

UPDATE REGARDING GSP IMPLEMENTATION IN THE EAST TURLOCK SUBBASIN GSA

Presentation to the Stanislaus County Agricultural Advisory Board

September 8, 2025

AGENDA

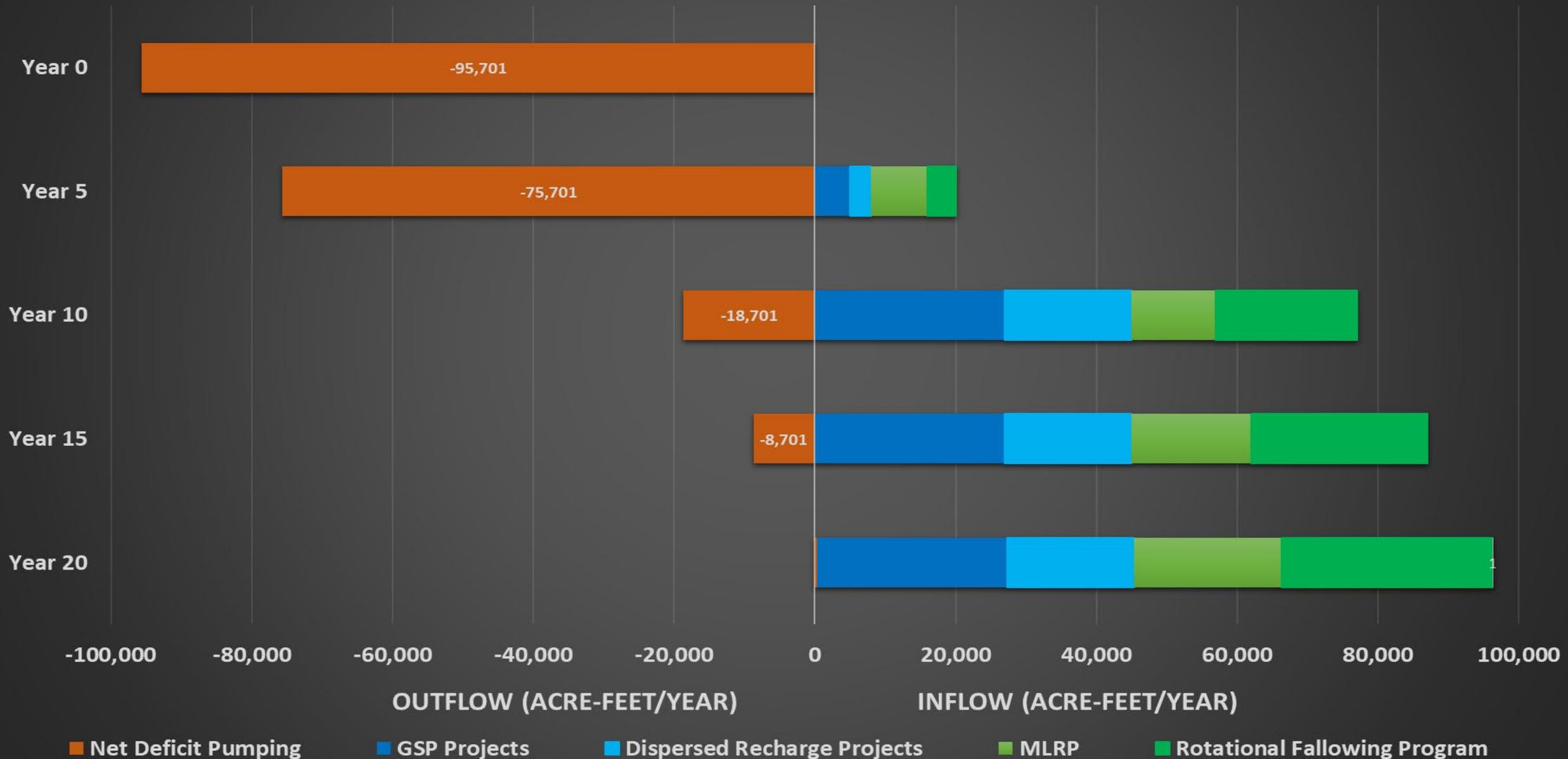


- ✓ Overview
- ✓ Update on Rules and Regulations
- ✓ Update on Projects
- ✓ Update on Adaptive Management



OVERVIEW

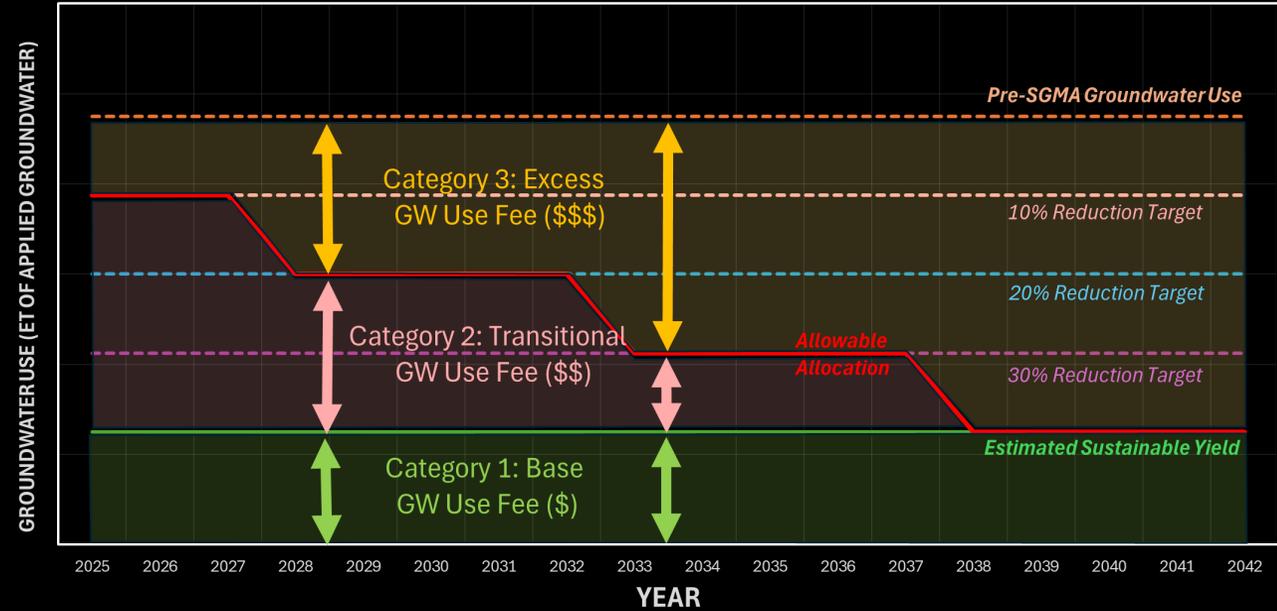
SUPPLY PROJECTS, RECHARGE PROJECTS AND DEMAND REDUCTION ACTIONS TO REACH SUSTAINABILITY



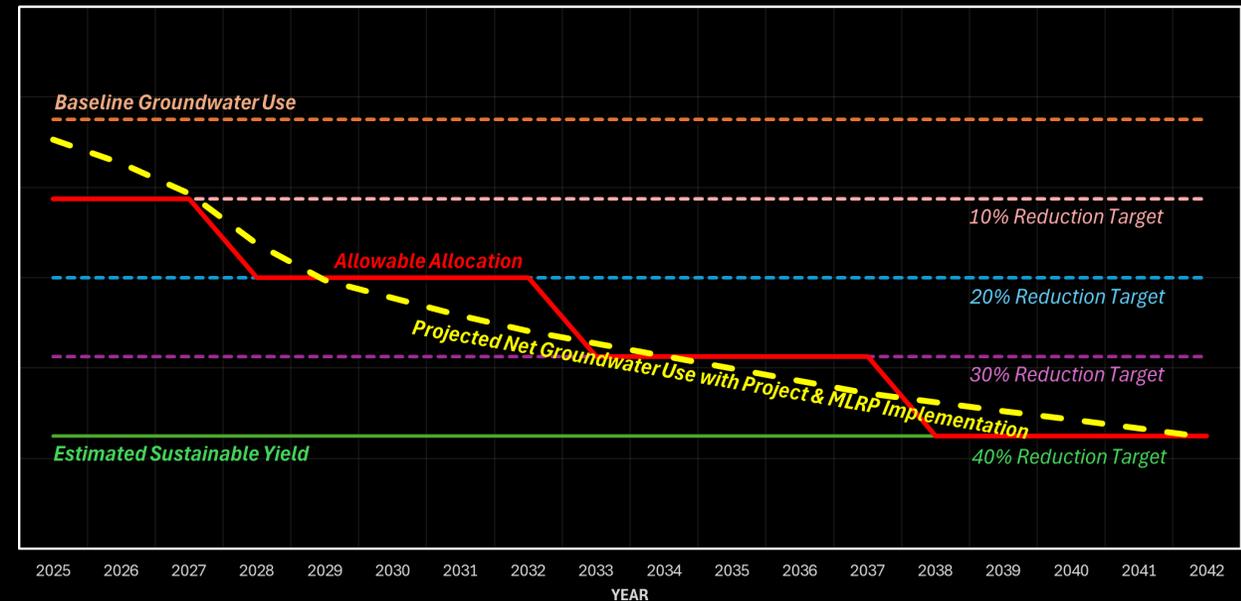
KEY COMPONENTS:

