

**PIXLEY IRRIGATION DISTRICT
GROUNDWATER SUSTAINABILITY AGENCY
POLICIES**

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POLICY 1: WATER MEASUREMENT & METERING

- 1.0 Summary and Purpose. The landowners within the GSA utilize both surface water and groundwater to meet the needs of the business operations and producing agricultural products. A key component to manage the sustainability of groundwater is to measure quantitatively the total amount of water used by each landowner within the GSA. The vast majority of groundwater use within the GSA boundaries is by agricultural landowners, and for that reason, the GSA's focus for its groundwater measurement and metering needs will be on agricultural landowners. This will allow the GSA to track groundwater water usage by landowner, which can then be correlated to the amounts allowed to achieve sustainability. The GSA will utilize satellite imagery to determine crop demands at the landowner level.

To accomplish agricultural use tracking and monitoring, the GSA has determined that the most effective and practical method is to use a third-party vendor to monitor crop demand on each parcel within the GSA boundaries utilizing satellite imagery to calculate Evapotranspiration (ET) at the parcel level as described in more detail in this Policy 1. The resulting ET quantity will be used in the groundwater crediting and surface water accounting system as provided in Policies 2-5 to determine, account for and regulate net groundwater use, and apply.

- 1.1 **Accounting of Crop Water Use.** The starting point for determining groundwater use for agricultural lands is to determine the total water use of the crop. Under Policy 3 (Accounting) the total measured crop water use is then offset by allocated credits for applied surface water, allocated credits for precipitation, and other allocated credits associated with landowner or district recharge activities, to arrive at a net allocated groundwater use.

To calculate the amount of water from all sources consumed by the crop, Total Crop Water Use (Evapotranspiration or ET) is calculated by a third party, using NASA LandSat satellite imagery, and recorded by the GSA on a parcel basis and accounted for per Policy 3..

The satellite imagery used to determine the ET values, will be audited by the GSA through spot checking land use for cropping patterns and compared to available District metered data.

- 1.2 **Alternative measurement of Crop Water Use using meter data**

As an alternative to using ET as the measurement methodology for determining total crop water use, landowners may apply for GSA approval to use metered data to account for groundwater use, to provide a Crop Water Use (Metered) quantity to use in place of Crop Water Use (ET) in the accounting process under Policy 3.

- 1.2.1 **Application.** Landowners may annually apply for approval to use meter data, with the opt-in to apply for a full calendar year, January 1 to December 31. Applications must be submitted on GSA provided forms no later than December 1 in order to be considered for the following calendar year:
- 1.2.2 **Application contents:** The application shall include:
1. Well registration forms to include all parcels served by wells (parcel data will be verified by staff before approving election)
 2. Meter specifications to include:
 - Manufacturer and Model of flowmeter (see GSA list of acceptable meters, or request GSA review of meter not on accepted meter list)
 - Date meter was installed
 - Meter size and specs
 - Certification and pictures of installation verifying location and installation to manufacturer specs
 - Calibration certification on installation and annually per GSA meter policy
 - Identification of APNs served by the metered well, including maps
 - Type and age of crops on the parcels served
 - Irrigation methodology (flood, drip, sprinkler, etc.)
 - The landowner must allow GSA staff access to inspect the meter, if necessary
- 1.2.3 **Reporting:** Landowners will be responsible for reading and reporting meter data according to the following standards:
- Metered data must be read on the last day of the month and submitted to GSA by 15th of the following month, through basin safe account with a photo of the meter read uploaded
 - Failure to submit data within the time provided for in this policy, will result in that month's groundwater use to be accounted for via ET measurement
 - A second consecutive failure to submit data within the time provided by this policy will result in the loss of election to use meter data as a replacement for ET measurement until the following year

- 1.2.4 **Accounting:** Every 6 months (Jan 1 – June 30 and July 1 – Dec 31), the GSA will determine Crop Water Use(Metered) in the following manner:
1. Calculate Total Applied Water
 - a. Total applied water = Metered data submitted + Actual Surface water deliveries + Actual monthly precipitation (obtained from Land IQ and applied evenly per acre throughout the GSA)
 2. Calculate Crop Water Use (Metered)
 - a. Crop Water Use (Metered) = Total Applied Water – estimated return flow (based on irrigation method)
 3. Compare Crop Water Use (Metered) to monthly Crop Water Use (ET) data from third party (i.e. Land IQ)
 - a. If there is less than +/- 10% difference, Crop Water Use (Metered) will be used for groundwater accounting purposes, as calculated in Step 2 above.
 - b. If more than 10% discrepancy;
 - i. GSA staff will notify landowner and meter data will need to be checked and verified (either through flow test, or meter inspection for malfunction, etc.)
 - ii. Once checked and verified, staff will determine whether the meter data can be relied upon, or whether ET will be used for groundwater accounting purposes.
 4. The determination by GSA staff regarding whether to use Crop Water Use (ET) or Crop Water Use (Metered) will be made in writing and delivered to opting-in landowners within 30 days of the end of the applicable accounting period, and will be subject to appeal.

Example of Calculation: **Step 1:** metered data 2 AF/Acre + Actual Surface water delivered 0.5 AF/Acre + Actual precipitation 0.5 AF/Acre = **Total Applied Water 3.0 AF/Acre**

Step 2: Total Applied Water 3.0 AF/Acre * 87% irrigation efficiency = **Crop Water Use (Metered) 2.61 AF/Acre**

Step 3: Crop Water Use (Metered) 2.61 AF/Acre, Crop Water Use (ET) 2.65 AF/Acre = 1.5% difference, Use Crop Water Use (Metered) (2.61 AF/Acre) for groundwater accounting.

