

2023

THE ALMOND CONFERENCE

Connecting the Dots

GROWERS // HANDLERS //
CUSTOMERS // CONSUMERS

Grower Breakfast Session: Understanding Funding Opportunities

Moderator: Jesse Roseman (ABC)

Speakers: Kelli Evans (Evans Farming), Caddie Bergren (UC ANR), Aaron Fukuda (Tulare Irrigation District), Roger Isom (Western Agricultural Processors Association), Jesse Bahm (NRCS)



Speakers

GROWER BREAKFAST SESSION: UNDERSTANDING FUNDING OPPORTUNITIES

Moderator: Jesse Roseman, ABC

Kelli Evans, Evans Farming

Caddie Bergren, UC ANR Climate Smart Agriculture Program

Aaron Fukuda, Tulare Irrigation District

Roger Isom, Western Agricultural Processors Association

Jesse Bahm, Natural Resources Conservation Service



Direct Government Grants (+ assistance)

Growers (potentially with TSP or Consultant support) apply to Federal and State Grants

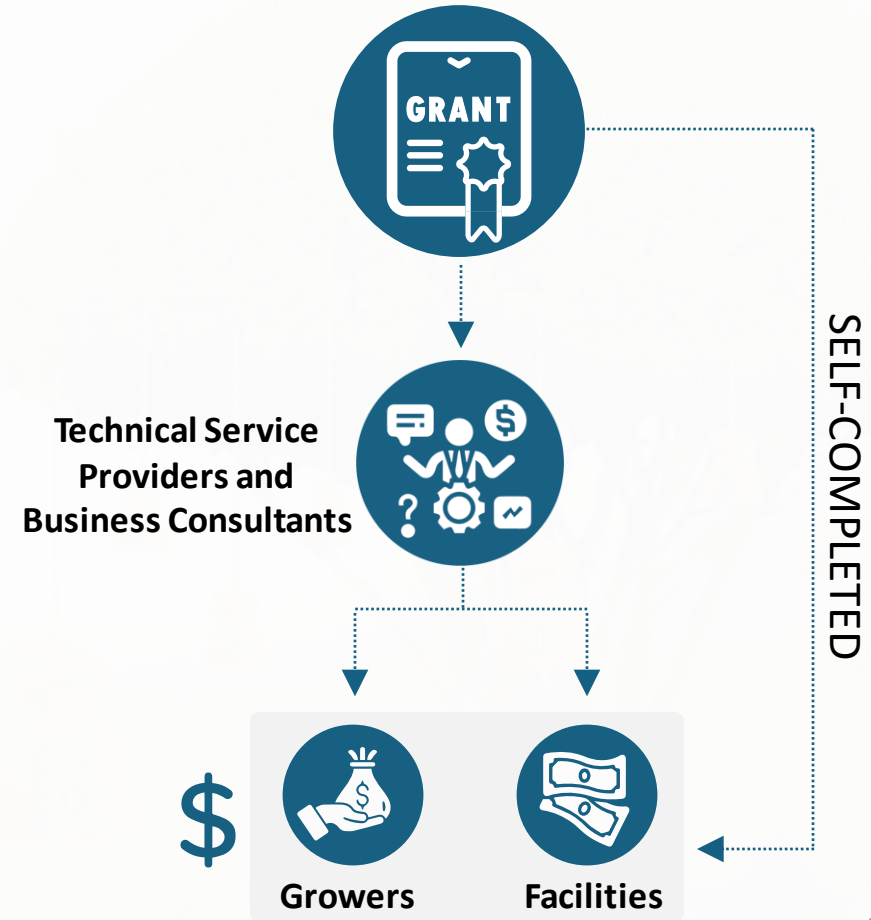
Examples:

- *CDFA*: SWEEP, Healthy Soils Program (HSP), Conservation Ag Planning Grants, Pollinator Habitat
- *NRCS*: Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP)
- *San Joaquin Valley Air Pollution Control District*: Low Dust Nut Harvester Replacement Program
- *Business Consultants*: Hortau, NewGen Energy
- *Technical Service Providers*: UC ANR Climate Smart Ag Program

Considerations:

- Available throughout almond growing region (except for SJV Air District funding)
- Can be multiple agencies and programs for the same practice (e.g., Whole Orchard Recycling, Low-dust harvesters, irrigation changes)
- Application details and requirements vary by practice and agency
- Experts are available to assist growers with applications

Government Grants



**FIND MORE GRANT INFORMATION AT
[ALMONDS.COM/INCENTIVES](https://www.almonds.com/incentives)**

Government Grants Pass-through 3rd Party

3rd party receives Federal and/or State Block Grants, which they pass-through to growers and facilities

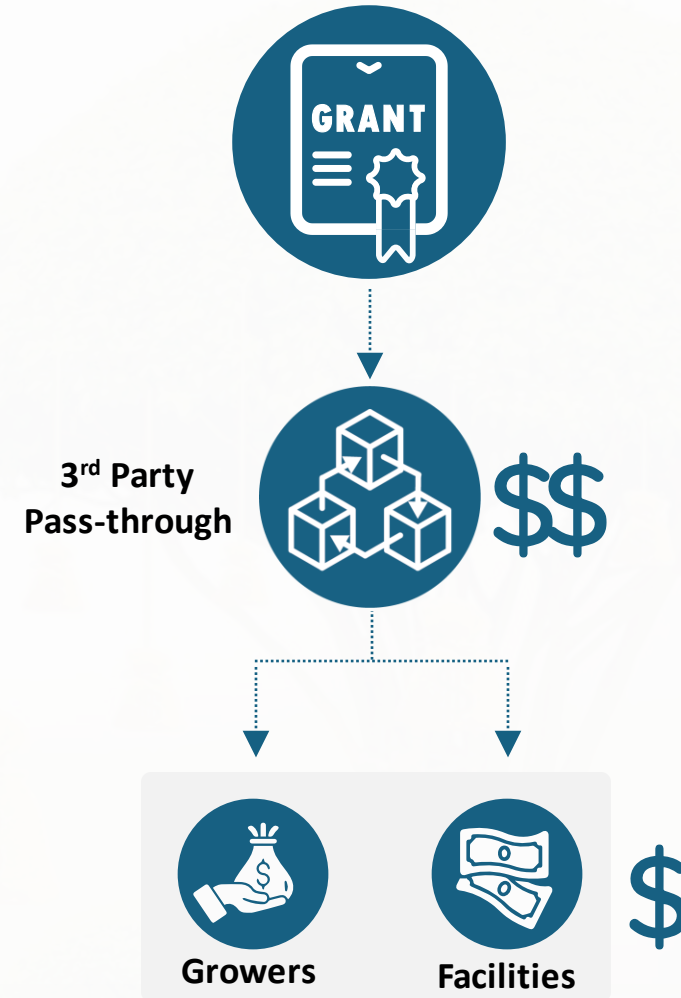
Examples:

- Pollinator Alliance (Great Valley Seeds and Almond Alliance)
- Partnerships for Climate-Smart Commodities Grant/ CCC (Blue Diamond Growers)
- NRCS Regional Conservation Partnership Program (American Farmland Trust, Pollinator Partnership)

Considerations:

- Available in distinct counties, regions, specific organizations, focused recipients
- Multiple agencies offering the same or similar programs and practices (e.g., Pollinator Habitat, Healthy Soils)
- Application details and requirements may vary by 3rd Party
- Same organization can assist growers with applications and provide funding

Government Grants



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Incentive and Grower Support Zone

THIS IS THE PLACE TO LEARN ABOUT GOVERNMENT INCENTIVES AND OTHER FORMS OF SUPPORT. THESE ORGANIZATIONS ARE IN THE ZONE (OUTSIDE THE PLENARY HALL) AND EXPO HALL:

- American Farmland Trust



- California Association of Resource Conservation Districts



- California Department of Food and Agriculture Office of Environmental Farming and Innovation



- California Department of Food and Agriculture's Fertilizer Research and Education Program (FREP)



- California Department of Pesticide Regulation



- California Department of Water Resources California Irrigation Management Information System (CIMIS)



- East Stanislaus Resource Conservation District



- Glenn County Resource Conservation District



- Madera/Chowchilla Resource Conservation District



- Natural Resources Conservation Service (NRCS)



- North West Kern Resource Conservation District

- Pollinator Alliance and Great Valley Seed Company



- RCD of Tehama County/Northern Sacramento Valley Mobile Irrigation Lab



- San Joaquin Valley Air Pollution Control District



- Sutter County Resource Conservation District



- University of California Agricultural and Natural Resources



- University of California Agriculture and Natural Resources/Climate-Smart Agriculture Program

