

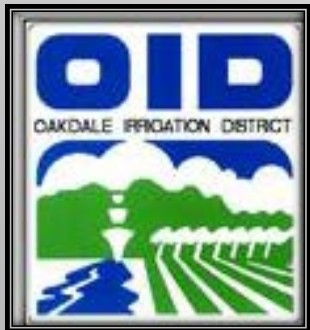
# SGMA STATUS

## MODESTO & EASTERN SAN JOAQUIN GROUNDWATER SUBBASINS

JUNE 6, 2022

ERIC THORBURN, P.E.

WATER OPERATIONS MANAGER & DISTRICT ENGINEER



# SUSTAINABLE GROUNDWATER MANAGEMENT ACT

- SIGNED INTO LAW BY GOVERNOR JERRY BROWN IN 2014.
- SETS FRAMEWORK FOR STATEWIDE SUSTAINABLE GROUNDWATER MANAGEMENT.
- RECOGNIZES THAT GROUNDWATER MANAGEMENT IS BEST ACCOMPLISHED LOCALLY.



# SUSTAINABLE GROUNDWATER MANAGEMENT ACT REQUIREMENTS

Jun. 30, 2017

Jan. 31, 2020/22

Every Five Years

2040/42



Form  
Groundwater  
Sustainability  
Agencies

Critically  
Overdrafted/Me  
dium and High  
Priority Basins  
Submit GSP to  
State

Update  
Groundwater  
Sustainability  
Plan

ESJ/Modesto  
Subbasin  
Achieves  
Sustainability

# SUSTAINABLE MANAGEMENT CRITERIA INDICATORS

## What is Sustainable Yield?



“Sustainable yield means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result.”