1.2.5 Appeal process:

- The amount of groundwater charged to a landowner account can be appealed, in writing, within 30 days of the semi-annual groundwater accounting statement.
- GSA staff will investigate, including consulting with GSA technical consultants if needed and make a determination within 30 days of the appeal.
- If the landowner is not satisfied with the staff decision, within 10 days of the decision, the landowner may request an appeal of the decision to the GSA Board of Directors, in writing, which will be presented to the Board at their next meeting. All decisions of the Board of Directors are final.

POLICY 2: GROUNDWATER BANKING AT LANDOWNER LEVEL

2.0 Irrigation District Recharge

The irrigation district oversees and manages the surface water for the district, separate and apart for the Groundwater Sustainability Agency. The irrigation district recognizes the surface water supplied is very important to achieve groundwater sustainability and needed for the landowners to continue operations of their farms and that landowners need to be able to balance all of these resources to achieve sustainability under SGMA.

When Millerton Reservoir is in flood control operations and surface water beyond what is needed to meet irrigation demands is available, the irrigation district will maximize the use of these surface waters and divert these waters into the natural waterways, open channel canals, and district-owned recharge basins. This will occur most often during above-average water years when those waters cannot be stored and are released from local reservoirs. The surface water diverted and recharged into groundwater into district-owned facilities is done to benefit all the landowners within the district without regard for specific credits under SGMA. Additionally, the irrigation district will continue to optimize the distribution systems to maximize the recharge of surface water while supplying surface water to landowners as efficiently as possible.

2.1 Landowner Groundwater Banking

2.1.1 During these periods of flood operations, and where surplus surface waters are deemed to be available by the District, landowners within the GSA can divert surface water into landowners-owned designated recharge facilities for future groundwater credits as follows:

1. Water that the landowner purchases from the irrigation district through a regular surface water purchase procedure.
2. The district has established the following priority order of water service and related canal capacities.
 - Deliveries for irrigation demand
 - District recharge/banking for the benefit of all landowners
 - Landowner recharge/banking

2.1.2 When these periods occur, the landowner can bank this surface water recharged to groundwater under the following conditions.

1. The surface water purchased must be applied directly to a specific groundwater recharge basin that meets the minimum GSA requirements for

a groundwater recharge basin. The basin must be registered with the GSA to receive any credits.

- All surface water diverted to the landowner is required to be metered per GSA metering requirements.
- Surface water diverted will be credited to the landowner at 90% of the surface water diverted. The remaining 10% credit will remain with the GSA to account for evaporation, groundwater migration and for the benefit of all the landowners.
- The groundwater credits issued to the landowners will be available and carried over to subsequent years. The term of the credits will be perpetual. The groundwater credits can also be transferred, sold, or leased to other landowners based upon the GSA groundwater transfer criteria.

2. Landowners can apply surface water above crop demand and generate groundwater credits as follows:

- All surface water diverted to the landowner is required to be metered per GSA metering requirements.
- Surface water diverted will be credited to the landowner at 90% of the surface water diverted. The remaining 10% credit will remain with the GSA to account for evaporation, groundwater migration and for the benefit of all the landowners.
- The groundwater credits issued to the landowners will be available and carried over to subsequent years. The term of the credits will be perpetual. The groundwater credits can also be transferred, sold, or leased to other landowners based upon the GSA groundwater transfer criteria.

POLICY 3: WATER ACCOUNTING AND WATER TRANSFERS

3.0 Summary and Purpose. To effectively achieve groundwater sustainability within the GSA and the Tule Subbasin, while maintaining the agriculture operations during the implementation of SGMA, each landowner within the GSA will be provided baseline groundwater credit allocations. These groundwater credit allocations are inputs into the individual water bank accounts for each landowner, allowing each landowner to decide how to feasibly and economically manage their farm operation within the rules established by the GSA and the Tule Subbasin.

3.1 Water Accounting:

To adequately track, monitor, and account for the water credits within the GSA as required by Policy 1 (Water Measuring and Metering), groundwater accounts will be established and monitored for each landowner. Groundwater credits are allocated by APN and added to landowner accounts. Following is a description of the type of additions and subtractions from landowner groundwater accounts in the GSA:

Groundwater Credit Allocations (Additions)

Definition:

Tule Subbasin Sustainable Yield

Common Groundwater available to all landowners within Tule Subbasin, defined under Subbasin Coordination Agreement

Precipitation Yield

Annual average precipitation in the GSA, calculated from 1991 going forward. Precipitation yield credits are not transferrable.

District Allocated Groundwater Credits(Allocated Surface Water Credits)

Allocated by the Board annually, per the Pixley Irrigation District Surface Water Allocation Policy, adopted 8/8/2019. Allocated amounts will be credited to landowners proportionally based on assessed acres. Since not all lands in the District are connected to the District canal system, the District policy is to accomplish such an allocation by annually allocating surface water as groundwater credits. Surface water, once actually delivered to lands with access to the District canal system and consumed by those lands through crop production, would then be accounted for as measured crop usage, against which the groundwater allocated credits would be credited

Transitional groundwater credit allocations are allocations of water above the long-term sustainable limits in the GSA, in order to assist landowners to transition to sustainability. Transitional credits are allocated per Policy 4.

Landowner Developed Credits

- Surface Water diverted by the landowners into a specified recharge basin, credit per criteria set forth in policy 2: Banking at Landowner Level.
- Surface Water over-applied by landowner during flood operations, beyond crop demand, credited per criteria set forth in policy 2.

Groundwater Debits from Account (Subtraction):

Definition:

Groundwater Consumption

Monthly crop demand measured, per Policy 1.

Exceedance Consumption

Consumption above Allowable Limits. Administered per Policy 8

Credits and debits in each landowner account will be accounted for on a monthly basis by the GSA.