- Allocation program with phased groundwater use reduction targets
- Groundwater Use Fee Program to fund projects and management actions
- MLRP and Land Fallowing: 5,000 acres by 2027; ~21,000 acres by 2042
- Groundwater Accounting Platform to manage groundwater use and fees
- Rules & Regulations for groundwater accounting, management and fees
- Well Mitigation Program

GROUNDWATER USE FEE FRAMEWORK



GROUNDWATER USE REDUCTON FRAMEWORK AND PROJECTED USE



Challenging Economics

Relative Revenue Per Acre w/o GW Use Fees

| Price | Yield (lb/acre) | | | | | | |
|---------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1,000 | 1,400 | 1,800 | 2,200 | 2,600 | 3,000 | 3,400 |
| \$ 1.00 | Red | Red | Red | Red | Red | Red | Red |
| \$ 1.50 | Red | Red | Red | Red | Red | Red | Red |
| \$ 2.00 | Red | Red | Red | Red | Red | Light Green | Light Green |
| \$ 2.50 | Red | Red | Light Green | Light Green | Light Green | Green | Green |
| \$ 3.00 | Red | Light Green | Light Green | Light Green | Green | Green | Green |
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| \$ 4.00 | Light Green | Light Green | Green | Green | Green | Green | Green |

Relative Revenue/Acre w/ Fees & No Demand Reduction

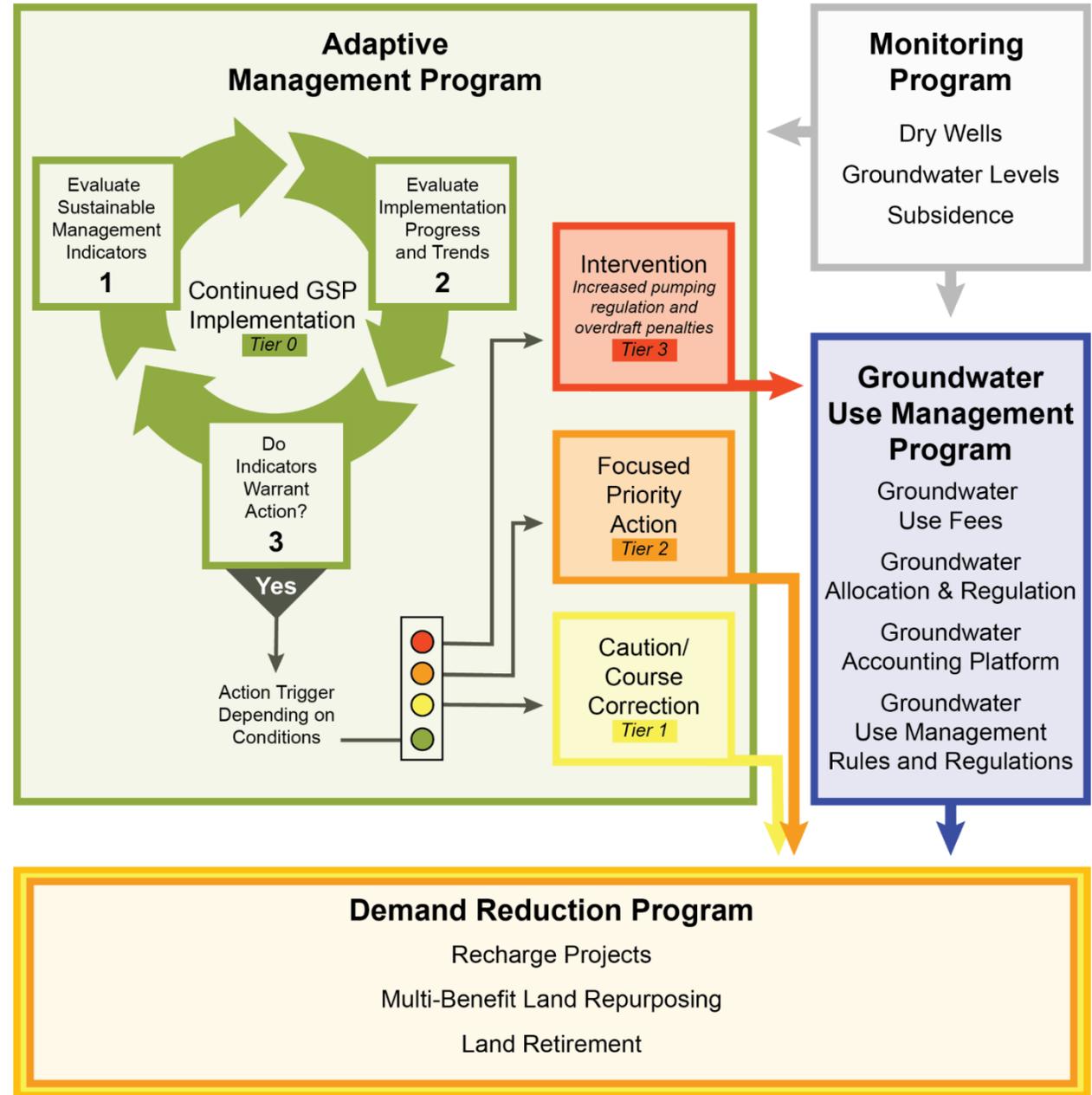
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- *Thin margin of profitable operation – groundwater use fees and water use restrictions can push operations from profit to loss*
- **Strategic land repurposing to decrease demand and implementation of water-wise agricultural practices can make the difference between success and failure**

Relative Revenue/Acre with Demand Reduction

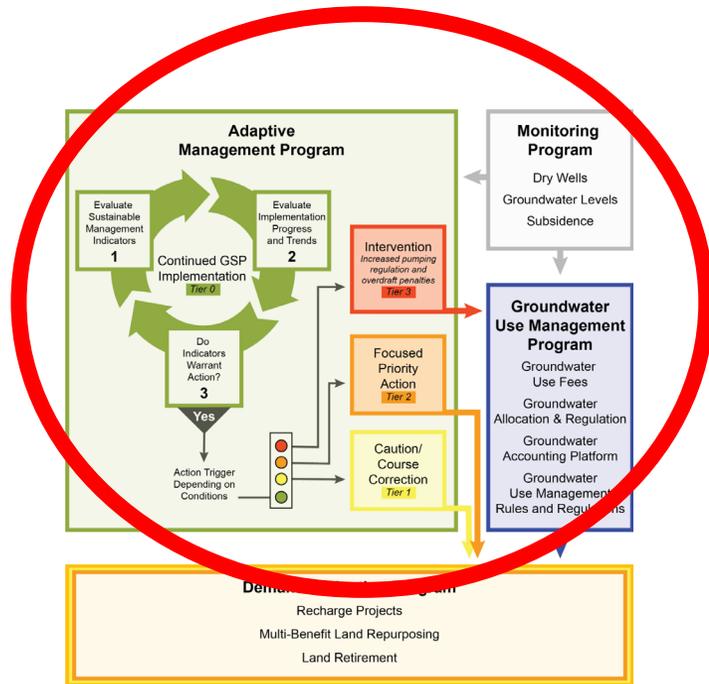
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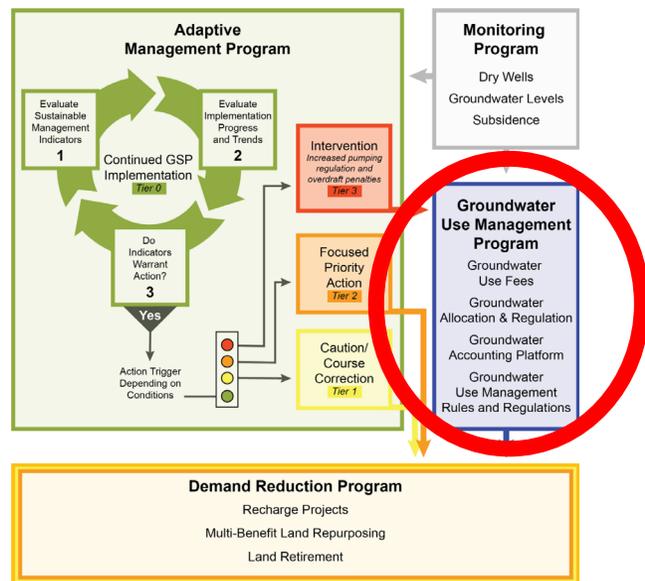
GROUNDWATER DEMAND REDUCTION FRAMEWORK