California Water Code Section 10721

## Undesirable Results:



Chronic Lowering of Groundwater Levels



Reduction in Groundwater Storage



Seawater Intrusion



Degraded Water Quality

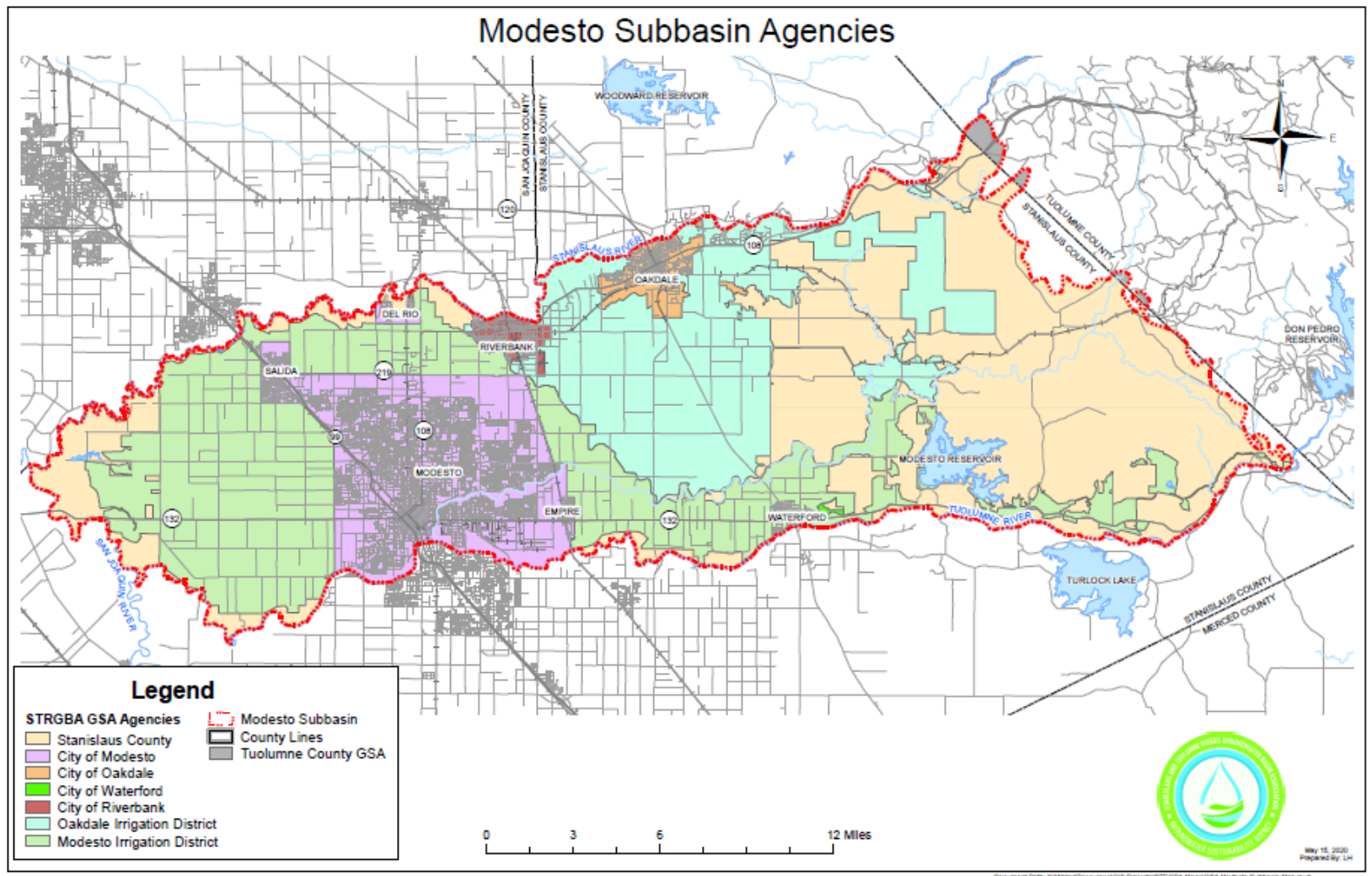


Land Subsidence



Depletion of Interconnected Surface Water

# STRGBA GSA AND THE MODESTO SUBBASIN



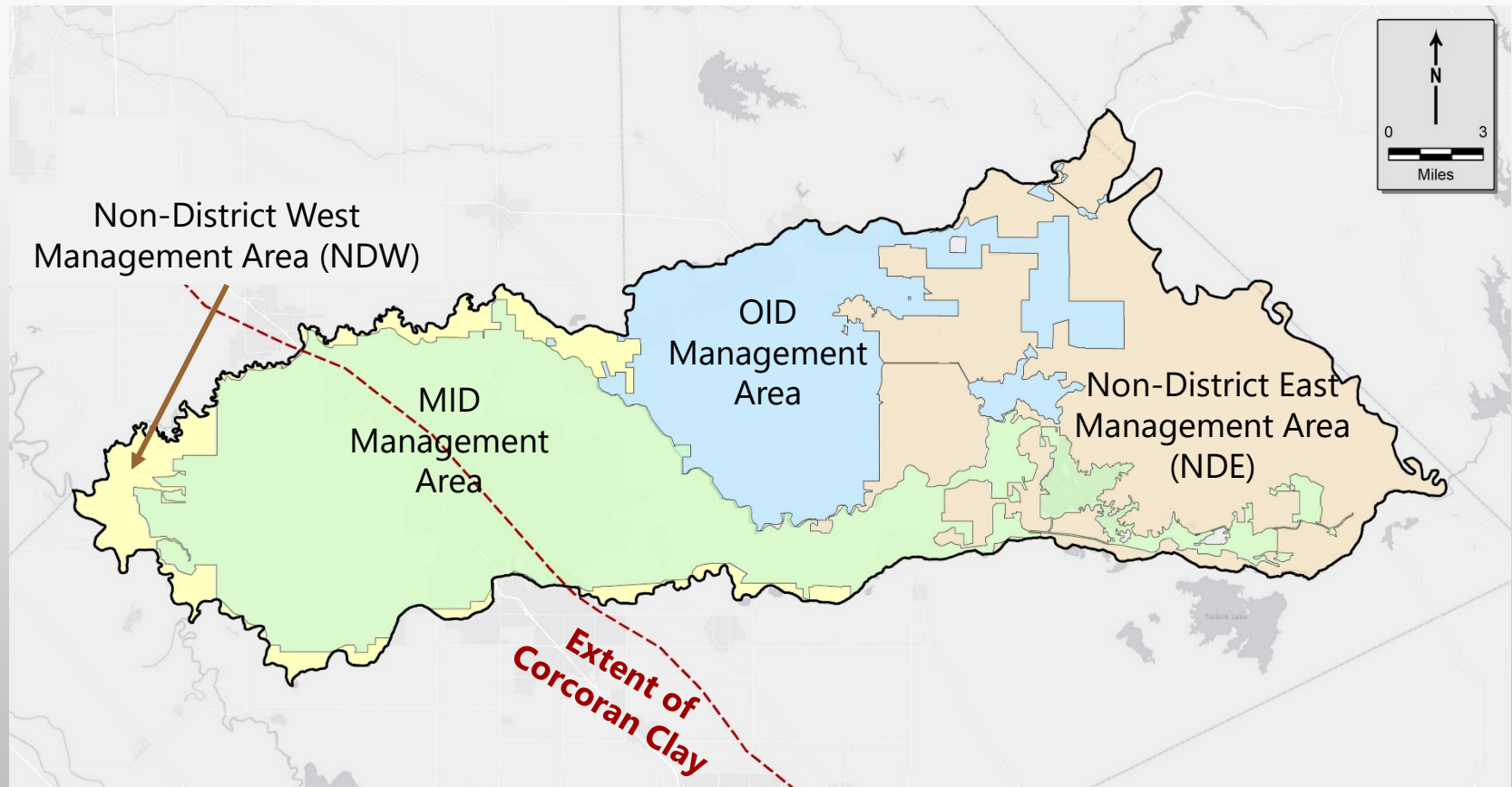


# TUOLUMNE COUNTY GSA



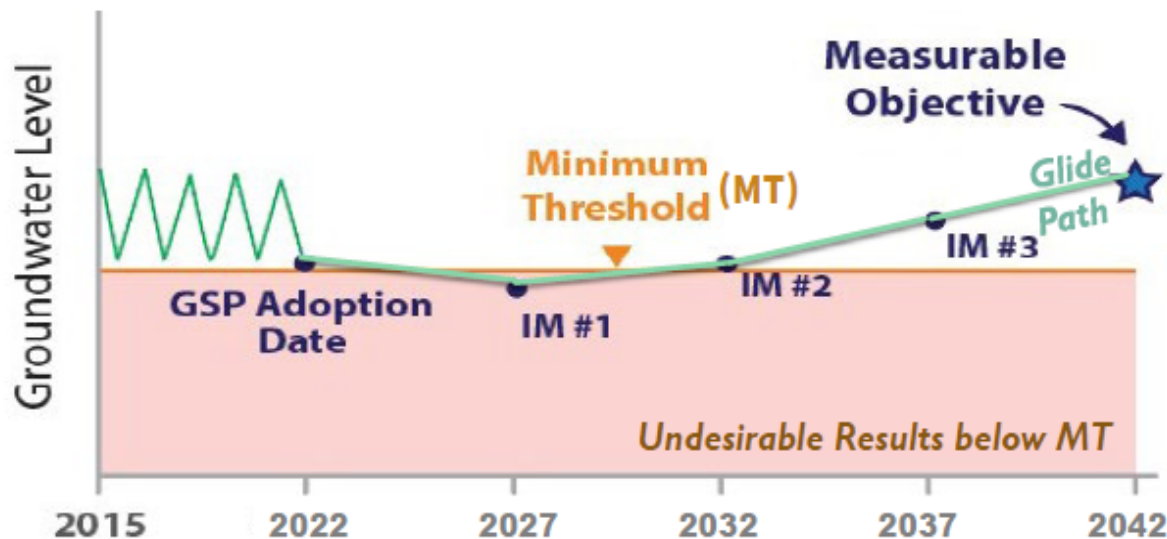
- Oversees the portion of the Modesto Subbasin that falls within Tuolumne County.
- Coordinating with the STRGBA GSA through Stanislaus County

# MODESTO SUBBASIN GSP MANAGEMENT AREAS



# INTERIM MILESTONES – PROPOSED APPROACH

- IM #1 – 2027: water level declines before project benefits are observed
- IM #2 – 2032: set at the MT
- IM #3 – 2037: one-half distance between the MT and the MO



TODD  
GROUNDWATER  
DRAFT

Management actions in non-District East will occur if IMs are not met.