3.2 Allowable Limits:

The sum of groundwater credit allocations added to each landowner account shall be considered the Allowable Limit of groundwater use for each landowner account. Consumption will be measured and debited from each landowner account monthly, per Policy 1. Any exceedance of the Allowable Limit shall be considered a violation, subject to enforcement under Policy 8.

3.3 Accounting:

Water Consumption, based on the ET calculations will be accounted for in the following sequencing:

- i. Precipitation Yield
- ii. Sustainable Yield credits
- iii. District allocated groundwater credits
- iv. Transitional groundwater credits**
- v. Landowner developed groundwater credits**

**The sequencing of the Transitional water credits and Landowner developed groundwater credits can be switched at the landowner's discretion.

Determination of Exceedance Consumption - If Groundwater Consumption uses all of the available credits available in a landowner account listed above (Allowable Limits), any remaining consumption will be accounted for as Exceedance Consumption and administered via Policy 8.

3.4 Water Transfers:

Landowners may transfer groundwater water credits through either a direct sale or lease. The process for transferring groundwater credits is as follows:

3.4.1 Transfers within the GSA;

- a. Groundwater credits will be tracked at a land-based level. Transfers of any credits accrued to the land requires the written approval of the landowner to transfer.
- b. Groundwater credits can only be transferred by a landowner that has a positive balance in their groundwater budget. Deficit groundwater credit transferring is not allowed.
- c. For every one acre-foot of groundwater credit a Landowner transfers out of their account, they cannot use one acre-foot of Transitional Groundwater Credit in that year. They will regain access to the restricted Transitional Pumping amounts in the next year.
- d. A groundwater credit transfer is a one-to-one transfer within the GSA. Transfers outside the GSA are subject to the Coordination with other Tule Subbasin GSAs.
- e. All groundwater credit transfers require formal notification (GSA-approved transfer template) and approval of the GSA. The GSA will keep an account of all transfers within the GSA Water Accounting Program. The sale or lease terms of the groundwater credits are between landowners and not subject to disclosure.

3.4.2 Transfers to or from other GSAs;

- General Provisions;
 - a. Groundwater credits will be tracked at a land-based level.
 - b. Groundwater credits can only be transferred by a landowner that has a positive balance in their groundwater budget. Deficit groundwater credit transferring is not allowed.
 - c. For every one acre-foot of groundwater credit a Landowner transfers out of their account, they cannot use one acre-foot of Transitional Groundwater Credit in that year. They will regain access to the restricted Transitional Pumping amounts in the

- next year.
- d. Groundwater Credits can only be transferred and used in GSAs within the Tule Subbasin that have similar landowner-based groundwater accounting systems as the Pixley GSA.
 - e. Groundwater credits may not be transferred or used outside of the Tule Subbasin.
 - f. A groundwater credit transfer is a one-to-one transfer ratio.
 - g. The maximum amount of groundwater transfers out of the GSA per year could be limited to 10,000 AF. Each transfer will be evaluated to ensure landowner's account maintains a positive balance, without going over the Allowable Limit. Transfers out of the GSA will be processed as they are requested.
 - h. The maximum amount of groundwater transfers accepted into the District per year will be limited to 10,000 AF.
 - i. Transfer requests into the GSA will be reviewed monthly and will be processed at the end of the month. The transfer request will be evaluated individually
 - j. If the total transfers requested are in excess of the 10,000 AF annual limit, the transfers approved will be allocated on a per acre owned basis. Once the 10,000 AF annual limit is reached, any further requests will be denied, unless otherwise determined by the GSA.

- Example

- Grower A requests 6,000 AF transfer
- Grower B requests 6,000 AF transfer
- Grower C requests 6,000 AF transfer
- Grower A owns 1,000 acres
- Grower B owns 500 acres
- Grower C owns 250 acres
- Each landowner will be allowed to transfer 5.71 AF/AC ($10,000 \text{ AF limit} / 1,750 \text{ acres}$)

3.4.3 Administration and Approval

- a. All groundwater credit transfers require formal notification (GSA-approved transfer template) and approval of the GSA. The GSA will keep an account of all transfers within the GSA Water Accounting Program. The sale or lease terms of the groundwater credits are between landowners and not subject to disclosure.
- b. There will be a \$100 fee, per transfer, charged by the GSA for administration and coordination with the other GSAs.
- c. In order to avoid undesirable results and avoid localized impacts, transfers in to certain areas may be limited or restricted even further by the GSA.
 - The Groundwater Planning Commission and Board of Directors will annually review the hydrographs at each

Representative Monitoring Site in the GSA to determine such restrictions for that year.

3.4.4 Implementation of the terms of this entire policy will be reviewed and determined annually by the Groundwater Planning Commission and Board of Directors. The Board of Directors reserves the right to change the terms of this policy at any time.

POLICY 4: TRANSITIONAL GROUNDWATER CONSUMPTION

4.0 Summary and Purpose. To assist landowner with the transition to implementation of the Sustainable Groundwater Management Act, this Policy 4 establishes an allowable amount of groundwater use and extraction above basin-wide sustainable yield, to be reduced in phases over the planning period. This will be accomplished by adding Transitional groundwater credit allocation to landowner accounts (“Transitional Allocations”). Transitional Allocations are allocations of water above the long-term sustainable limits of the GSA, which may be safely consumed within the planning area of the GSA without exceeding Sustainability Objectives as established by the GSA.