SGMA Operational Assessment

- Funds GSA Operations and Compliance
- \$17.75/acre for Irrigated Parcels
- \$1.54/acre for Non-Irrigated Parcels
- About 20 requests to reclassify parcels from irrigated to non-irrigated
- A few applications to reclassify parcels from non-irrigated to irrigated



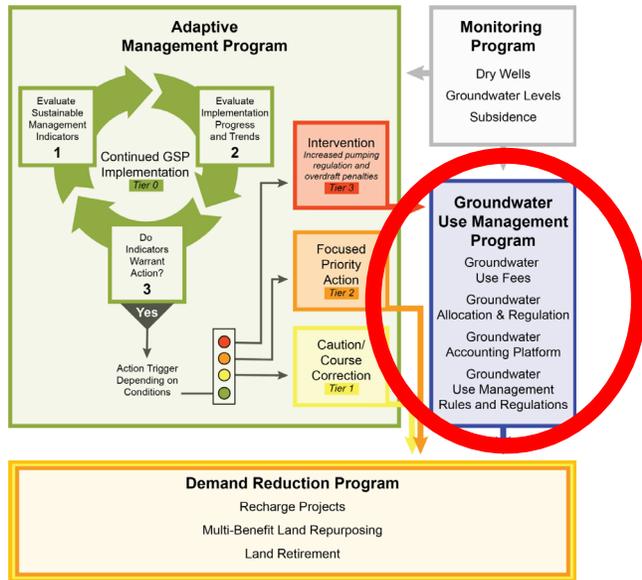


Groundwater “Allocations” and Use

- Applied to “Irrigated Parcels”
- Consistent with Reduction Targets that decrease over time
- First two steps (to 20% reduction) locked in, the rest are subject to future adaptation
- Consistent with GW Use Fee Program
- Use measured using ET (Land IQ)
- Tracked on Groundwater Accounting Platform

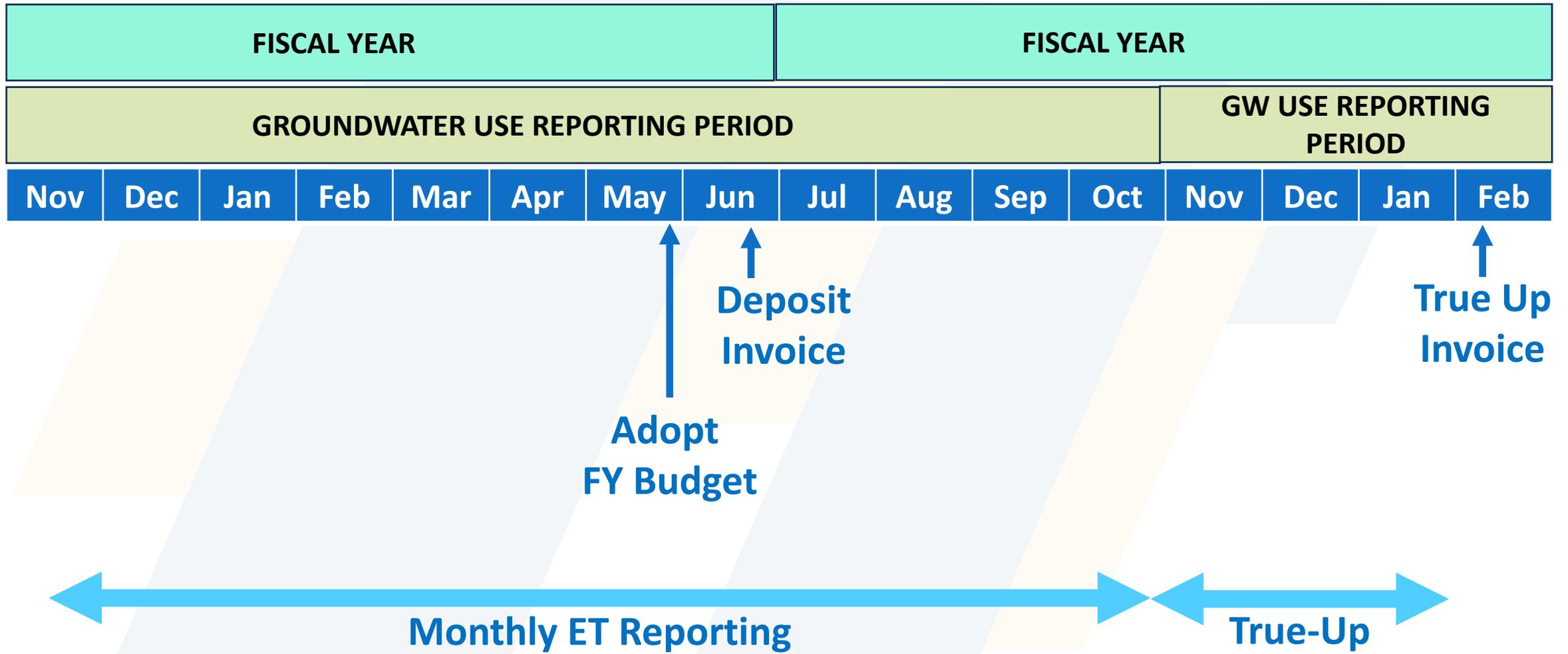
Groundwater Use Fee

- Adopted May 2025 to fund PMAs
- Deposit Invoice: Collected ~\$2.5 million so far
- True Up Invoice: January or February 2026

