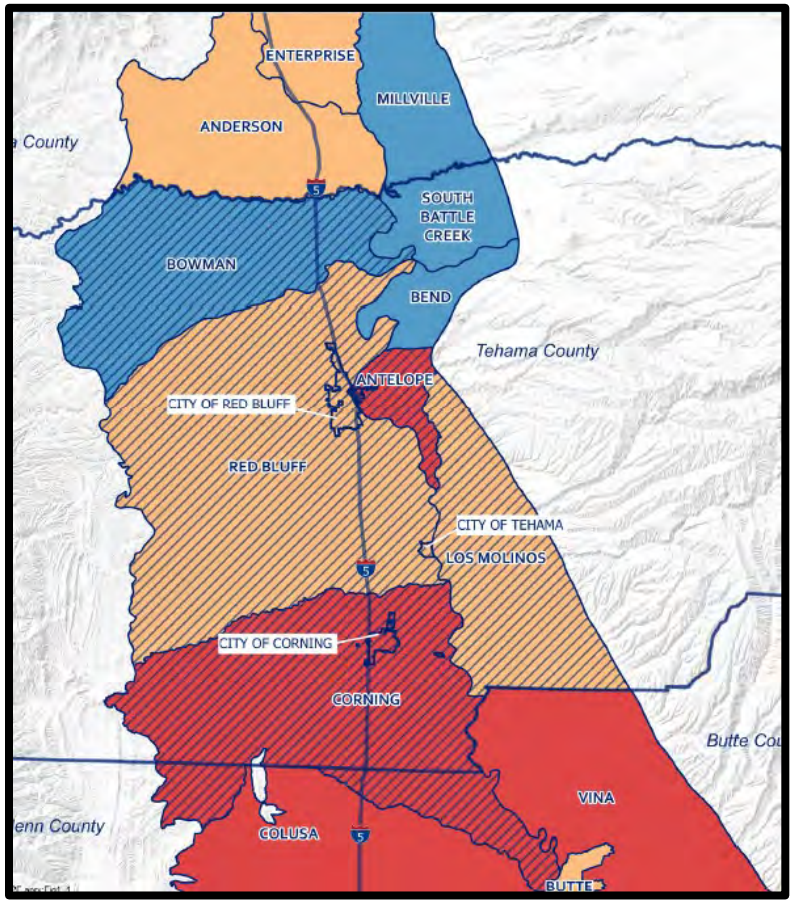
Managing Our Groundwater for the Future

Implementing the
Sustainable Groundwater Management Act (SGMA)
in Tehama County



Red Bluff Subbasin Tailgate
October 21, 2020 (5:30 PM)

Multiple Opportunities to be Involved

EMAIL UPDATES

Sign Up for the interested parties email list and/or to receive meeting agendas - contact nbethurem@tcpw.ca.gov

MEETINGS – October 2020

Outdoor Tailgates | October 14, 15, 21, and 22 | 5:30-6:30 pm

(Specific to the Bowman, Red Bluff, Antelope, and Los Molinos Subbasins)

Oct 15 – Evergreen Middle School, Cottonwood

Oct 21 – Tehama County Public Works, 9380 San Benito Ave., Gerber

Oct 22 – Los Molinos Veterans Hall, 7980 Sherwood Blvd., Los Molinos

Corning Subbasin tailgate meeting dates and locations TBD

MEETINGS – October/November/December 2020

Board of Supervisors Informational Presentation | October 20| 1:30 pm

Next Round of Public Meetings | November & December| Date & Time TBD

County-wide and subbasin-specific groundwater conditions

REGULAR MEETINGS

Groundwater Commission Meetings | 4th Wednesdays | 8:30 am

District Board Meetings | 3rd Monday, every other month (Next meeting 11/16/20) | 11:00 am

Corning Subbasin Advisory Board Meetings | 1st Wednesdays | 1:30 pm

TehamaCountyPublicWorks.CA.gov and CorningSubbasinGSP.org

What is SGMA?

The Sustainable Groundwater Management Act (SGMA) -- law was passed in 2014

Values Local Control

Local responsible agencies = Groundwater Sustainability Agencies (GSAs)

Management plans = Groundwater Sustainability Plans (GSPs)

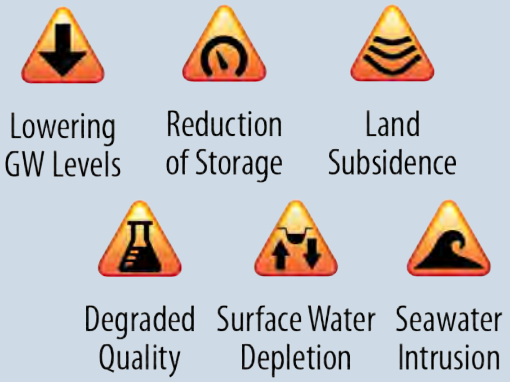
GSPs submitted to the State by January 31, 2022

Sustainability must be achieved within 20 years (by 2042)

What is the purpose of SGMA?

- Promote sustainable management of groundwater basins
- Enhance local management of groundwater (State to step in if necessary)
- Improve data collection and understanding of groundwater resources and management
- Avoid or minimize undesirable results to groundwater

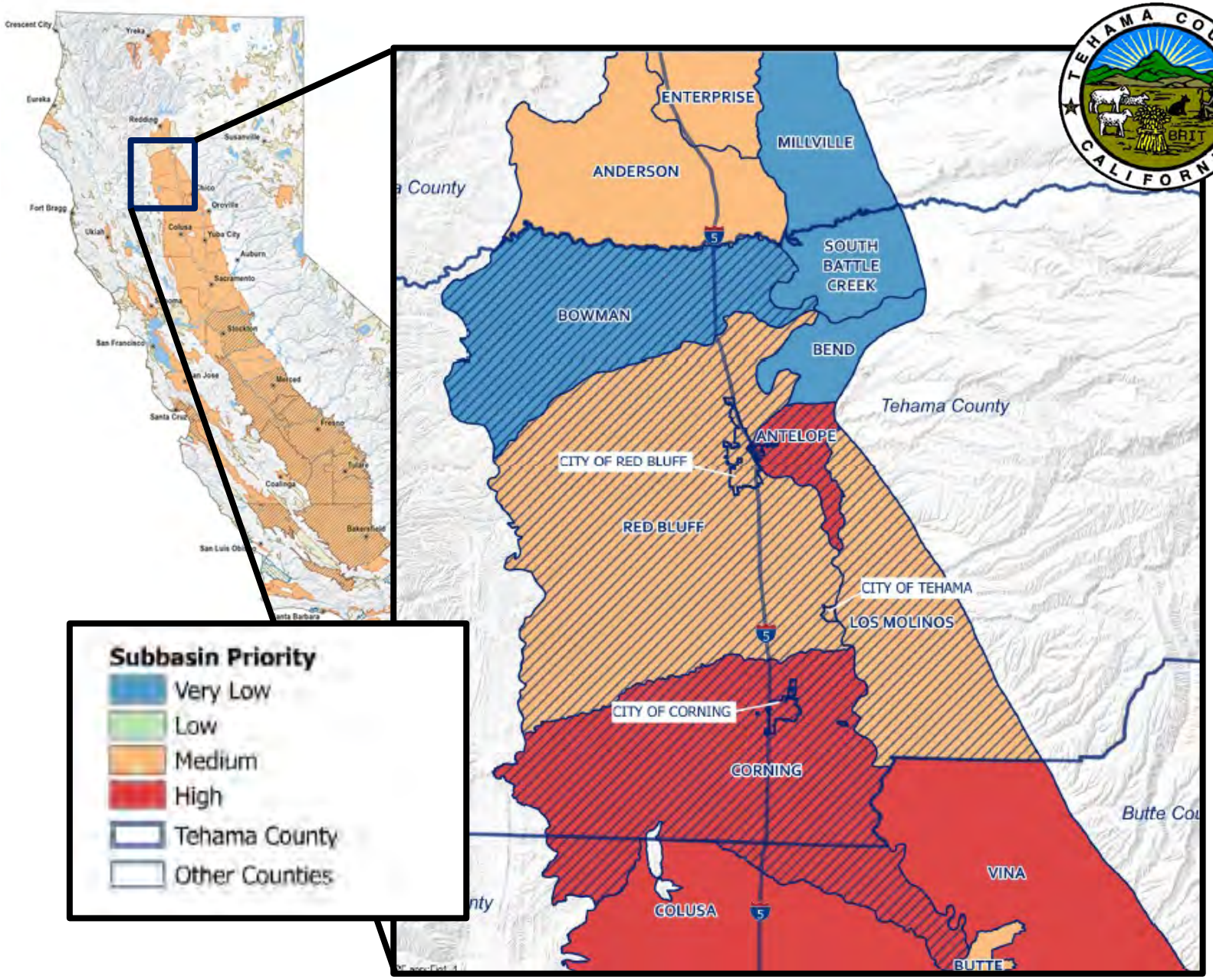
Undesirable Results



What is the SGMA Implementation Timeline?

