

**Sustainable Groundwater  
Management Act  
Joint GSP**

**Madera Subbasin**

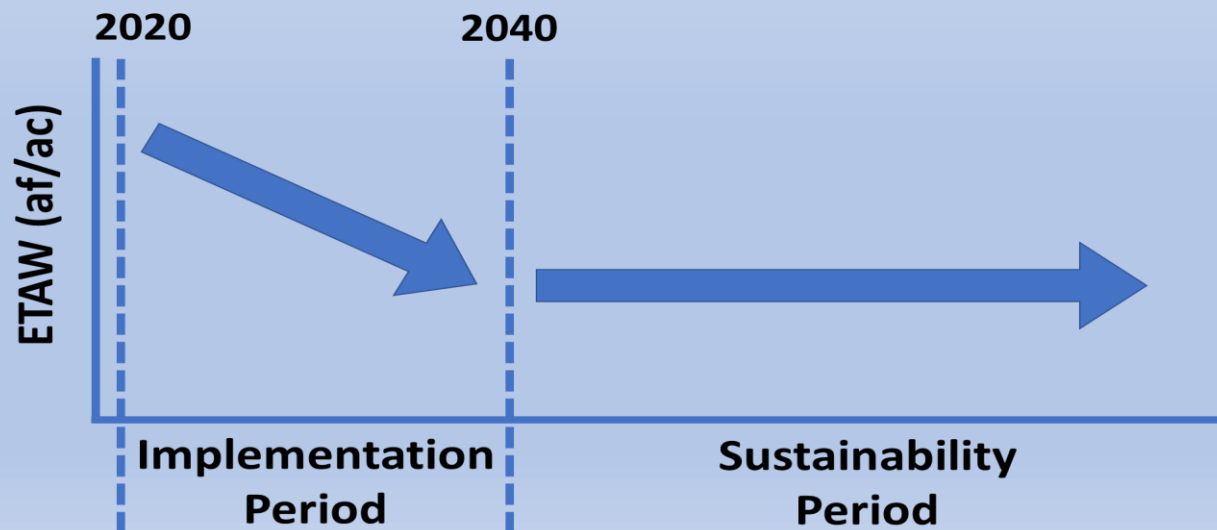
**Madera Water District Outreach  
Meeting**

**October 24, 2019**

**6:00 p.m.**

# What is a Groundwater Sustainability Plan?

The Groundwater Sustainability Plan (GSP) (currently in draft form) is a new document required by the state that was developed to demonstrate how groundwater sustainability will be achieved in the subbasin by 2040.



