

Turlock Subbasin
Groundwater Sustainability Plan
Community Workshop

Ceres Community Center

April 18, 2018

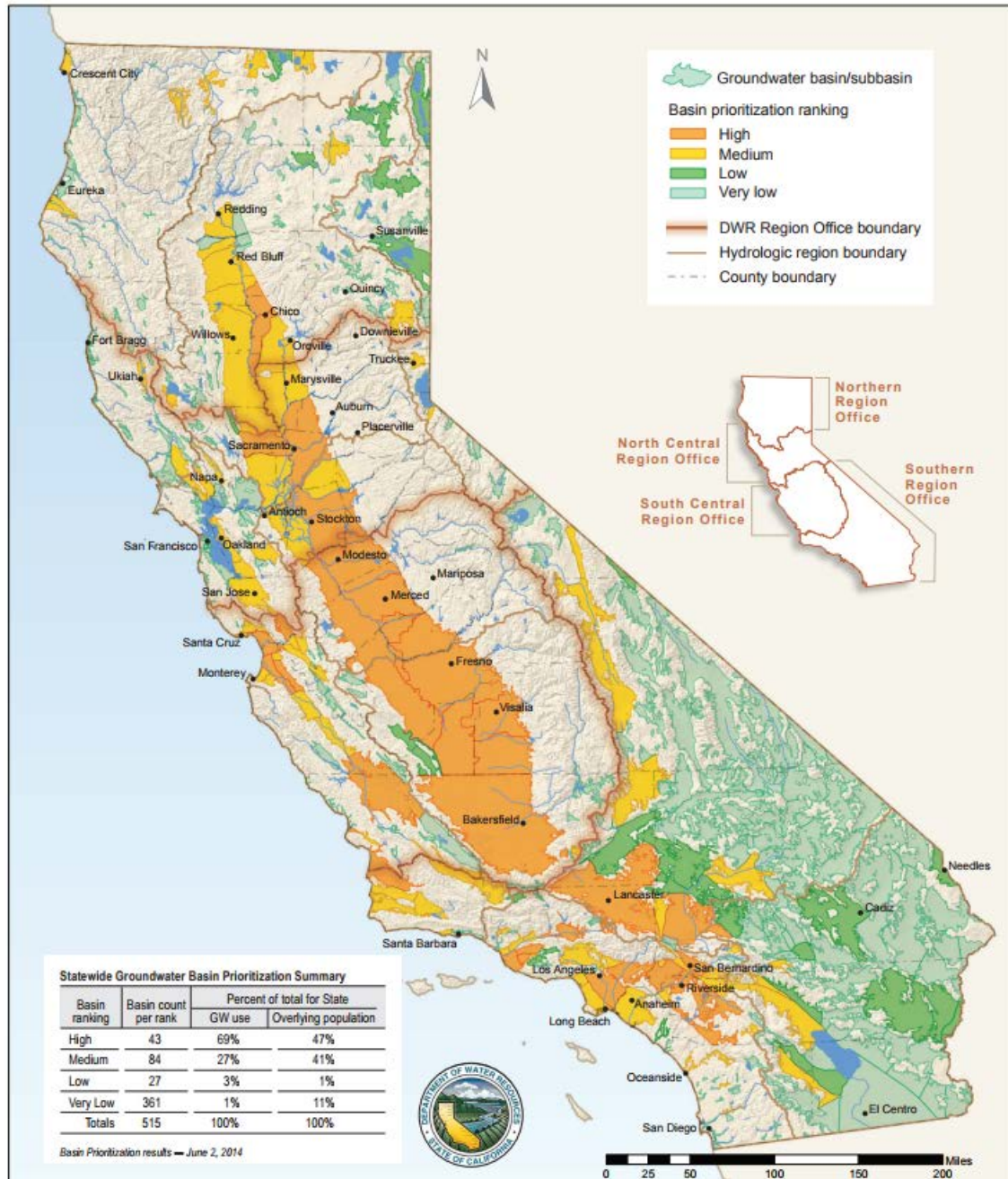
Overview

- Welcome
- Turlock Subbasin Groundwater Governance
- GSP Development Process and Engagement
- Poster Session (open-house format)

Tonight's Objectives

1. Outline the Groundwater Sustainability Plan (GSP) development process.
2. Identify specific GSP topics of most interest to stakeholders, while informing stakeholders of engagement opportunities within in the GSP process.