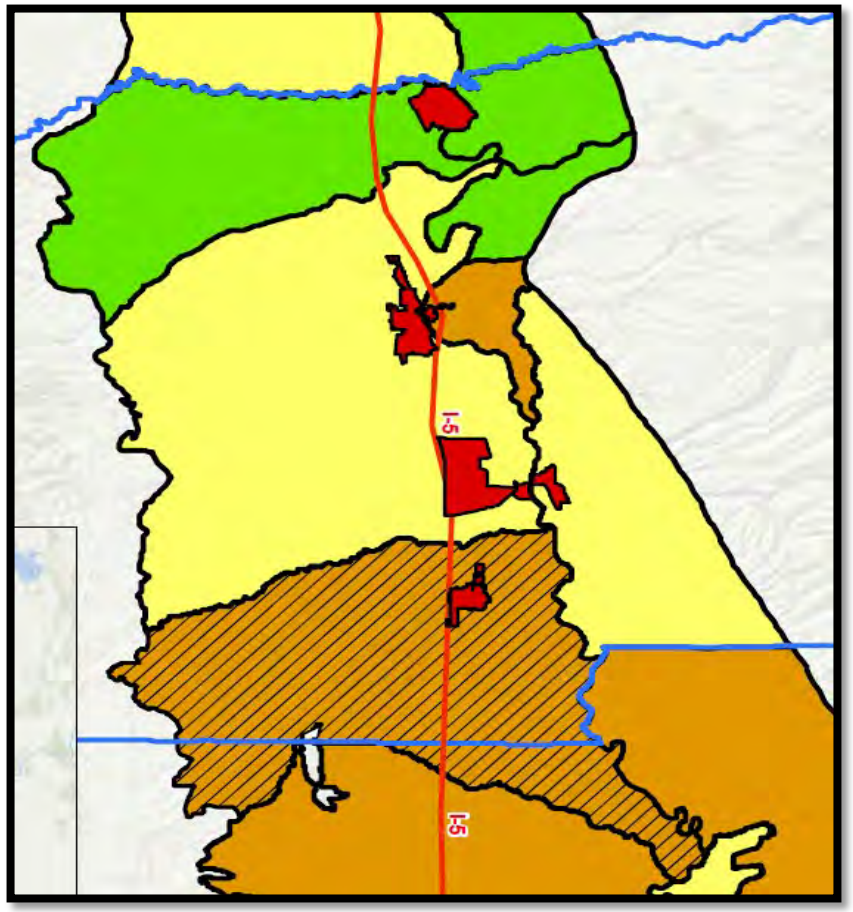
Occurring throughout:
- Conduct Outreach & Engagement
- Evaluate and Modify

What are our subbasins?



Tehama County GSA Governance Structure

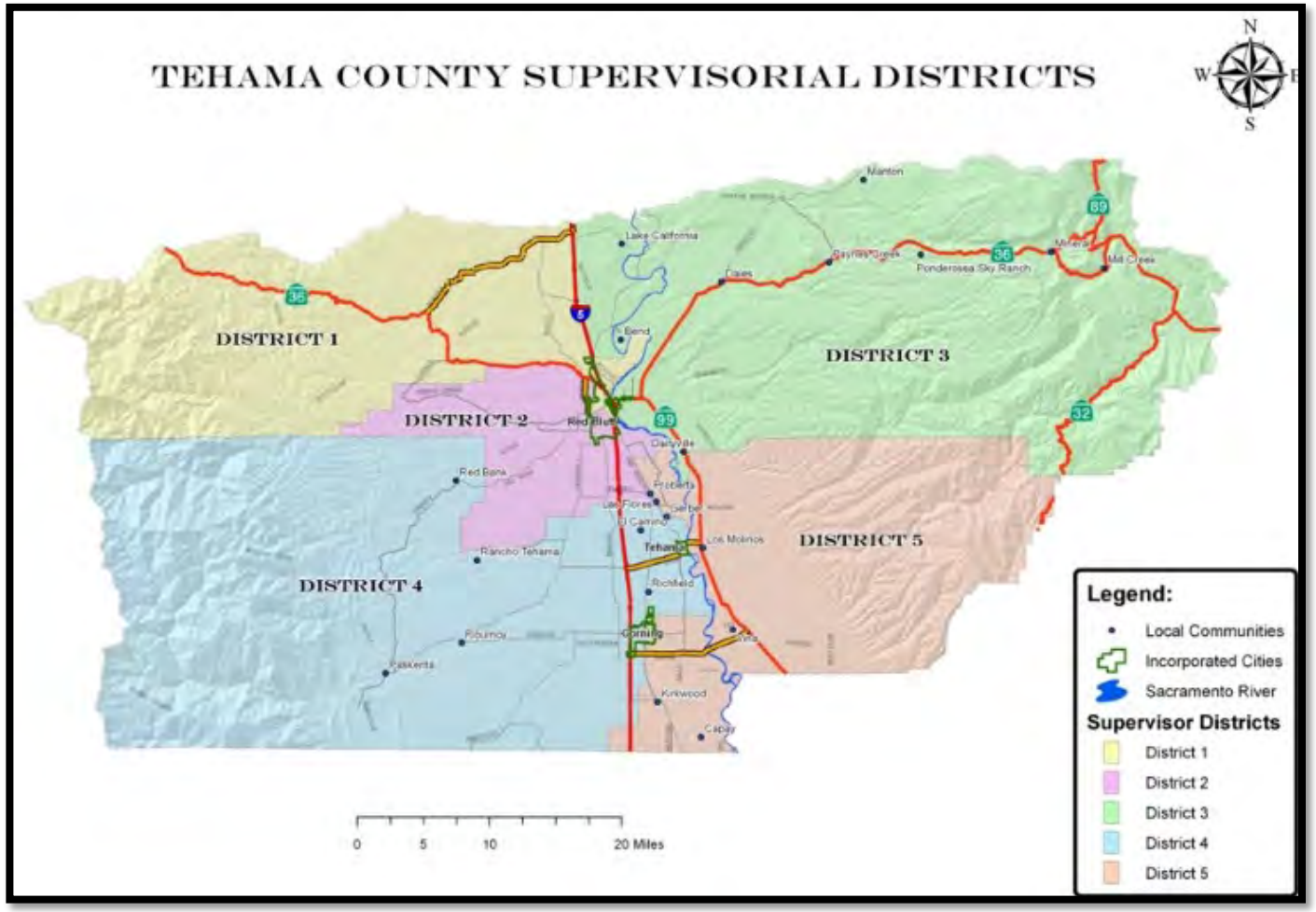
- **Governing Board** – Tehama County Flood Control & Water Conservation District Board of Directors (County Board of Supervisors)
- **Groundwater Commission** (similar to Planning Commission)
  - The Commission is made up of 11 members
  - Six agencies will have designated seats on the Commission and appoint their own members.
    - 1 – City of Corning
    - 1 – City of Red Bluff
    - 1 – City of Tehama
    - 1 – El Camino Irrigation District
    - 1 – Los Molinos Community Services District
    - 1 – Rio Alto Water District



Groundwater Commission Membership (*continued*)

Additional Members will Include 1 Representative from each County Supervisorial District

- Members should be a resident, property owner, or groundwater user within Tehama County;
- 2 members should represent surface water agencies/districts;
- 2 members should represent private pumpers;
- 1 member should represent the general public.