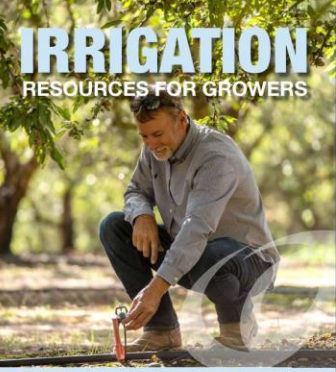


- USDA California Farm Service Agency



- Yolo County RCD/Sutter-Yolo Mobile Irrigation Lab





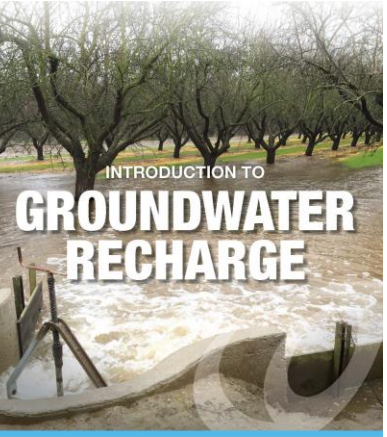
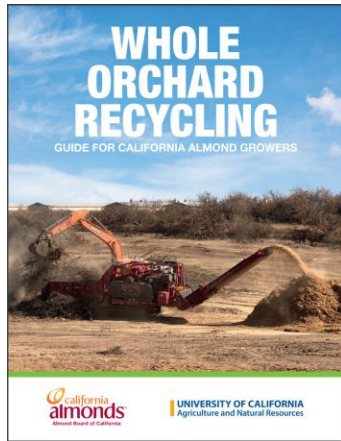
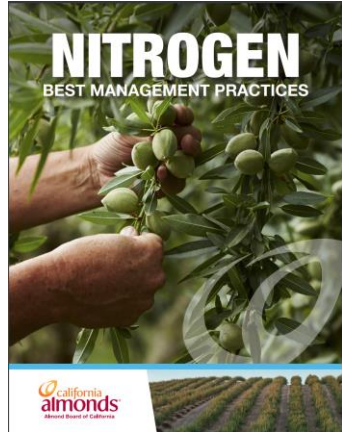
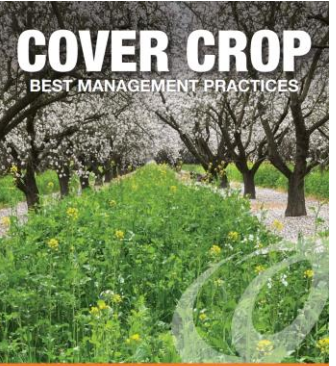
UC IPM Pest Management Guidelines - ALMOND

Conservation Practice 595
Conservation Pest Management System



Documentation for use of Integrated Pest Management (IPM) Program
including Mating Disruption for Navel Orangeworm (NOW) Control in Almonds

All guidance based on University of California
Integrated Pest Management Program Guidance



ABC Grower Resources

SEE INCENTIVE ZONE GUIDANCE
IN TWO PAGER.

MANY FUNDABLE PRACTICES
ALSO HAVE AN ABC GUIDE.



Incentive and Grower Support Zone Key

	Disaster Relief	Dust Reduction	Energy	Easements	Emissions Reduction	Groundwater Recharge	Irrigation System	Pollinator Habitat	Soil Health	Water Quality	IPM
American Farmland Trust				X		X	X	X	X	X	
Dept. of Pesticide Regulation										X	X
DWR CIMIS						X	X				
Mobile Irrigation Lab			X				X			X	
San Joaquin and Sacramento Valley Resource Conservation Districts				X		X	X	X	X	X	
Pollinator Alliance						X		X	X		
USDA Farm Service Agency	X										
UCANR Climate Smart Agriculture Program						X	X	X	X	X	
UCANR and CDFA FREP							X		X	X	
CDFA							X	X	X	X	
San Joaquin Valley Air Pollution Control District		X	X		X				X		

Questions?

WRITE YOUR QUESTION, HOLD IT UP AND
HAND THEM TO ABC STAFF.





KELLI EVANS

**Evans Farming
&
Evans Ag Consulting**





BACKGROUND



- Farming for over 17 years
- Evans Ag Consulting - CEO
- Evans Farming - CFO
- Almond Board of California - Director
- Blue Diamond Growers - Liaison Committee
- Almond Alliance - Grower Committee



Programs That We Specialize In

Equipment Upgrades
Accepting New Clients

Cover Crops
Accepting New Clients

Compost
Accepting New Clients
Subject to Location

Conservation Cover
Accepting New Clients

Irrigation Upgrades
Waitlist Open

Water Bird Programs
Accepting New Clients

Solar Projects
Waitlist Open

Battery Storage
Accepting New Clients

Low Dust Harvester
Accepting New Clients

Whole Orchard Recycling
Accepting New Clients

Truck Upgrades
Accepting New Clients



CONTACT

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Phone: (530) 682-4784



@franceskellie



@kelli-evans-25a9271b5



A person wearing a hat and a vest is walking away from the camera on a dirt path that runs through a dense almond orchard. The trees are lush green, and the path is a mix of dirt and gravel. The sky is clear and blue.

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CDFA Climate-Smart Incentives: SWEEP and Healthy Soils



CDFA Incentives Programs



HEALTHY SOILS
PROGRAM



STATE WATER
EFFICIENCY AND
ENHANCEMENT
PROGRAM (SWEEP)

Healthy Soils Program

Duration: 3 years

Max grant award: \$200,000

Includes practices such as:

- Compost Application
- Cover Cropping
- Hedgerows
- Whole Orchard Recycling
- Low/No-till
- Nutrient Management



Healthy Soils Program:

How does the grant work?

Online application, opening January 2023
First come, first serve funding

Flat rate reimbursement for each practice, eg:

- \$64/ton for Compost (can be bought or made on-farm)
- \$150/acre Cover cropping
- \$12/ft Hedgerow
- \$860/acre Whole orchard recycling

Must take yearly organic matter sample
Yearly photo verification sent to CDFA



SWEEP Program



Application window open now!
Max grant award: \$200,000
Project must save water AND energy.



Examples:

- Flood to drip/micro conversion
- Replace old pumps
- VFDs
- Solar panels
- Soil moisture sensors/ weather stations