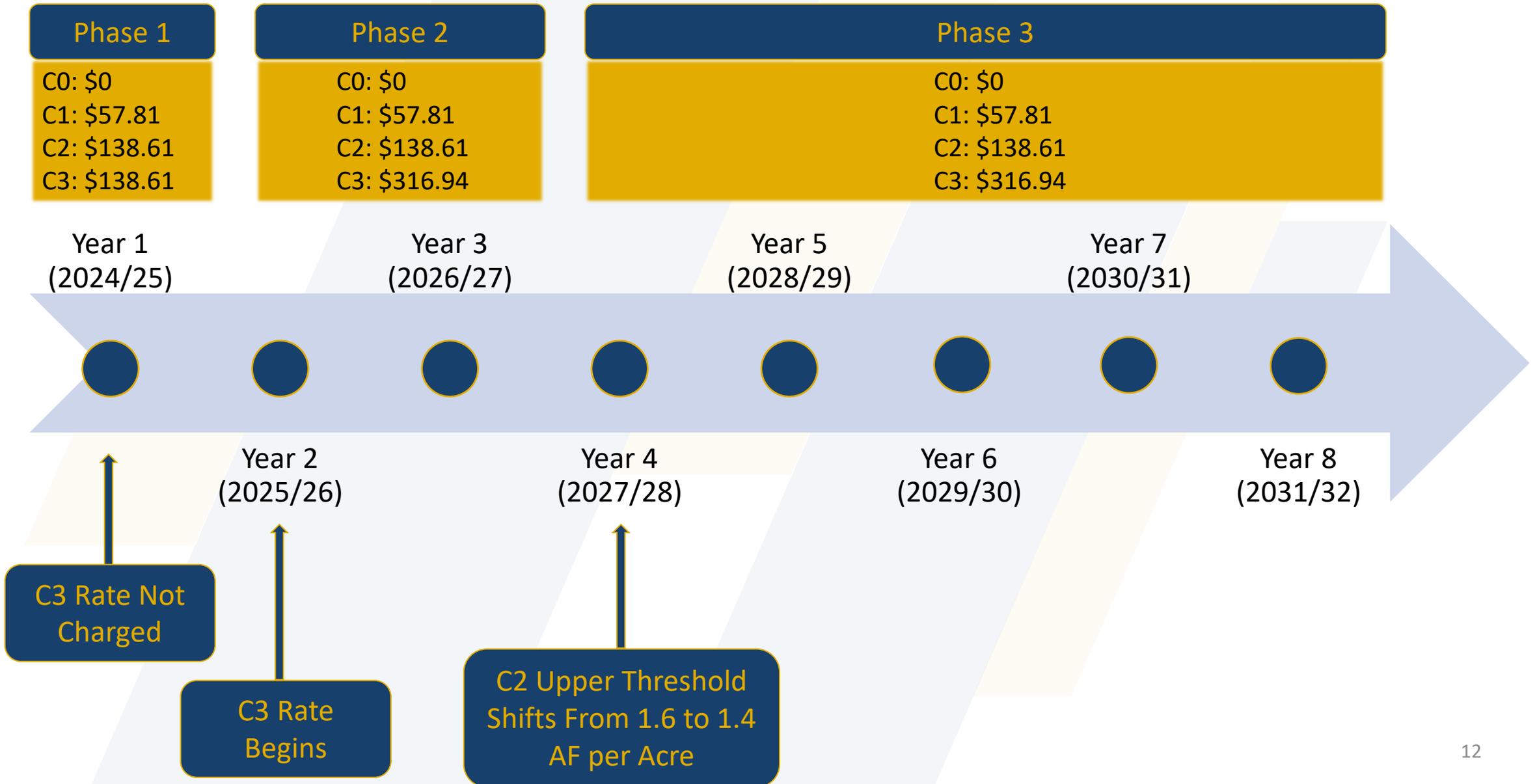


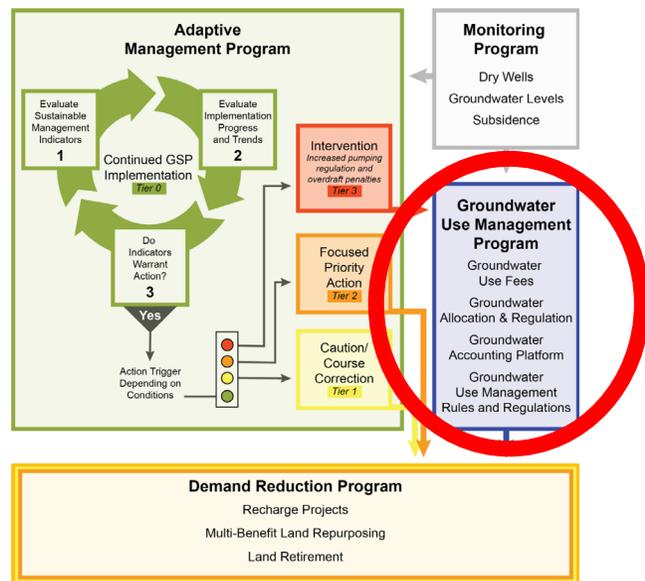
| Category | Description | Consumed Groundwater Category Threshold (AF/Ac) | Rate (per AF) |
|------------|-------------------------------------------------------------|-------------------------------------------------|---------------|
| Category 0 | Estimated Native Yield (no charge) | 0.0 - 0.5 | \$0.00 |
| Category 1 | Estimated Sustainable Yield | 0.5 - 1.1 | \$52.27 |
| Category 2 | Use above Sustainable Yield, and below the Reduction Target | 1.1 - 1.6 | \$138.61 |
| Category 3 | Use above Reduction Target | Greater than 1.6 | \$138.61 |

INVOICING AND BUDGETING TIMELINE



PROPOSED FEE PROGRAM PHASES - TIMELINE





Rules and Regulations

- Phase 1 defined GW Allocations, measurement and use and was adopted January 2025
- Phase 2 defines Carryover, Surface Water Credits, Recharge Credits and Fallowing and was adopted August 2025
- Updated approaches to surface water use and recharge credit splits expected soon
- Transfers and Pooling Management Zones in the future

Projects and Management Actions

- GSP Projects

- Replenishment Water expansion
- Dry Creek expansion
- Backbone Projects use creeks for conveyance

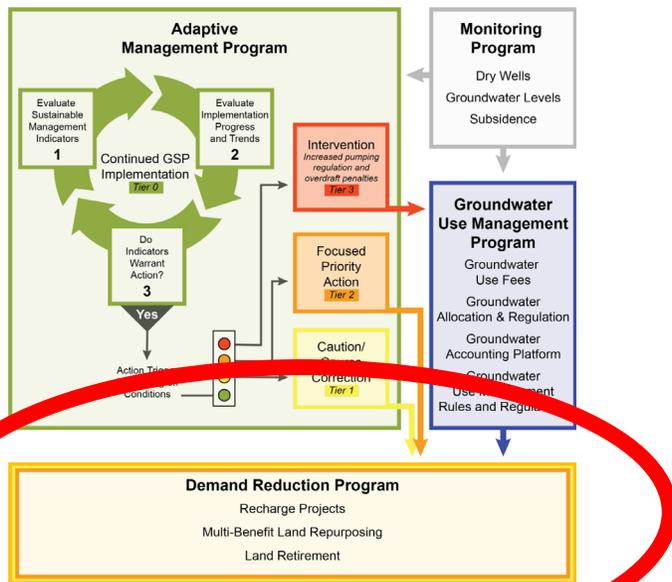
- Incentivized Fallowing Program

- Implementation expected starting later this summer

- Multi-benefit Land Repurposing Program

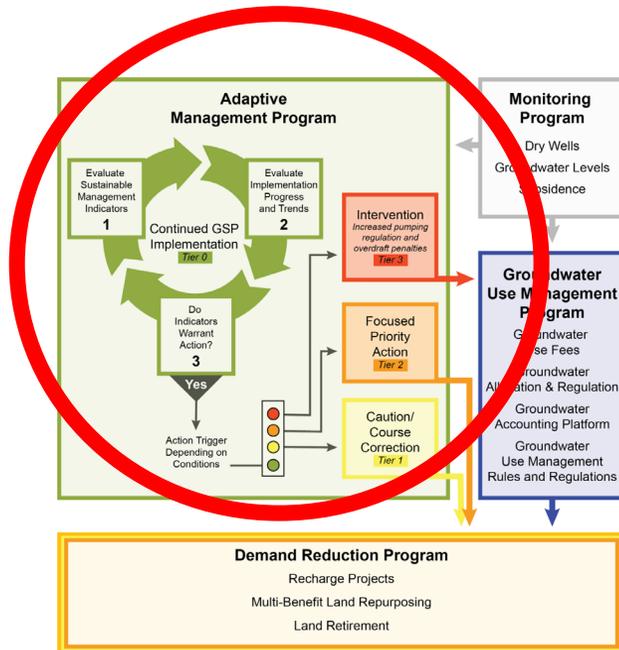
- Pilot Projects this fall
- Full scale solicitation Q1 2026

- Incentive Rate Structure and Procedures coming soon



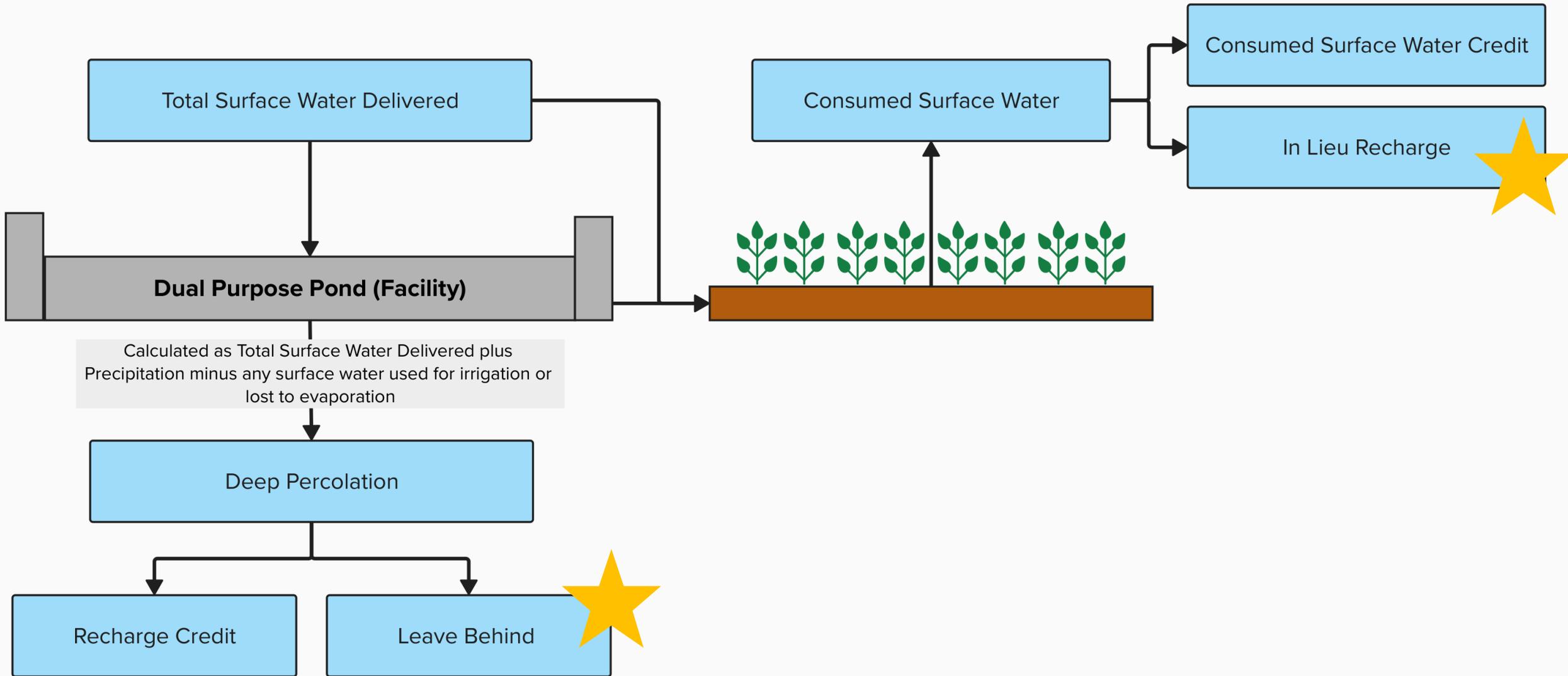
Adaptive Management Program

- Priority Action Areas
 - Cortez Incipient Subsidence Area
 - ETSGSA-08 Area
- Prioritize Projects and Management Actions
- Focused analysis and monitoring
- Restrict pooling across boundaries