Turlock Subbasin Groundwater Governance



Groundwater basin/subbasin

Basin prioritization ranking

- High
- Medium
- Low
- Very low

DWR Region Office boundary

Hydrologic region boundary

County boundary

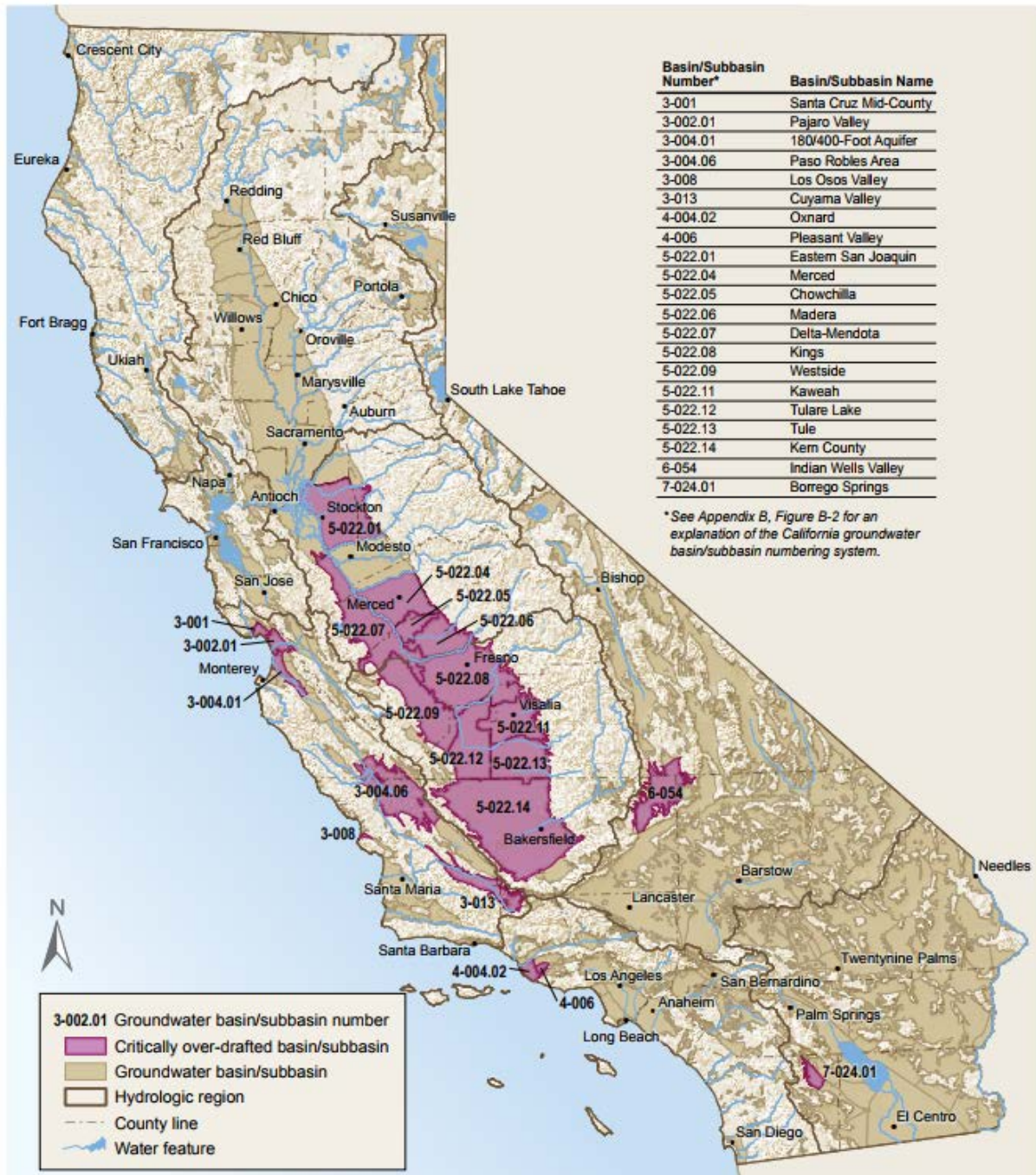