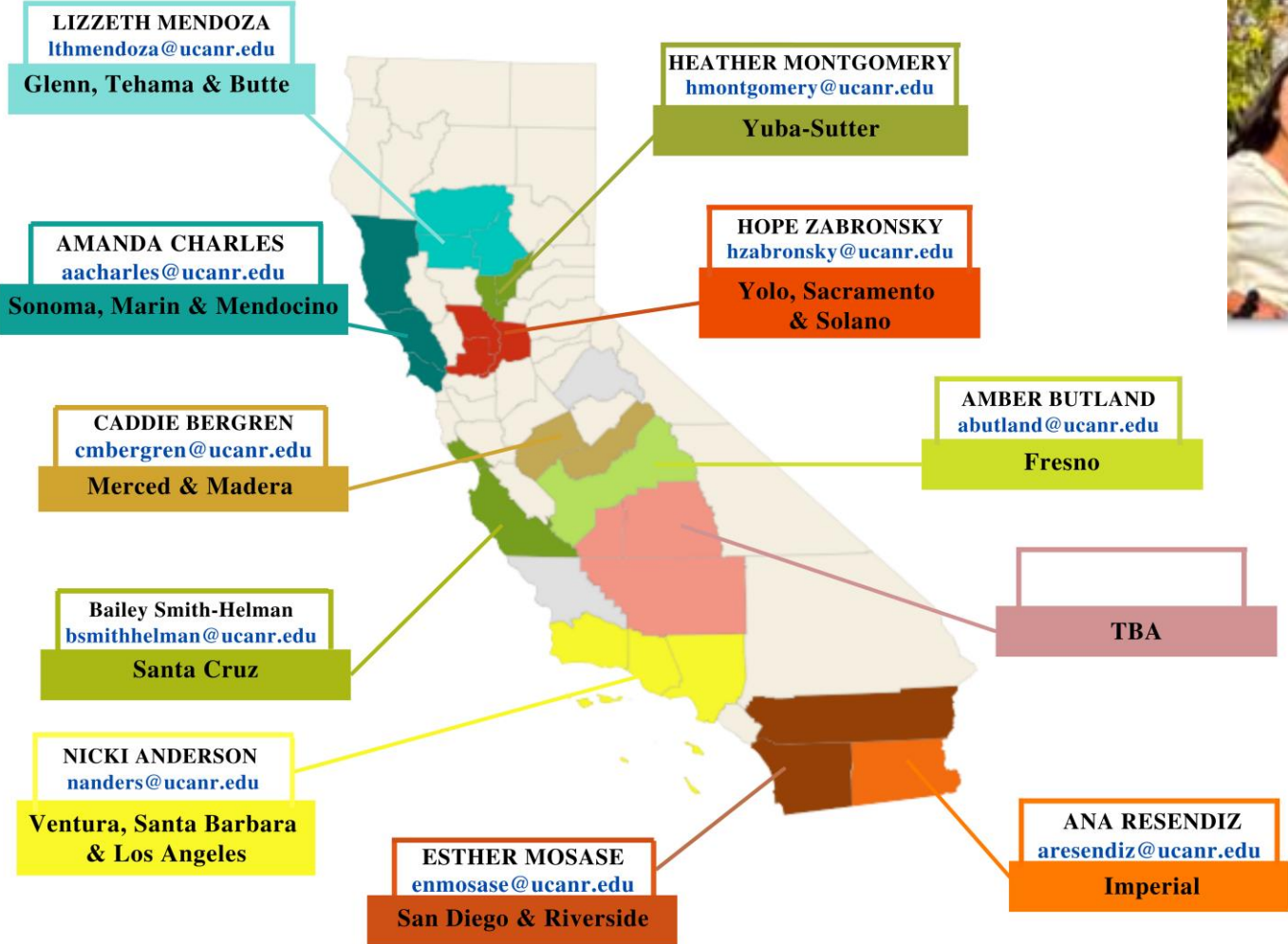
SWEEP Program

What do I need to apply?



1. Recent pump efficiency test(s)
2. Twelve consecutive months energy records for pumps (electric bills or diesel receipts)
3. Quotes/bids from vendors