# How was the GSP Developed?

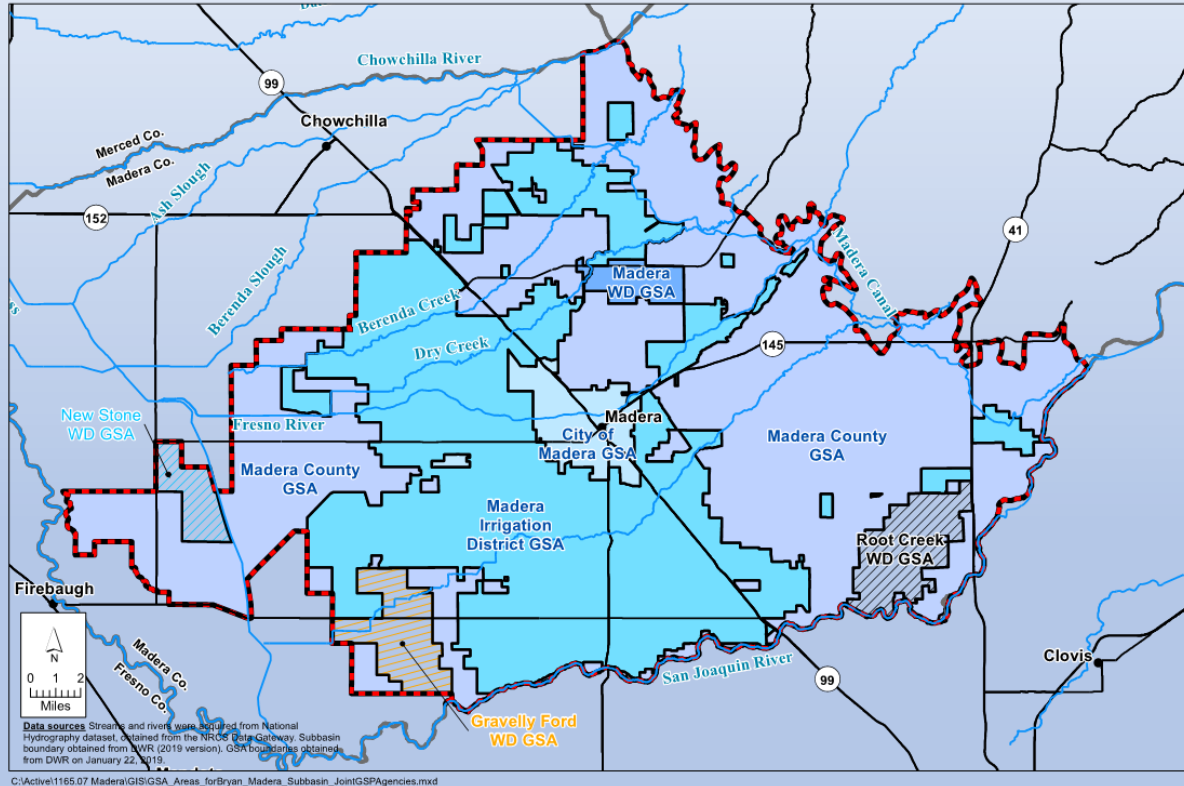
- With the support of a \$500,000 grant for 'stressed basins' from DWR
- With the support of a \$1.5 million grant from DWR
- Local technical experts and consultant team drafted GSP
- Feedback from public, a Coordination Committee, GSA Boards incorporated along the way

# Previous Subbasin Workshops

- **Technical workshop, 5/24/2018**
- **Technical workshop, 6/25/2018**
- **Groundwater workshop, 8/2/2018**
- **Technical workshop, 10/18/2018**
- **Coordination committee, 3/21/2019**
- **Technical workshop, 4/25/2019**
- **Technical workshop, 5/29/2019**
- **Coordination Committee, 8/7/2019**

# Madera Subbasin: 7 GSAs preparing 4 GSPs

See Chapter 1 for Agency Descriptions



## Total Subbasin

~ 348,000 ac

~ 216,000 ac

irrigated

## Madera County GSA

~180,000 ac

~85,000 ac irrigated

- Significant acres are 'non-irrigated' (unique to County GSA)

