



## *Presenters:*

- Bill Stretch, General Manager*
- Adam Claes, Assistant General Manager of Operations*



## *Grower Meetings:*

<i>Easton</i>	<i>2/22/2019</i>
<i>Kerman</i>	<i>2/26/2019</i>
<i>Clovis</i>	<i>2/27/2019</i>

# *Topics of Discussion*

- 1) Introductions
- 2) Water Supply
  - a) Current Conditions
  - b) Projections
- 3) Sustainable Groundwater Management Act (SGMA) Update
- 4) FID's Strategies to SGMA



# Rainfall in Fresno

As of Feb 19, 2019

- 11.5" (100%) = Average Annual inches
- 7.79" (108%) = Season to Date

# Snow Conditions



## As of Feb 25, 2019

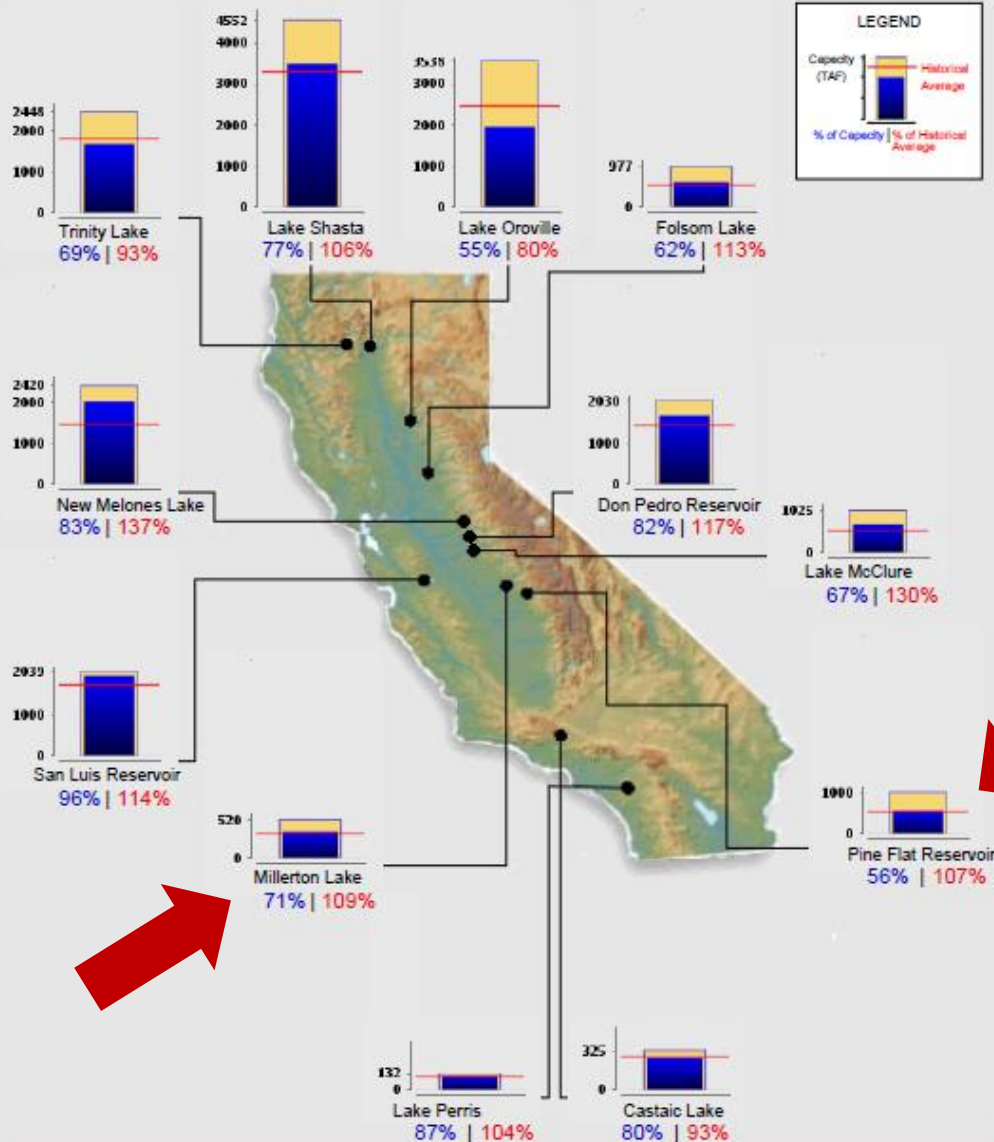
- Kings River Basin
  - 119% of April 1 avg
  - 144% of Feb 25 avg
- San Joaquin Basin
  - 125% of April 1 avg
  - 148% of Feb 25 avg