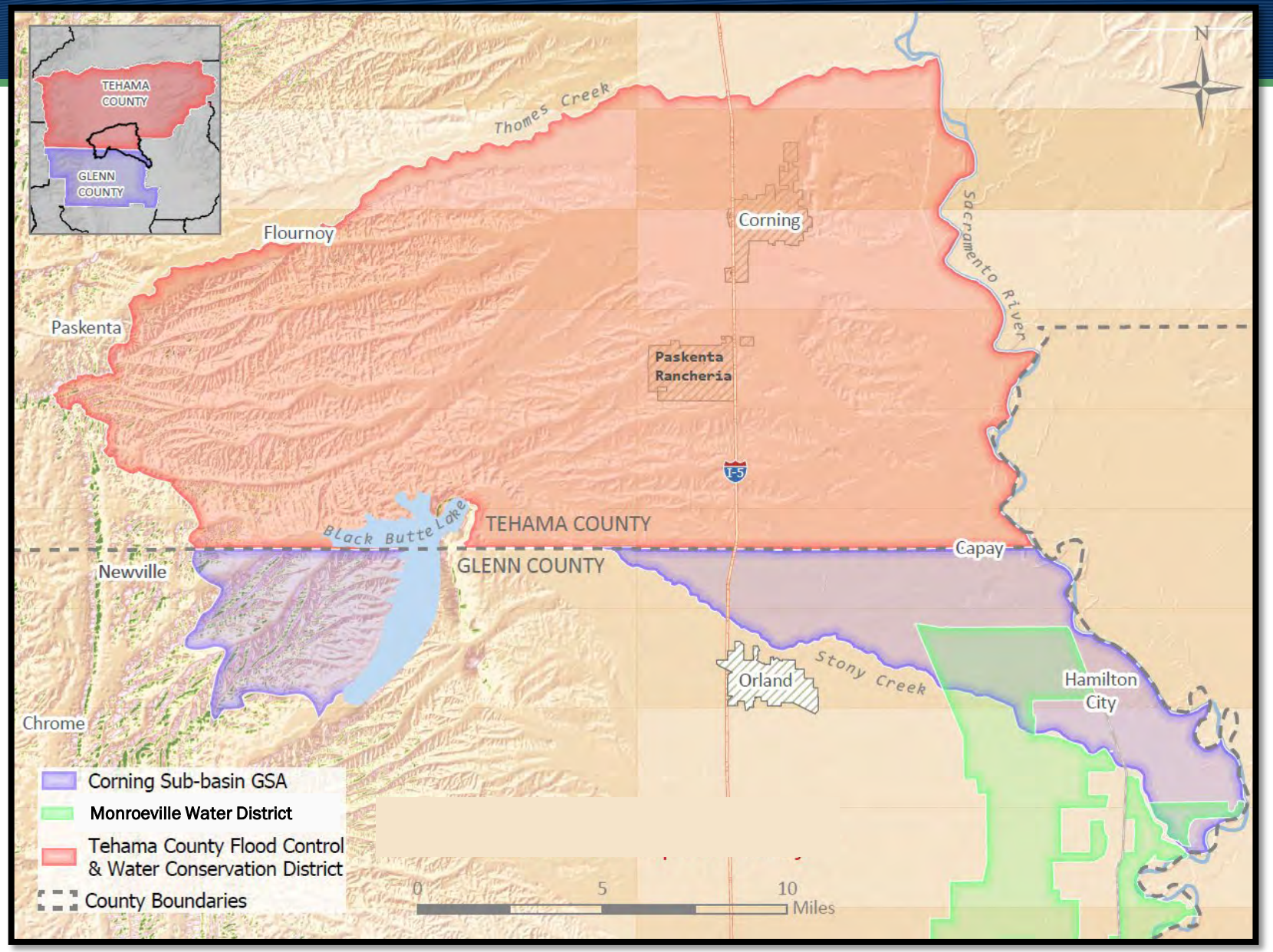


Groundwater Commission Members

- City of Corning – Kristina Miller
- City of Red Bluff – Clay Parker
- City of Tehama – Bill Borror
- El Camino Irrigation District – Kris Lamkin
- Los Molinos Community Services District – Todd Hamer
- Rio Alto Water District – Martha Slack
- District 1 – Harley North, private pumper
- District 2 – Sam Mudd, general public
- District 3 – Bart Fleharty, surface water agency/district
- District 4 – Hal Crain, surface water agency/district
- District 5 – David Lester, private pumper

Corning Subbasin

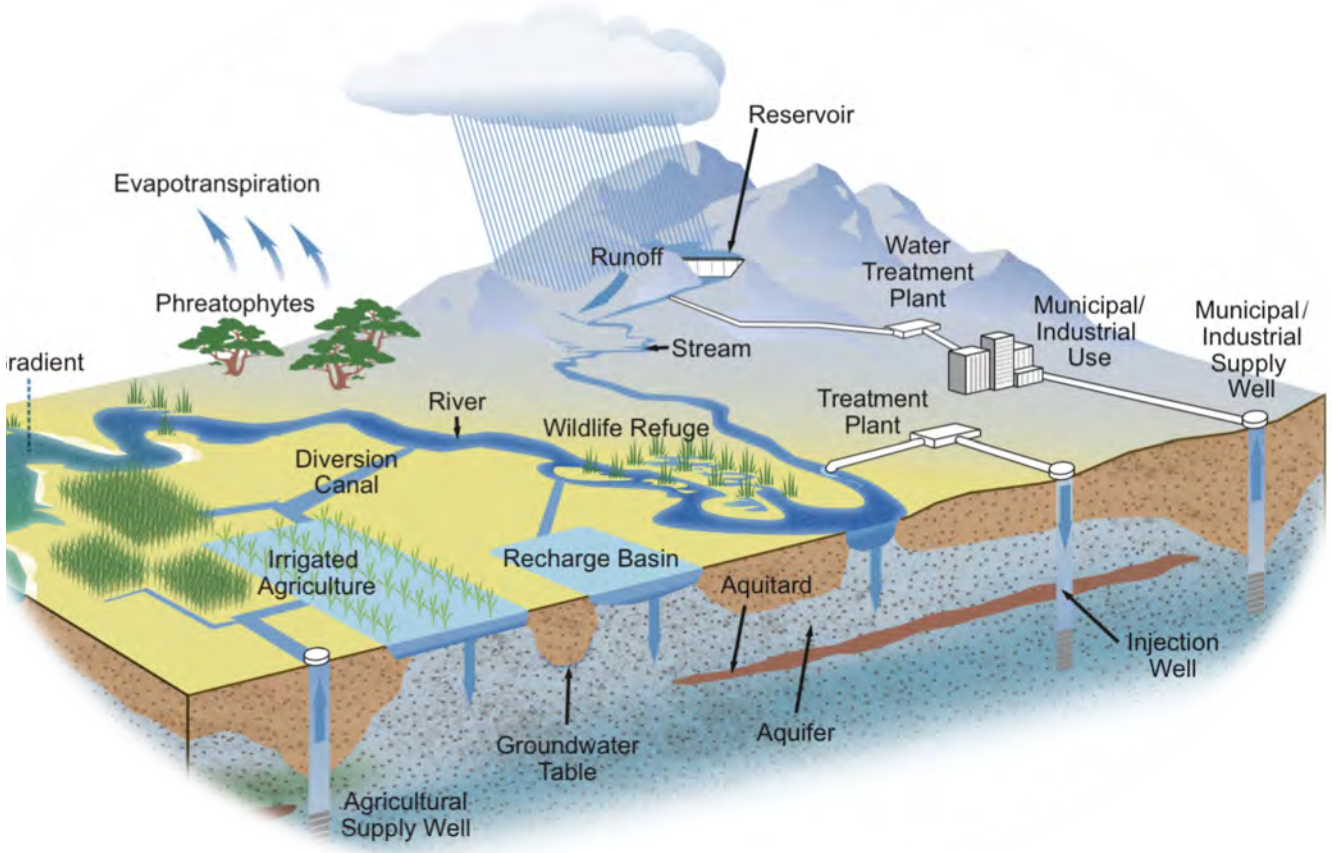
- 2 GSA Agencies
- Co-Management of the Subbasin
- Develop 1 GSP
- Separate Prop 1 Grant



CorningSubbasinGSP.org

Understanding the Hydrogeologic Setting

- Graphical and narrative description of the physical components of the basin
- At least two scaled cross-sections
- Map(s) of physical characteristics
  - Topographic information
  - Surficial geology
  - Soil characteristics
  - Delineation of existing recharge areas that substantially contribute to the replenishment of the basin, potential recharge areas, and discharge areas
  - Surface water bodies
  - Source and point of delivery for local and imported water supplies



Account for Water with a "Budget"

Inflows

- Precipitation;
- SW inflow & infiltration;
- Intentional recharge (ponds, ditches, etc.);
- Applied water, net recharge (e.g., irrigation);
- Unintentional recharge (leaky pipelines);
- Subsurface inflows from outside basin.

Outflows

- GW extraction by wells;
- GW discharge to SW/springs;
- Evapotranspiration; and
- Subsurface outflow from basin.

Inflows – Outflows = ▲ S

Change in GW Storage

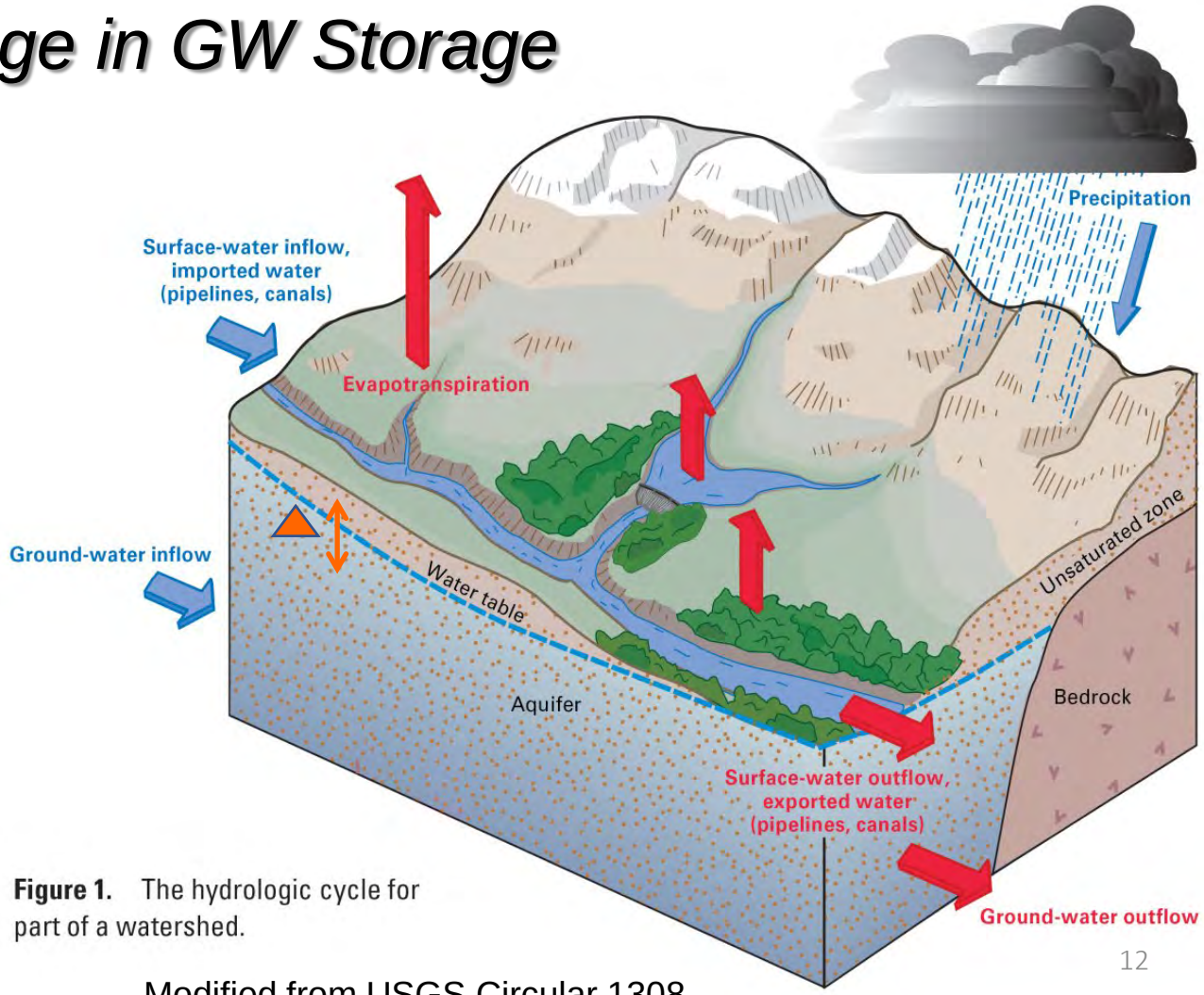
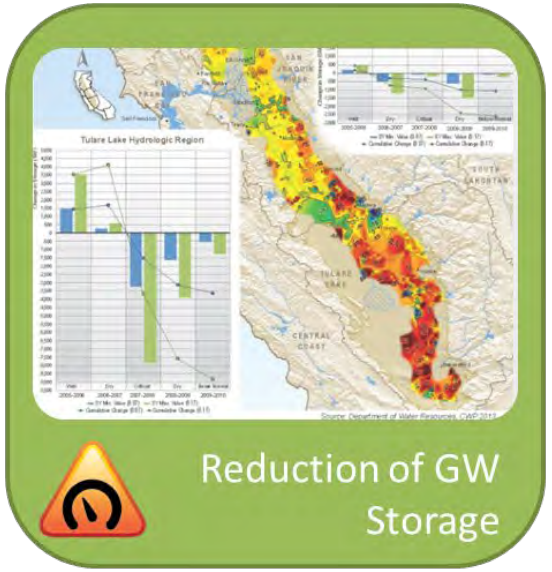