# Madera Subbasin “consumptive use” [a.k.a. Evapotranspiration of Applied Water (ETAW)]

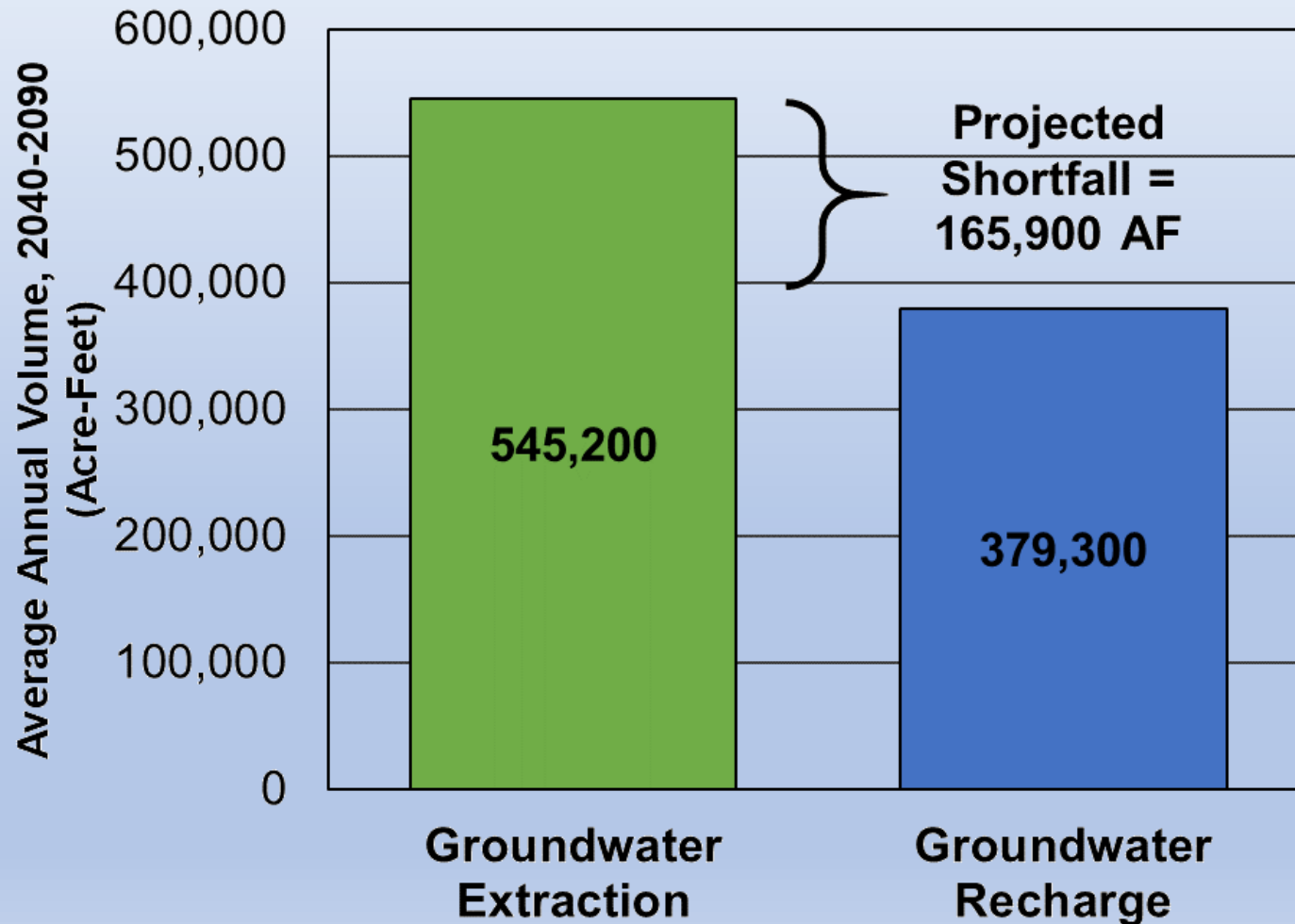
- Irrigated ag dominates
- Significant shift in crop types
- Average ETAW has increased
  - 1989 = 1.75 af/ac
  - 2015 = 2.13 af/ac
- Urban use is minor
  - City of Madera ~ 4,500 af/yr
  - Rural residential ~ 18,200 af/yr

Land Use	Crop Area (acres)	
	1989	2015
Citrus and Subtropical	6,071	4,512
Corn	5,266	6,963
Grain and Hay Crops	5,548	9,118
Grapes	69,562	67,489
Idle	32,783	4,198
Miscellaneous Field, Truck, Decid.	27,480	12,943
Almonds	21,797	75,006
Pistachios	14,169	27,189
Walnuts	1,180	1,157
Pasture and Alfalfa	30,069	7,581
<b>Total</b>	<b>213,924</b>	<b>216,158</b>

See Chapter 2 for more on land use

# Simplified Groundwater Condition No Action 2040-2090

See Executive Summary



# What is being planned to close this deficit by 2040?

See Chapter 4 for Projects

- **Water Supply Projects/Programs**
  - Full utilization of existing water rights and contracts
  - Augment supplies
    - Flood flows (limited) (Fresno River and Chowchilla Bypass)
    - More use of CVP intermittent supplies ('215 water')
    - Purchase from others
  - Build recharge projects
    - On-farm recharge
    - Dedicated recharge basins
  - Participate with others:
    - GSAs work cooperatively where feasible