Climate-Smart Agriculture team at University of California Cooperative Extension





Tulare Irrigation District

Disincentives that can be Incentives



Aaron Fukuda

akf@tulareid.org

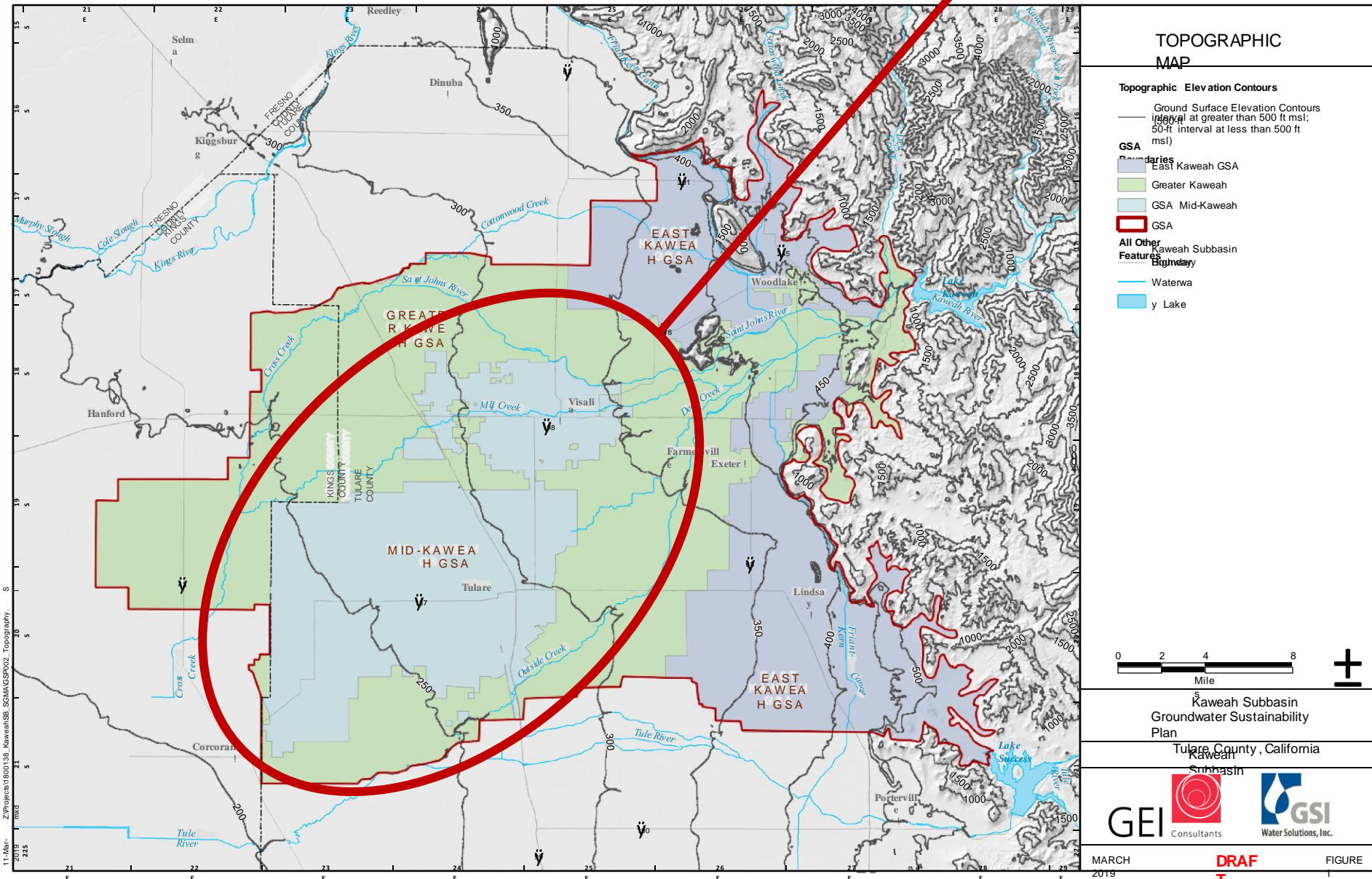
559-707-8928: Mobile

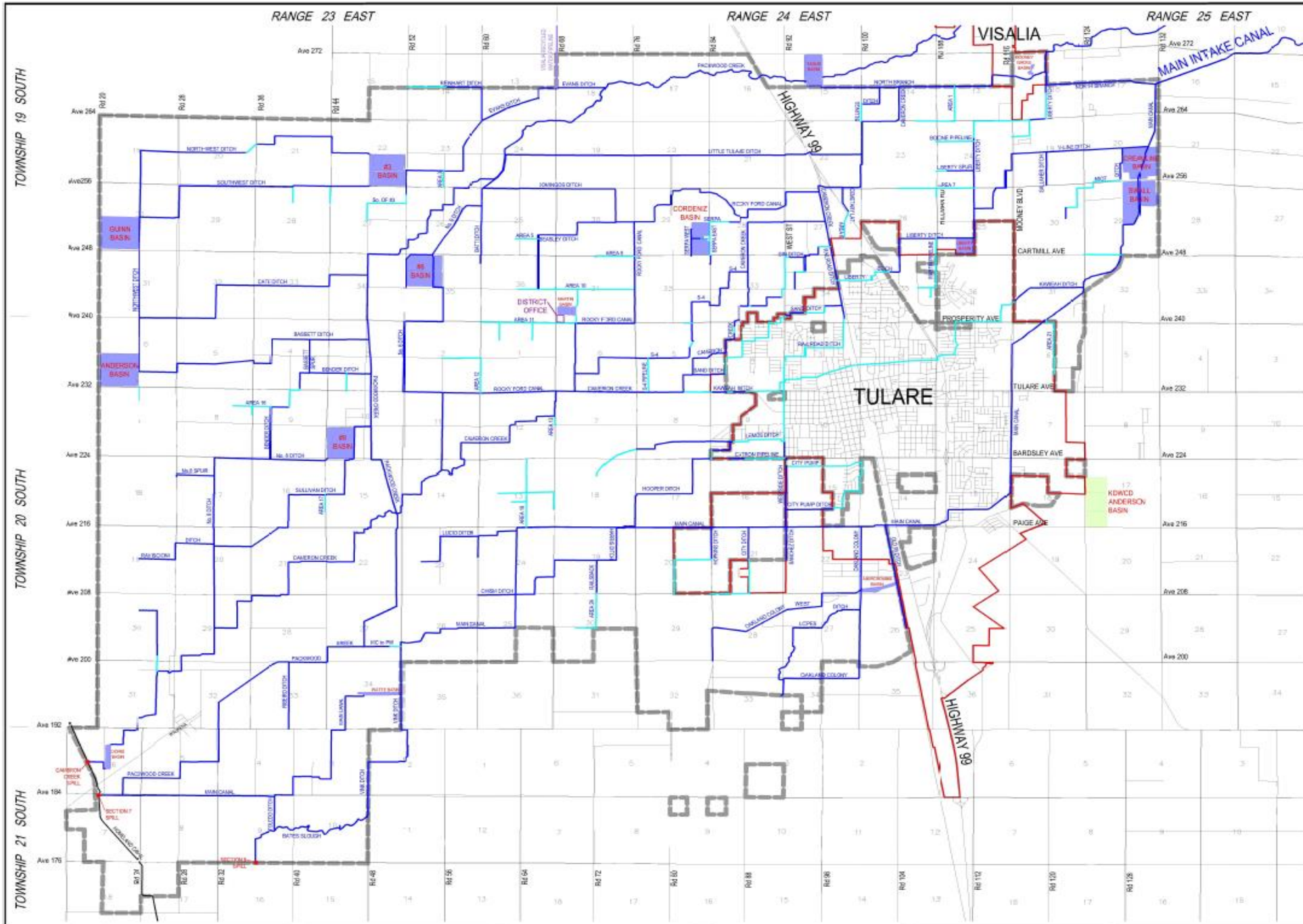
559-686-3425: Office



Kaweah Sub Basin

Mid-Kaweah GSA





STATE OF CALIFORNIA

- LEGEND**
- DISTRICT DITCH
 - DISTRICT PIPELINE
 - - - - DISTRICT BOUNDARY
 - DISTRICT BASIN
 - DISTRICT SPILL POINT
 - KD/WCD ANDERSON BASIN
 - CITY LIMITS
 - VISALIA RECYCLED W/TER PIPELINE
 - CID/BOSWELL CO. HOMELAND CANAL

NOTE: DISTRICT BOUNDARY IS APPROXIMATE. SEE ASSESSOR'S PARCEL MAPS FOR EXACT BOUNDARY.

TULARE IRRIGATION DISTRICT
TULARE, CALIFORNIA

**2019 DISTRICT
MAP**



The Story Begins

SGMA Compliance on The Ground in 2022

We are here to help;

We are going to allocate;

We are going to restrict; and

We are going to charge

You for GROUNDWATER.

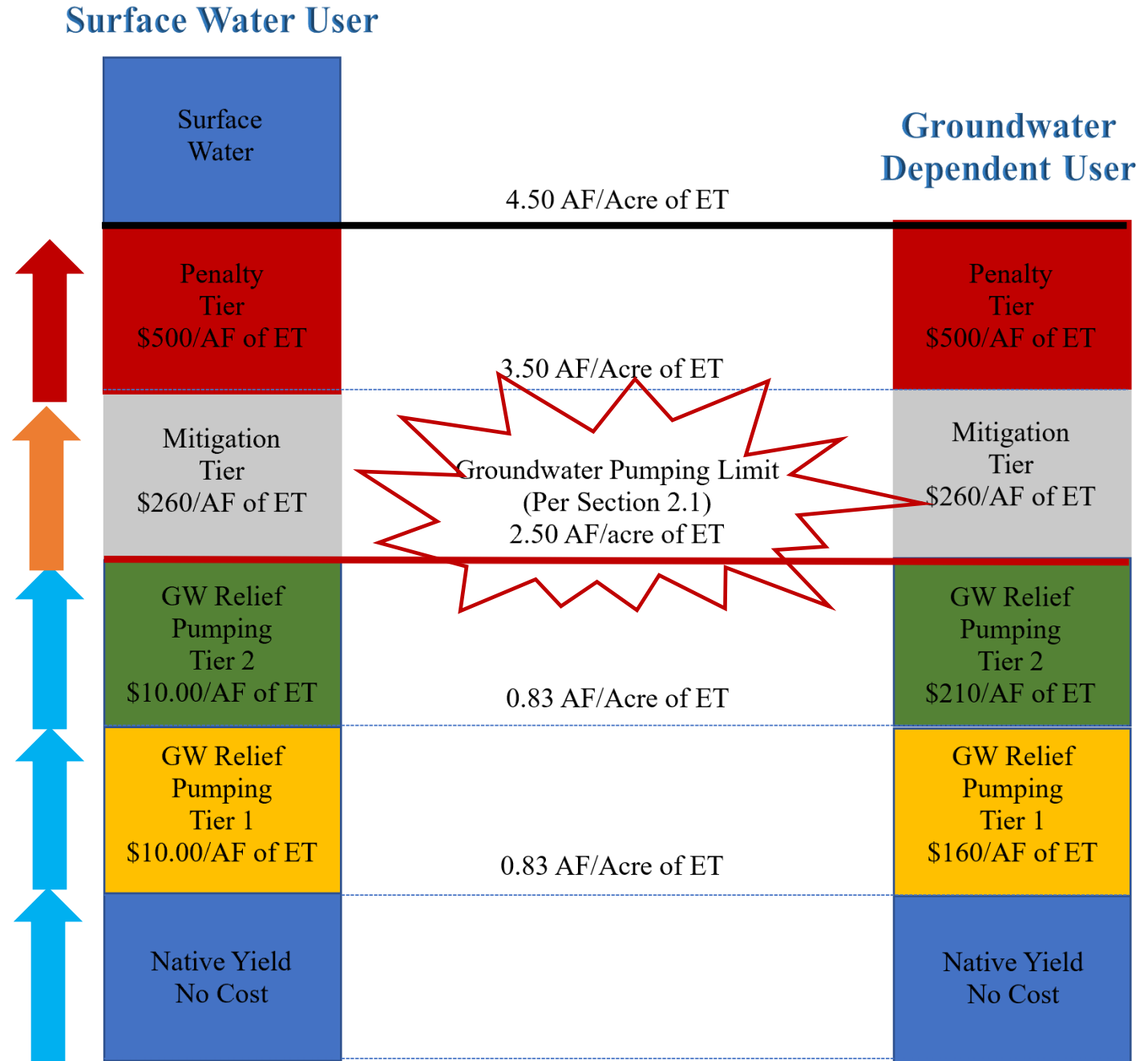


MKGSA Emergency Ordinance



Emergency Ordinance - Groundwater Pumping Limit

- Pumping Limit (“Cap”): 2.5 AF/acre as ET
 - Native Yield – 10”
 - Relief Pumping Tier 1 – 10”
 - Relief Pumping Tier 2 – 10”
 - Costs: Service Fees and Replacement Fees
- Mitigation Tier – 1 AF/Acre
 - Allows for buffer as we begin the program
 - Pricing based upon cost to replace water
- Penalty Tier – 1 AF/Acre
 - High Penalty Fees
 - Loss of future water allocation on a 1:1 ratio