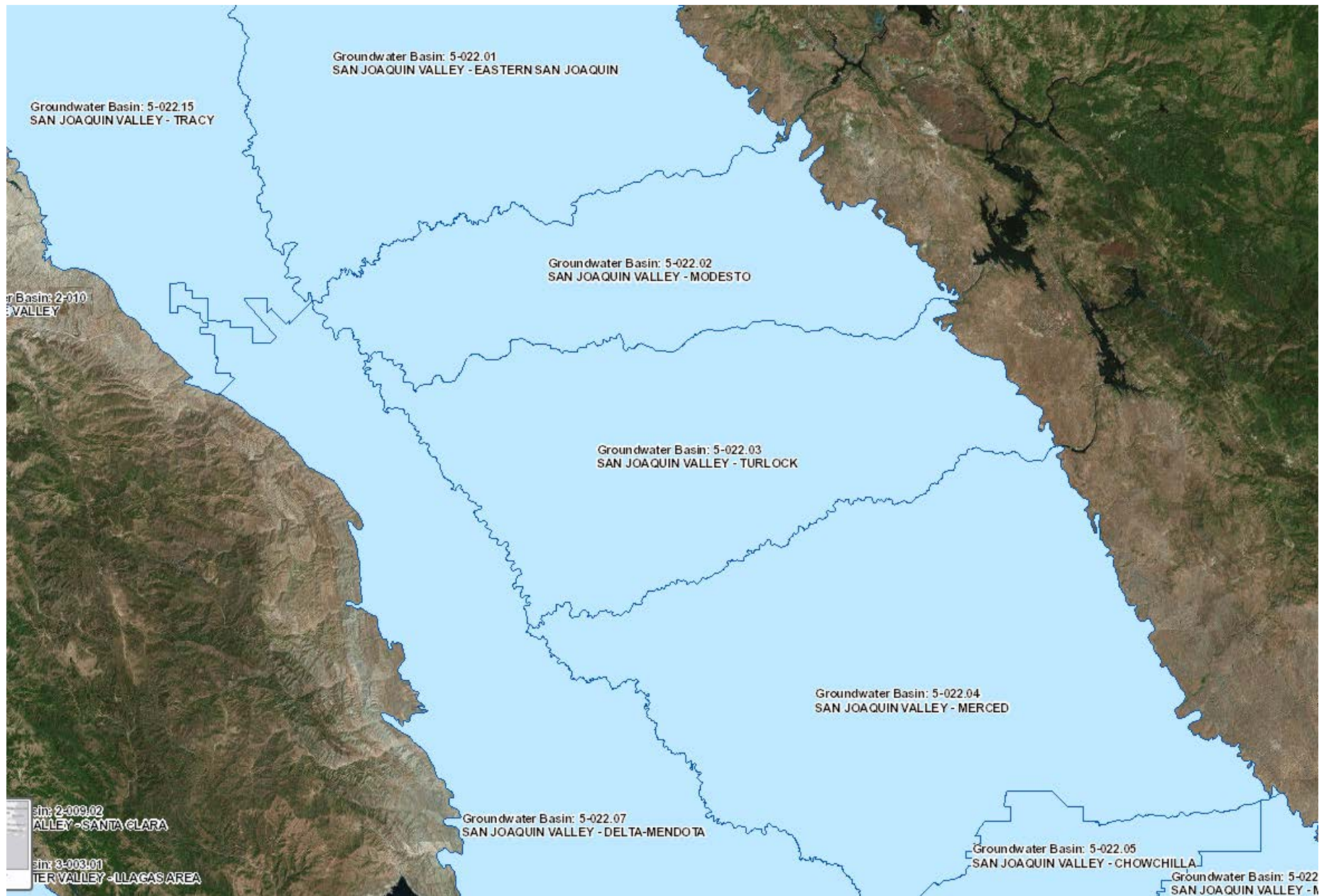
Statewide Groundwater Basin Prioritization Summary

Basin ranking	Basin count per rank	Percent of total for State	
		GW use	Overlying population
High	43	69%	47%
Medium	84	27%	41%
Low	27	3%	1%
Very Low	361	1%	11%
Totals	515	100%	100%