Figure 1. The hydrologic cycle for part of a watershed.

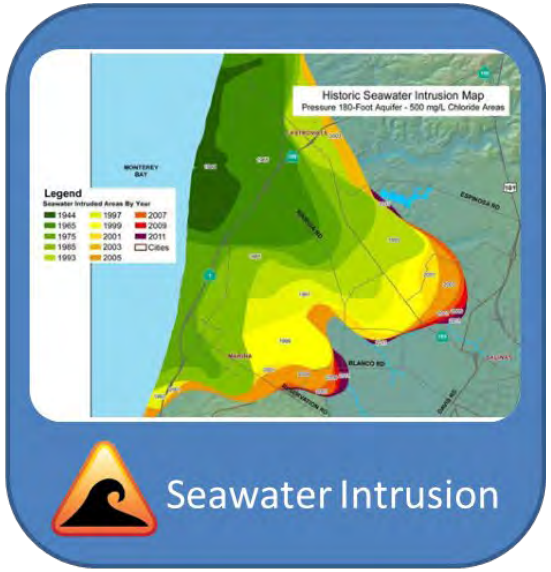
Modified from USGS Circular 1308

Avoiding Undesirable Results for Six Sustainability Indicators

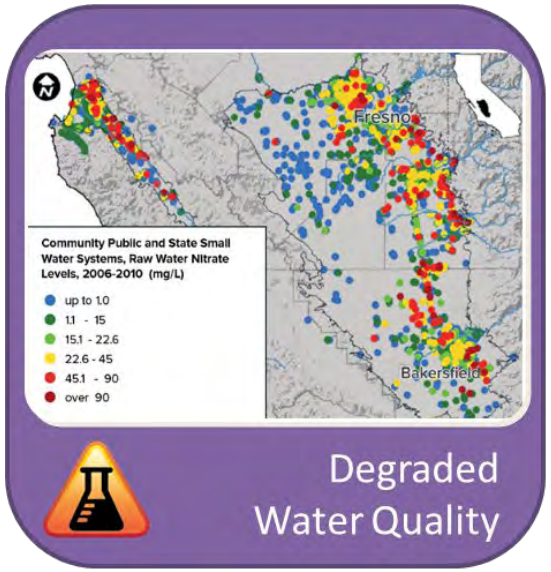
Lowering of GW Levels