# Reservoir Conditions

Ending At Midnight - February 24, 2019

## CURRENT RESERVOIR CONDITIONS



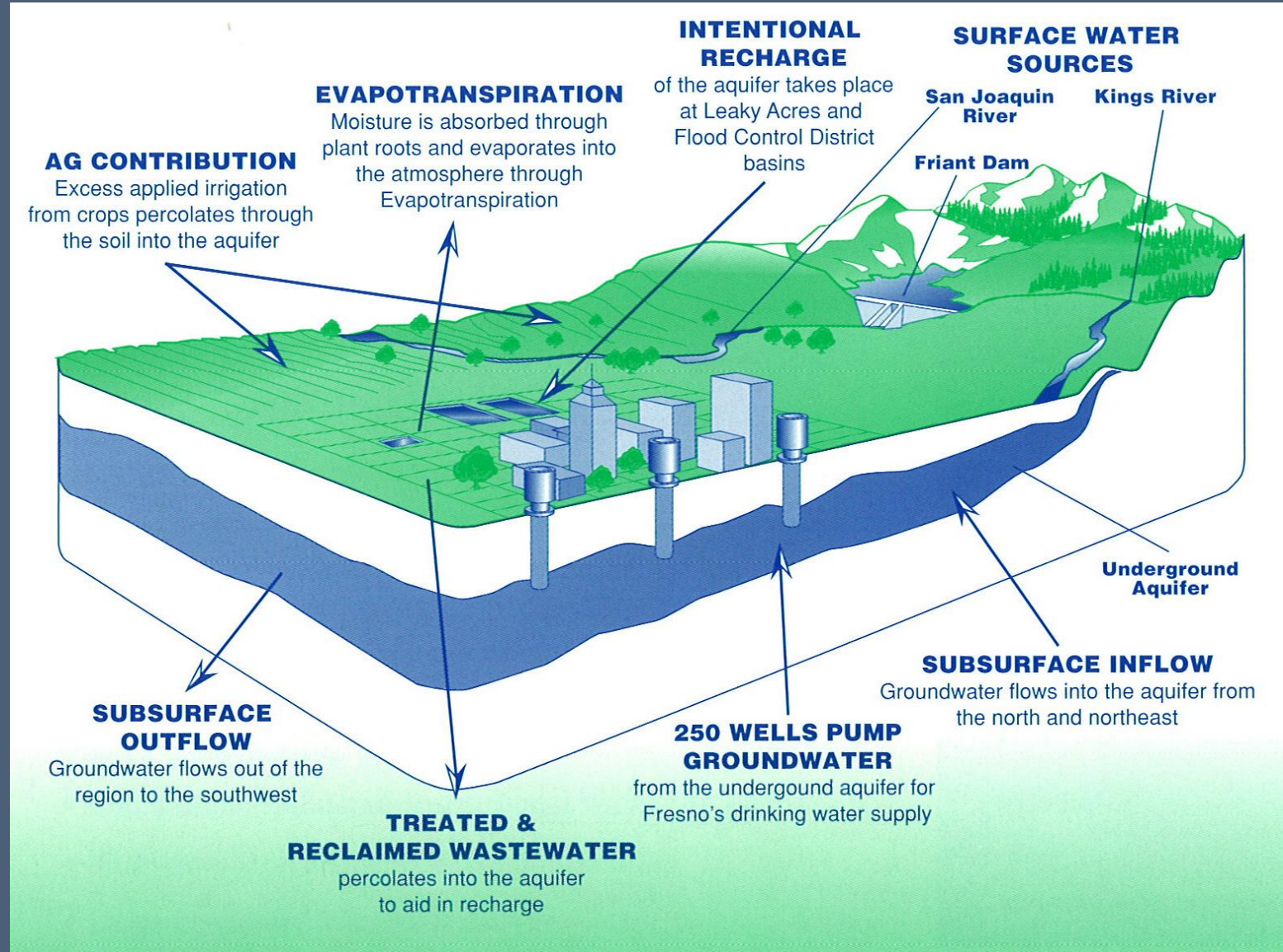
Graph Updated 02/25/2019 08:48 AM

# Most Reservoirs in the State are above Historical Average





# FID Conjunctive Use



# *FID Water Supply*

Estimated FID Water Supplies  
as of February 19:

- 135% - Kings River
- San Joaquin River
  - 100% - City of Fresno's CVP Class I
  - 25% - FID's CVP Class II



# *FID Conjunctive Use & GW*

- Average FID deliveries

- 2017 FID deliveries

500,000  
AF

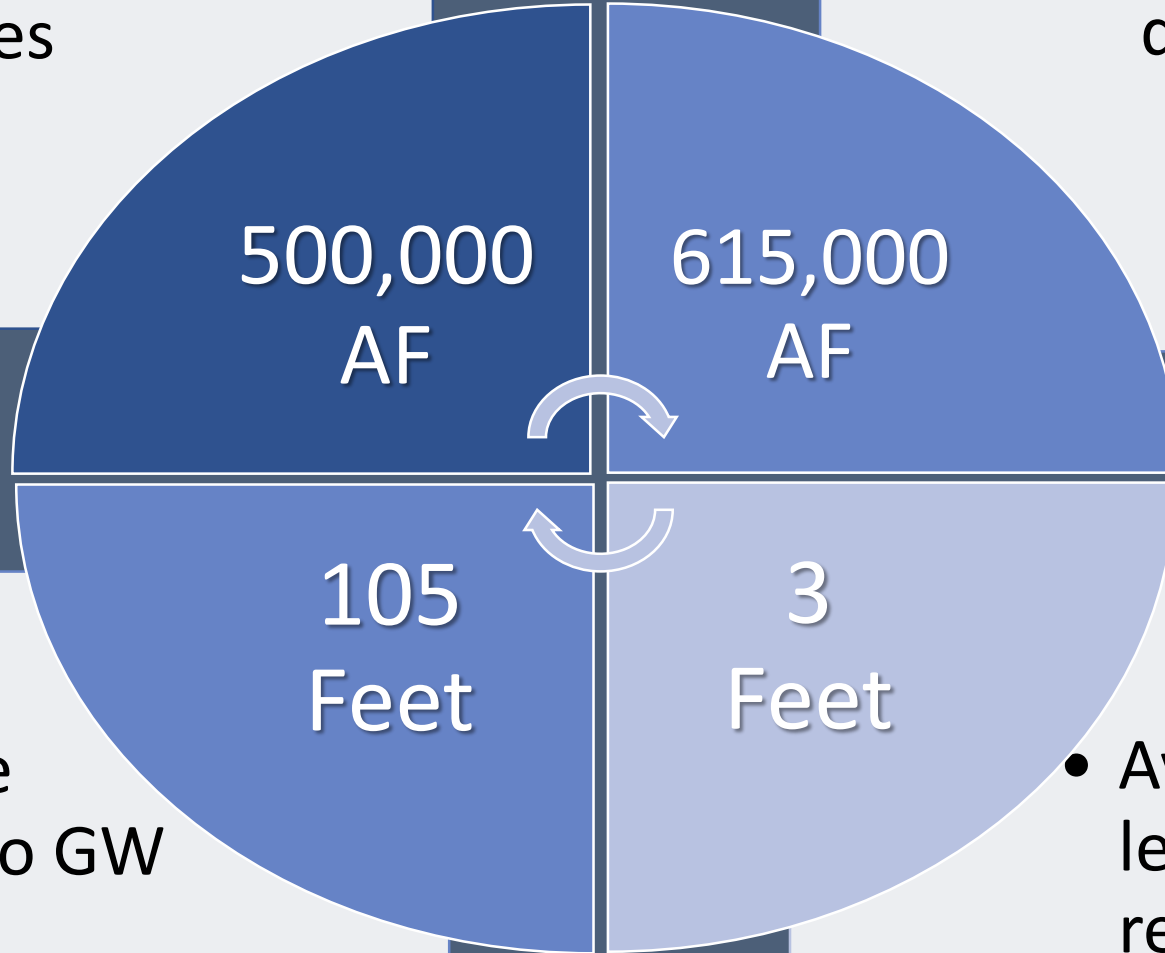
615,000  
AF

105  
Feet

3  
Feet

- Average Depth to GW

- Average GW level recovery (2016-2018)