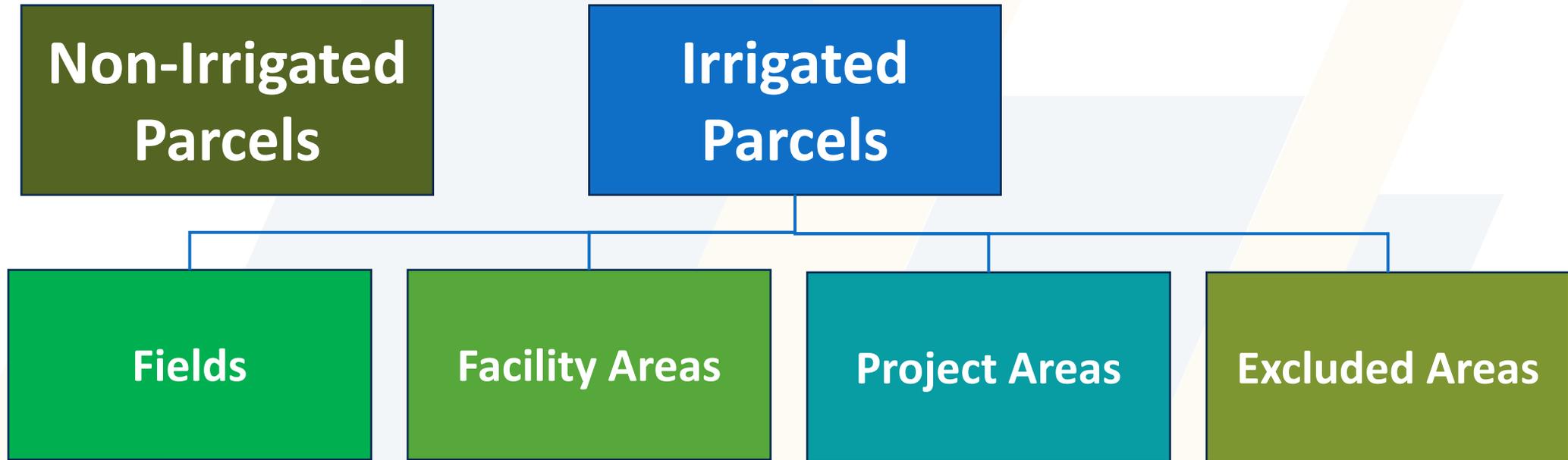


SLIDES IN RESERVE RULES & REGULATIONS

Credits from Combined Irrigation and Recharge



LAND USE AREA DEFINITIONS



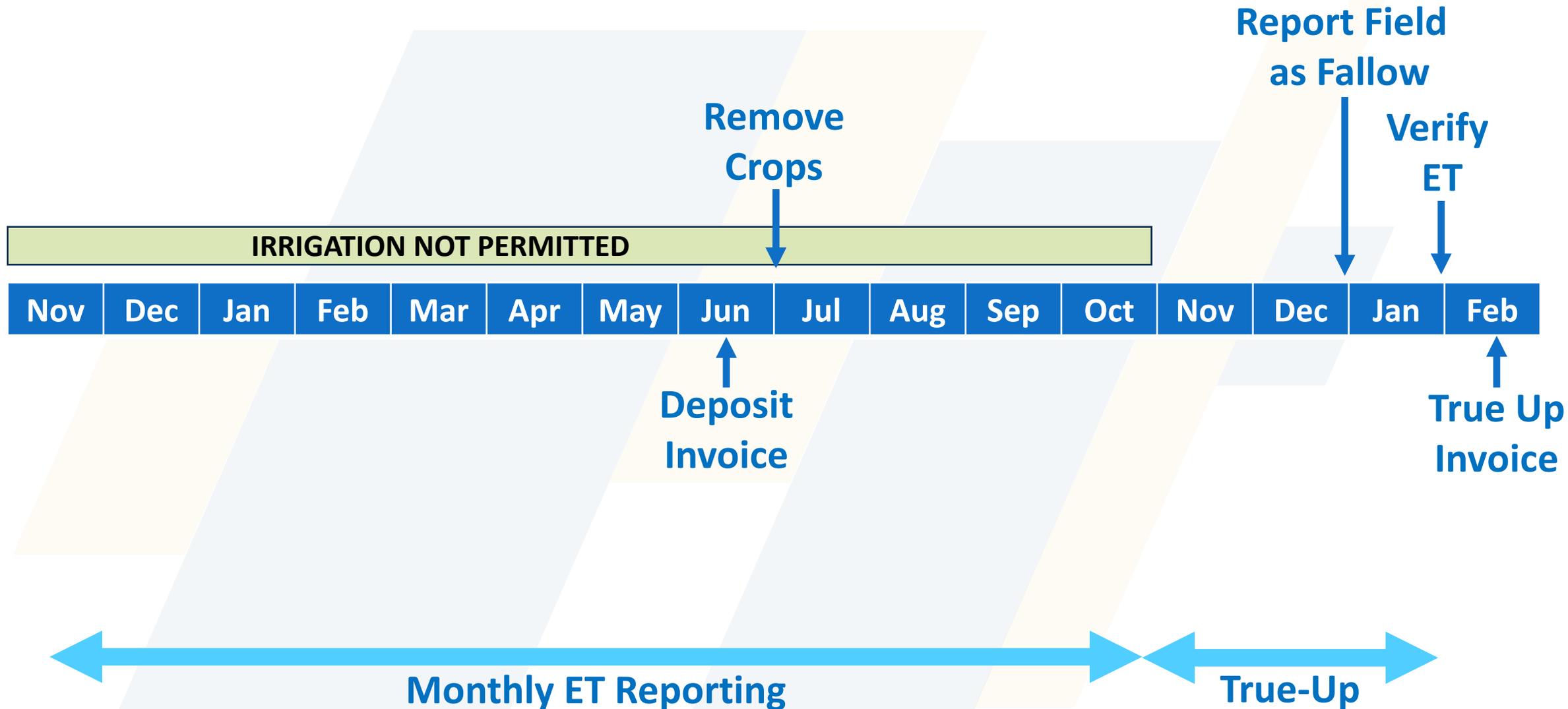
LAND USE AREA SUMMARY

| Consideration | Irrigated Field | Self-Directed Fallow Field | Facility Area | Project Area (IFP, MLRP, Other) | Excluded Area |
|-------------------------------|-------------------------------------------------|------------------------------------------------------------------------|---------------|----------------------------------------|---------------|
| Allocation | Yes | Yes | Yes | No | Yes |
| Monthly ET Tracking | Yes | Yes | No | No | No |
| GW Use Reporting | No | No | Yes | No | No |
| GW Use Calculation at True-up | Yes | No (If ET – Effective Precip </= 0.5 AF/ac during Reporting Period) | Yes | No | No |
| Other Self Reporting | Cover Cropping Self Attestation (if applicable) | Following Self Attestation @ end of Reporting Period | None | Metered or calculated inflows/outflows | None |
| Other Calculations | Cover Cropping adjustment (if applicable) | None | None | Credit Calculations | None |