4.1 This Policy 4 establishes the rules and regulations for the establishment, accounting, and administration of Transitional Allocations

4.2 Transitional water credits will be available based on assessed acres and made available annually.

4.3 The amount of Transitional water available to be allocated will be determined at the beginning of each year, and will be based on modeled projections, with the goal of ensuring that anticipated use of transitional allocations within the GSA will not result in groundwater levels declining below the Sustainability Objectives (the established Minimum Thresholds and Measurable Objectives) as defined by the PIXID GSP.

4.4 Transitional water credits stay with the landowner to be used on properties within the GSA and cannot be transferred to other landowners. Tier 1 transitional water allocations can be transferred to lease tenants on an annual basis.

4.5 The PIXID GSP includes modeling analysis based on the following assumed levels of transitional water allocation:

- a. Phase 1 (from 2025 through 2029) Transitional Allocation of 0.75 AF/Acre/Year.
- b. Phase 2 (from 2030 through 2034), Transitional Allocation of 0.50 AF/Acre/Year
- c. Phase 3 (from 2035 through 2039), Transitional Allocation of 0.25/AF/Acre/Year

The PIXID GSA Board will initially set Transitional Allocations according to the above assumed schedule and will annually review monitoring and updated modeling data. The purpose of the annual review is to determine whether Sustainability Objectives are being met by the above levels of allowable Transitional Allocations, or whether an adjustment to the Transitional Allocation phase down schedule is needed.

4.6 Landowners may apply Transitional Allocations as credits against Groundwater Consumption, based on the sequencing outlined in Policy 3.

4.7 Transitional allocation use shall be assessed a fee. The fee will be adjusted annually by the board based on an analysis of SGMA implementation costs, including amounts collected for mitigation and project implementation

4.8 The transitional use fee is intended to serve as a disincentive mechanism while also relating to the cost of mitigating the impacts of use of transitional pumping allocations. Further analysis and additional justifications for the level of the fee may be considered annually by the GSA.

4.9 Exceedance Tier. Consumption of groundwater beyond the Allowable Limit as defined in Policy 3 will be subject to enforcement as described in Policy 8. Unless an exceedance is corrected as provided in Policy 8, the total amount of groundwater consumed beyond the Allowable Limit shall be considered Exceedance Tier consumption. Each acre foot of Exceedance Tier consumption which is not corrected shall be subject to a fee to be analyzed and determined annually by the GSA, in addition to any fine and administrative penalty (including reduction of future groundwater credits) as may be established in Policy

- a. The Exceedance Tier fee is to be established annually by the GSA as a fair representation of the cost to mitigate the damage to the GSA and the lands served by the GSA due to the contribution toward undesirable results, as defined in SGMA, caused by the exceedance of groundwater use beyond the established Allowable Limits. Such fee is subject to reassessment and determination by the GSA from time to time based on changing analysis of the cost of mitigation of damages caused by exceedance of the Allowable Limits.

4.10 The GSA will set aside revenues from collection of Transitional and Exceedance Tier fees and dedicate them to the following uses, in order of priority:

- a. To meet any obligations assignable to the PIXIID GSA under the Tule Subbasin-Wide Mitigation Program
- b. Friant Kern Canal capacity correction
- c. To fund groundwater enhancement actions of the PIXID GSA, including but not limited to:
 - Surface water and groundwater banking development
 - Additional recharge basin construction
 - Water conservation grants to GSA members

- Land conservation and set-aside programs
- Monitoring impacts and effects of groundwater pumping.
- Other projects that may be identified by the GSA.

POLICY 5: LANDOWNER SURFACE WATER IMPORTED INTO THE GSA

5.0 Summary and Purpose. District Landowners may participate in water exchanges or transfers outside of the GSA boundary that result in surface water being available for direct use by the landowner. Use of that water by the landowner within the GSA requires the use of Irrigation District infrastructure to divert this surface water to their land.

This surface water that is brought into the GSA by the landowner will be tracked and accounted by the GSA and applied to the landowner's water budget according to the following procedures:

- 5.1 Surface water brought into the GSA and credited to the landowner will be subject to a loss/reduction factor as determined by the Irrigation District Board of Directors.
- 5.2 Surface water brought into the GSA will be delivered to the landowner based upon canal capacity. No surface water delivery brought into the GSA will interrupt or interfere with scheduled allocations of the District surface water supplies.
- 5.3 Imported surface water may be used for groundwater recharge subject to the policies of the GSP.

POLICY 6: DISTRICT ALLOCATED GROUNDWATER CREDITS

6.0 Summary and Purpose. One of the primary purposes of the Pixley Irrigation District is to enhance the groundwater resources that underlie the District through the importation of surface water. The District overlies the Tule Subbasin Groundwater Basin, which has been defined by the State of California as being in a state of critical overdraft. Since its formation in 1958, the District has imported as much surface water as possible to offset the use of groundwater for irrigation purposes and to replenish the aquifer through direct recharge via sinking basins, river channels and unlined canals. The District's efforts are funded through assessments and water charges paid by landowners in the District. The lack of access to a reliable surface water supply for Pixley means that providing water to landowners through both direct and in- lieu recharge in wetter years becomes a method for stabilizing access to water for the landowners of the District.

In 2014, the State of California passed the Sustainable Groundwater Management Act (SGMA), which regulates the use of groundwater in the State of California. Groundwater Sustainability Plans, under SGMA, are to be implemented by January 1, 2020. As part of the SGMA process, and consistent with the provisions of the California Water Code that are applicable to Irrigation Districts related to distribution of water resources among District lands, the District has determined that imported surface water should be allocated proportionally to lands within the District on an annual basis.