# *FID Irrigation Season*

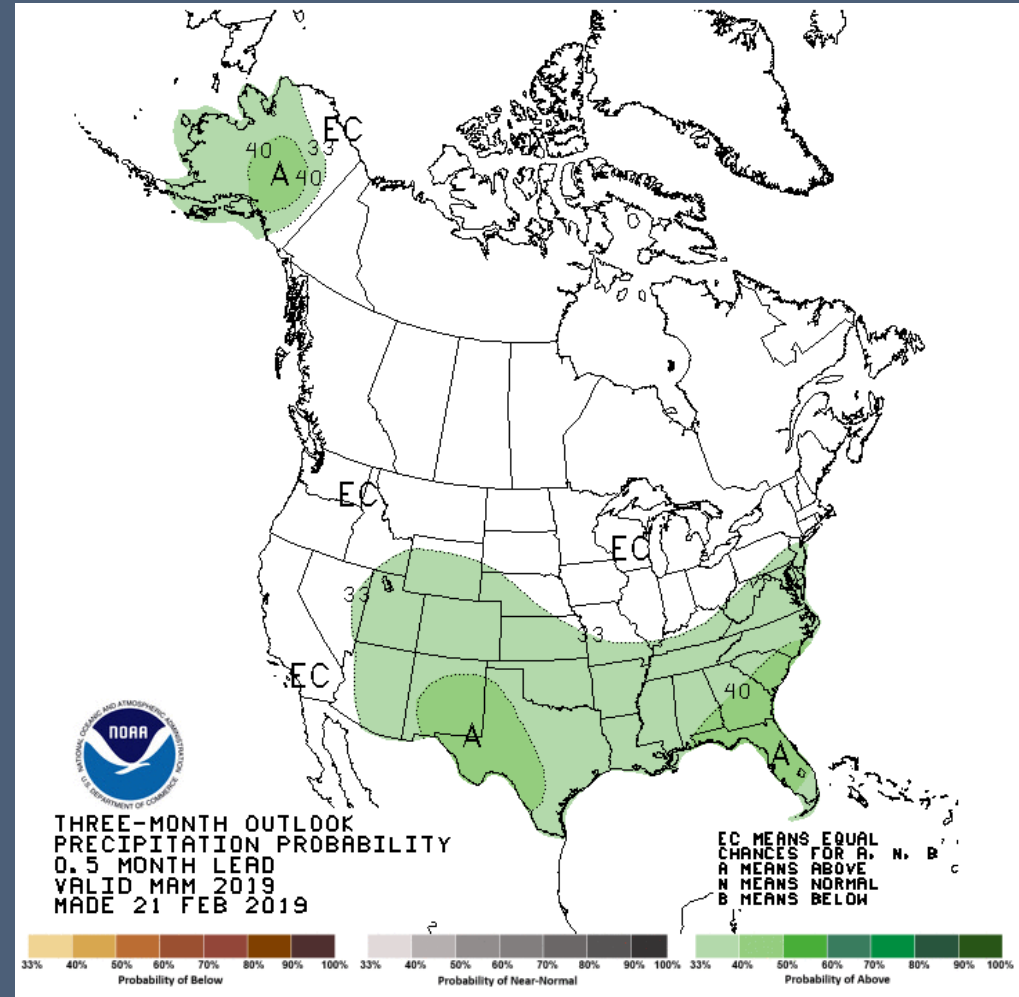
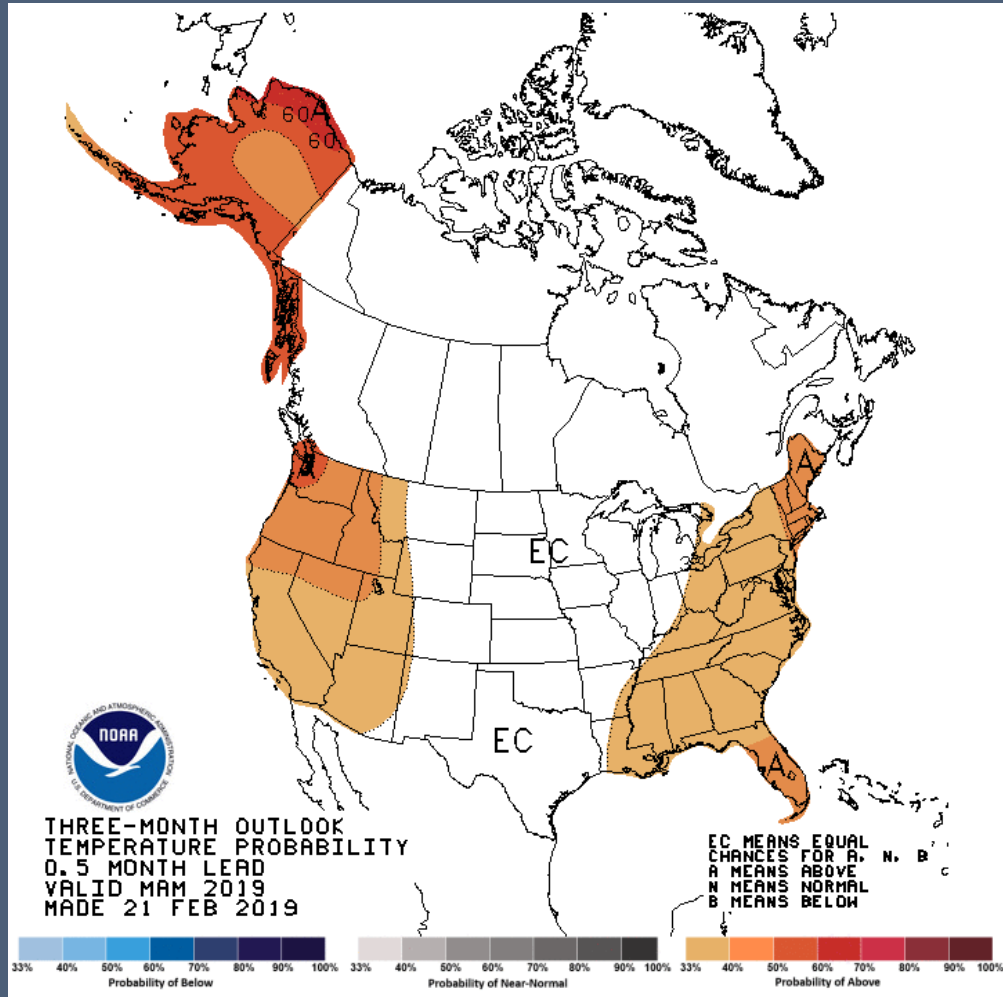
## Estimated Irrigation Run:

- 7 months potentially
  - March 1 – into September
  - Hopefully longer
- 
- FID benefits from snow in high elevations and a cool spring!



# 3-Month Outlook for Temperature and Precipitation

## March, April, and May as of February 21





***Adam Claes***  
***Assistant General Manager***  
***Sustainable Groundwater  
Management Act***





# *What is SGMA?*

- 2014 State legislation
- Intends to protect and sustain groundwater supplies

<b>First</b>	<b>Local public agencies given ability to form Groundwater Sustainability Agencies (GSAs) to comply</b>
Second	If locals fail, Counties are backstop
Third	If counties fail, State will take control



# SGMA Timeline

**June 30, 2017**

GSA must be formed.

**Summer 2019**

Draft plan for public review

**January 2040**

Achieve sustainability.

**January 31, 2020**

- Plan adopted by NKGSA board
- Submitted to State

## Reports

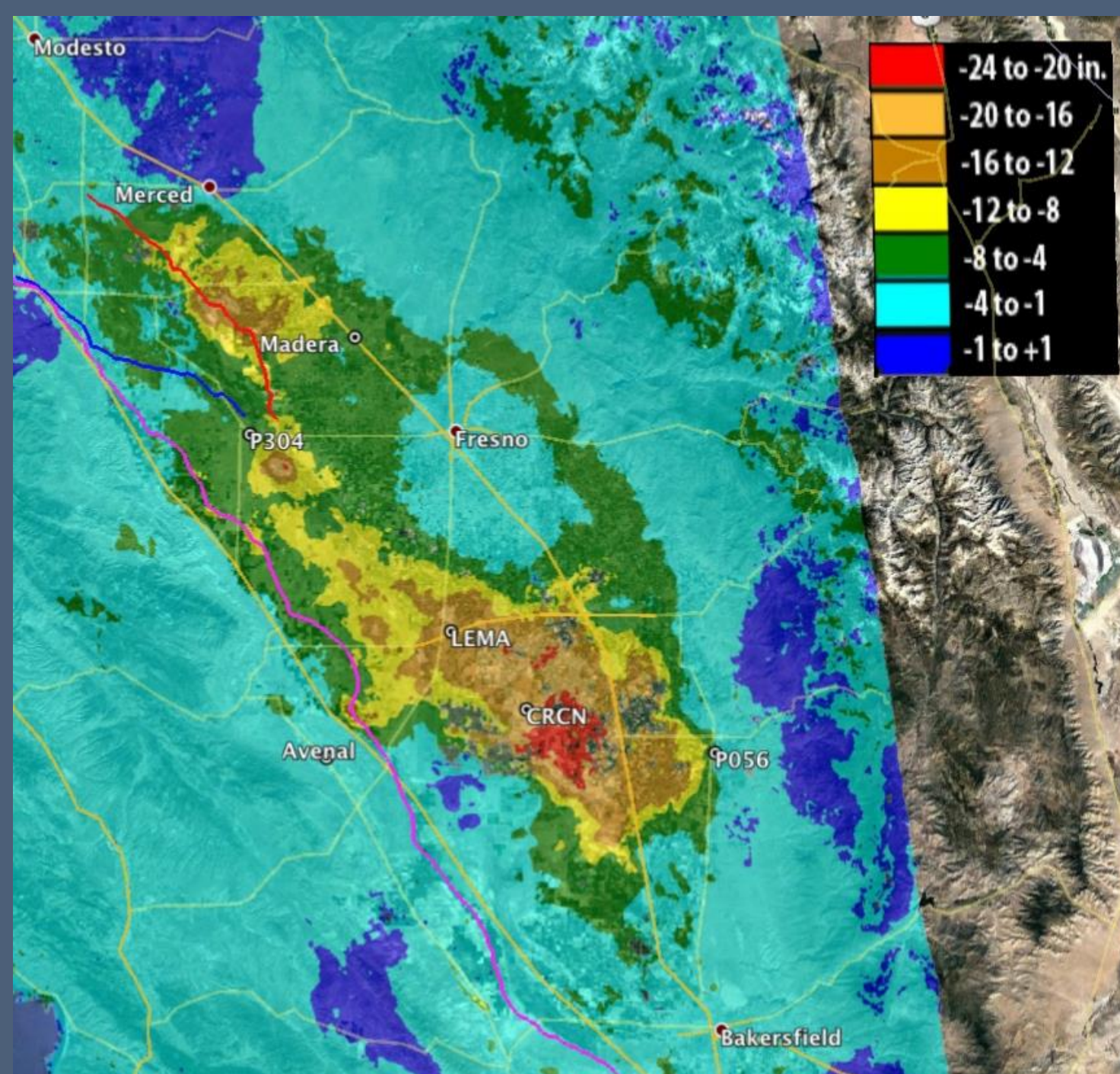
- Annual Reports
- 5-Year Updates of the Plan