DRAFT REQUIREMENTS FOR SELF-FALLOWING

- Fallowed Fields that are not under an IFP or MLRP contract:
 - Receive a groundwater allocation
 - Are excluded from Consumed Groundwater Use accounting
- Requirements:
 - Must be registered within 60 days after the end of the Reporting Period (Dec 30)
 - Formerly irrigated crops are removed by June 30 of the Reporting Period (Nov 1 to Oct 31)
 - There must be no irrigation during the Reporting Period (Nov 1 to Oct 31)
 - There can be cover crops, dryland crops, pasture, etc. as long as there is no irrigation
 - ET – Effective Precipitation must be ≤ 0.5 AF/ac for the Reporting Period
 - Applies to the entire field, not a portion of a field. (For a partially fallowed field, reduced consumed groundwater will be reflected in the ET from the fallowed area.)
- Procedures:
 - Reporting using the GAP Self-Reporting Module (Self-Attestation)
 - Monthly and cumulative ET – Effective Precip reported in GAP
 - Cumulative Reporting Period ET – Effective Precip calculated in True-Up after end of Reporting Period and used to verify fallow status qualification
 - Qualifying fields are excluded from Consumed Groundwater Use calculation

SELF-FOLLOWING TIMELINE



RECHARGE

Recharge Definitions

- Recharge
- Recharge Facility
- Recharge Credit

Designation of a Recharge Facility

- Designation through a Project Agreement
- Self-Registration of an existing or self-funded project
- Recharge Facilities can generate Recharge Credits during the true-up calculation at the Reporting Period end
- Recharge Facilities are included in the GAP as a location polygons

Calculation of Recharge

- Recharge Facility inputs/outputs are self reported through the GAP self-reporting module (Meter Data or other approved method)
- ETSGSA applies a seasonal efficiency adjustment from April – September and October - March
- At this time, no adjustment for site-specific conditions is proposed

Calculation of Recharge Credit

- Calculate Recharge Credit based on Credit-Leave Behind split
- Add to Water Account supply as a separate line item for which there is no charge
- Credit expires after three years

Carryover Credit Topics List

Definition: Any unused portion of Category 0, Category 1, and Category 2 groundwater assigned to a Water Account in each Reporting Period may be carried forward and may be credited to the Water Account as a Carryover Credit.

1. How does Carryover Occur

- ❑ Unused allocations are automatically carried over to the next Reporting Period unless requested to be paid out

2. Categories Eligible for Carryover

- ❑ Category 0, Category 1, Category 2 are eligible for carryover
- ❑ Category 3 is not eligible for carryover

3. Expiration of Carryover

- ❑ A Carryover Credit will expire after 3 years and amounts paid will be refunded

4. Priority of Use

- ❑ The default priority of use shall be as follows: (1) Carryover then (2) the current Reporting Period's Allocation within a category, applied in order of increasing Category (0, then 1, then 2)

5. Payment

PROJECT UPDATES

TWO TYPES OF PROJECTS & INCENTIVE PAYMENTS

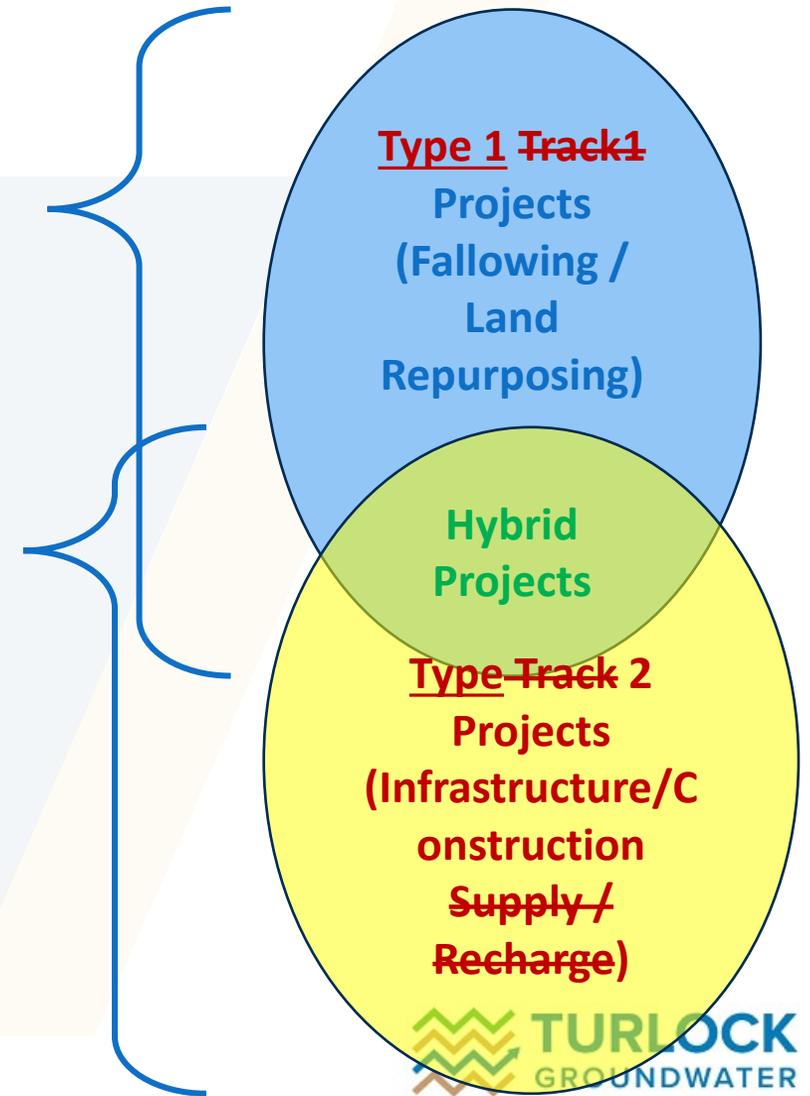
- **Type 1 Recurring Annual Incentive Payments**

- Units will typically be \$ per year per acre

- **Type 2 One-time Incentive Payments**

- Common self-performed items incentivized at unit rates (e.g., \$/cu yd or \$/ft or \$/HP)

- Incentive cost share of actual contracted implementation costs



TYPE 1 INCENTIVE PAYMENTS

| Land Repurposing Practice | ETSGSA Annual Incentive Rate * |
|---------------------------------------------|--------------------------------|
| Incentivized Fallowing Program (IFP) | \$730 |
| Multibenefit Land Repurposing (MLRP) | |
| Rotational Extended Fallowing | \$890 |
| Orchard Swale Rewilding | \$1,300 |
| Floodplain Reconnection | \$1,450 |
| Flood Flow Spreading | \$1,590 |
| Swale Ponds (maintenance) | \$970 |
| Recharge or Storage Basins (maintenance) | \$1,050 |

* IFP rate based on Category 3 Groundwater Use Fee rate multiplied by the average almond field ET of 2.3 afy/acre. MLRP rates are based on NRCS EQIP analogs for implementation and periodic maintenance, interspersed with the baseline IFP rate.

TYPE 2 INCENTIVE PAYMENTS

- Application Process for Type 2 Incentives
 - Sidegates, pumps, pipelines, filters, metering and other conveyance and distribution infrastructure must be installed by a qualified contractor.
 - Other improvements may be constructed by a contractor or self-implemented (e.g., basins, ponds, outlet controls, ranch roads, general earthwork, etc.)
 - Applications must include at least two quotes for contractor-implemented work
 - Applications must include quantity estimates for self-implemented work
 - Supporting details and calculations
- Type 2 Incentive Payment Amounts
 - 50% of contractor invoices outside Priority Action Areas
 - 60% of contractor invoices inside Priority Action Areas
 - Type 2 Rates based on EQIP analogs for self-implemented work

TYPE 2 INCENTIVES FOR SELF-IMPLEMENTED WORK

| Project Component | Incentive Payment Rates | | |
|---------------------------------|------------------------------------------------------------------------------------------------------------|------------|----------------|
| | Description | Rate | Unit |
| Basin or Reservoir Construction | Construct water storage/recharge basins or embankment reservoirs for stream abstraction | \$5,400.00 | \$/AF Capacity |
| Swale Pond | Construct detention/retention ponds in topographic swales or hollows | \$3,700.00 | acre |
| Flow Control Outlet | Install Flow Control Outlets (e.g., Double Track Weirs, Flashboard Risers, Armored Weirs/Overflow Outlets) | \$2,400.00 | each |
| Diversion Ditch and Berm | Diversion ditches and berms for flood flow spreading | \$6.00 | linear ft |
| Ranch Road | Construct new earth surface ranch roads | \$6.50 | foot |
| General Earthwork | Miscellaneous general earthwork, excavation, grading and compaction | \$3.70 | cy |

