquin Valley Groundwater basin (collectively, the "Subbasins");

**WHEREAS**, on December 17, 2019, the County GSAs adopted GSPs for the Subbasins that described a "sustainable yield" of native groundwater (water that naturally exists in the Subbasins from seepage and percolation) of approximately 0.5 acre-feet per acre for the Subbasins;

**WHEREAS**, consumptive use of groundwater within the County GSAs boundaries exceeds the available sustainable yield, and the GSPs identified demand reduction as a

critical management action to achieve SGMA's sustainability goal in the Subbasins within twenty (20) years of the implementation of the GSPs;

**WHEREAS**, under SGMA, a GSA has the authority to limit extractions from groundwater wells, establish groundwater extraction allocations, authorize temporary and permanent transfers of groundwater extraction allocations, and adopt rules, regulations, ordinances, and resolutions to further these ends;

**WHEREAS**, on December 15, 2020, the Board of Directors for the County GSA adopted Resolution No. 2020-166, adopting an approach to allocating groundwater (the "Allocation Approach") in the Subbasins;

**WHEREAS**, the Allocation Approach includes the monitoring of evapotranspiration ("ET") and ET of applied water ("ETAW") for designated "farm units," and the comparison of ETAW is assigned allocations, where such services will be provided through a contract between the County GSA and third-party experts with multiple parties performing quality assurance and quality control;

**WHEREAS**, in furtherance of the Allocation Approach, on June 8, 2021, the County GSA Board of Directors adopted Resolution No. 2021-069, providing for per-acre allocations of sustainable yield and transitional water for enrolled, eligible parcels within each County GSA based on best available data, to be limited to the use within the eligible parcel or within a County GSA approved farm unit, that represents a combination of eligible parcels (the "Allocations");

**WHEREAS**, pursuant to Resolution No. 2021-069, an eligible parcel includes agricultural lands that are (1) currently irrigated as of June 8, 2021; (2) were last irrigated

as recently as January 1, 2015, but now may otherwise be non-irrigated (e.g., fallowed or idle);

**WHEREAS**, pursuant to Resolution No. 2021-113, an eligible parcel includes the total APN acreage that is part of active irrigated agricultural operations or permitted confined animal operations (e.g., equipment storage area or milking parlors);

**WHEREAS**, on August 17, 2021, the County GSA Board of Directors adopted Resolution No. 2021-113, making refinements to the Allocations (the "Allocation Refinements"). The Allocation Refinements included a provision (No. 12), whereby if a participant in the Allocation Approach intends to appeal the County GSA-determined ETAW, such appeal shall be based upon use of a flow meter, and the participant shall (1) demonstrate that the flow meter was installed and maintained per the manufacturer's specifications, (2) provide an engineer-certified calibration report where such calibration occurred within the last two (2) calendar years of the appeal, (3) record the flow meter at least monthly, and (4) submit a photograph of each meter reading to the County GSA for verification purposes;

**WHEREAS**, on September 27, 2022, the Board of Directors for the County GSA adopted resolutions for all three (3) Subbasins (Resolutions No. 2022-143, 2022-144, and 2022-145), establishing the authority for the imposition of penalties for those who extract groundwater in excess of an allocation. These resolutions provide that as an alternative to appealing the County GSA's determination of ETAW, as defined in Resolution No. 2021-113, a grower may request to be pre-approved for use of a groundwater flow meter data for determining ETAW, and to be eligible for such approval, a grower must have all irrigated parcels registered within IrriWatch. For all registered parcels that a grower

intends to have ETAW determined using a groundwater flow meter, the grower must provide the County GSA with that information identified in Resolution No. 2022-192;

**WHEREAS**, on December 20, 2022, the Board of Directors for the County GSA adopted Resolution No. 2022-192 to govern the use of different measurement methods for groundwater allocations for enrolled acres, including groundwater flow meter rules.

**WHEREAS**, beginning in 2023, GSA staff and growers have faced challenges and issues, including meter read submittal timing and accuracy issues, that require refinement of the groundwater flow meter rules;

**WHEREAS**, it is the desire of the Board of Directors for the County GSA to adopt a resolution that further refines such groundwater flow meter rules; and

**WHEREAS**, this Resolution is exempt from the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines sections 15307 (action of regulatory agency to protect natural resources), 15308 (action of a regulatory agency to protect the environment), and 15061(b)(3) (the "common sense" exemption, where a project is exempt if it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment).