Reduction of GW Storage



Seawater Intrusion

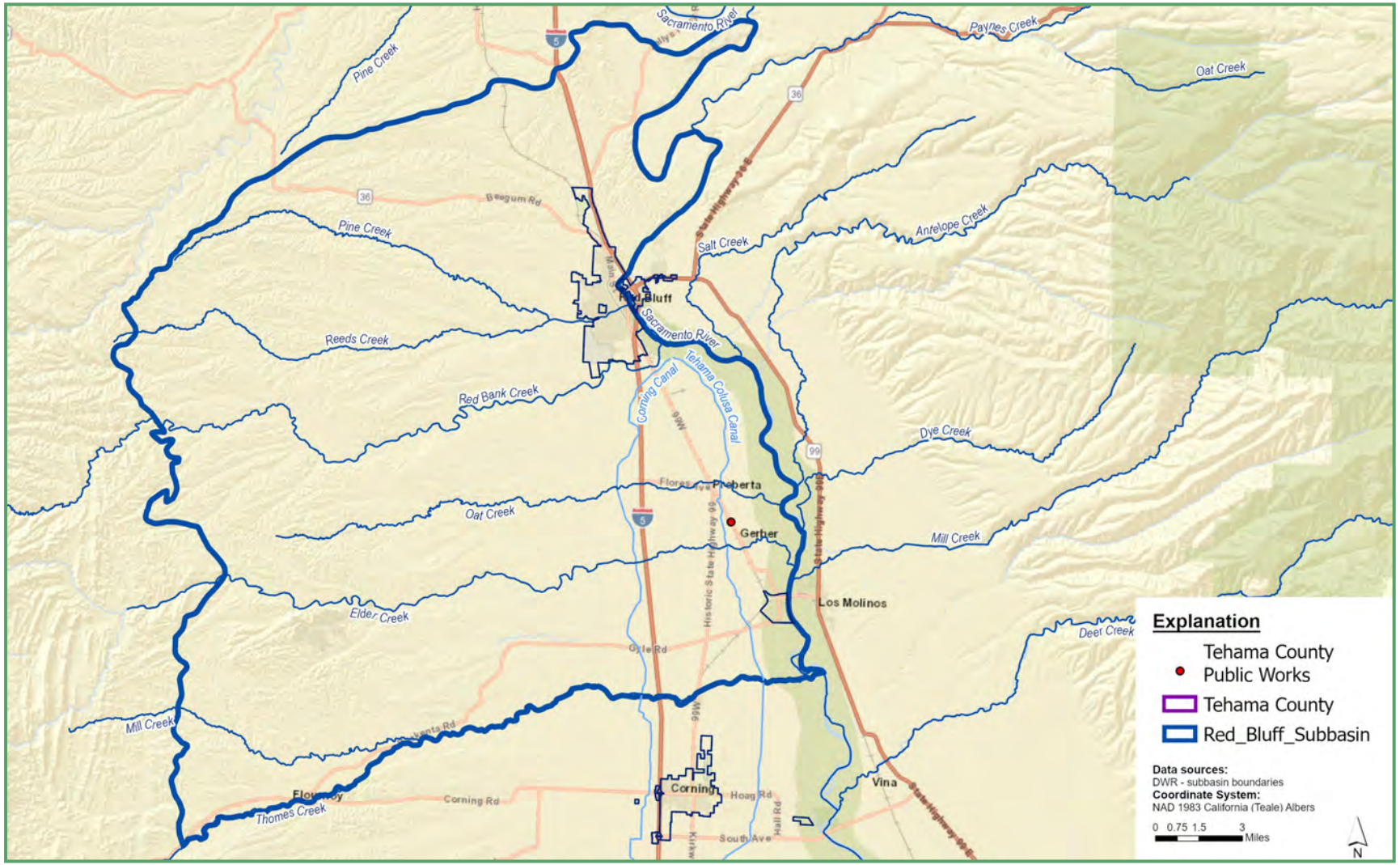


Degraded Water Quality

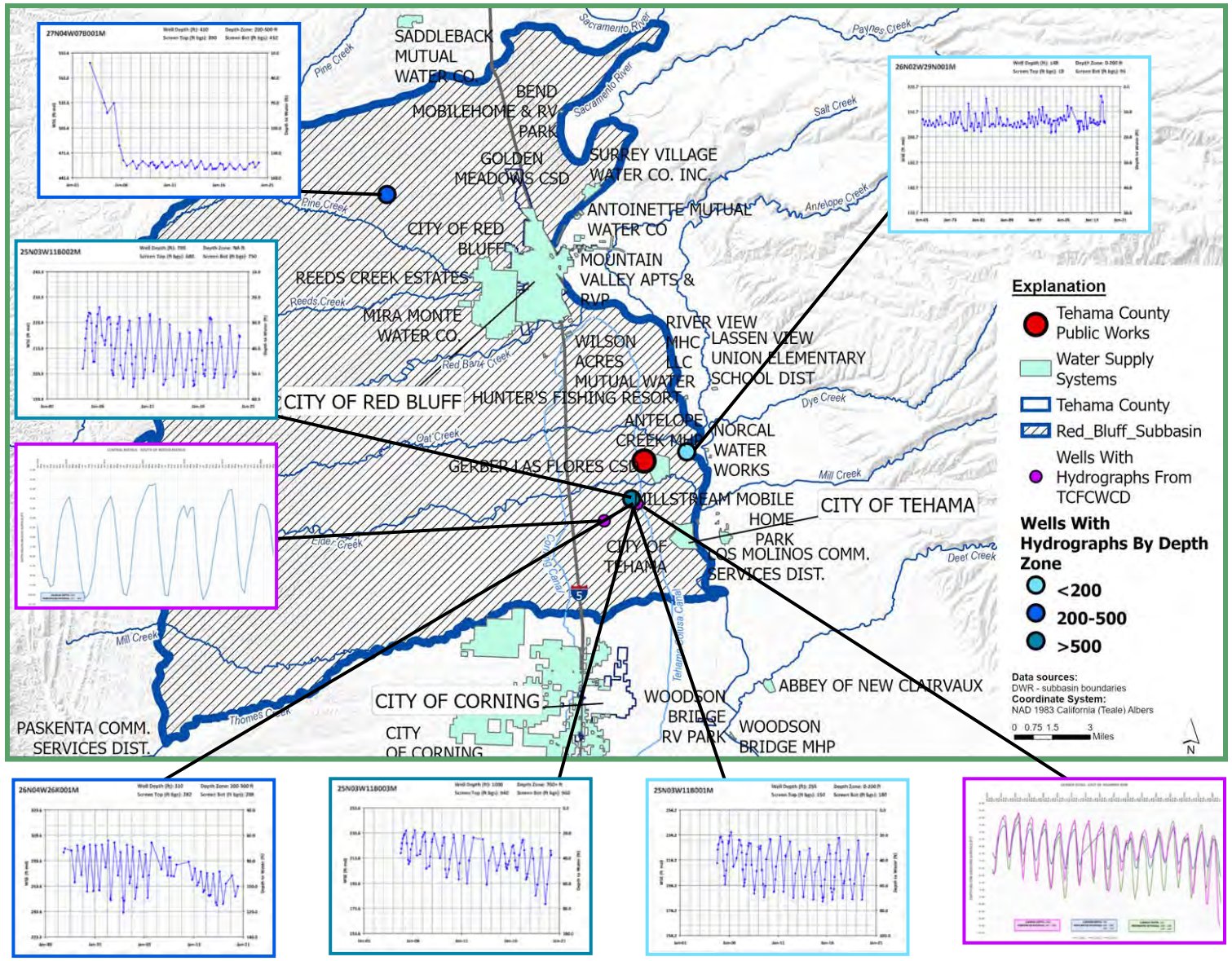
Land Subsidence

Depletion of Inter-connected Streams

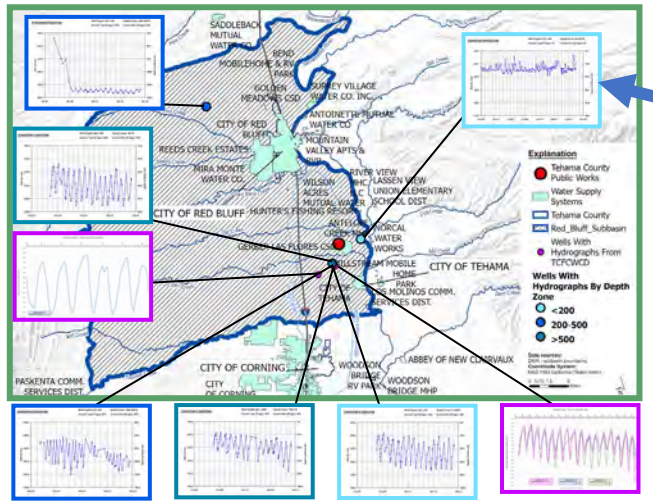
Red Bluff Subbasin