Water Dashboard – Online Allocation/Usage Tool

Shared View

Dashboard

WD1779

Tulare Irrigation District
Aaron Fukuda
(559) 686-3425

Member Menus

Home

Water Accounts

Farm Map

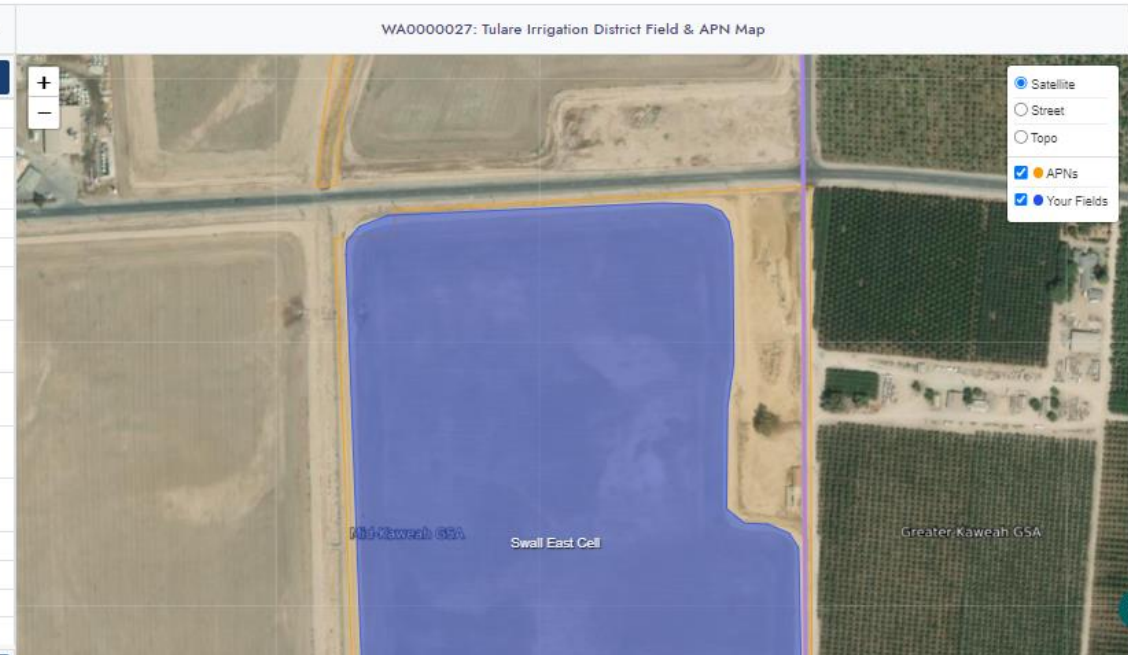
Explore Usage

WA0000027: Tulare Irrigation District

P.O. Box 1920 Tulare, CA 93275
Aaron Fukuda · 5596863425 · akf@tulareid.org

Water Account Summary Table									
Groundwater Sustainability Agency	Billing Period	Billing Usage to Date	Water Supply	Usage to Date		Last Year's Usage		Parcel Acres	Field Acres
				Land IQ ET Oct 2021 - August 2022		Land IQ ET Oct 2020 - Sept 2021			
Mid-Kaweah GSA	May 22 - Sep 22	5.3 AF	251.15 AF	29.23 AF	0.52 AF/field ac	28.66 AF	0.51 AF/field ac	100.37	56.76
Greater Kaweah GSA	N/A	N/A	N/A	0.02 AF	0.00 AF/field ac	0.09 AF	0.00 AF/field ac	693.93	0.00

Water Supply Summary Table		
MKGSA 2022 (May 22 - Aug 22)		
+ Total Water supply		251.15 AF
+ Precipitation		0.23 AF
Precipitation Credit <small>80% of total precipitation for (May 22 - Aug 22)</small>		0.23 AF
+ Surface Water Deliveries		Not Currently Available
+ Groundwater Allocations (2.5 AF/Ac)		250.93 AF
Native <small>SW: 0.84 AF/parcel ac</small>	<small>\$0/AF</small>	<small>SW: 84.31 AF</small>
Tier 1 <small>SW: 0.83 AF/parcel ac</small>	<small>\$10/AF</small>	<small>SW: 83.31 AF</small>
Tier 2 <small>SW: 0.83 AF/parcel ac</small>	<small>\$10/AF</small>	<small>SW: 83.31 AF</small>
Mitigation Tier <small>\$260/AF</small>		More Information
Penalty Tier <small>\$500/AF</small>		More Information
+ Groundwater Credits		TBD
+ Recharge and Banking Credits and Debits		TBD
+ Prohibited Tier 3 Groundwater Pumping		
Dairy Operations		Not Currently Available



Getting Started Guide

Contact Us

Roadmap



SNOW MELT

RIVER
CLOSED

SAN JOAQUIN
VALLEY

Barra © 2003

Cordeniz Basin (60 Acres)



Swall/Creamline Basin (265 Acres)



Martin Basin (27 acres)