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors for the County GSA, as follows:

1. The recitals set forth above are found to be true and correct and are incorporated herein by reference.
2. The rules governing groundwater flow meters are attached hereto as Exhibit "A."

3. The Director of the Department of Water and Natural Resources is hereby authorized and directed to take further actions as may be necessary to implement the intent and purposes of this resolution.

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The foregoing Resolution was adopted this 13<sup>TH</sup> day of MAY 2025, by  
the following vote:



Director Wamhoff voted: Yes

Director Rogers voted: Yes

Director Poythress voted: Yes

Director Gonzalez voted: Yes

Director Macaulay voted: Yes

Laurie Favini  
Chair, Board of Directors

ATTEST:

Karen Scivier

Clerk, Board of Directors

Approved as to Legal Form  
COUNTY COUNSEL

Laurie  
Avedisian-  
By: Favini

Digitally signed by: Laurie  
Avedisian-Favini  
DN: CN = Laurie Avedisian-Favini  
email = llavin@lozanosmith.com  
C = US O = LOZANO SMITH  
Date: 2025.05.06 10:10:12 -  
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1245-92IRESW906-0870-8669 v.1

# Exhibit A



## EXHIBIT A

### **Groundwater Flow Meter Rule Refinement for Madera County Groundwater Sustainability Agency in Madera, Chowchilla, and Delta-Mendota Subbasins (County GSA)**

These are flow meter rule refinements for the meter measurement pathway as a primary measurement method for tracking allocation.

#### **Monthly Meter Reads (Timeliness and Completeness)**

1. Monthly meter readings must be submitted via portal between the first and tenth (1-10) of the month.
2. A grace period from the 11<sup>th</sup> to the 20<sup>th</sup> for late submission of data will be allowed. No data for the month will be accepted after the 20<sup>th</sup>. If data is not submitted by the 20<sup>th</sup> of the month, the groundwater allocation report will not be issued, and the data is considered missing.
3. If two months (consecutive or non-consecutive) of data on any meter in a Farm Unit is unreported or unusable within one calendar year, the grower will be moved automatically to a satellite measurement, for all meters in the Farm Unit for the year.
4. If the meter is replaced, or if the meter sticker is removed, lost or tampered with, a new meter sticker must be issued. Additionally, if a meter is removed for a new irrigation unit, for calibration, or replacement, the meter read must be taken before removing the meter and when the meter is returned and reinstalled.

Malfunctioning flow meters must be repaired or replaced within 10 business days. Once a repair or replacement is complete, a new flow meter reading must be submitted, and a new meter sticker must be installed.

#### **Calibration (Meter accuracy)**

1. Meters must be calibrated every two years. Calibration any time within the calendar year that it is due will be accepted. This allows for calibration in the non-irrigation season.
2. Purchase receipt dates of meters are allowed to stand for calibration dates. Purchase receipt dates may be used as proof of calibration within two years of purchase. This is applicable only to new meters accompanied by a calibration certificate in the original packaging. This is not valid for used meters.





### **Installation (Meter accuracy)**

1. If a meter is not installed according to manufacturer specifications, then the Farm Unit cannot use meters as their primary measurement method for allocation tracking and is shifted to a satellite measurement, for the calendar year.
2. Meter measurement of commingled surface water and groundwater will not be accepted. Surface water must be measured with a separate and distinct meter. Additionally, all groundwater wells with pumps and a power source must be metered and reported even if not currently in use. All extracted groundwater must flow through a flow meter before it enters the on-farm distribution system.

### **General Quality Assurance/ Quality Check**

1. A third party may be hired to review data, meter installation, meter calibration, and irrigation practices/ schedules.
2. The issues listed above may result in a Farm Unit being shifted to a satellite measurement for the calendar year. If a Farm Unit is moved to a satellite measurement in a calendar year and wishes to use meters the following year, the Farm Unit must be reapproved to use meters again.
3. Being issued a Madera County GSA meter sticker does not mean Madera County GSA approves the installation and calibration of the meter.