Historically, proportional distribution of the District's available surface water has presented a challenge in that not all the lands in the district have direct access to surface water. However, with the development of a GSP as required by SGMA, the distribution of surface water on a District-wide proportional basis can now be accomplished by coordination with a groundwater allocation system. The approach taken in the District's Surface Water Allocation Policy is designed to provide proportional access to imported surface water to all lands in the District and not just those with access to the District's distribution system. To meet this goal, the surface water is allocated to all lands as an additional groundwater credit. Surface water actually delivered to lands with access to the canal system and consumed by those lands through crop production would then be accounted for as a debit against their groundwater credit balance.

District groundwater credit allocations will not be allocated in full to the landowners if a determination is made by the GSA Board that minimum threshold amounts identified in the GSP have not been met.

6.1 Allocation will occur annually on January 1 based on the prior year surface water supply received by the District.

- a. Allocation will be made in the form of groundwater credits.
- b. The amount of the allocation will be a maximum of 90% of year surface water deliveries to account for evapotranspiration and the ability to meet the goals of the

Groundwater Sustainability Plan.

- c. The Board will address a variety of factors related to meeting the goals of the Groundwater Sustainability Plan before finalizing the allocation. As an example, if minimum thresholds of groundwater elevation have been exceeded, the leave behind factor may have to be greater and less water will be allocated

6.2 Allocations will be made to total developed, assessed acres. Non-irrigated lands will not receive an allocation.

6.3 Use and transfer of groundwater credits must follow the policies adopted by the GSA.

6.4 When surface water is made available, the District will make it available for irrigation purposes on a first come, first served basis.

- a. Each acre-foot of water consumed (ETc) by a landowner's crop through surface water delivered will result in an acre-foot of groundwater credit reduction from their groundwater account
- b. Any water not delivered as irrigation demand will be recharged by the District
- c. Taking surface water will be on a voluntary basis
- d. The price to access surface water will be set by the District and may be based on the approximate cost to pump groundwater or other factors as deemed appropriate by the Board.

6.5 During flood release and unlimited uncontrolled season operations, based on the amount of water available to the District, the District may make water available to landowners for purchase by the landowner for on-farm recharge per Policy #2.

POLICY 7: CSD & PUD WATER USE WITHIN THE GSA

7.0 Summary and Purpose. A community service district (CSD) is an entity formed by residents of an unincorporated area to provide a wide variety of services to its residences, particularly water and wastewater management, along with many others. A CSD may be formed and operated in accordance with the Community Services District Law (Government Code §61000-61850), which was created to provide an alternate method of providing services in unincorporated areas.

The Public Utility District Act authorizes the formation of public utility districts (PUD) and authorizes a district to acquire, construct, own, operate, and control works for supplying its inhabitants with water and other critical components for everyday life.

Within the Pixley GSA boundary are the following CSDs and PUDs ("Community):

- Teviston CSD
- Pixley PUD

Each Community entered into an MOU with the Pixley GSA to cooperate on SGMA implementation. Consistent with Section 3 of the MOU, the Community will be considered within the boundaries of the Pixley GSA and included in the Pixley Groundwater Sustainability Plan.

Consistent with Section 6 of the MOU, Pixley will identify the Community as a separate management area. As its own management area, Pixley will specifically address the minimum thresholds and measurable objectives for the Community to achieve sustainable management.

7.1 Reporting of Community Water Use

Consistent with Section 7 of the MOU, the Community will provide Pixley the following information for determining the net groundwater usage of the Community:

On a quarterly basis:

- Each Community will submit the total of groundwater pumped from Community wells.
- Each Community will submit the total of water discharged to the wastewater treatment system that is treated and diverted to percolation/evaporation ponds

7.2 Minimum Thresholds and Measurable Objectives

The following will be considered the minimum thresholds and measurable objectives required by the Community to meet the sustainability for the implementation of the Pixley GSP for the period from January 2020 to January 2026:

- a. The net of water pumped minus water discharged will be considered total Community water use
- b. The total of all treated water discharged to percolation/evaporation ponds, less than 10%, will be available to the Pixley GSA for Calculation and use in the total Pixley GSA water balance.
- c. If the Community is providing any treated discharge to adjacent lands, the Community shall provide a regular accounting to the Pixley GSA that includes the total volume amount discharged and APN(s) receiving the discharge.
- d. The water use will be reviewed through periodic updates to the GSP and will be compared to the available sustainable yield for the community and pumping limits acceptable to the GSA, as allowed under the regulatory code of SGMA.
- e. Community wells will include all wells used by the Community that are connected to the Community water distribution system.
- f. The Community and the GSA Board of Directors agree to cooperate on conditions of approval for future growth to ensure they are consistent with GSA and Community policies including pursuing grant funding opportunities, outreach and joint projects for developing additional water supply for the Community.

POLICY 8: ENFORCEMENT OF GROUNDWATER POLICIES

This Groundwater Sustainability Plan (GSP) establishes the actions, which include the policies, projects, and implementation schedule, to achieve groundwater sustainability in accordance with the Sustainable Groundwater Management Act (SGMA). GSA Policies 1 through 7 have been adopted and implemented in furtherance of GSP Management Action 5.2.1 as set forth in the Pixley Irrigation District Groundwater Sustainability Plan.