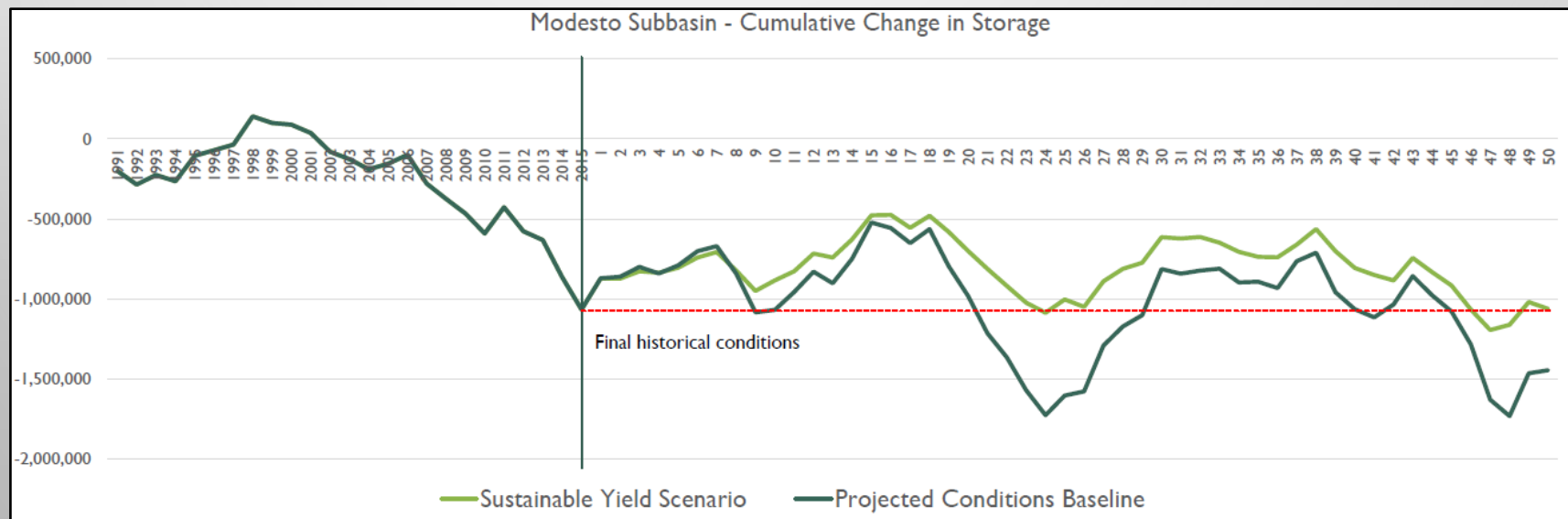




# BASELINE VS. SUSTAINABLE YIELD (SY)

	Historical (WY 1991-2015)	Baseline (50-Yr Avg)	SY Scenario (50-Yr Avg)
Ag. Area (acres)	138,000	132,000	122,000
Ag. ETAW	288,000	321,000	292,000
Ag. SW Deliveries	289,000	266,000	266,000
Ag. Private Pumping	223,000	230,000	183,000
Ag. Agency Pumping	26,000	24,000	24,000
Urban Area (acres)	31,000	37,000	37,000
Urban Demand	88,000	116,000	116,000
Urban SW Deliveries	26,000	51,000	51,000
Urban Pumping	63,000	60,000	60,000
<b>Total SY Pumping</b>	<b>311,000</b>	<b>314,000</b>	<b>267,000</b>

In the absence of any surface water supply projects, a pumping reduction of 47,000 AFY (58%) in the Non-District East would be needed to reach sustainability.



# Project Scenarios

#	Urban Projects	Project Proponent	Group	Scenario I	Scenario II	Scenario III
1	Municipal Conservation Projects	City of Modesto	1	X	X	X
2	Storm Drain Cross Connection Removal Project	City of Modesto	2	X	X	X
3	Surface Water Supply Project	City of Waterford	2	X	X	X
<b>In-lieu Supply or Recharge Projects</b>						
4	MID to Out-of-District Lands In-lieu and Direct Recharge Project	Non-District East	2		X	X
5	OID to Out-of-District Lands In-lieu and Direct Recharge Project	Non-District East	2		X	X
<b>Flood Mitigation Projects</b>						
6	Tuolumne River Flood Mitigation Direct Recharge Project	Stanislaus County	2		X	X
7	Dry Creek Flood Mitigation Direct Recharge Project	Stanislaus County	2		X	X
<b>Post-PMA Sustainable Yield Analysis</b>						
	Demand Reduction					X

**NOTE:** The *Growth Realization of Surface Water Treatment Plant Phase II* – is a Group I PMA and is already simulated as part of the projected conditions baseline



# MODESTO GW SUBBASIN SGMA STATUS

- GSP ADOPTED & SUBMITTED BY JAN. 31, 2022 DEADLINE
- PROJECT IMPLEMENTATION = NO MANAGEMENT ACTIONS?
  - NDE SUPPLY PROJECTS
  - ADDRESS IDENTIFIED DATA GAPS
- 2022 ANNUAL REPORT SUBMITTED BY APRIL 1, 2022 DEADLINE

## FUTURE - 2042 SUSTAINABILITY

- CONTINUED ANNUAL REPORTING & 5-YR GSP UPDATES
- DWR REVIEW TO APPROVE OR IDENTIFY DEFICIENCIES (2-YRS)
- ADDRESS DATA GAPS