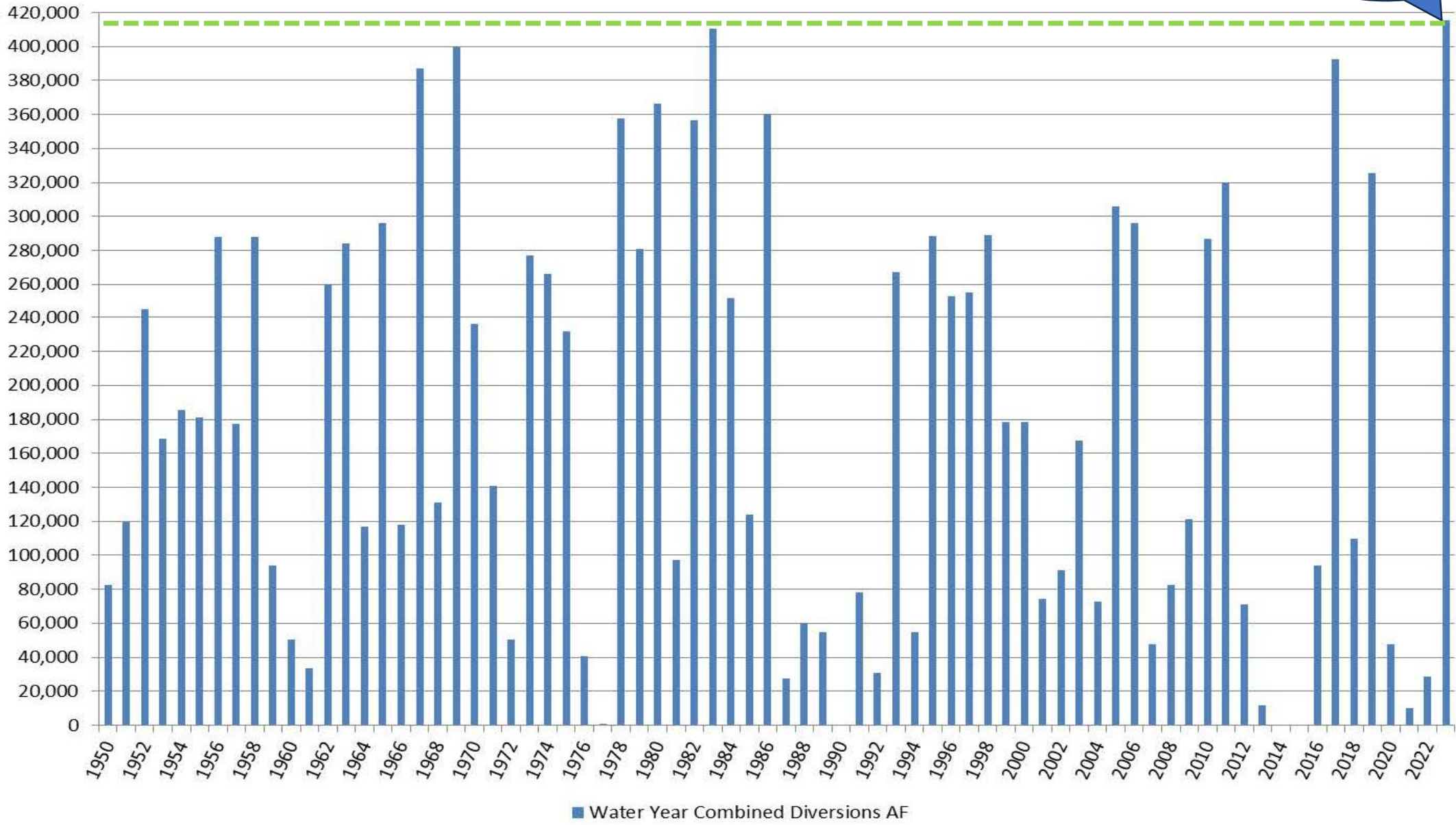
Recharge Basins



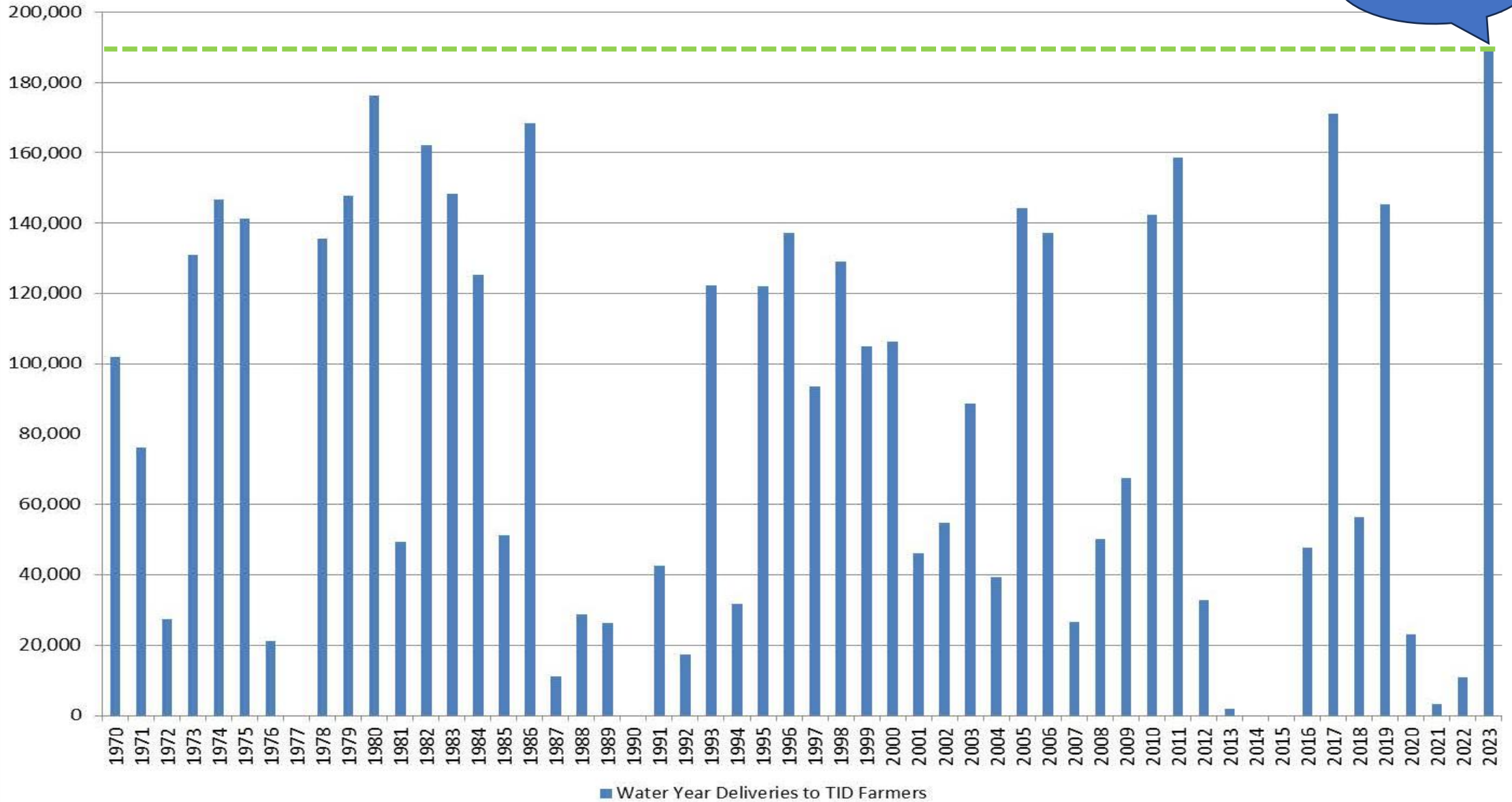
Winter Irrigation Recharge

Water Year Combined Diversions to TID Acre-Feet 1950 - 2023

414,000 AF

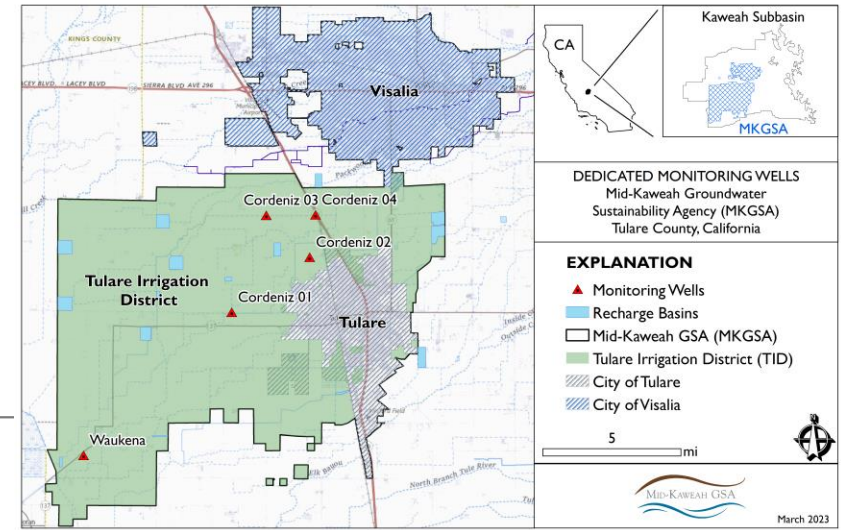
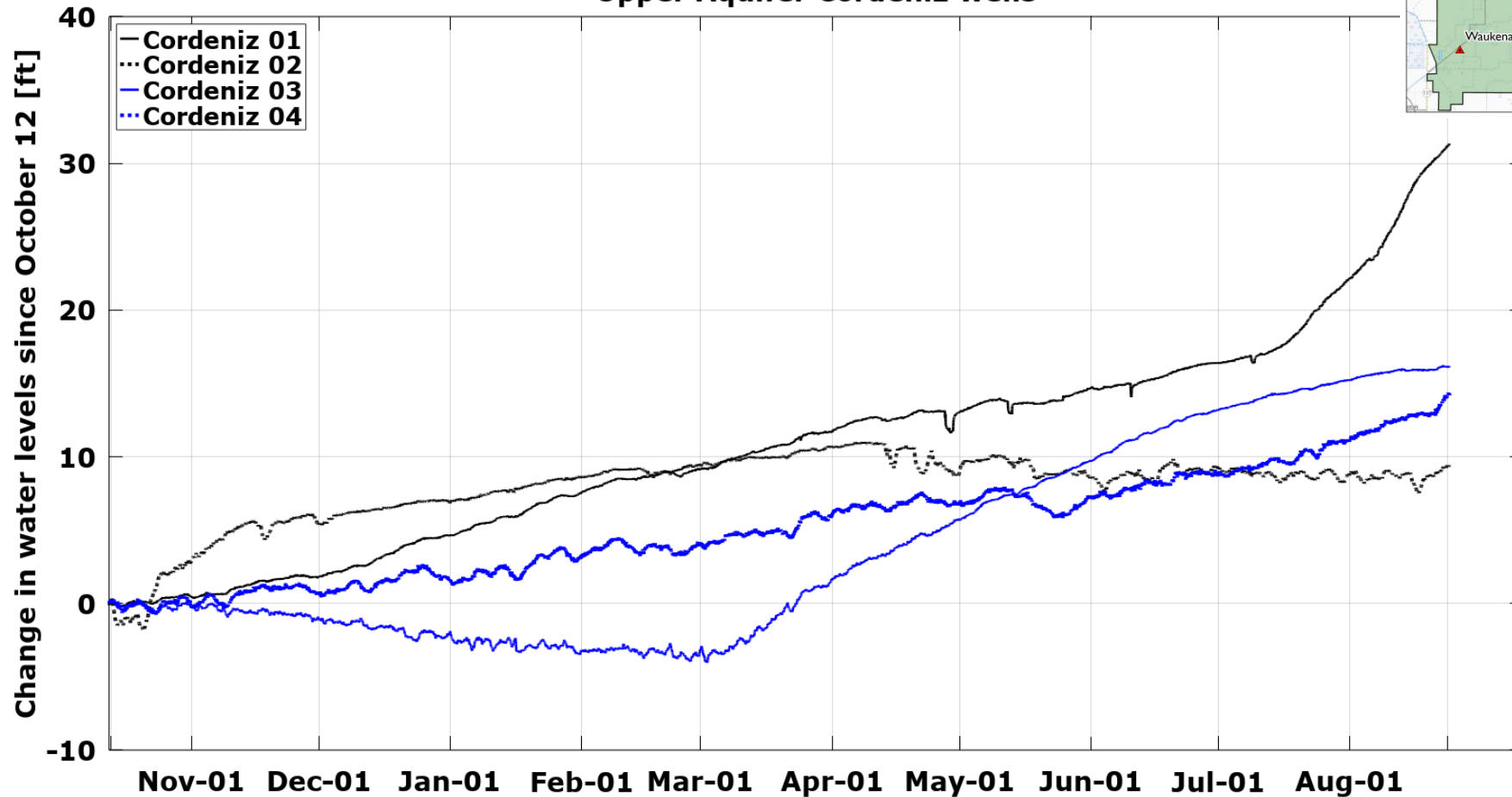