# *Dry Wells and/or Poor Water Quality*



Small Rural Communities – i.e. East Porterville

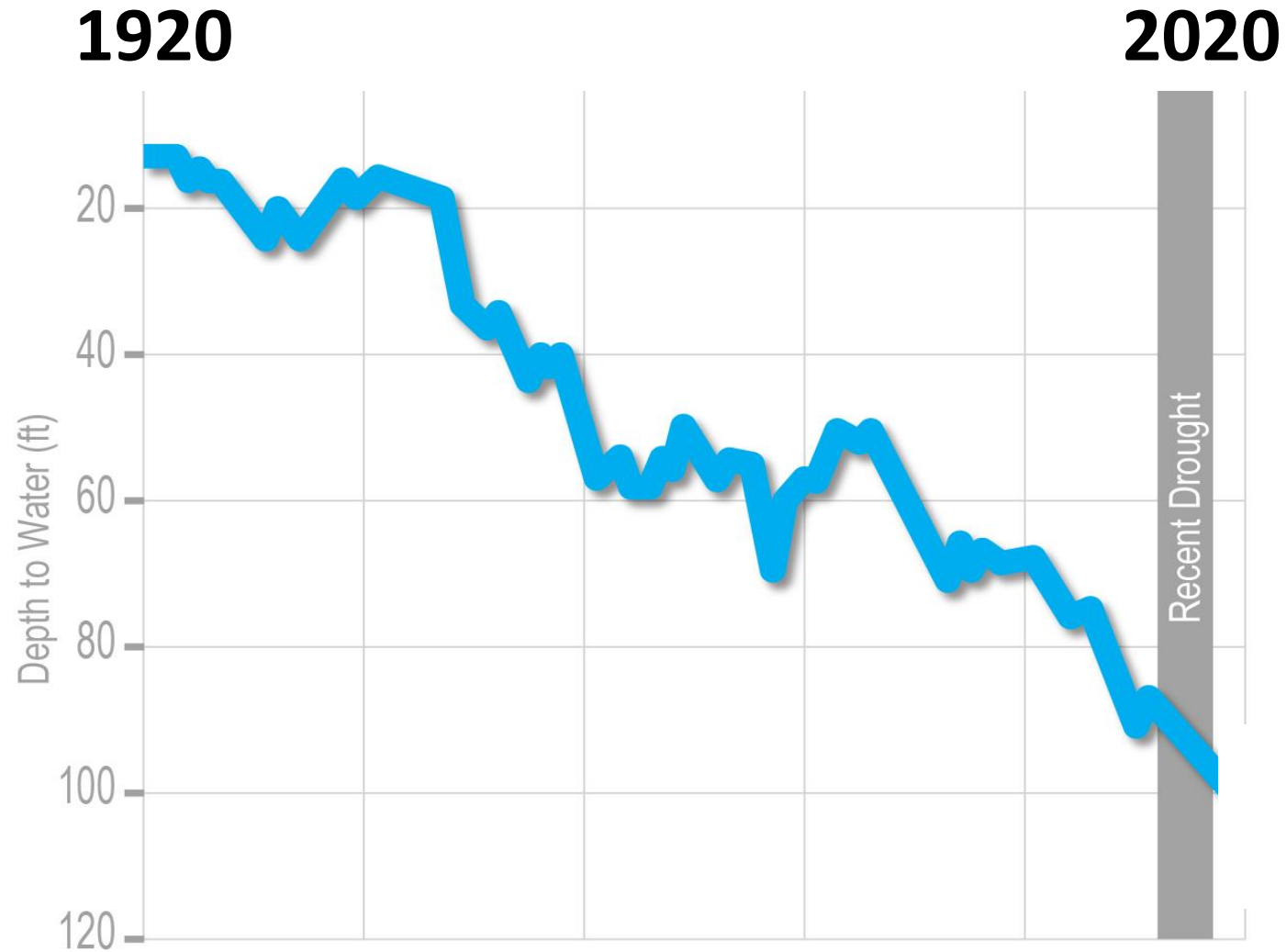




# *Subsidence 2015 – 2016*

**Friant Kern Canal  
\*60% Reduction  
in Capacity**

# Chronic Overdraft



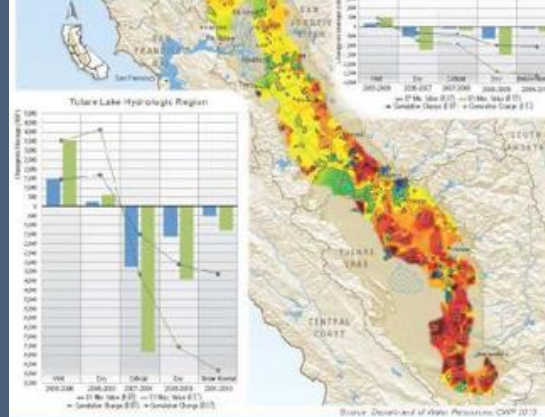
Average Depth to Groundwater - Fresno Irrigation District