PROJECT INCENTIVE AGREEMENTS

Project Incentive Agreement

Project Map

Implementation Standards

Project Components List

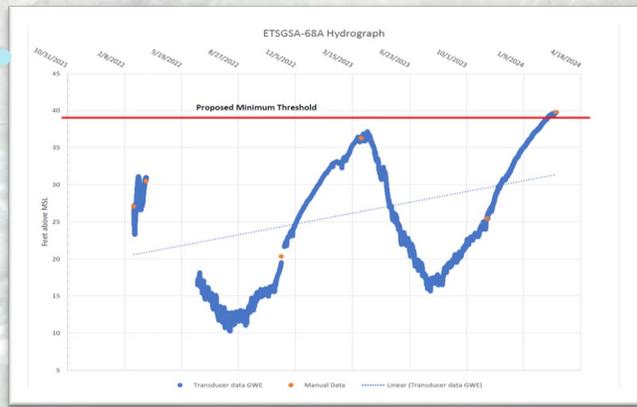
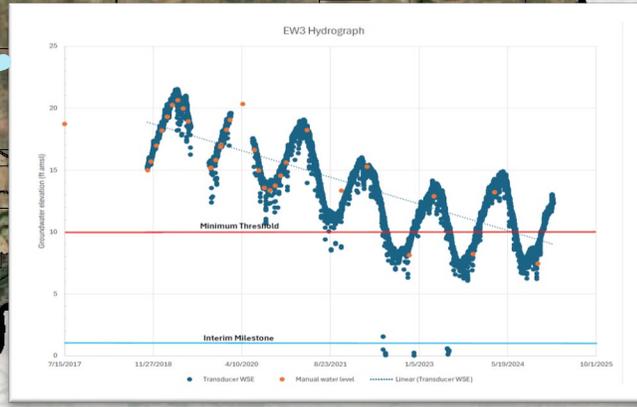
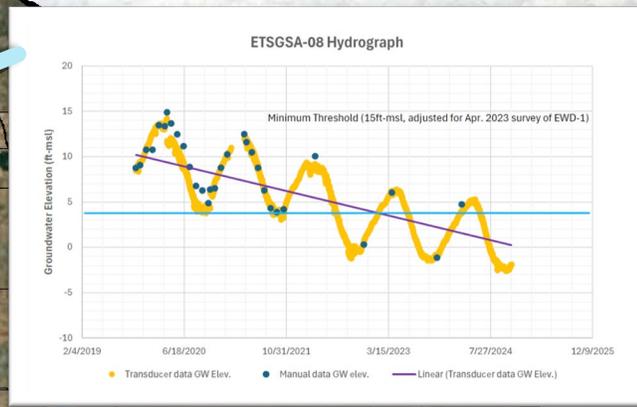
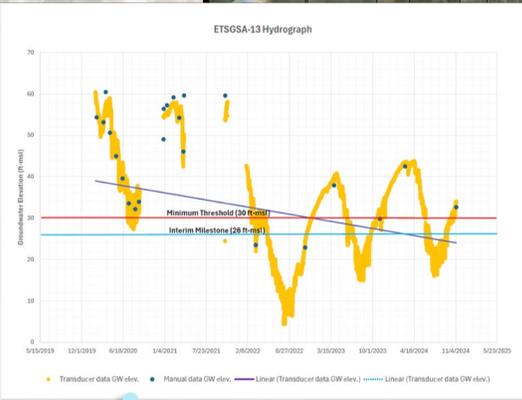
Schedule of Incentive Payments

Develop standard Project Incentive Agreement with a term of 3 to 10 years and attachments that describe requirements and payments:

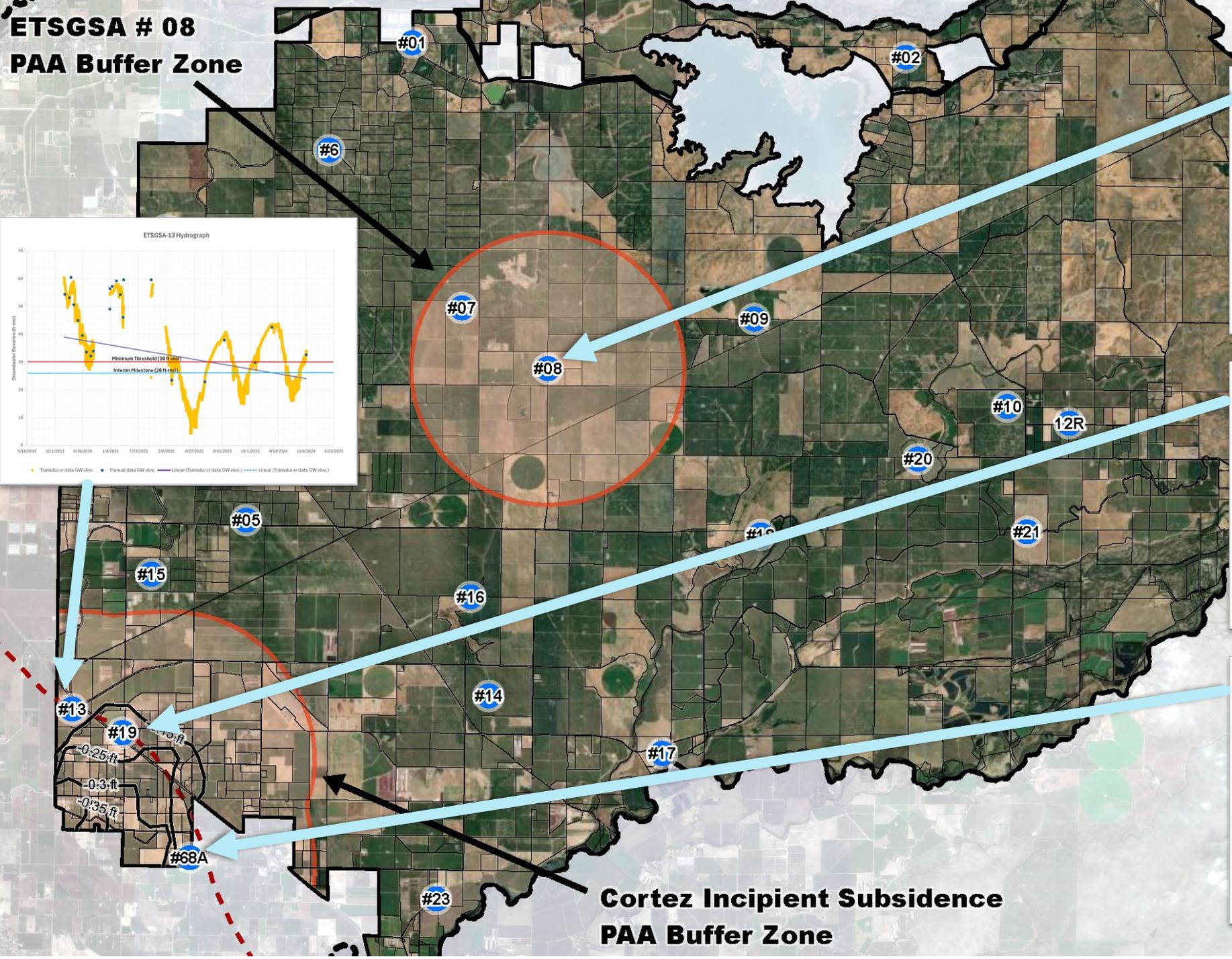
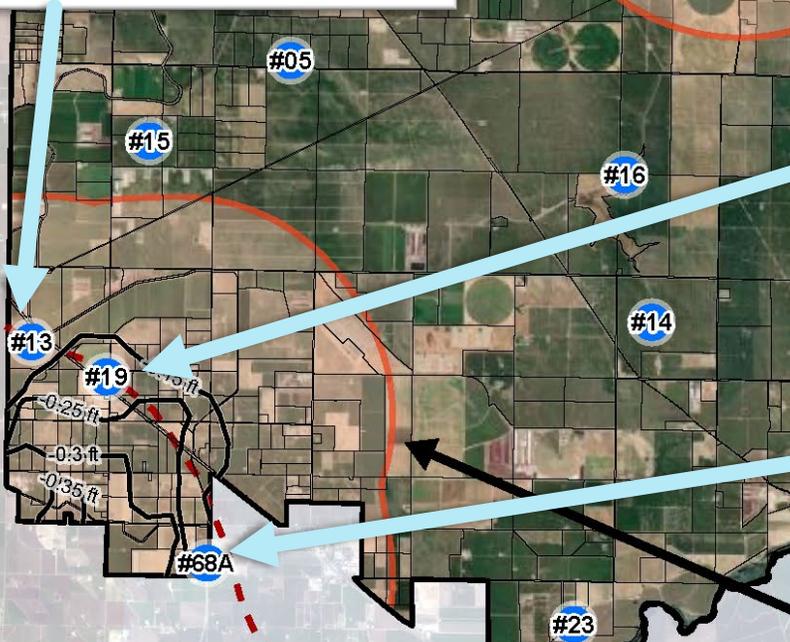
- 1. **Project Map** keyed to callouts that describe the extent of Land Repurposing and locations of standard Project Components*
- 2. **Implementation Standards** for Type 1 Land Repurposing*
- 3. **List of Project Components** for Type 2 project infrastructure improvements*
- 4. **Schedule of Incentive Payments** for Land Repurposing and standard project infrastructure improvement components*