Basin Prioritization results - June 2, 2014







Groundwater Basin: 5-022.01
SAN JOAQUIN VALLEY - EASTERN SAN JOAQUIN

Groundwater Basin: 5-022.15
SAN JOAQUIN VALLEY - TRACY

Groundwater Basin: 5-022.02
SAN JOAQUIN VALLEY - MODESTO

Groundwater Basin: 5-022.03
SAN JOAQUIN VALLEY - TURLOCK

Groundwater Basin: 5-022.04
SAN JOAQUIN VALLEY - MERCED

Groundwater Basin: 5-022.07
SAN JOAQUIN VALLEY - DELTA-MENDO TA

Groundwater Basin: 5-022.05
SAN JOAQUIN VALLEY - CHOWCHILLA

Groundwater Basin: 5-022
SAN JOAQUIN VALLEY - M

r Basin: 2-010
VALLEY

sin: 2-009.02
ALLEY - SANTA CLARA

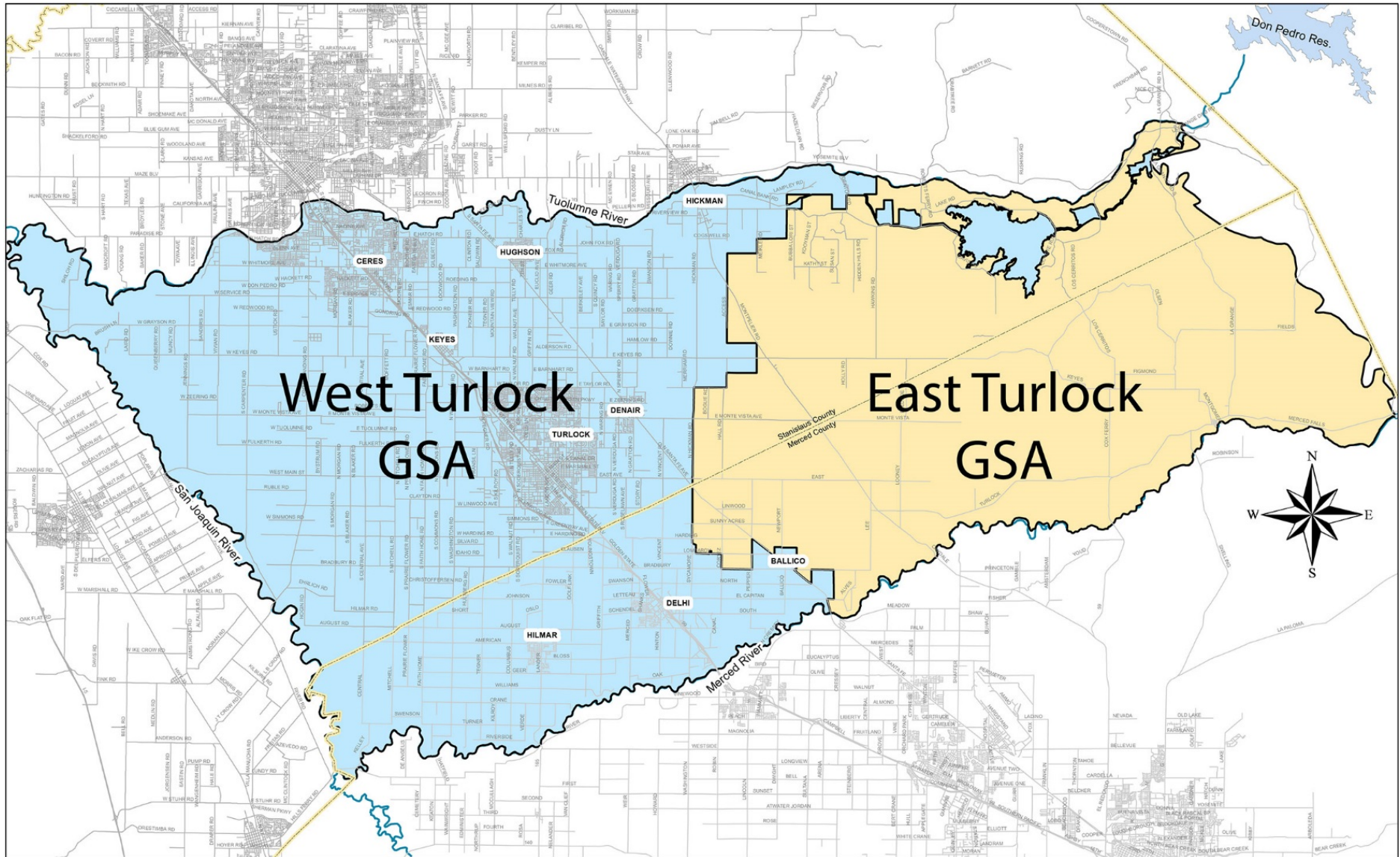
sin: 3-003.01
TER VALLEY - LLACAS AREA

Turlock Subbasin Facts

- Mix of cities, counties, irrigation districts, community services districts, water districts, county water districts and private landowners **pump groundwater** from the Subbasin.
- **347,000 acres**, with irrigated crops (250,000 acres), non-irrigated areas (53,000 acres), and urban development (25,000 acres) as the predominant land uses.

Turlock Subbasin Facts

- **Groundwater** supplies municipal, industrial, rural and agricultural demands of the region. **Surface water** from the Tuolumne River and, to a lesser extent, the Merced River, supplies a large portion of agricultural irrigation demands within the Subbasin.
- Deep percolation of irrigation water, via flood irrigation, is the **largest inflow** to the Subbasin and plays an important role in maintaining groundwater storage.