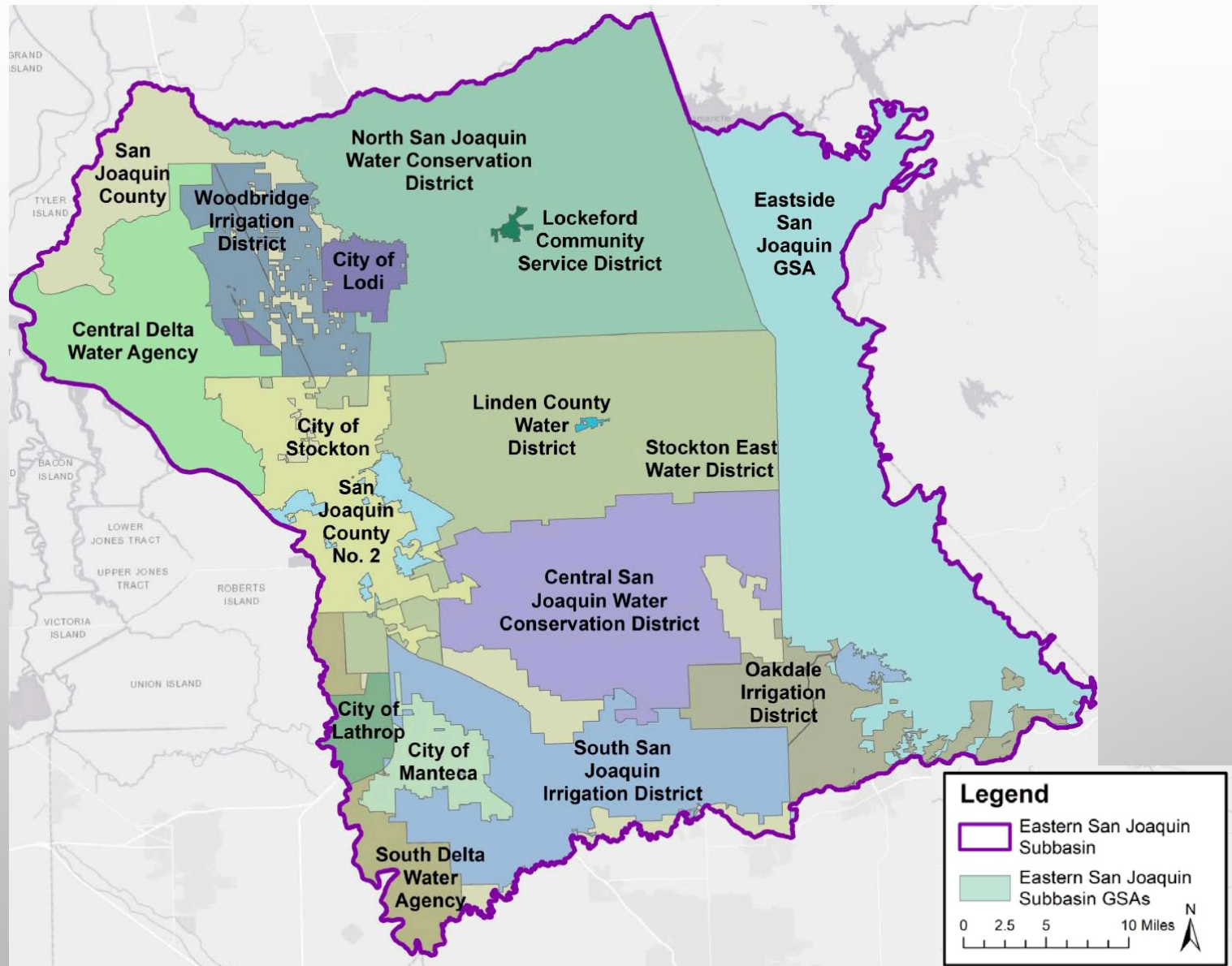


# STRGBA GSA – GET INVOLVED!

- STRGBA GSA MEETINGS
  - TYPICALLY MONTHLY @ 1:30 PM ON THE 2<sup>ND</sup> WEDNESDAY
- OID WEBSITE
  - [WWW.OAKDALEIRRIGATION.COM](http://WWW.OAKDALEIRRIGATION.COM) → WATER OPERATIONS → SGMA
- STRGBA.ORG
  - MODESTO SUBBASIN GSP
  - STRGBA GSA ACTIVITIES
  - JOIN THE STRGBA MAILING LIST!