Water Year Deliveries to TID Farmers Acre-Feet 1970-2023

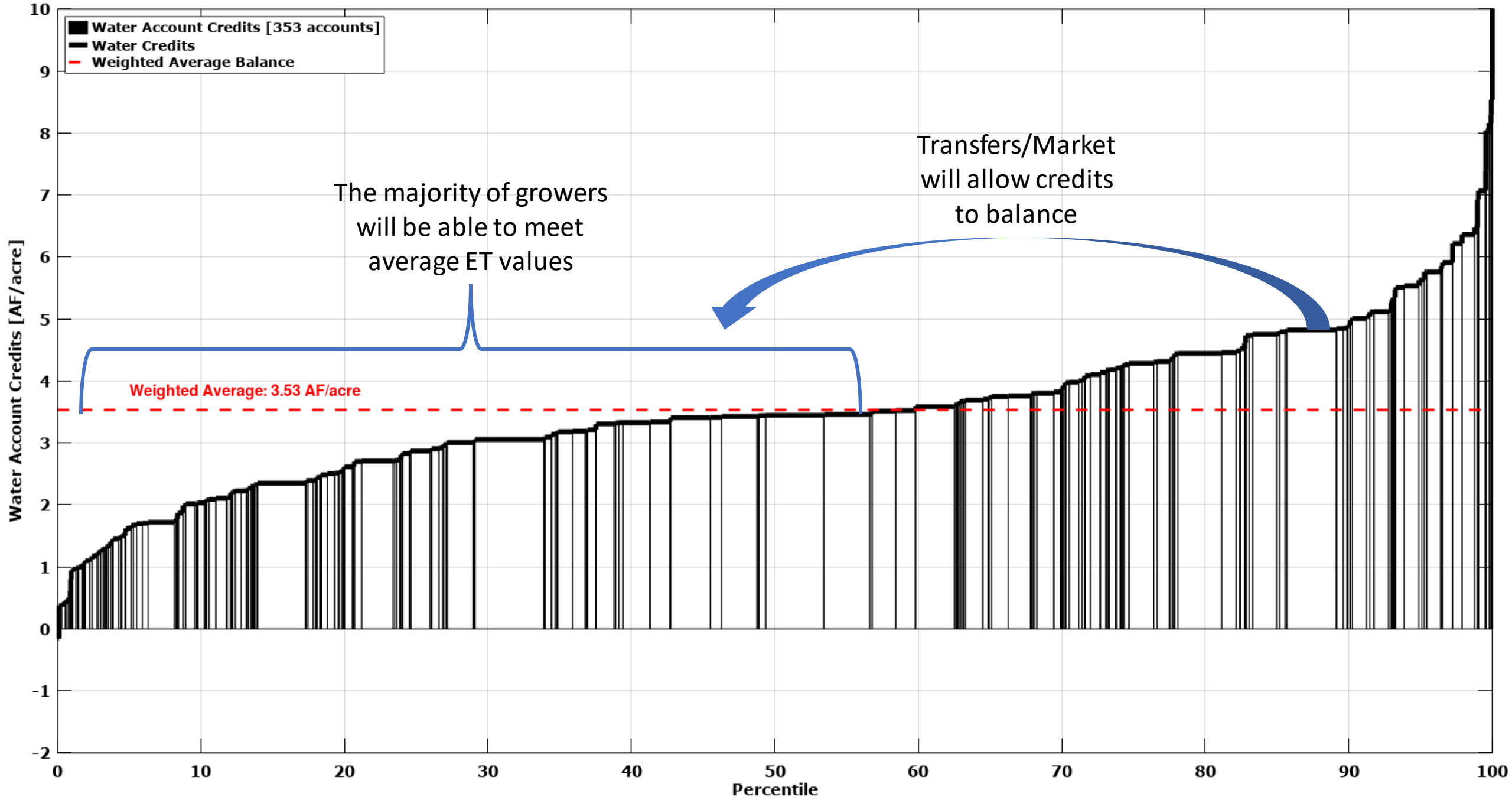


Summer Groundwater Levels

Upper Aquifer Cordeniz wells



MKGSA Water Dashboard Credits(Extrapolated to September 30, 2023)



- Water Account Credits [353 accounts]
- Water Credits
- Weighted Average Balance

The majority of growers will be able to meet average ET values

Transfers/Market will allow credits to balance

Weighted Average: 3.53 AF/acre

Aaron Fukuda – Tulare Irrigation District

(559) 686-3425

akf@tulareid.org

www.tulareid.org



Thank You





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Air Pollution Incentives





SJVAPCD Incentives

- Low Dust Harvesters
- Shaker/Sweeper Combination Units
- Ag Tractors
- Ag Pumps
- Zero Emission Ag UTVs
- Ag Burn Alternatives



Low Dust Harvesters

- 50% of eligible equipment costs up to \$150,000
- 75% of eligible equipment costs w/ no cap if within Shafter 7 mile radius CERP Boundary



Ag Irrigation Pumps

- Diesel to Diesel - 85%
- Fuel to Electric – 85% + line extension fees



Ag Tractors

- Small (< 100 ac.) – 80% of eligible costs
- Medium (101-500 ac) – 70% of eligible costs
- Large (> 500 ac) – see table next
- Zero emission – 80% of costs incl. charger & battery

Ag Tractors - Large

Size	Incentive
25 – 74 hp	\$450/hp
75 – 149 hp	\$575/hp
> 150 hp	725/hp



Zero Emission UTVs

- 75% of eligible equipment costs up to \$13,500



Ag Burn Alternatives

- One time \$180 million state grant
 - \$30 million for equipment
 - \$150 million for chipping & incorporation
- Money will run out in 2024
 - Looking for more!

Ag Burn Alternatives

Project Type	Incentive
Chipping w/ incorporation	\$600/acre
Chipping w/o incorp.	\$300/acre
Air Curtain Burner	\$1,000/acre
Off-site beneficial reuse	\$600/acre
Add \$400/acre for farms < 100 acres total	



United States Department of Agriculture

December 6, 2023 – Almond Board
Conference



NRCS Programs and Practices

Jesse Bahm
State Air Quality Specialist
USDA NRCS - California



Natural
Resources
Conservation
Service

nrcs.usda.gov/

NRCS Financial Assistance

Environmental Quality Incentives Program

EQIP is NRCS' flagship conservation program that helps farmers, ranchers and forest landowners integrate conservation into working lands.

Conservation Stewardship Program

CSP helps landowners build on their existing conservation efforts while strengthening their operation.

Regional Conservation Partnership Program

RCPP is a partner-driven approach to conservation that funds solutions to natural resource challenges on agricultural land.

Inflation Reduction Act (IRA)

* Not a New Program – Expanded Funding to Help Meet Unmet Demands

Historical Investment - \$19.5 billion Nationally

Climate Smart Focus – GHG and Carbon Sequestration

Seamless Implementation – Existing Programs

Accelerate Conservation – CSP Opportunities

IRA California Investment 2023-2026

Doubles conservation funds available across four years

\$213 million - Environmental Quality Incentives Program

\$ 55 million - Conservation Stewardship Program

\$16 million - Regional Conservation Partnership Program*

\$92 million - Conservation Technical Assistance Program

Agricultural Conservation Easement Program (ACEP)

Agricultural Conservation Easement Program (ACEP)

- Protects the agricultural viability and related conservation values of eligible land by limiting nonagricultural uses which negatively affect agricultural uses and conservation values, protect grazing uses and related conservation values by restoring or conserving eligible grazing land, and protecting and restoring and enhancing wetlands on eligible land.
 - **Agricultural Land Easements (ALE)** – protect croplands and grasslands on working farms and ranches by limiting non-ag uses.
 - **Wetland Reserve Easement (WRE)** - help private and tribal landowners protect, restore and enhance wetlands which have been previously degraded due to agricultural uses.

Conservation Assistance for Almond Growers



Top 5 Conservation Practices

- *Microirrigation (Practice 441)*
- *Irrigation Water Management (Practice 449)*
- *Cover Crops (Practice 340)*
- *Pest Management (Practice 595)*
- *Mulching (Practice 484)*



Conservation Assistance for Almond Growers

U. S. Department of Agriculture
Natural Resources Conservation Service



NRCS Conservation Planners are trained to help you identify conservation practices to support both your conservation objectives and your bottom line. Working together with an NRCS Conservation Planner, you can create a Conservation Plan that tackles your management objectives. There are several different types of assistance and programs available to support implementation of your plan. The Conservation Planner will help locate those that best fit your needs.

You're a good fit for an application if, for example, you want to:

- Add mating disruption to your Naval Orange Worm (NOW) control program
- Increase the precision of your nutrient or pesticide applications
- Reduce herbicide use by using mulch for weed control
- Optimize irrigation scheduling with increased soil moisture monitoring and automation
- Evaluate your pump and irrigation system to ensure they are working optimally
- Explore low dust harvesters and road dust control to meet dust reduction goals
- Reduce emissions with a cleaner running tractor
- Chip orchard waste
- Add cover crops to your orchard
- Increase pollinator and beneficial insect benefits in your orchards

Submit an application at any time.

There are multiple review deadlines throughout the year for financial assistance for eligible growers.

APPLICATION DEADLINES
November 3, 2023 – EQIP-Classic, EQIP-CIC
February 16, 2024 – EQIP-IRA, EQIP-NAQI

Financial assistance is available for eligible applicants

NRCS offers two great programs to help farmers achieve and maintain their stewardship goals. NRCS conservation planners will help producers decide which program works best for their goals and operation. The Environmental Quality Incentives Program (EQIP) is a voluntary program that shares with participants the cost of planning and installing conservation practices. The Conservation Stewardship Program (CSP) offers additional opportunities for those already meeting a baseline level of stewardship. You may apply at any time of the year for either program. Eligible projects will be evaluated, prioritized and selected for funding as budget allows.