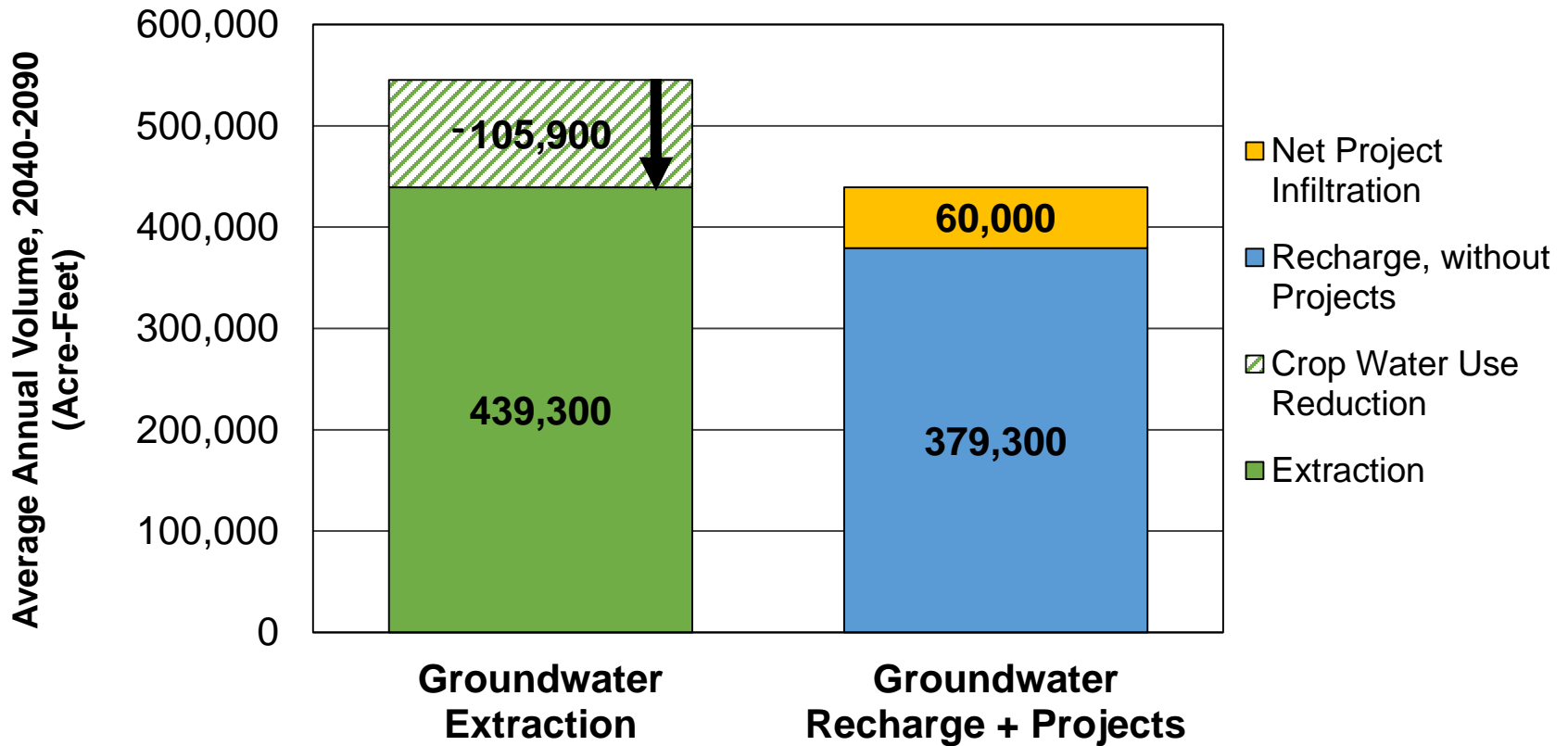
# What is being planned to close this deficit by 2040?

See Chapter 4 for County Management Actions

- **Demand Management  
(mostly within Madera County GSA)**
  - Create conservation easements
  - Establish groundwater allocations
  - Create market for allocations
  - Charge extraction fees
  - Temporary continued use of existing stored groundwater
  - Establish potential mitigation for dry domestic wells