SGMA provides the GSA with the authority to enforce the adopted Management Actions of a GSP. (See Water Code section 10732(a)(1) – authority to assess penalties for extraction of groundwater in excess of the amount that is authorized under a GSA rule, regulation, ordination or resolution; and Water Code section 10730.6 - authority to collect any delinquent groundwater charges and any applicable penalties and interest on the groundwater charges in the same manner as the GSA may collect delinquent assessments or water charges)

Pursuant to such authorities, the following actions shall be considered violations of the GSA’s established GSP and Policies adopted thereunder and shall be subject to administrative enforcement penalties and actions specified for each category of violation:

8.1 Failure to Pay GSA Assessments or Groundwater Consumption Fees and Fines

- 8.1.1 Non-Compliance. Pursuant to Water Code section 10730.6, an owner or operator who knowingly fails to pay a groundwater fee within 30 days of it becoming due shall be liable to the groundwater sustainability agency for interest at the rate of 1 percent per month on the delinquent amount of the groundwater fee and a 10- percent penalty.
- 8.1.2 Process for collecting unpaid fees and fines. The GSA may collect any unpaid fees and fines by: a) bringing suit in Tulare County Superior Court for the collection of unpaid fees and fines and seeking attachment against the property of the named defendant, pursuant to the authority of Water Code section 10730.6(c); or b) adding such unpaid fees, fines, penalties and interest to the charges and assessments payable to the Pixley Irrigation District, after which remaining unpaid fees, fines, penalties and interest may be collected in the manner established by Division 11 of the Water for the collection of assessments and charges of California Irrigation Districts.

8.2 Consumption of groundwater beyond the Allowable Limits. The Allowable Limits of groundwater consumption are as set forth in Policies 3 and 4, and shall be accounted for pursuant to Policy 1. Any time the GSA determines that an owner or operator subject to the Groundwater Measurement and Metering provisions of Policy 1 of the PIXID GSA has exceeded the Allowable Limits, as established by Policy 3 of the PIXID GSA, the exceedance shall be enforced through the following process:

- 8.2.1 Notice of Non-Compliance. The GSA shall provide written notice of the non-compliance, specifying the quantity of exceedance, and requesting response and plan for correction of non-compliance within 30 days. The notice of non-compliance shall be in writing and shall be deemed delivered when placed in U.S. Mail, certified, to the owner or operators address of record, or if the owner or operator has consented to receiving notices from the GSA via email, via email to the address provided at the time of providing consent.
- 8.2.2 Opportunity to Correct Exceedance. An owner or operator who is provided a notice of non-compliance related to exceedance of the Allowable Limits of groundwater consumption shall respond within 30 days of delivery of the notice by either a) disputing the determination of non-compliance and requesting an appeal hearing, in which case the owner or operator shall provide a documentary basis for such dispute, or b) identifying a plan to correct such non-compliance. An exceedance of the allowable groundwater use limits may be corrected by procurement of sufficient credits, through purchase or otherwise, to the account of the owner or operator, provided that any such credits are obtained in a manner that is consistent with the policies of the GSA.
- 8.2.3 Determination of Failure to Correct Non-Compliance. An owner or operator who responds to a notice of non-compliance by timely disputing the determination of non-compliance shall be provided with an opportunity to present such dispute, and evidence supporting the owner or operator's position, to the PIXIDGSA Groundwater Planning Commission. An administrative hearing to consider the dispute shall be scheduled within 30 days of the response and shall occur whenever possible at a regular meeting of the Groundwater Planning Commission. The Groundwater Planning Commission shall provide notice of its determination within 5 days of the hearing, which notice shall be provided in accordance with section 8.2.4.
- 8.2.4 Final Notice of Non-compliance - Monetary and Administrative Penalties for Failure to Correct. If an owner or operator fails to respond to or correct

notice of non-compliance issued under 8.2.1, or if the Groundwater Planning Commission sustains the finding of non-compliance in the case of disputed notices, a final notice of non-compliance shall be issued which shall include the following:

- 8.2.4.1 Assessment of a penalty of \$500 per acre foot for every acre foot of groundwater determined to have been consumed beyond the allowable limits (Water Code section 10732(a)(1)).
- 8.2.4.3 Assessment of charges for Exceedance tier groundwater consumption pursuant to the provisions of Policy 4 for each acre foot determined to have been consumed beyond the allowable limits.
- 8.2.4.2 Imposition of Exceedance tier consumption, which shall consist of groundwater credits to be subtracted from the owner or operator's account at the rate of 1 acre foot for every acre foot of groundwater determined to have been consumed beyond the Allowable Limits.
- 8.2.4.3 An order to Cease and Desist continued exceedances.
- 8.2.5 Enforcement. Fines, penalties and charges imposed pursuant to section 8.2.4, shall be due and payable within 30 days of the issuance of a final notice of noncompliance, and if unpaid may be collected pursuant to the processes established by Policy 8.2.1. Cease and desist orders issued as part of a final notice of non-compliance may be enforced through civil adjudication processes including by seeking civil mandate orders.

8.3 Violation of Early Action Management Plan or Corrective Subsidence Management Order under Policy 9 – Subsidence Management Regulation. The regulations related to Subsidence management are set forth in Policy 9. Any time the GSA determines that an owner or operator subject to an Early Action Management Plan or Corrective Subsidence Management Order as established under Policy 9 is out of compliance with such order, the order shall be enforced through the following process:

- 8.3.1 Notice of Non-Compliance. The GSA shall provide written notice of the non-compliance, and requesting response and plan for correction of non-compliance within 30 days. The notice of non-compliance shall be in writing and shall be deemed delivered when placed in U.S. Mail, certified, to the owner or operators address of record, or if the owner or operator has consented to receiving notices from the GSA via email, via email to the address provided at the time of providing consent.
- 8.3.2 Opportunity to Correct Exceedance. An owner or operator who is provided a notice of non-compliance related to the subsidence management plan shall

respond within 30 days of delivery of the notice by either a) disputing the determination of non-compliance and requesting an appeal hearing, in which case the owner or operator shall provide a documentary basis for such dispute, or b) identifying a plan to correct such non-compliance.