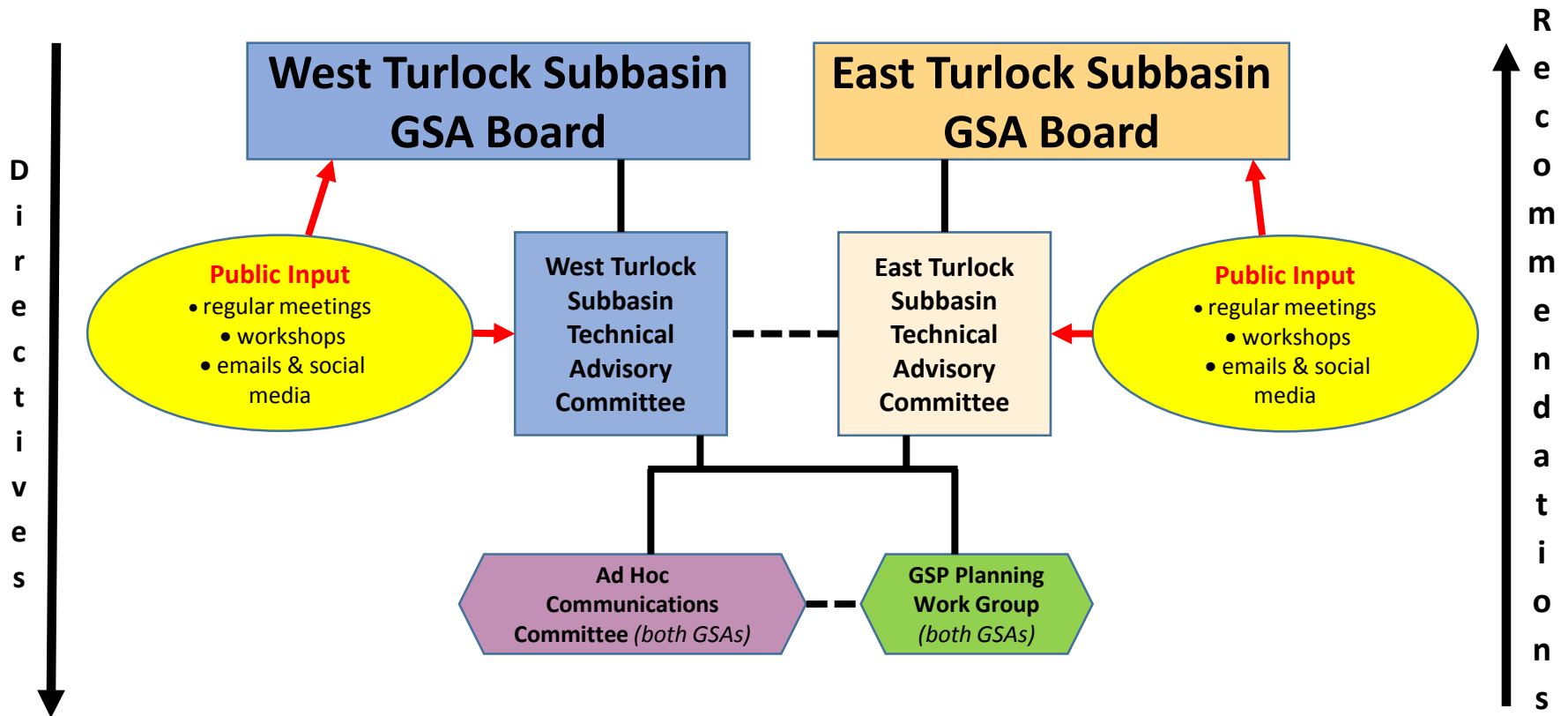


**West Turlock
GSA**

**East Turlock
GSA**



Turlock Subbasin Governance



Questions on Governance?

GSP Development Process and Engagement

May 31, 2017 Denair Workshops

- **Goals**

1. Update stakeholders on GSA formation activities
2. Gather best practices for stakeholder engagement

- **By the Numbers**

- 81 participants
- 26 stakeholder questions
- 60 'interested parties' e-mails gathered

May 31, 2017 Denair Workshops

- **General Takeaways**

- Still interested in groundwater despite wet water year
- E-mail is preferred update format
- Workshop format enables conversation
- Large visuals (e.g. maps, charts) would be of help
- Lots of good questions, primarily about process and past/future decisions

Post-SGMA Outreach Events

- **Oct. 2015 TGBA Workshop (Ceres)**
 - New law, timeline, process and early talks
- **GSA public hearings (March 2017)**
 - SGMA requirement
- **May 31, 2017 TGBA Workshops (Denair)**
 - GSAs have formed; communication preferences
- **Tonight's Workshop**
 - GSP process; poll stakeholders on GSP topics

Future Engagement Opportunities

- Public workshops
- Technical workshops
- Board meetings (GSAs and TACs)
- Public hearings
- Written comment periods
- Listserv sign-ups/emails
- Social media (Twitter and Facebook)
- Website – www.turlockgroundwater.org