ADAPTIVE MANAGEMENT UPDATES

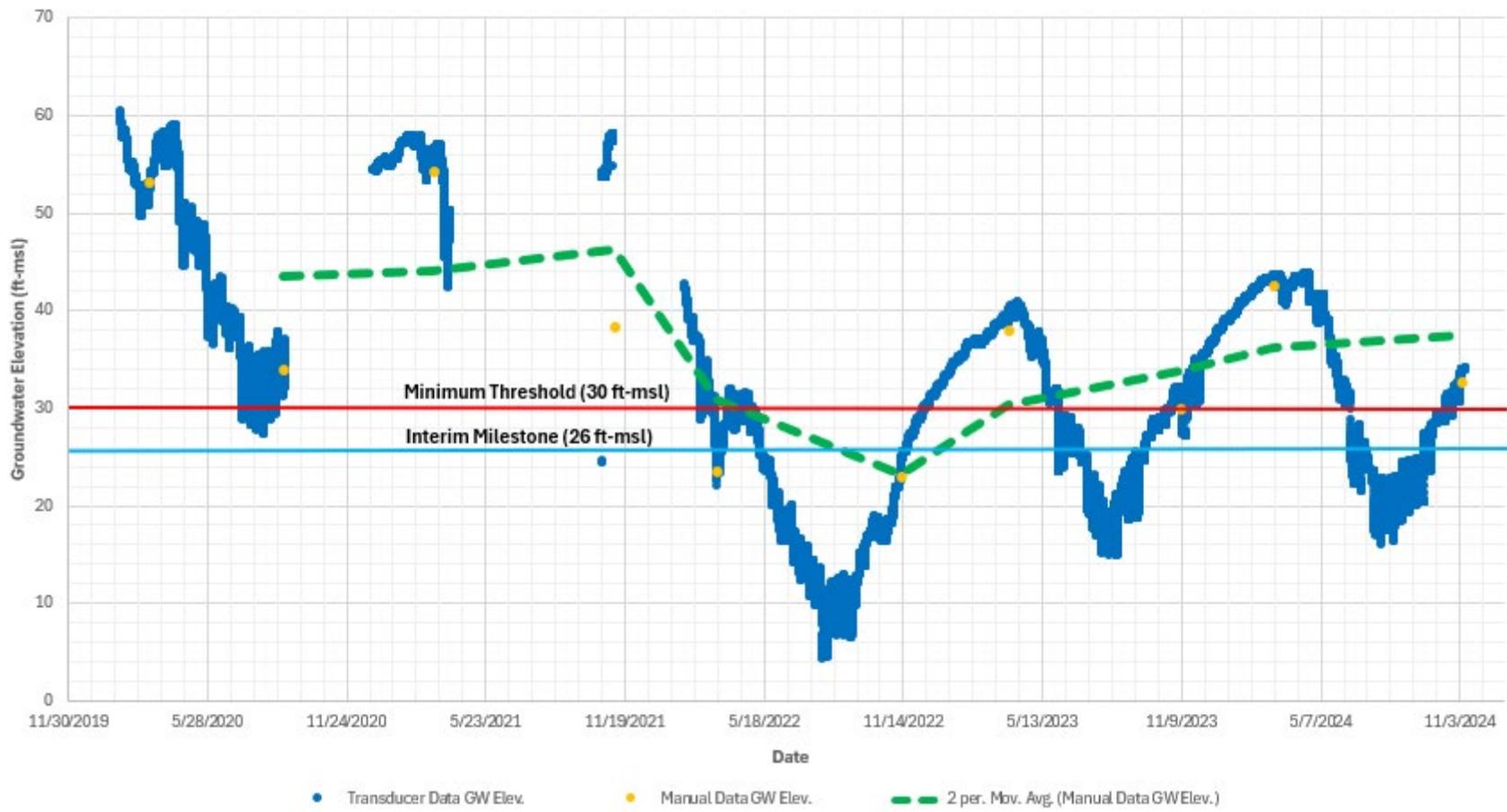
ETSGSA # 08 PAA Buffer Zone



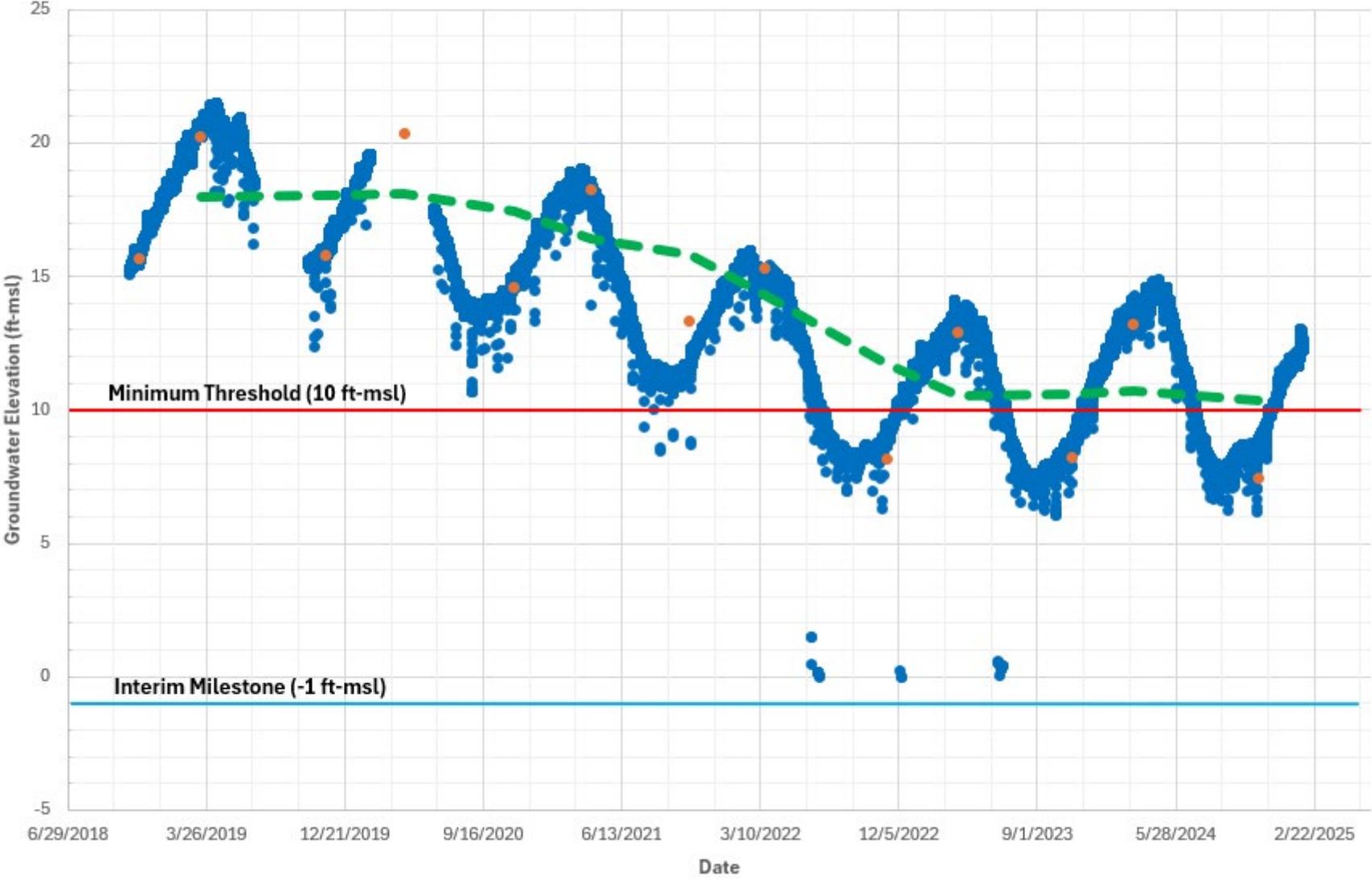
Cortez Incipient Subsidence PAA Buffer Zone



ETSGSA-13 Manual & Transducer Groundwater Elevation Data
2/4/2020 to 11/7/2024



EW-3 Hydrograph - Manual & Transducer Groundwater Elevation Data 10/25/2018 to 1/31/2025



● Transducer Data GW Elev. ● Manual Data GW Elev. - - - 2 per. Mov. Avg. (Manual Data GW Elev.)

ETSGSA-8 Hydrograph - Manual & Transducer Groundwater Elevation Data
(10/25/2019 to 11/6/2024)