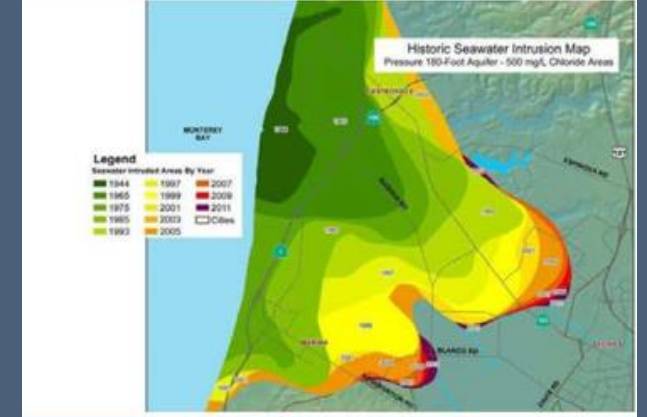
# The 6 Undesirable Results



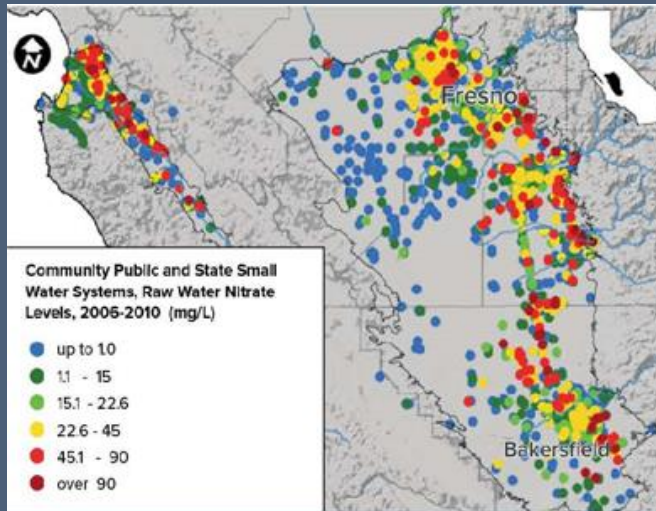
Lowering of GW Levels



Reduction  
of GW Storage



Seawater Intrusion



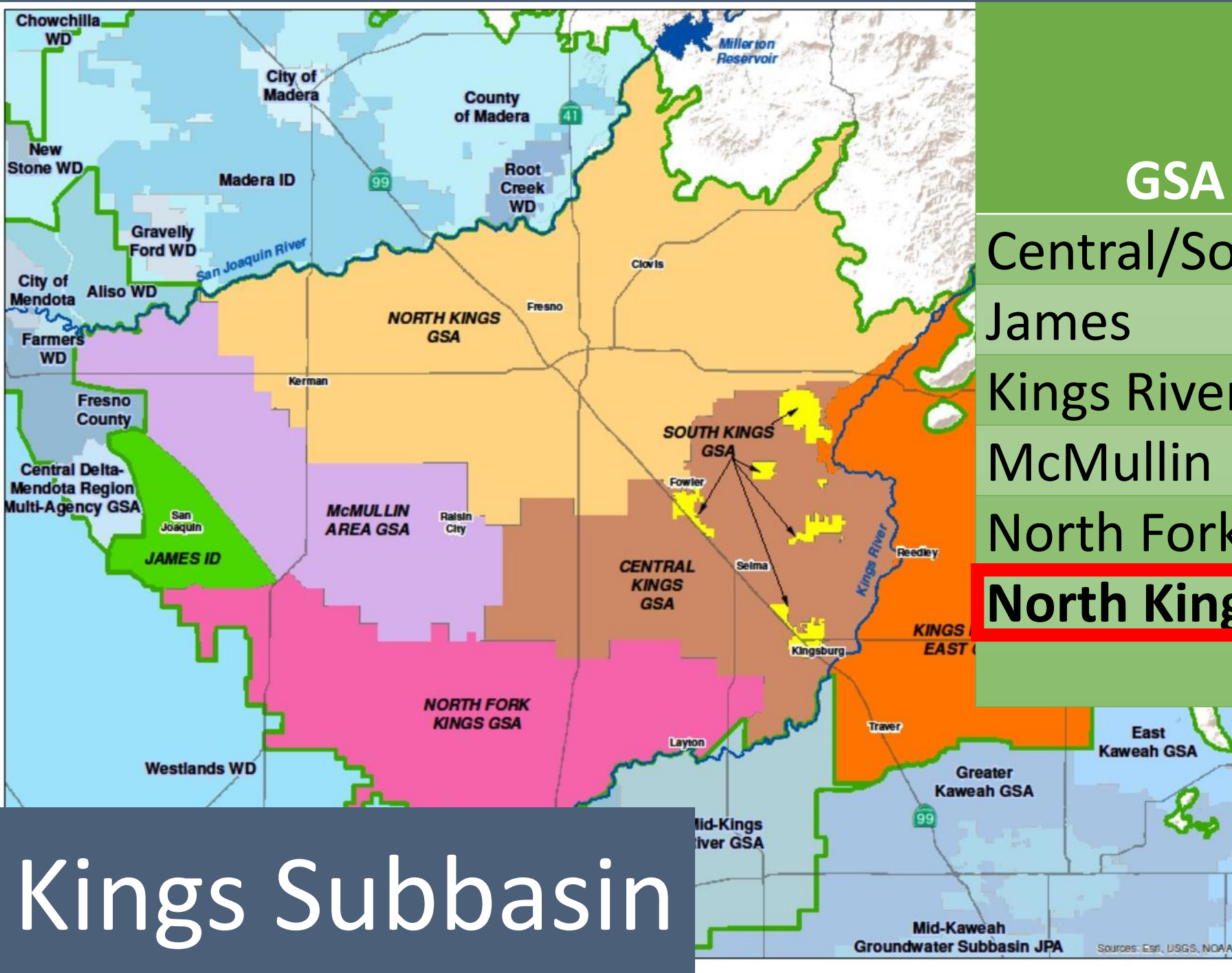
Water Quality Degradation



Land Subsidence



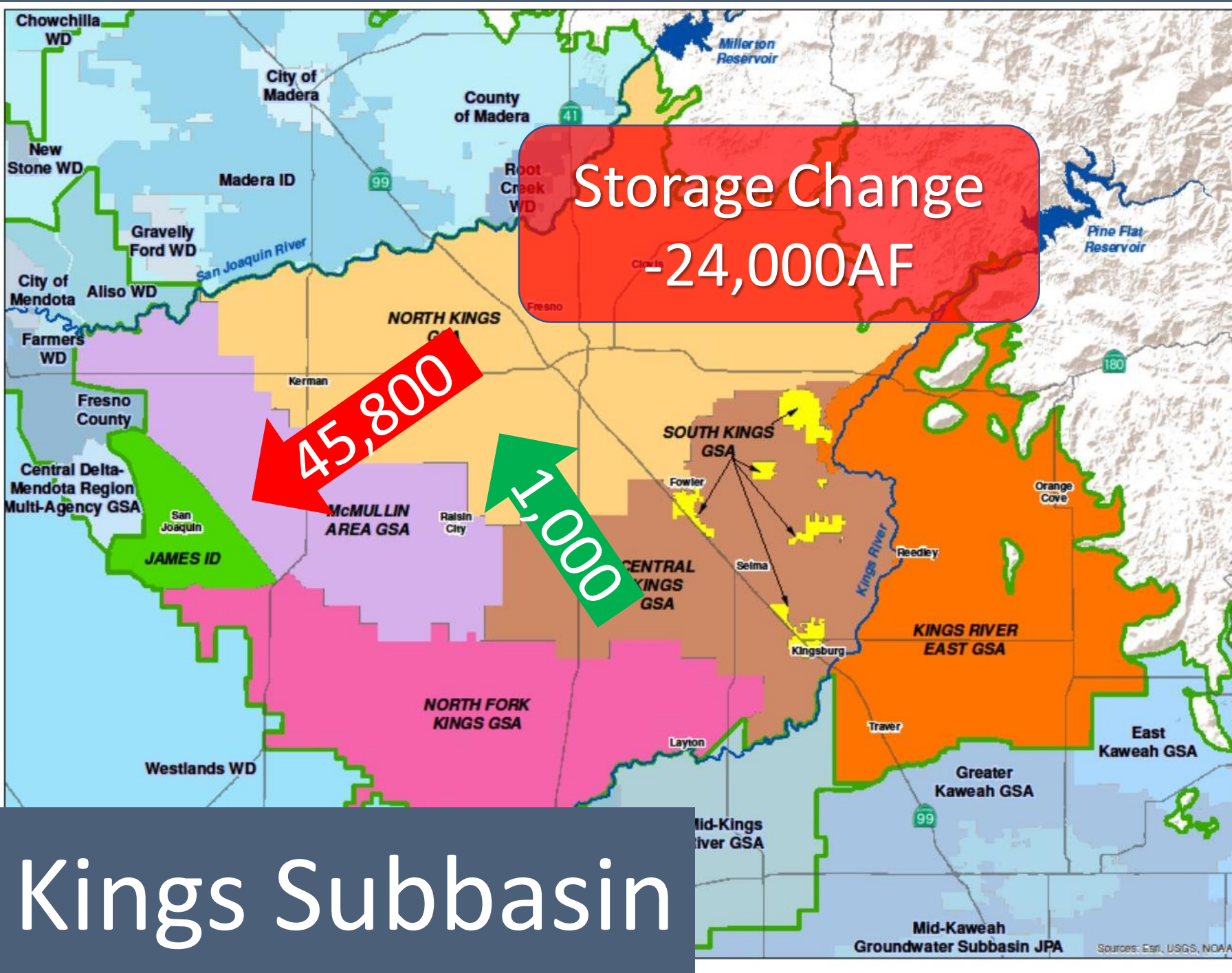
Depletion of  
Interconnected Streams



# Kings Subbasin

Initial Responsibility (AF)	
GSA	
Central/South James	-7,100
Kings River East McMullin	16,700
North Fork	-11,000
	-91,100
	-50,300
<b>North Kings</b>	<b>20,800</b>
<b>Total</b>	<b>-122,000</b>