TurlockGroundwater.org

TURLOCK GROUNDWATER

INFORMATION ABOUT SGMA COMPLIANCE WITHIN THE TURLOCK SUBBASIN

Q Search

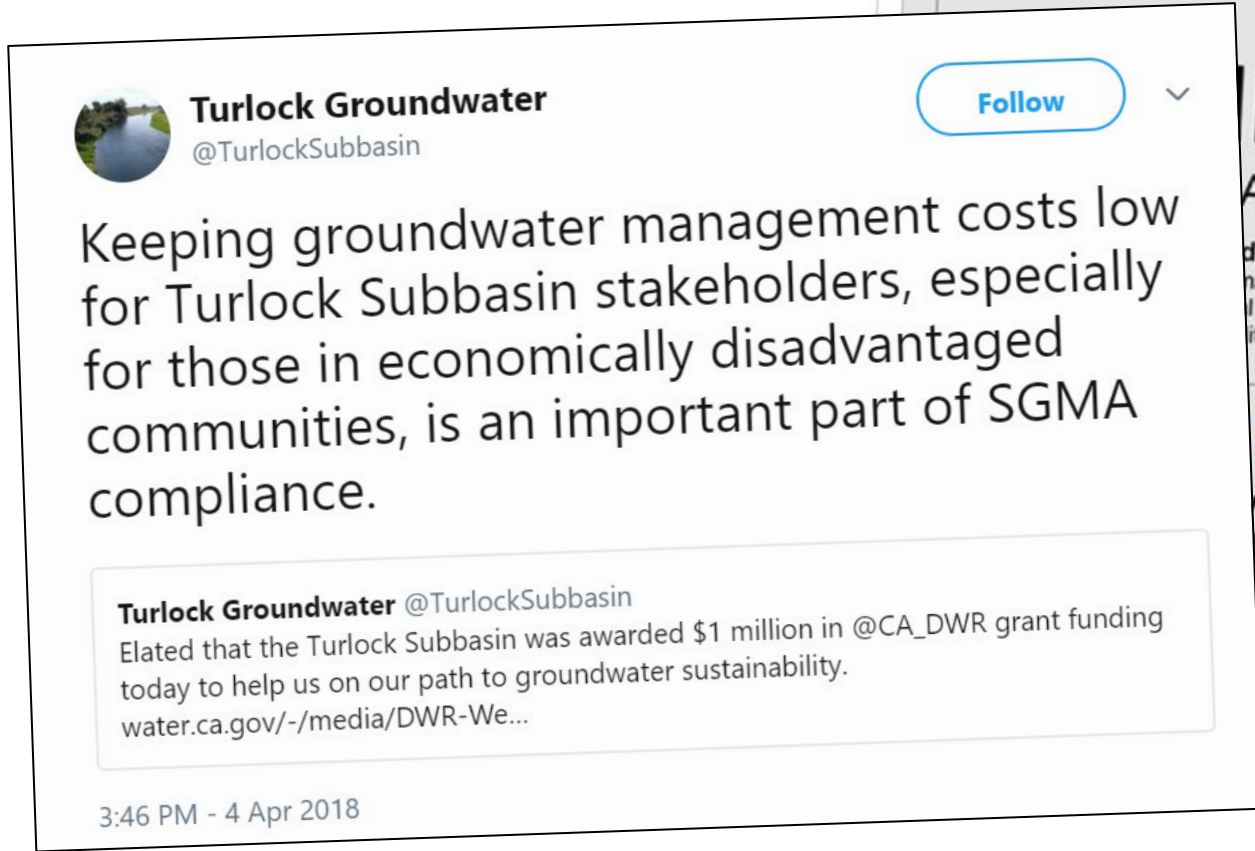
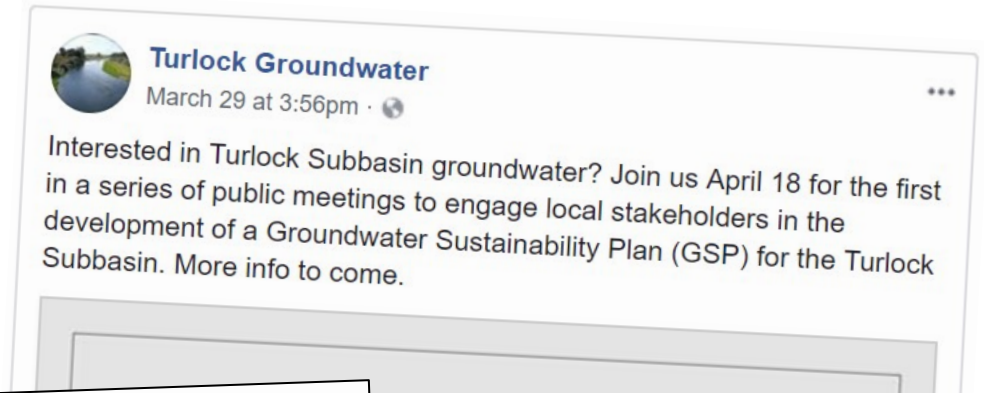
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Meetings & Agendas

West Turlock Groundwater Sustainability Agency Board

- [> ≡ WTSGSA Meeting - 3-1-18](#)
- [> ≡ WTSGSA Meeting - 1-11-18](#)
- [> ≡ WTSGSA Meeting - 12-14-17](#)
- [> ≡ WTSGSA Meeting - 9-7-17](#)
- [> ≡ WTSGSA Meeting - 6-1-17](#)
- [> ≡ WTSGSA Meeting - 3-2-17](#)
- [> ≡ WTSGSA Meeting - 2-2-17](#)

Social Media



Information Card

Turlock Subbasin Community Workshop

**I want to receive email notifications
from Turlock Subbasin managers.**

First & Last Name

email address

**and
/or**

**I have a comment/information to pass
along to Turlock Subbasin managers.**

First & Last Name *(not required)*

Comment



turlockgroundwater.org



info@turlockgroundwater.org



[TurlockGroundwater](https://www.facebook.com/TurlockGroundwater)



[@TurlockSubbasin](https://twitter.com/TurlockSubbasin)

Components of a GSP: Steps Toward Sustainability

- Based on a strong foundation of scientific analysis of the Subbasin
- Informs sustainability goals
- Communication with stakeholders throughout the process



What is Sustainability?