# Simplified Groundwater Condition With Projects (2040-2090)

See Executive Summary

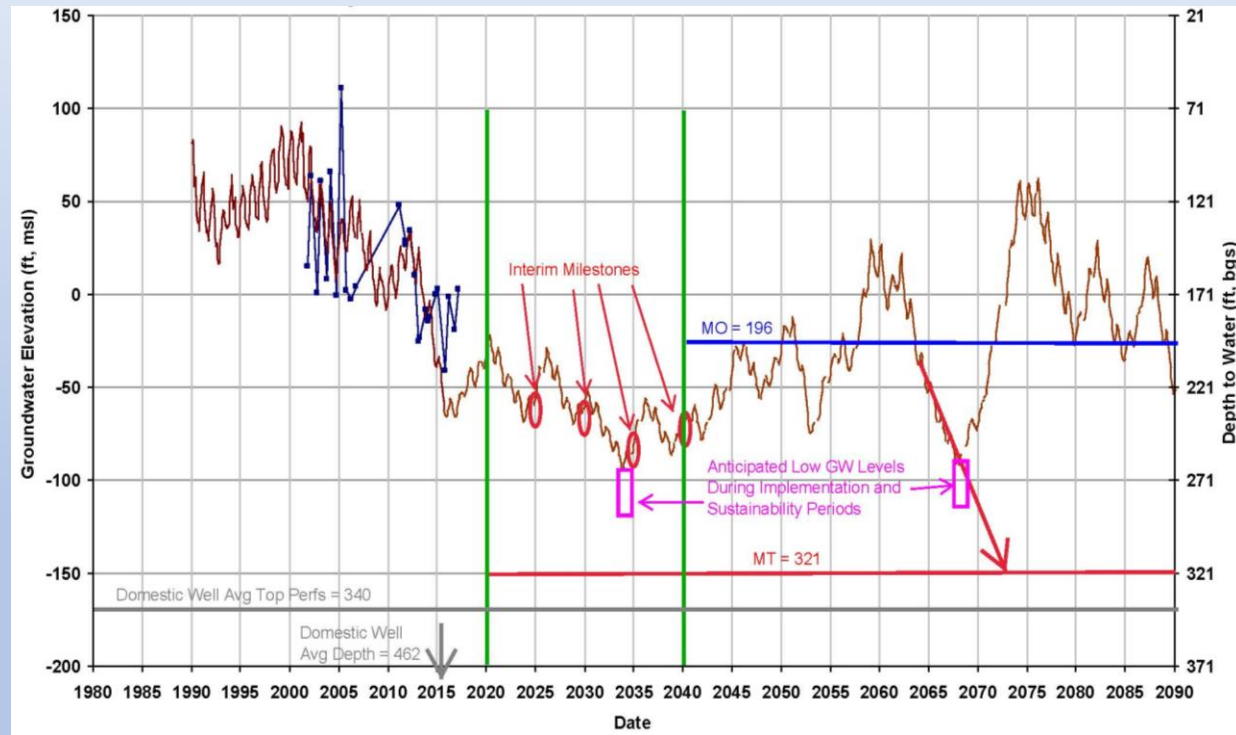


Crop Water Use Reduction Program: Madera County GSA 90,000 af. Remaining crop water use reduction due to permanent recharge basins replacing irrigated area.

# Potential near-term groundwater impacts

See Chapter 3 for Setting of MTs and MOs

- GSAs need time to transition and complete projects and actions – which will lower groundwater levels during implementation
- Planned mitigation for impacts can address concerns of lowered groundwater levels during implementation



# **GSAAs are considering a mitigation program for impacted drinking water wells**

- **Details developed during first year of implementation**
  - Subbasin is applying for \$500,000 grant for well inventory
- **Possible mitigation actions**
  - Replace/lower existing well
  - Connect to community water system
  - Staging and availability of temporary solutions
- **Possible types of support**
  - Low interest loans
  - Grants
- **Likely will require well owners to sign up for program**

# Where to find more information

- Joint Madera Subbasin GSP available at:  
[www.maderacountywater.com/madera-subbasin/](http://www.maderacountywater.com/madera-subbasin/)
- Comments can be submitted to:  
[MaderaGSPComments@maderacounty.com](mailto:MaderaGSPComments@maderacounty.com)

# Next Steps

- **Receive public comments on draft GSP (through November 9, 2019)**
- **Revise and respond to comments (November 2019)**
- **GSAs approve Coordination Agreement**
- **GSAs adopt GSP (December 2019)**
- **GSP Submitted to DWR by Jan 31, 2020**
- **DWR public comment period (60 days)**
- **DWR evaluates plan**
- **DWR approves plan**