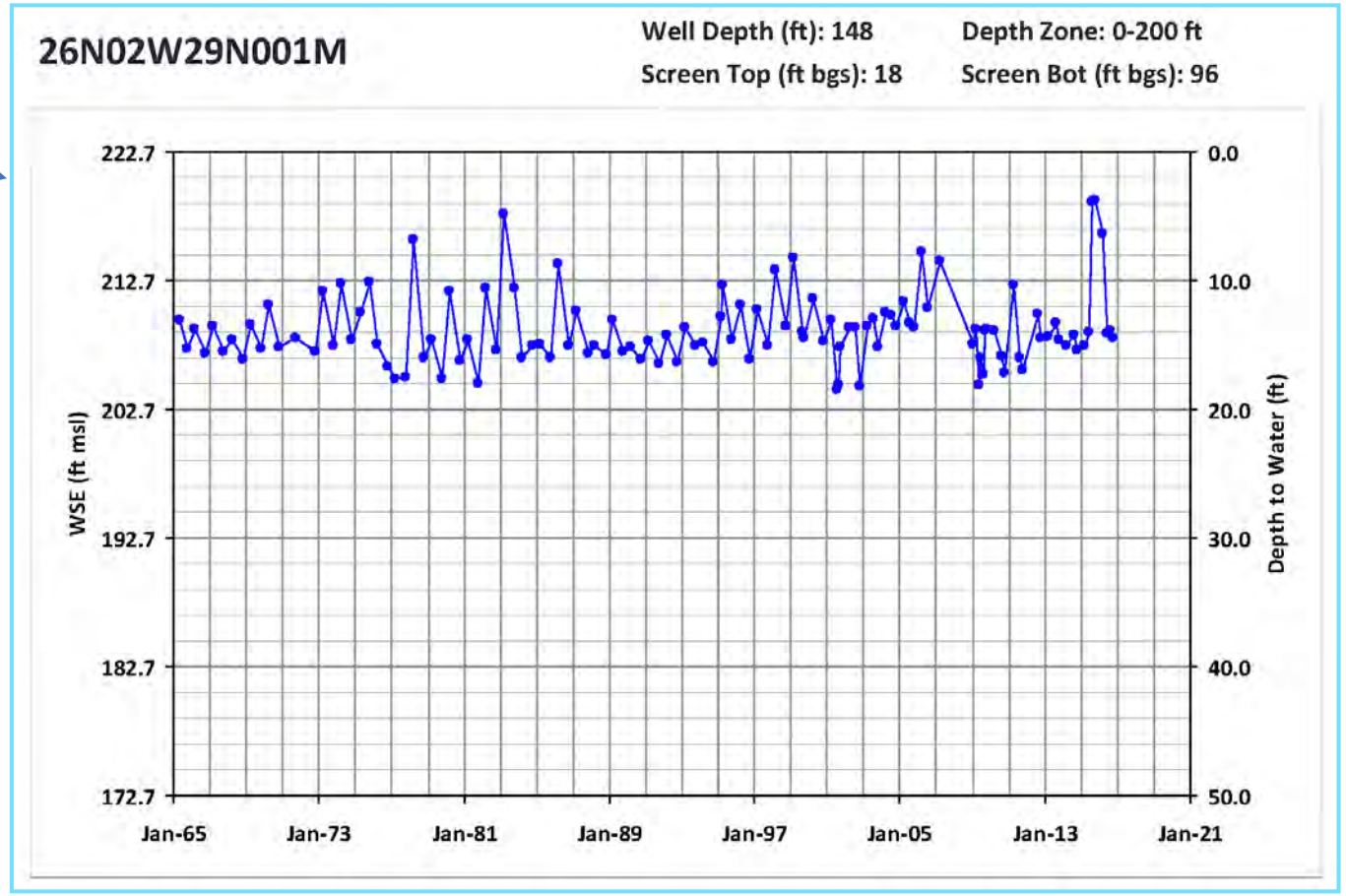


Red Bluff Subbasin Hydrographs

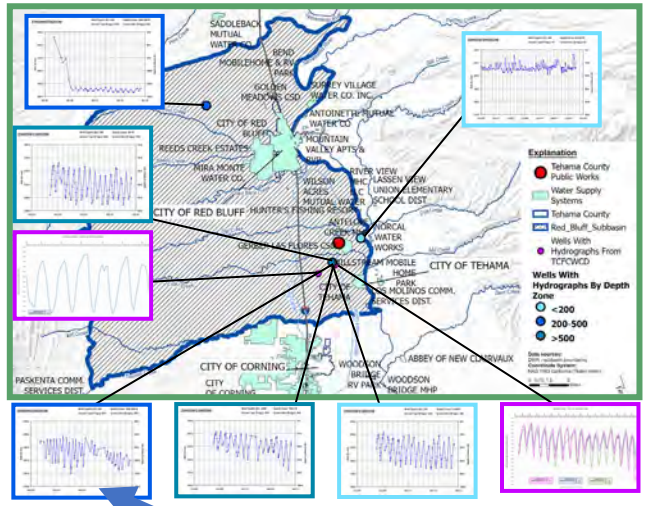


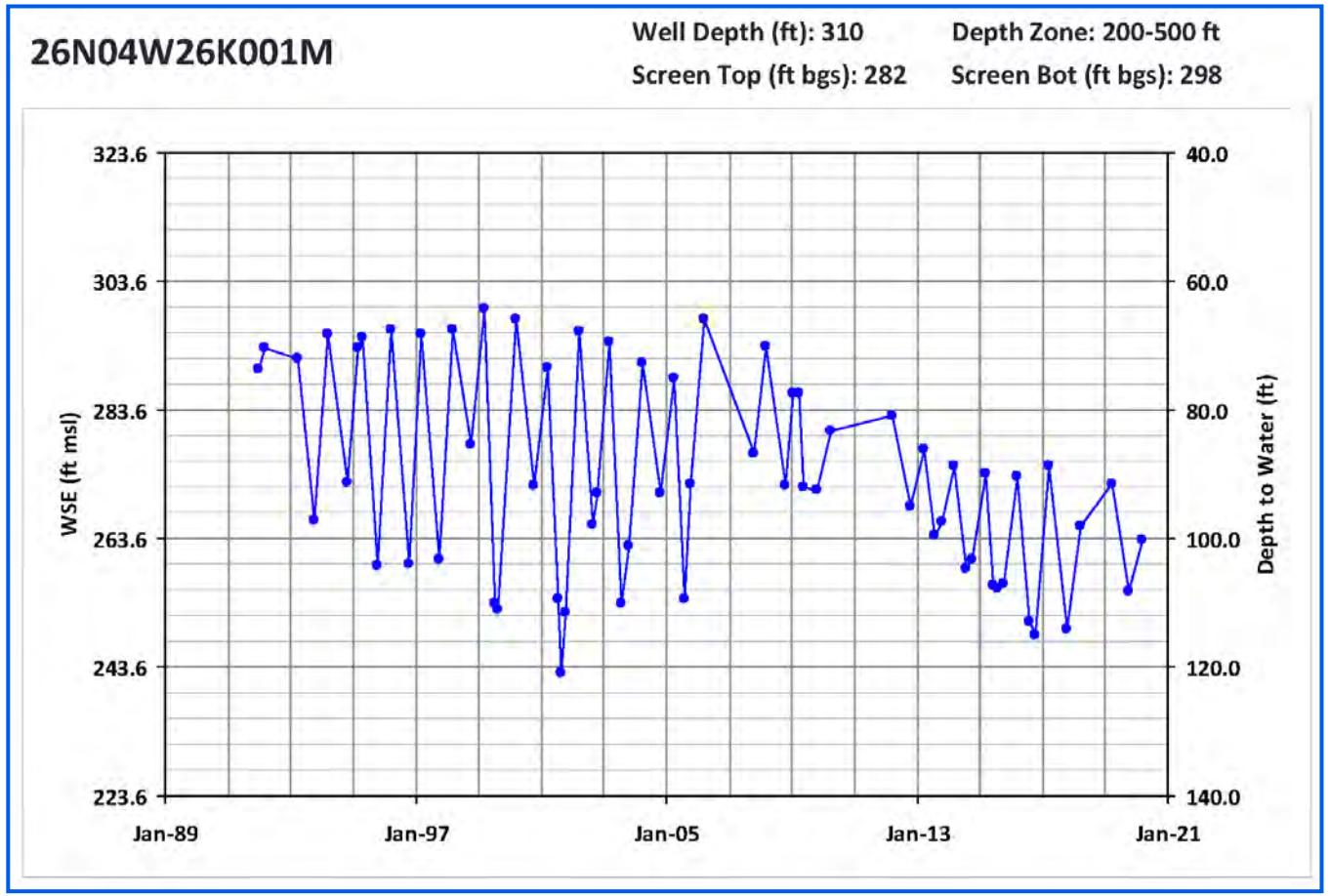
Red Bluff Subbasin Hydrographs



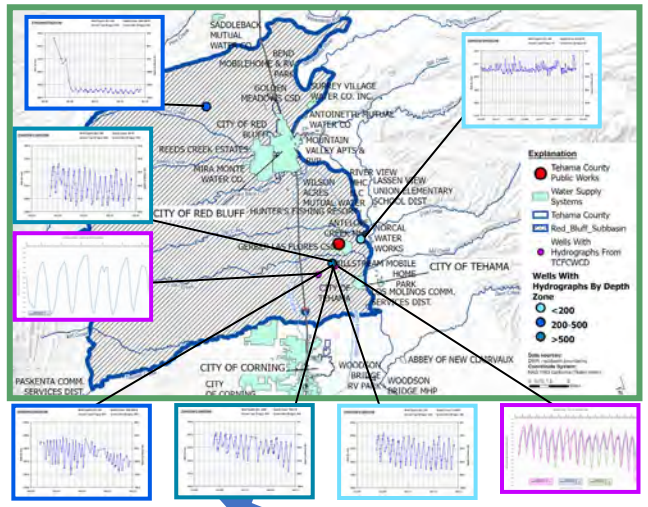


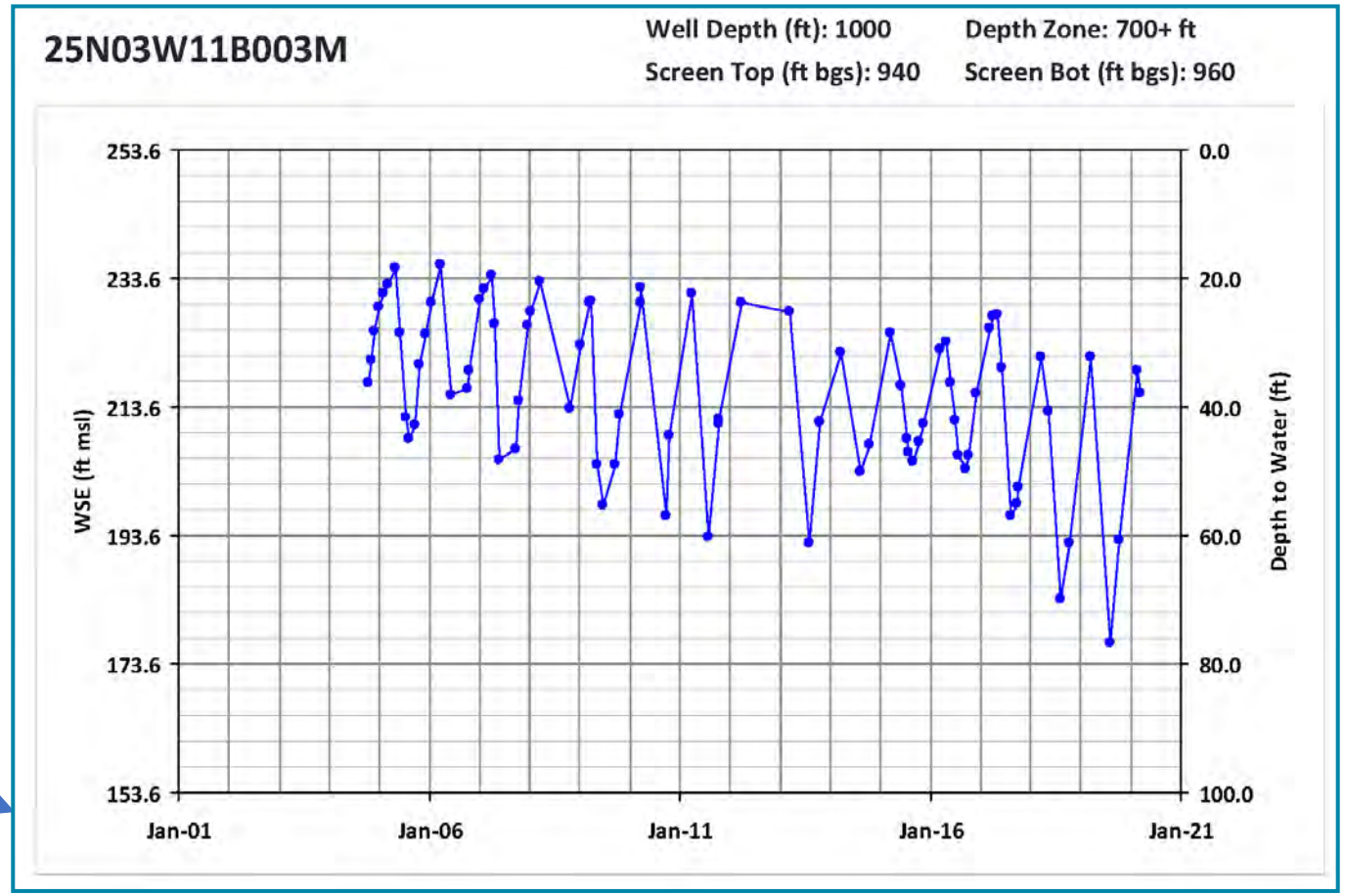