Five Sustainability Indicators for the Turlock Subbasin



Chronic lowering of water levels



Depletion of groundwater in storage



Degradation of groundwater quality



Land subsidence from groundwater pumping

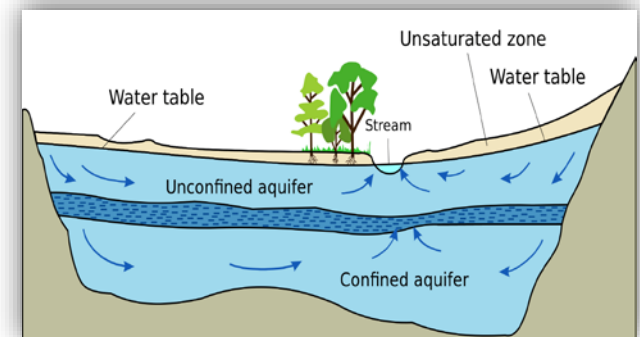


Depletion of interconnected surface water affecting beneficial uses

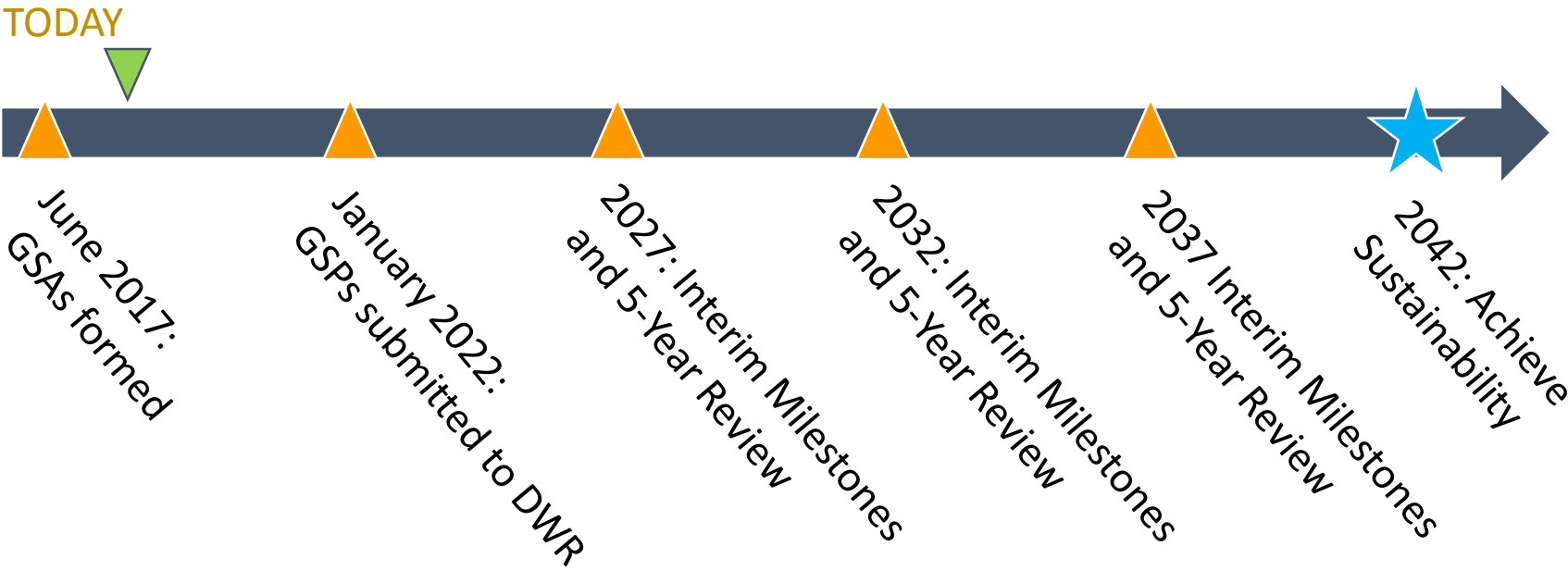
Each sustainability indicator is an undesirable result if determined to be “significant and unreasonable”

Technical Analysis: Plan Area and Basin Setting

- ***What does the groundwater basin look like?***
 - Physical setting, topography, geology, soils, hydrology, aquifers, basin geometry
- ***What are the current and historical groundwater conditions?***
 - Groundwater occurrence, levels, flow, and quality; changes over time
- ***What are the inflows and outflows for the groundwater system?***
 - Current and historical water budgets for the Subbasin
- ***What management and monitoring programs exist in the Subbasin and what improvements are required?***
 - Compile data for analysis and address data gaps
 - Monitoring required to demonstrate future success