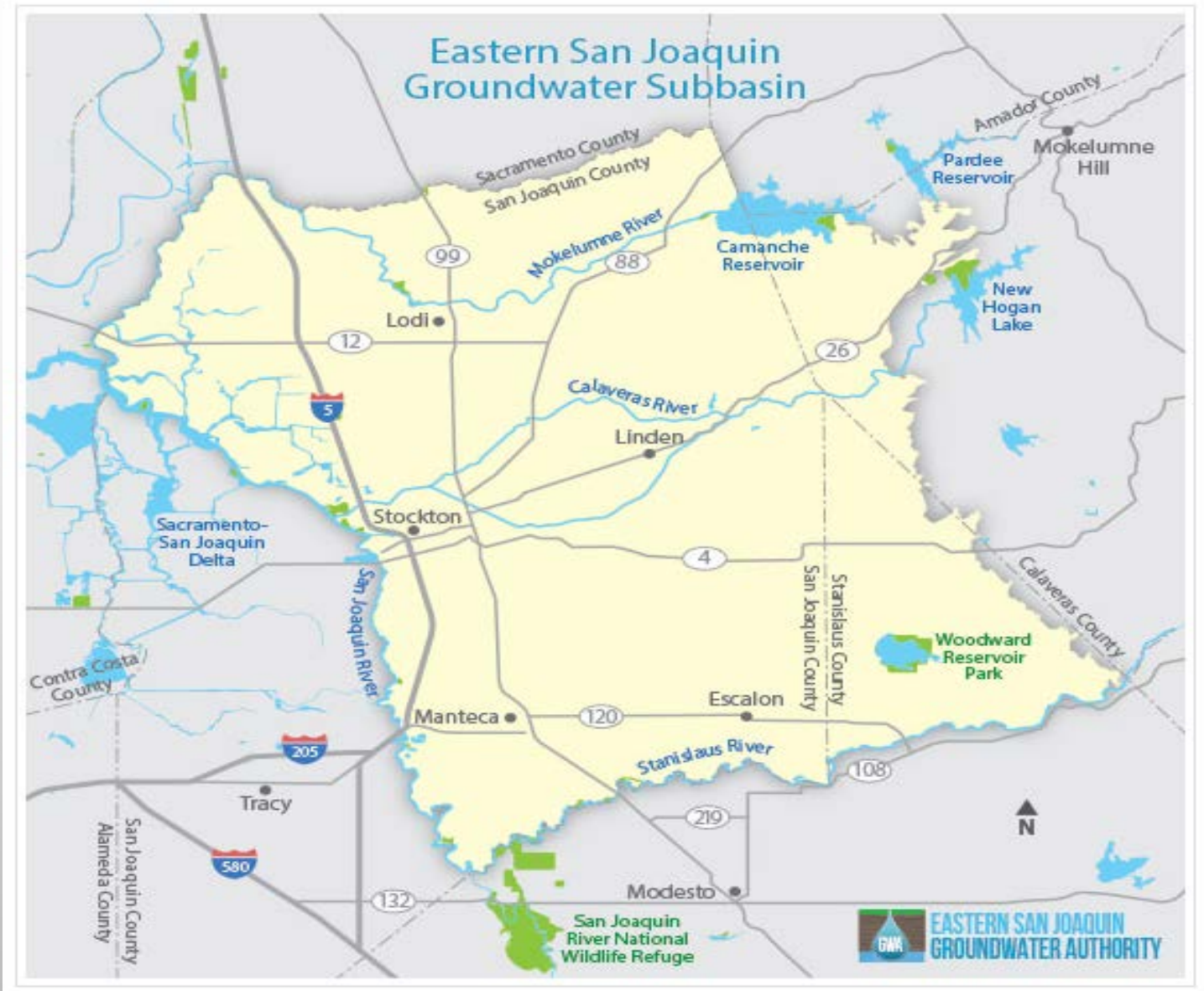


# ESJGWA & THE ESJ GW SUBBASIN



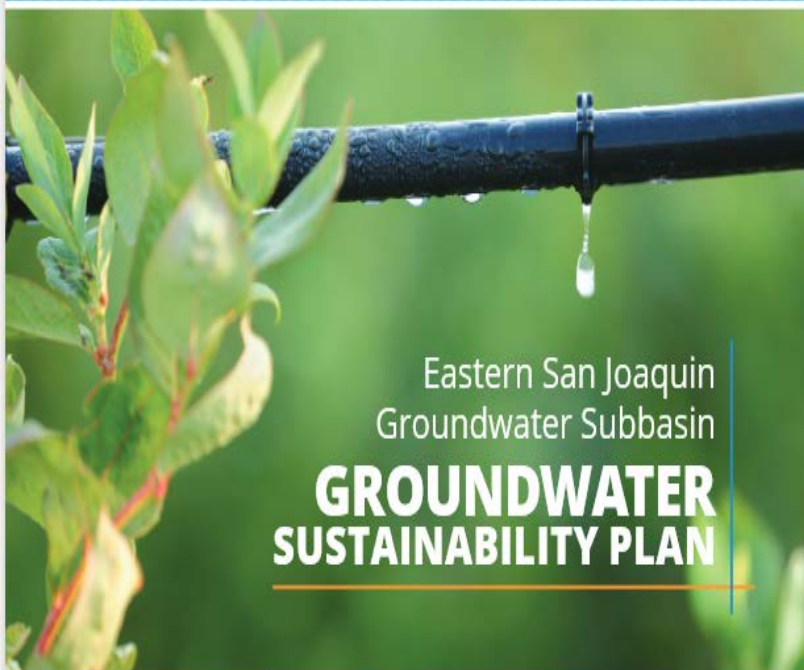


# ESJ GW SUBBASIN BOUNDARIES





EASTERN SAN JOAQUIN  
GROUNDWATER AUTHORITY



Eastern San Joaquin  
Groundwater Subbasin  
**GROUNDWATER  
SUSTAINABILITY PLAN**