- 8.3.3 Determination of Failure to Correct Non-Compliance. An owner or operator who responds to a notice of non-compliance by timely disputing the determination of non-compliance shall be provided with an opportunity to present such dispute, and evidence supporting the owner or operator's position, to the Pixley ID Groundwater Planning Commission. An administrative hearing to consider the dispute shall be scheduled within 30 days of the response and shall occur whenever possible at a regular meeting of the Groundwater Planning Commission. The Groundwater Planning Commission shall provide notice of its determination within 5 days of the hearing, which notice shall be provided in accordance with section 8.3.4.
- 8.3.4 Final Notice of Non-compliance - Administrative Action for Failure to Correct. If an owner or operator fails to respond to or correct the notice of non-compliance issued under 8.3.1, or if the Groundwater Planning Commission sustains the finding of non-compliance in the case of disputed notices, a final notice of non-compliance shall be issued, which shall include an order to Cease and Desist continued non-compliance, which could include an order to stop pumping from a certain well or wells.
- 8.3.5 Enforcement. Cease and desist orders issued as part of a final notice of non-compliance may be enforced through civil adjudication processes including by seeking civil mandate orders.

Policy 9: Subsidence Management Regulation

9.0 Background and Purpose

- 9.0.1 The GSA's Groundwater Sustainability Plan establishes Measurable Objectives (MOs) and Minimum Thresholds (MTs) related to land subsidence, as required by the Sustainable Groundwater Management Act (SGMA).
- 9.0.2 The GSA has MOs and MTs in the Groundwater Sustainability Plan (GSP) described as annual rates of subsidence (measured as feet of change in ground level elevation per water year) and total cumulative feet of subsidence (change in ground level elevation), relative to 2020 land surface elevations and elevations in 2040. The GSA has also established Interim Milestones to reflect decreasing rates of subsidence over time on a glide path to obtain a subsidence rate of zero feet per year by the year 2040.
- 9.0.3 The GSP requires quarterly subsidence monitoring. If measured subsidence exceeds the annual Interim Milestone rate in any given year, the GSA must implement management actions in order to prevent further exceedance of subsidence rates that, if continued, would prevent the GSA from limiting cumulative land subsidence within the allowable MT. Violation of a MT is an undesirable result under SGMA that the GSA must manage to avoid.
- 9.0.4 The purpose of this Policy is to establish enforceable management actions to address subsidence and avoid violating the MTs. The effects of residual subsidence are unknown but will be addressed as knowledge progresses.
- 9.0.5 Research, data gathering and analysis in the last few years has shown that subsidence rates differ in different locations within the Pixley Irrigation District GSA and there is concern that higher rates of subsidence in specific areas may be linked to pumping from specific wells and/or from wells that pump from the lower aquifer. Therefore, this Policy implements subsidence management actions by zones with priority given to zones where historical subsidence rates suggest a greater risk for exceeding the subsidence management goals than other zones. Figure 1-1 displays management zones and the percentage of cumulative subsidence in all areas. High-risk areas are highlighted using a color key showing which trigger the zone is in based on information from a technical consultant and will be continuously updated.
- 9.0.6 In order to further investigate and work to manage subsidence in the GSA within established Interim Milestones, MOs, and avoid exceeding MTs, there is a need to gather more specific information about the pumping occurring in areas of the GSA where subsidence rates are greatest.
- 9.0.7 The GSA's technical consultants have also explained that there appears to be a difference between upper and lower aquifer pumping as it relates to

subsidence and that pumping in the lower aquifer may contribute to subsidence more than pumping in the upper aquifer. (See GSP Attachment 2). This Policy will provide for collection of information regarding whether pumping is from the lower or upper aquifer and allow for tailored actions to reduce pumping in the different aquifers to address subsidence.

9.0.8 The GSA board recognizes that this is an area in which the GSA is still developing technical understanding, and the policy may need to be amended over time to address new information or understanding regarding this challenging issue.

9.1 Subsidence Monitoring and Management Zones (Zones): The Board hereby adopts the Zones set forth on Exhibit A to allow for targeted monitoring, early action, and corrective management to address subsidence. The Board may adjust the Zones in the future as warranted at a noticed meeting.

9.1.1 **Designation:** The Board will identify and designate which Zones are High-Risk Zones based on recommendations from a hydrogeologist based on measured historical subsidence data. The High-Risk Zones, along with supporting information, will be presented at a public meeting and the GSA will maintain a record of the data supporting the designation. The Board will revisit the designations annually. **Notice of Designation:** Within 60 days of the GSA Board designating a Subsidence Monitoring and Management Zone as a High-Risk Zone, the GSA will provide notice of the designation to all landowners within the Zone. The notice will provide the technical basis for the determination of the area as a High-Risk Zone and will indicate the GSA's intention to develop and adopt a proposed Early Action Management Plan applicable to the Zone.

9.2 Early Action Management Plan: For each SMMZ designated as High Risk, the GSA will develop a proposed Early Action Management Plan, which the GSA intends to impose within the High-Risk Zone. The Early Action Management Plan will include some or all of the following elements:

9.2.1 Landowner Regulatory Actions: The Board shall require Well Registration and Metering for all wells within the High-Risk Zones. Registration shall include designation of whether the well is extracting from the upper aquifer, lower aquifer or combination of both. To this end, the landowner will be required to submit all available well construction data at the time of registration. Landowners will also have to submit a third-party certification that an in-line flowmeter is installed correctly on the discharge pipeline of each well and is calibrated. The landowner is then required to report month-end meter readings by the 10th of the following month and annually submit a third-party certification of recalibration by December 31 of each year. From time to time, the District will conduct site visits to verify meter readings and meter installations.