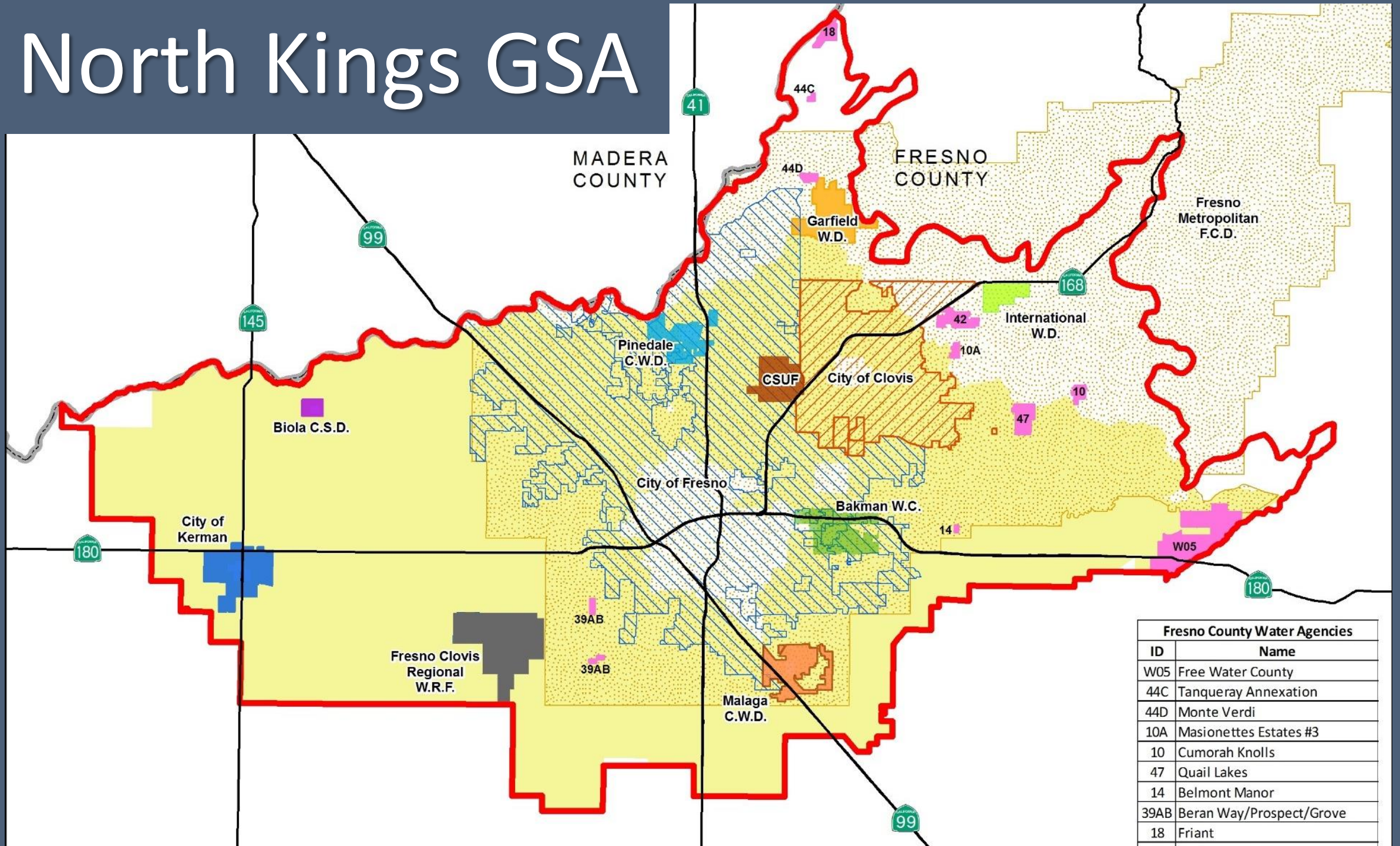




NKGSA in  
“surplus”  
ONLY if  
boundary  
flows stop

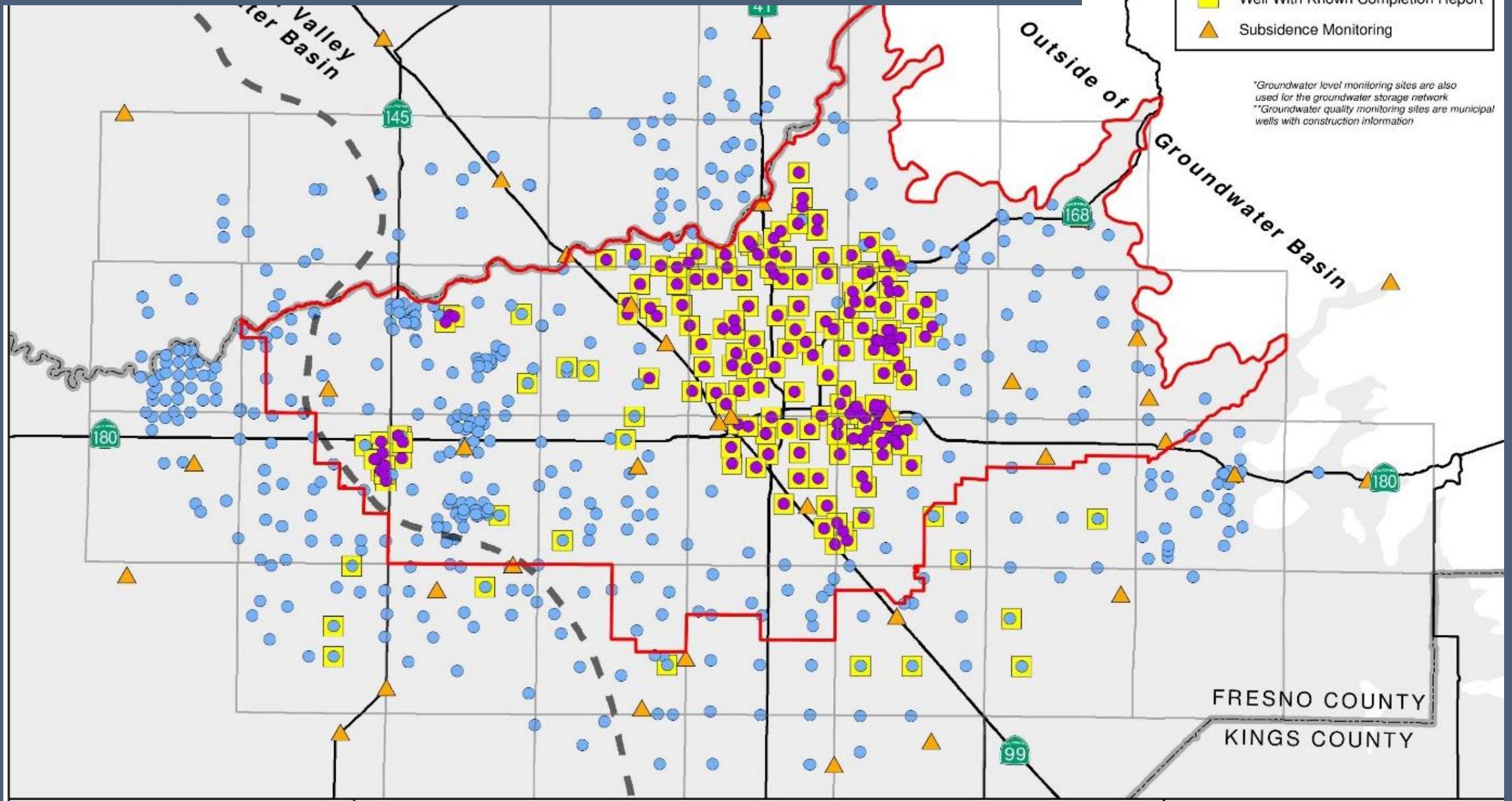


# North Kings GSA



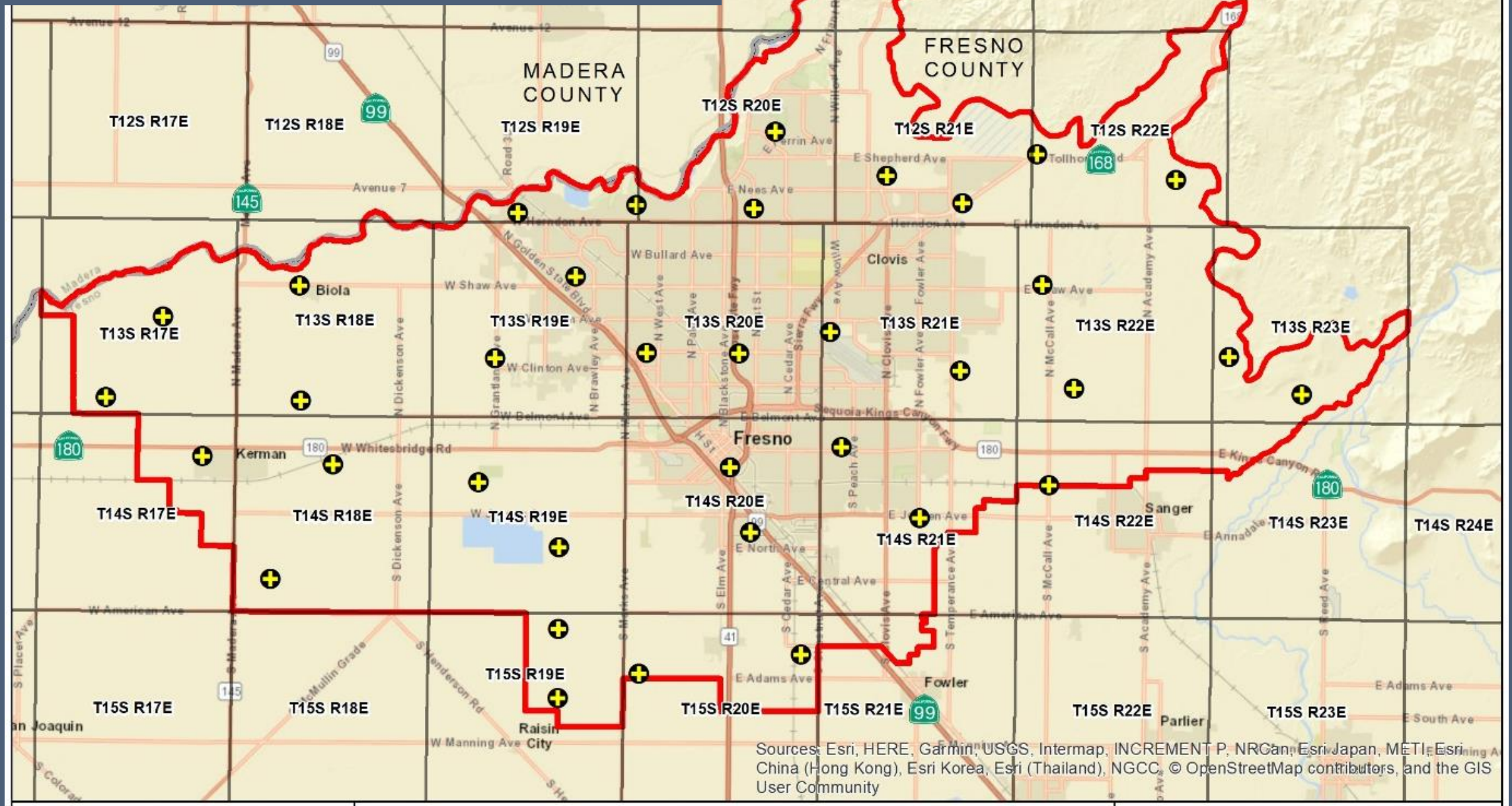


# Groundwater Monitoring



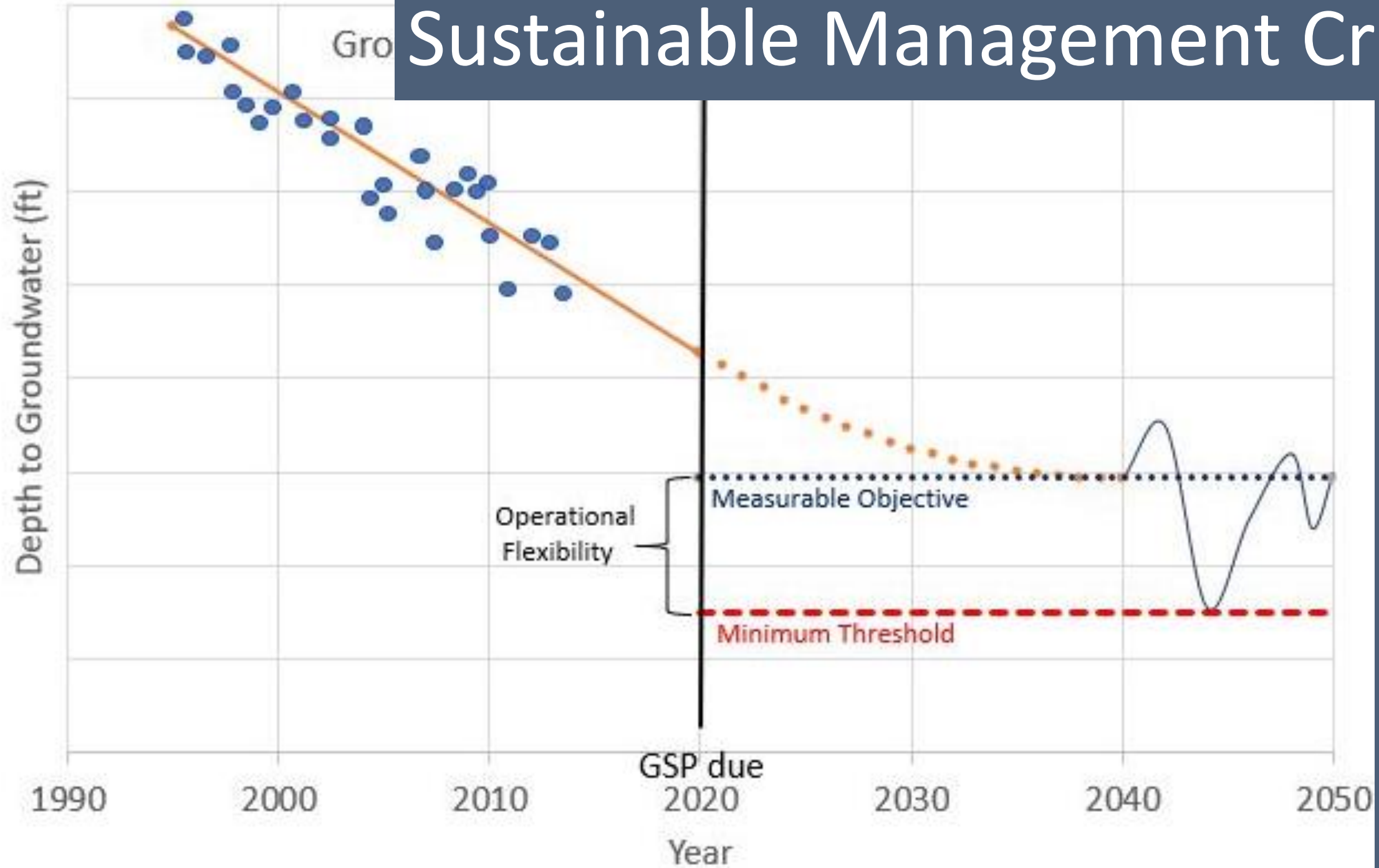


# Indicator Wells





# Sustainable Management Criteria



1. With all the surface water that FID delivers, isn't FID in balance?

- *FID portion of NKGSA may already be sustainable based on current land use and cropping demands*



## 2. If the GSA is essentially sustainable now, why are groundwater levels continuing to decline?

- *Pumping from FID's neighbors w/o surface water.*
- *Creates GW outflow from FID*
- *FID is working with its neighbors*