PUBLIC DRAFT  
JULY 2019



# ESJ GW SUBBASIN SGMA STATUS

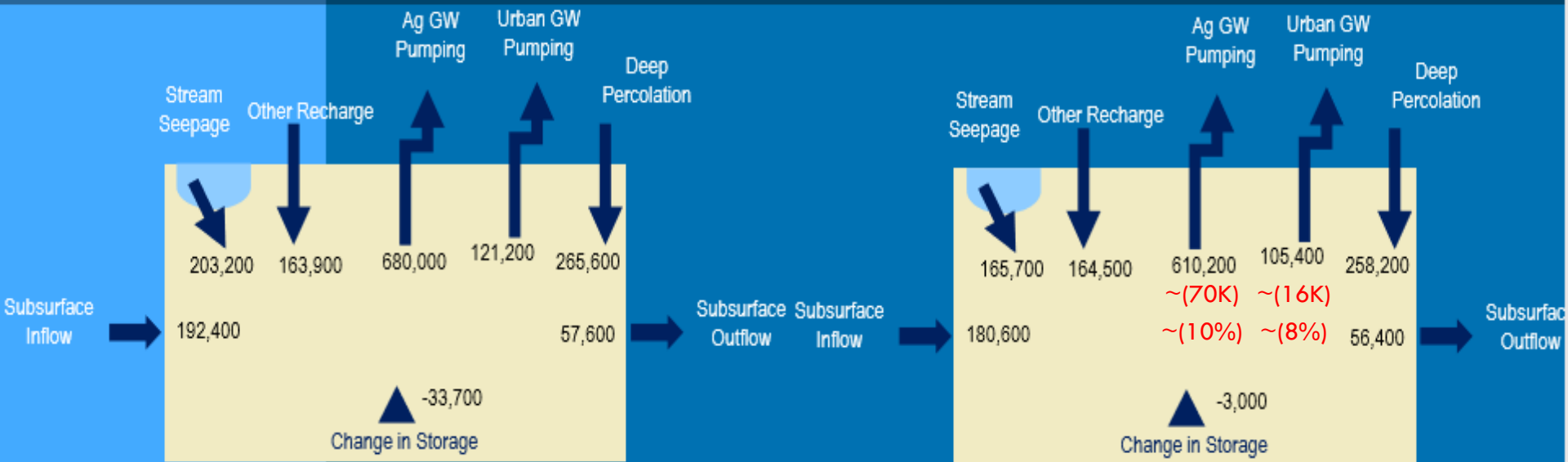
HIGH PRIORITY BASIN IN CRITICAL  
OVERDRAFT

- OID GSA FORMED JUNE 15, 2017
- ESJGW AUTHORITY JPA ESTABLISHED  
FEBRUARY 8, 2017
  - A TOTAL OF 16 GSAS

GSP ADOPTED BY JANUARY 31, 2020  
DEADLINE

# ESJ GW SUBBASIN GSP - WATER BUDGET

## Water Budget Comparison Optimized GW Pumping Reduction



**Projected Conditions**

**Sustainable Yield:  
Optimized GW Pumping Reduction**

**Note:** All flows are rounded annual averages in acre-feet per year (AFY)

**\*NOTE: MANAGEMENT TO A RECHARGE/REDUCTION OF 78K AC-FT/YR.**

**DRAFT**

# HOW DO WE GET THERE?

## PROJECTS & MANAGEMENT ACTIONS

### 1. GSAS MAY IMPLEMENT PROJECTS INDIVIDUALLY OR JOINTLY

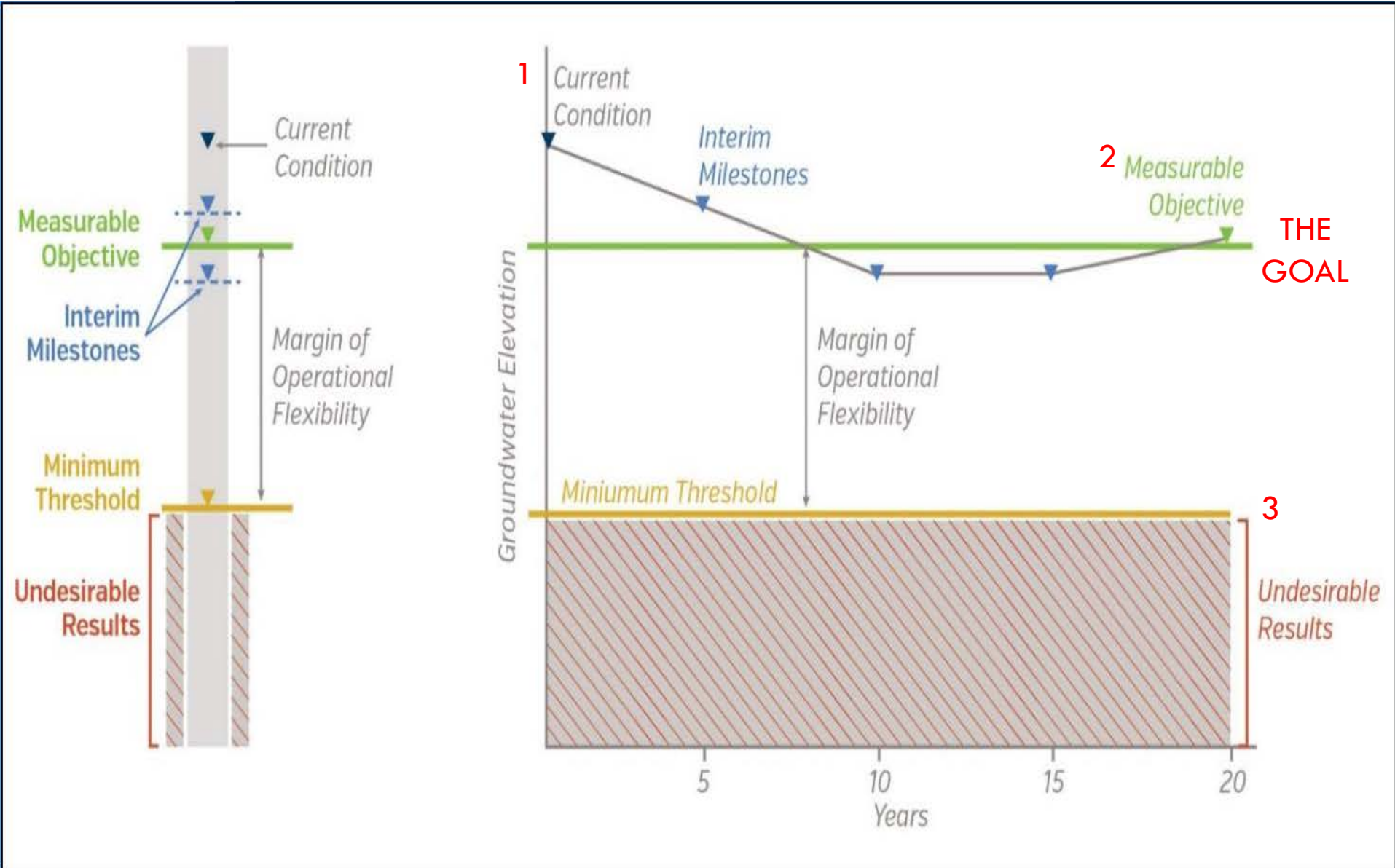
- 23 POSSIBLE PROJECTS IN THE FOLLOWING CATEGORIES (CH. 6)
  - PLANED PROJECTS (8)
  - POTENTIAL PROJECTS (9)
  - LONGER-TERM OR CONCEPTUAL PROJECTS (6)

### 2. GW PUMPING RESTRICTIONS OR ALLOCATIONS

- THESE DEMAND-SIDE MANAGEMENT ACTIONS WILL FOLLOW IF NECESSARY