Farm Services Agency (FSA) colleagues assist to review eligibility for financial assistance as the ability to use NRCS programs involves income limits. They will need the following information:

- Location of the property (APN number/map)
- Copy of your current deed or signed lease
- *AD-2047 Customer Data Worksheet –basic information to establish a record
- If applying as an entity the following also needed
 - Proof of signature authority (LLC documents, Minutes of Corporation, etc.)
 - *CCC-901 Members Information
- Proof of identification of individual and/or entity members (photo ID such as driver's license)
- *CCC-941 Average Adjusted Gross Income Certification (for entity & members) (AGI averaged over three tax years prior to application of \$900,000 or less is eligible.)
- Form *AD-1026 Highly Erodible Land/Wetland Certification

*FSA and NRCS will provide these forms and assist in completing them. See them at this link if you want to see more detail about what they ask, note, you have to scroll to the bottom.
<https://www.farmers.gov/recover>

Helpful Hints:

- If you are already enrolled in other USDA programs (e.g. crop insurance, loan programs, past NRCS work, COVID related relief, etc.) your eligibility review is likely simple and quick.
- Sharing documentation of conservation achievements as tracked by the California Almond Sustainability Program (CASP) may help make additional opportunities available, especially for CSP.

USDA IS AN EQUAL OPPORTUNITY PROVIDER, LENDER AND EMPLOYER

Natural Resources Conservation Service Service Areas and Office Locations



AREA 1 – Brandon Johnson (Acting)
530-216-5857
Brandon.Johnson@usda.gov

AREA 2 - Karen Lowell
831-682-4187
Karen.Lowell@usda.gov

AREA 3 - Rob Roy
559-490-5136
Robert.Roy@usda.gov

AREA 4 – Jim Hyde
951-384-7900
James.Hyde@usda.gov

NRCS Office Types

- Field Office / Service Center
- ▲ Local Partnership Office
- ★ Area Office
- ★ State Office
- ★ Soil Survey Office
- ★ Plant Materials Center
- ◆ Urban Agriculture Office

Source of Data:
USDA - Natural Resources Conservation Service

Map prepared using ArcGIS
GIS Credits: Team, NRCS, Davis





USDA-NRCS Recharge Pilot

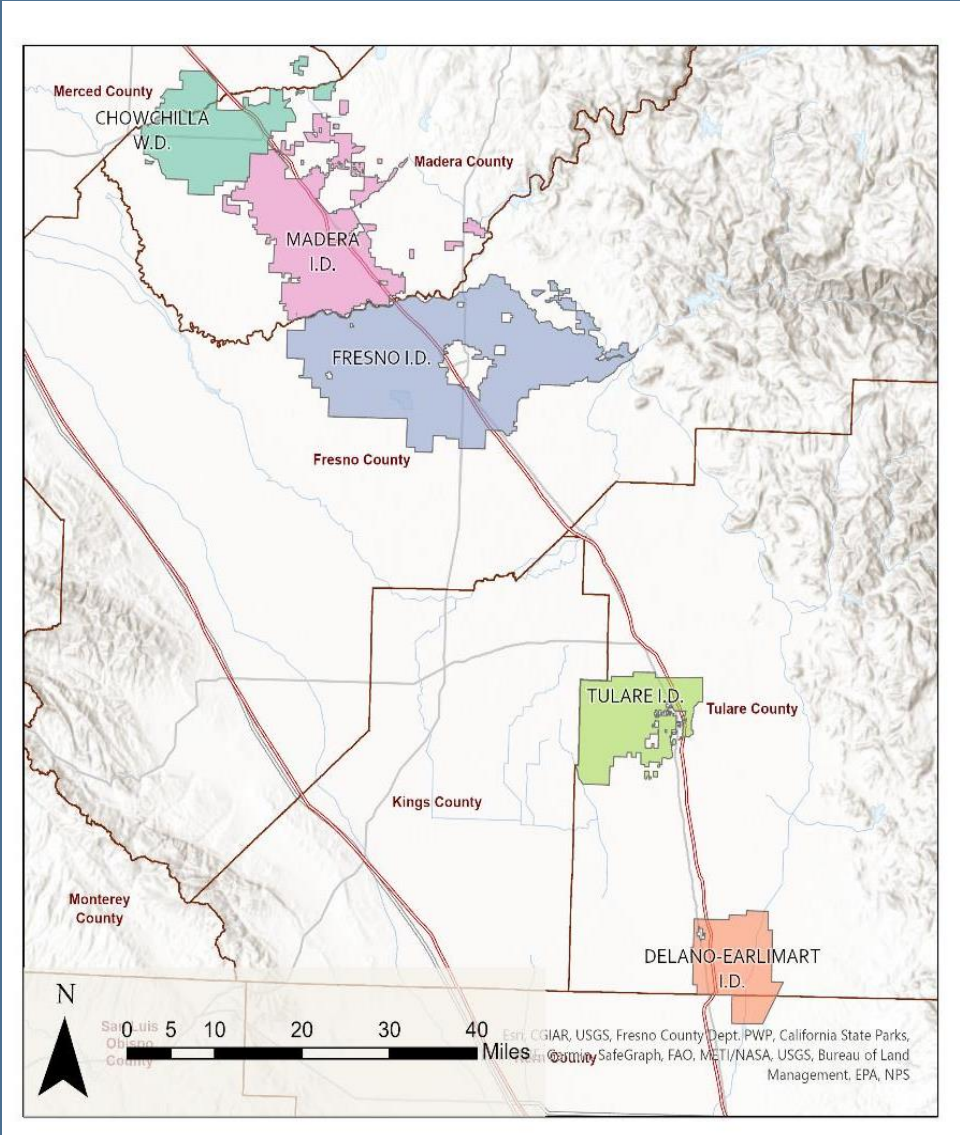
Groundwater Recharge Interim Practice Options

Recharge trench or basin

- Permanent feature (15 years) - land dedicated to recharge

On-farm recharge

- Management practice in tandem with agriculture



Plans can include supporting practices like:

Basin or Trench

- Structures for Water Control
 - Inlets, outlets
 - Flow meters
- Pre-treatment of water
 - Sediment basin
 - Coagulants (PAM)
 - Denitrifying Bioreactor

On-Farm Recharge

- Water conveyance
 - Pipeline
 - Field ditch
 - Pump
- Water control
 - Diversion/Dike
- Land shaping



These are conservation practices that can be paid for as part of an EQIP contract!

(595) Precision Pest Control/IPM Application

- Photo ID or sonar sensor technologies with IPM plan for single target pest per UC guidelines

- Pest Mgt, Precision Ag \$58.71/acre

Resource Concerns: Ozone and PM from reduced drift

(373) Dust control on unpaved roads and surface areas

- Lignin derivatives: \$0.38/square foot

- Road oils (SC-250 or SC-800): \$0.23/sq. ft.

- Polymers emulsions: \$0.23/square foot

- Resource Concern: PM



376 – Field Operations Emissions Reductions

(376) Field Operations Emissions Reductions
 Processing woody debris from orchard/vineyard removal

- Fuel for biomass powerplants: \$460.93/acre
- Air curtain burner: \$122.24/acre
- All other chipping scenarios: \$984.84/acre

Resource Concerns: Ozone, PM, GHG, Odors, and Airborne Reactive Nitrogen



(376) Utilize “low-dust” harvesters: \$56.69/acre

- Many producers rely on jobbers
- Already owning and using low-dust harvesters means the PM resource concern has been met.
- Resource Concerns: PM

NRCS “Low Dust” Harvester List

Make	Models
Exact Corporation	E-3800, E-4000, E-7000-SP
Flory Industries	680, 8550, 8600, 8700, 8770
Jackrabbit	Harvester
Weiss-McNair	9800 California Special, 9810, Magnum X

FY 2023 EQIP AQ Payment Rates

(372) Replace in-use mobile diesel-powered equipment

- 25-160 bhp: \$514.63/bhp | >160 bhp: \$801.59/bhp
- Specialty Scenario added for low dust harvesters, conditioners, loaders

(372) Repower irrigation pump engines (also includes stationary engines)

- New electric motor, <12 hp: \$1,344.02 to \$39,435.76 per motor
- New diesel engine, 50+ bhp: \$121.02/bhp

Resource Concerns: NO_x, Ozone & PM



Discussion and Q&A





california
almonds[®]
Almond Board of California

Thank you