### 3. Am I going to be limited on how much I can pump?

- *Plan to monitor GW on area-wide basis rather than set and limit groundwater pumping from every single well*
- *Parcel-by-parcel monitoring expensive*



## 4. Am I going to have to put a meter on my well?

- *FID not initially recommending meters*
- *Utilize area-wide approach first*
- *May require meters if conditions do not improve prior to 2040*

## 5. Am I going to have to pay more for water?

- *FID not planning on increasing rates for additional SGMA-related projects*
- *Will seek grants to fund projects*
- *FID currently funding SGMA admin through existing assessment revenue*



## 6. What are the cities & urban pumpers required to do about groundwater impacts?

- *All pumpers must mitigate for impacts*
- *Cities have relied on GW, significantly lowering GW under urban area*
- *Cities operate SWTFs to treat FID surface water.*
- *Divert storm water to FMFCD basins*



***FID Strategies***

***Sustainable Groundwater  
Management Act***



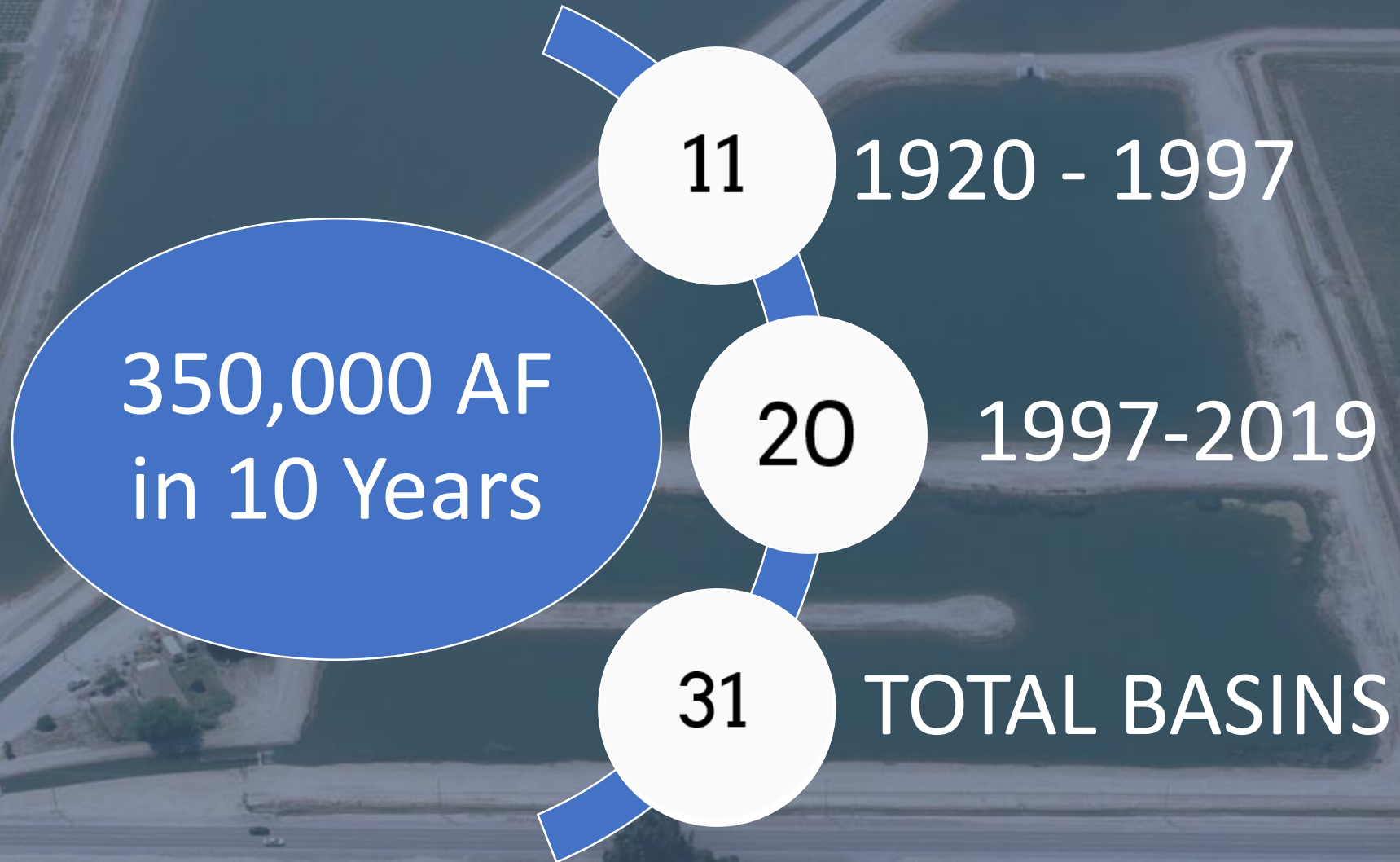


# FID Strategies – Existing & Proposed Infrastructure



	Strategy	Examples
1	On-Farm Recharge	Irrigation Season, Floods
2	Dual Use Recharge Basins	Regulation, Storm
3	Flood Detention Basins	Big Dry Creek Reservoir, etc.
4	Operational Efficiencies	Transfers, etc.
5	Invest in New Reservoirs	Temperance Flat, etc.

# *FID Basins & Recharge*





# NEW RECHARGE BASINS UNDER CONSTRUCTION



WATER - YOUR MOST VALUABLE RESOURCE



150 Acres of New Basins