# SUSTAINABLE MANAGEMENT CRITERIA





# ESJ GW SUBBASIN GSP ADOPTION

- GSP ADOPTED & SUBMITTED BY JAN. 31, 2020 DEADLINE
- PROJECT IMPLEMENTATION = NO MANAGEMENT ACTIONS?
  - SUPPLY-SIDE PROJECTS (**NOT MODELED W/ SPECIFIC APPLICATIONS**)
  - ADDRESS IDENTIFIED DATA GAPS
- ANNUAL REPORT SUBMITTED BY APRIL 1, 2022 DEADLINE
- DWR IDENTIFIED 2020 GSP DEFICIENCIES
  - **JULY 27, 2022 DEADLINE** TO RESPOND/ADOPT NEW GSP

## FUTURE - 2040 SUSTAINABILITY

- CONTINUED ANNUAL REPORTING & 5-YR GSP UPDATES
- ADDRESS DATA GAPS

# ESJGWA SGMA RESOURCES

- DWR SGMA PORTAL
  - [SUSTAINABLE GROUNDWATER MANAGEMENT ACT \(SGMA\) \(CA.GOV\)](https://www.water.ca.gov/sgma/)
- OID WEBSITE
  - [WWW.OAKDALEIRRIGATION.COM](http://WWW.OAKDALEIRRIGATION.COM) → WATER OPERATIONS → SGMA
- EAST SAN JOAQUIN GW AUTHORITY
  - MONTHLY WORKGROUP & JPA MEETINGS (2<sup>ND</sup> WEDNESDAY)
  - WEBSITE: [ESJGROUNDWATER.ORG](http://ESJGROUNDWATER.ORG)
  - DMS: [HTTPS://OPTI.WOODARDCURRAN.COM/ESJ](https://OPTI.WOODARDCURRAN.COM/ESJ)