- 9.2.2 District Actions:** The Board may also identify and prioritize district project actions such as: (1) focusing surface water deliveries in water short years in specific Zones; (2) focusing District-operated or landowner-initiated recharge projects in specific Zones; (3) focused land retirement/fallowing programs in the Zones; (4) Deep aquifer injection (Aquifer Storage and Recovery (ASR)) in specific zones; (5) Preventative projects on infrastructure to mitigate impacts. Funding for these actions is intended to come from Transitional fees collected by the GSA as well as grant funding that may be obtained. If insufficient funding is available, the landowners in the Zone will be given the opportunity to help fund the actions, prior to having to implement pumping restrictions and corrective actions identified in this Policy.
- 9.3 Notice of Proposed Management Plan - Comment/Opportunity to be Heard:** Either concurrently with the Notice of Designation of a Zone as a High-Risk Zone, or separately, the GSA will provide notice of intent to adopt the proposed Early Action Management Plan to affected landowners, and provide a period of at least 45 days to submit written or verbal comment and input on the proposed Early Action Management Plan for the Zone.
- 9.4 Public Hearing/Adoption of Management Action:** After allowing at least 45 days of public review of a proposed Early Action Management Plan, the Board will hold a public hearing, at the conclusion of which it may adopt, amend, or decline to adopt the proposed Early Action Management Plan. In making its decision, the Board will consider technical data and information provided by the GSA's staff and consulting hydrogeologists as well as any technical data and information provided by affected property owners or interested members of the public. The Board may delegate the initial review and decision on whether to adopt an Early Action Management Plan to the Groundwater Planning Commission. The Commission's decision shall be subject to appeal to the GSA Board. If no appeal is filed within 30 days of notice of a decision of the Commission, the Commission decision shall be final.
- 9.5 Enforcement.** The GSA will establish an administrative record supporting its decision to adopt an Early Action Management Plan. Any landowner regulatory actions included in a plan will be considered an administrative enforcement decision, appealable and enforceable through judicial action as specified by GSA Policy 8 – Implementation & Enforcement of Plan Actions.
- 9.6 Investigation.** The Board will review subsidence monitoring data quarterly to determine the threat of exceedance of Interim Milestones, MOs, MTs and trigger levels as set forth in 4.3.2 of this Section. Upon determination by the Board that an Interim Milestone, MO, MT, or trigger level has been exceeded at a representative monitoring site, or in a monitoring zone, GSA staff and its consulting hydrogeologist will investigate to determine if pumping from one or more wells caused the exceedance and whether there is a threat to critical infrastructure.
- 9.7 Notice of Exceedance.** Within 30 days of making the determination that one or more wells are causing the exceedance, the GSA will provide notice to the

identified well owner(s) of the determination and the intent to adopt a Corrective Subsidence Management Order.

9.8 Corrective Subsidence Management Order. Following the investigation, the GSA staff, in consultation with its consulting hydrogeologist and based on the findings of the investigation, will develop a proposed Corrective Subsidence Management Order (CSMO) to be proposed for adoption by the GSA Board, subject to review and comment by affected property owners and members of the public. The Corrective Subsidence Management Order will be based on the following elements:

9.8.1 If not already metered and registered as a result of being in a High-Risk Zone, all wells within the affected area shall be required to be metered and registered. Registration shall include designation of whether the well is extracting from the upper aquifer, lower aquifer or combination of both.

9.8.2 To help the landowner mitigate or offset impacts, the District will work with the landowners in these areas to take actions as described in Section 3.3.2 of this Policy. Wells determined to have an impact to critical infrastructure will be subject to the CSMO and shall have the following restrictions of use:

- **When at least 50% of allowable cumulative subsidence has been documented to have occurred:** Water accounting will be based on metered groundwater pumping, rather than ET, with no precipitation credits or transitional pumping credits allowed to be pumped from the lower aquifer. No transfers of groundwater credits into the affected area will be allowed. When surface water is available to the lands within the affected areas, it must be used first, prior to any groundwater pumping. No new wells in the deep aquifer to be approved for permitting.
- **When at least 75% of allowable cumulative subsidence has been documented to have occurred:** no groundwater pumping allowed from the lower aquifer in wells the data show are contributing to land subsidence
- **When 100% of allowable cumulative subsidence has been documented to have occurred:** no groundwater pumping allowed from wells the data show are contributing to land subsidence.

9.9 Reporting Data. Landowners with wells subject to a CSMO shall directly report metered pumping data from designated wells for accounting within the GSA groundwater crediting system. The District will conduct site visits from time to time to verify readings.

9.10 Notice of proposed CSMO. Either concurrently with the Notice of Determination of an Exceedance, or separately, the GSA will provide notice of intent to adopt the proposed Corrective Subsidence Management Order to affected landowners and provide a period of at least 45 days to submit

written or verbal comment and input on the proposed Corrective Subsidence Management Order for the well owner or owners or the Zone.

- 9.11 **Public Hearing/Adoption of Management Action:** After allowing at least 45 days of public review of a proposed Corrective Subsidence Management Order, the Board will hold a public hearing, at the conclusion of which it may adopt, amend, or decline to adopt the proposed Corrective Subsidence Management Order utilizing the best available science and data. In making its decision, the Board will consider technical data and information provided by the GSA's staff and consulting hydrogeologists as well as any technical data and information provided by affected property owners or interested members of the public. The Board may delegate the initial review and decision on whether to adopt a Corrective Subsidence Management Order to the Groundwater Planning Commission. The Commission's decision shall be subject to appeal to the GSA Board. If no appeal is filed within 30 days of notice of a decision of the Commission, the Commission decision shall be final.
- 9.12 **Enforcement.** The GSA will establish an administrative record supporting its decision to adopt a Corrective Subsidence Management Order. Any adopted plan or order, including any landowner or well owner obligations, will be considered an administrative enforcement decision, appealable and enforceable through judicial action as specified by GSA Policy 8 – Implementation & Enforcement of Plan Actions.