Red Bluff Subbasin Hydrographs



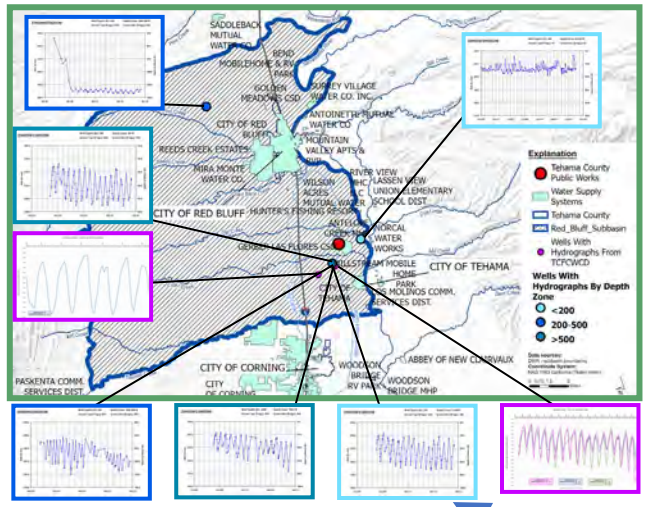


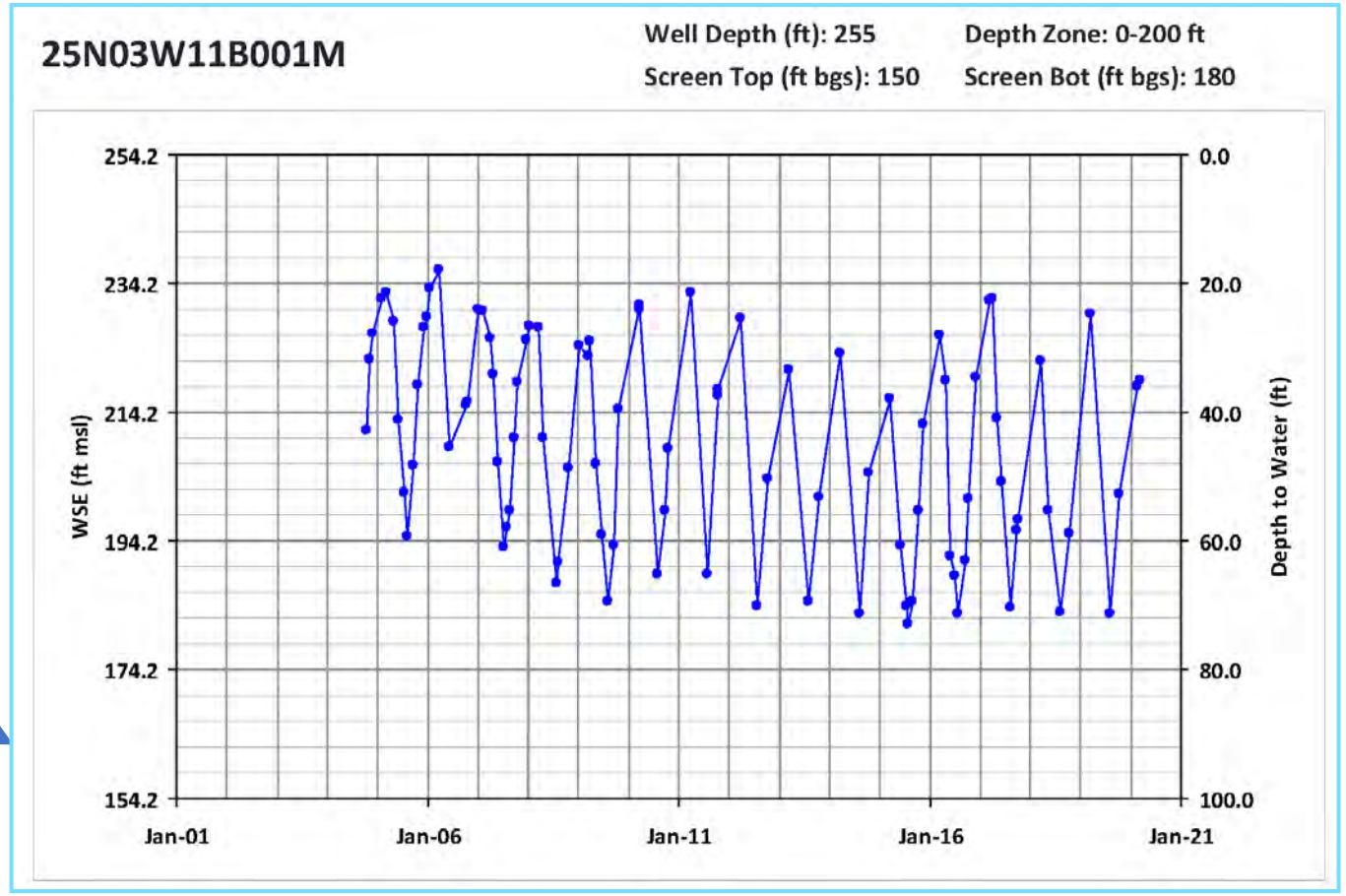
Red Bluff Subbasin Hydrographs



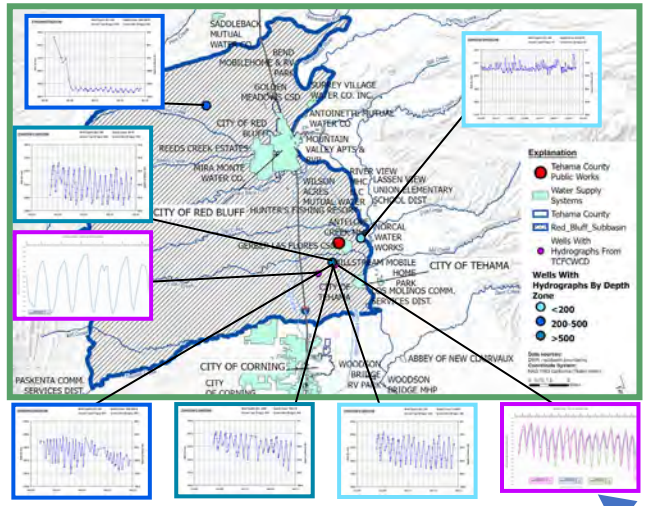


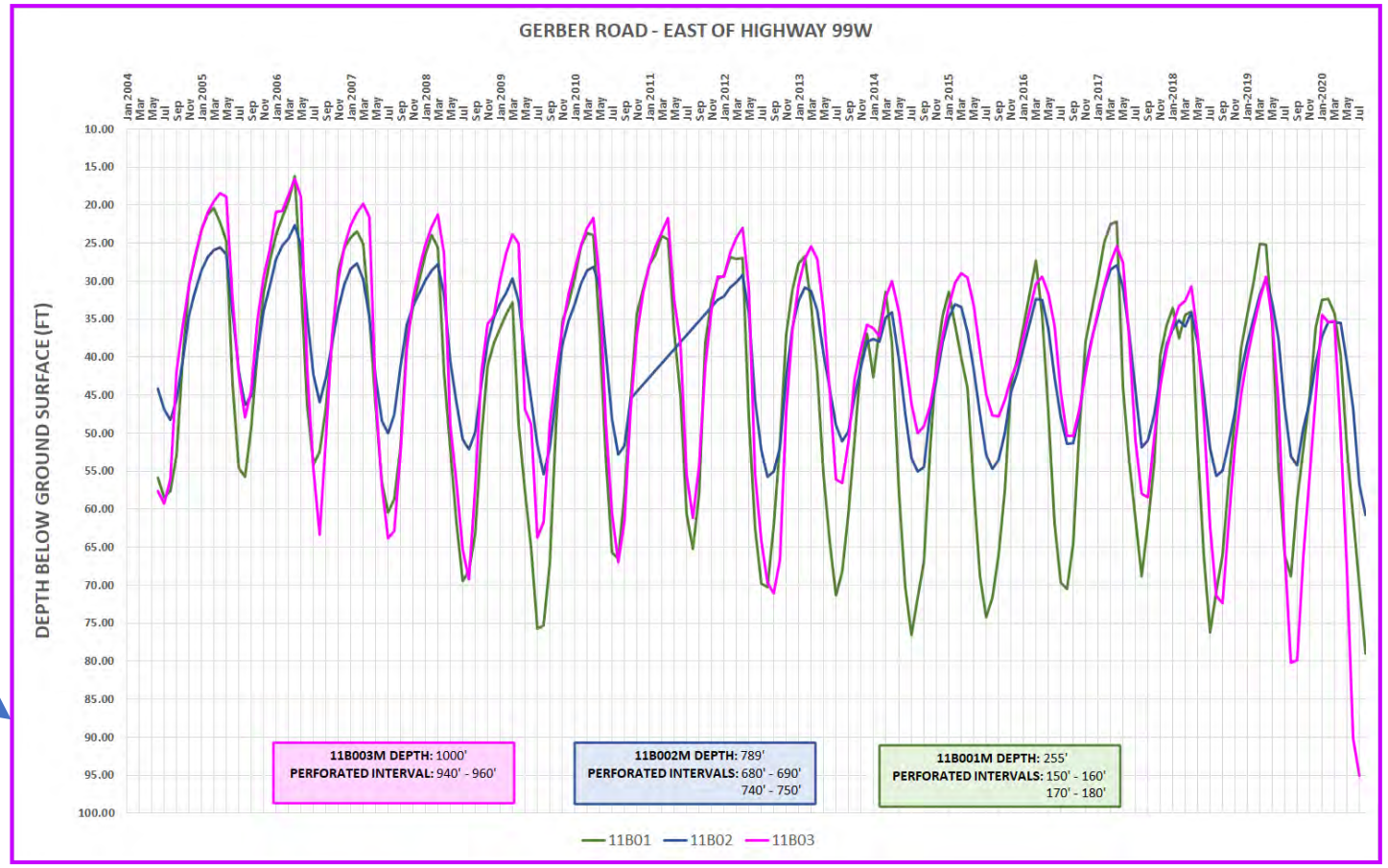