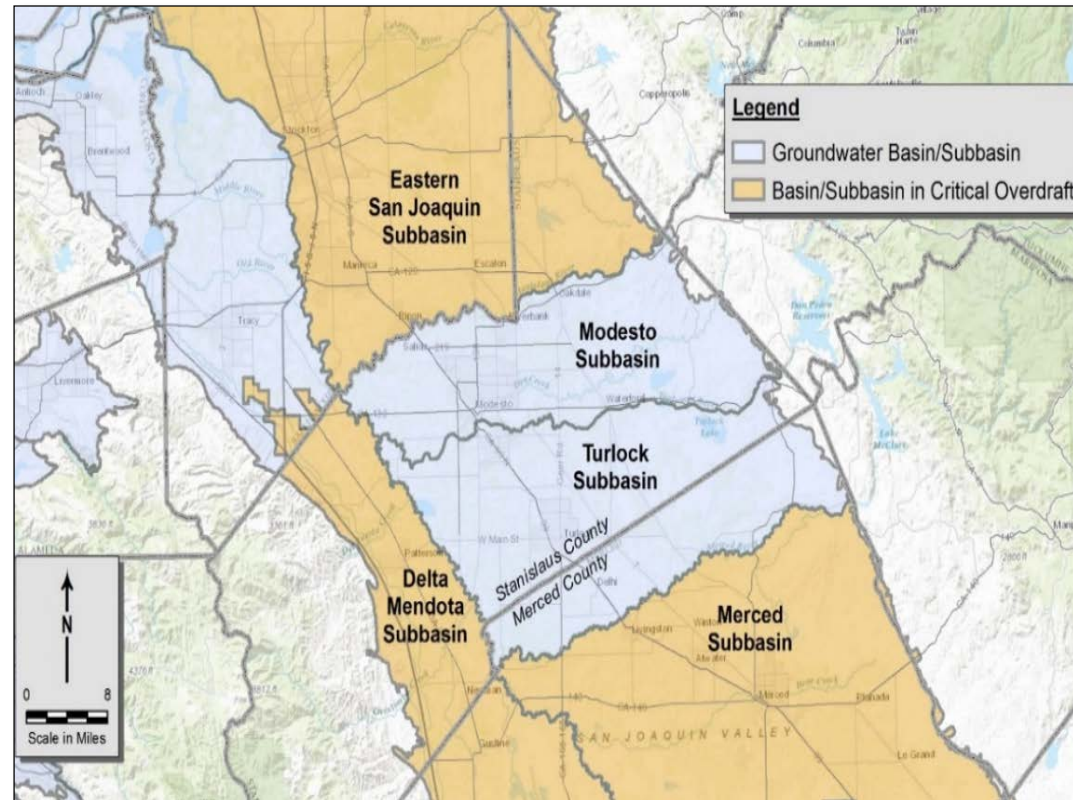


Overall Timeline for Turlock Subbasin

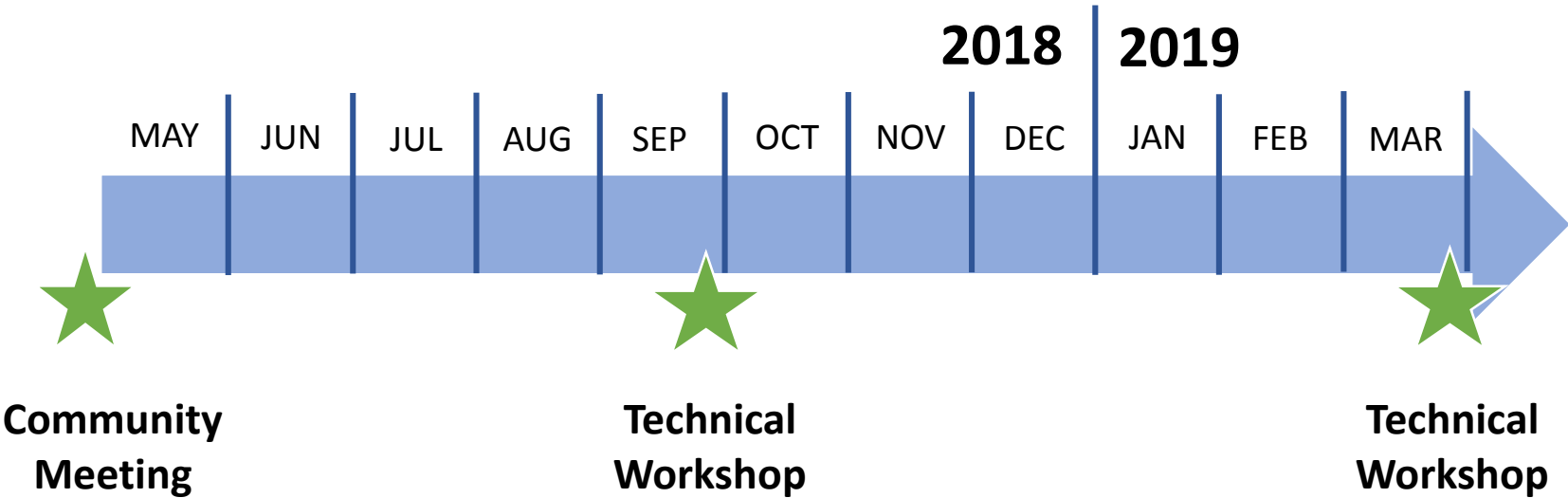


Neighboring Critically Overdrafted Basins

- Critically Overdrafted Basins to the **south and west** of the Turlock Subbasin
- GSPs for Critically Overdrafted Basins due 2020
- **Turlock Subbasin GSP due 2022**
- Turlock Subbasin **required to coordinate the GSP** analyses across the river boundaries
- Expedite technical analysis to allow for coordination



Stakeholder Input 2018 - 2019



Questions on GSP Process
or GSP Outreach?

Poster Session

POSTER SESSION

- **Four Stations**
 1. GSP Components
 2. Finding Solutions
 3. What Happens if Sustainability is a Struggle?
 4. Community Impacts
- Listen, take handouts, ask questions, provide comments
- 10-minute rotations, but feel free to roam

Poster Session Wrap-up

What can I do now?

- Fill out information card
- Visit turlockgroundwater.org
- Follow us on social media
- Attend meetings
- Stay tuned for more!