Red Bluff Subbasin Hydrographs



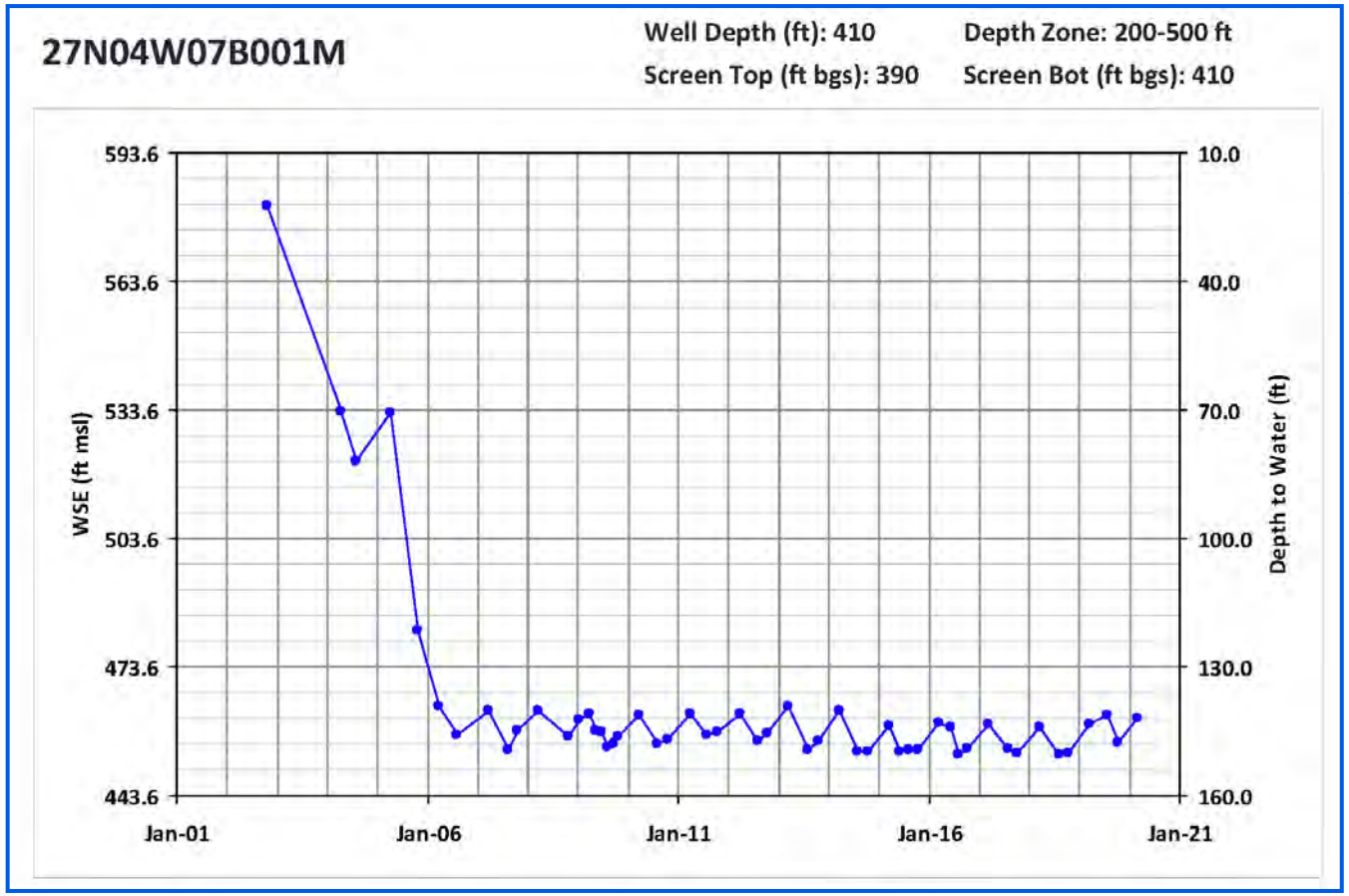


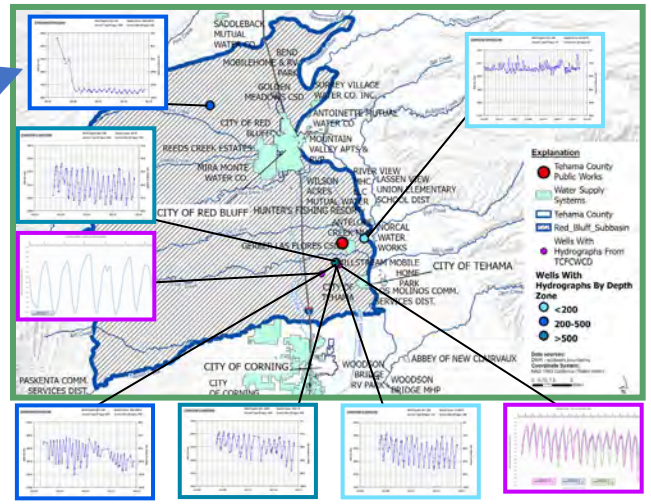
Red Bluff Subbasin Hydrographs



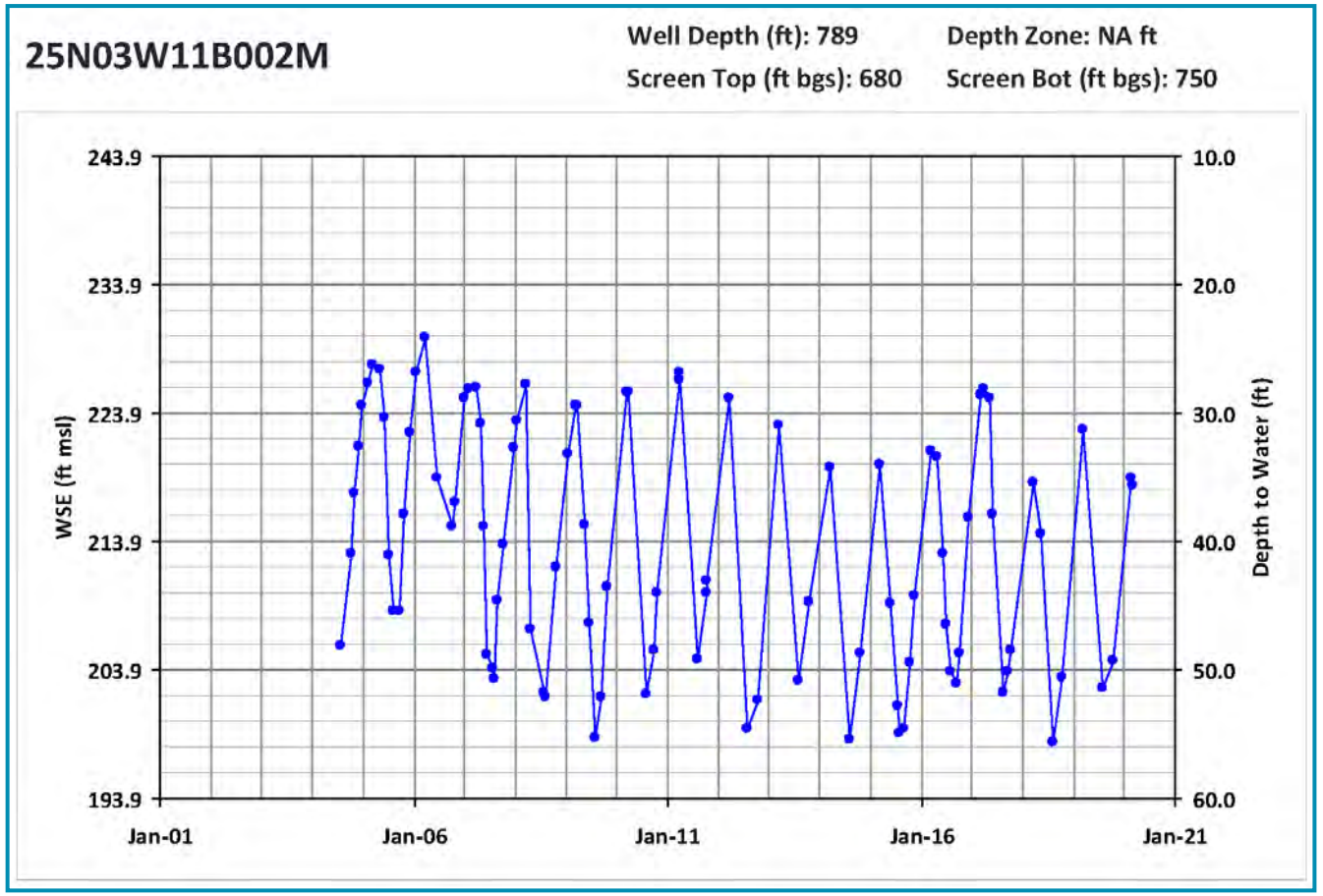


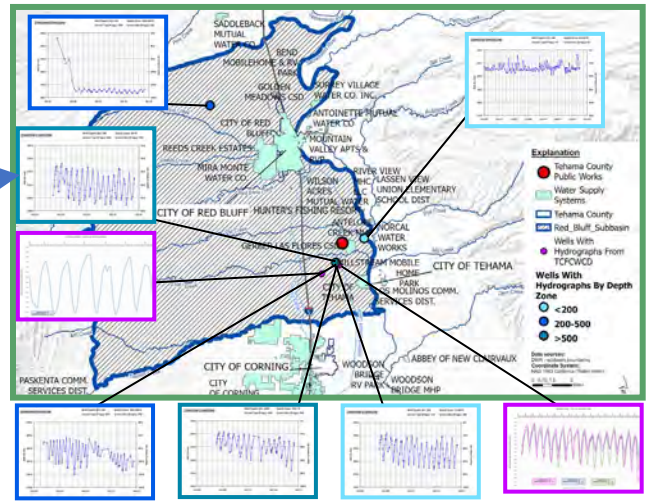
Red Bluff Subbasin Hydrographs



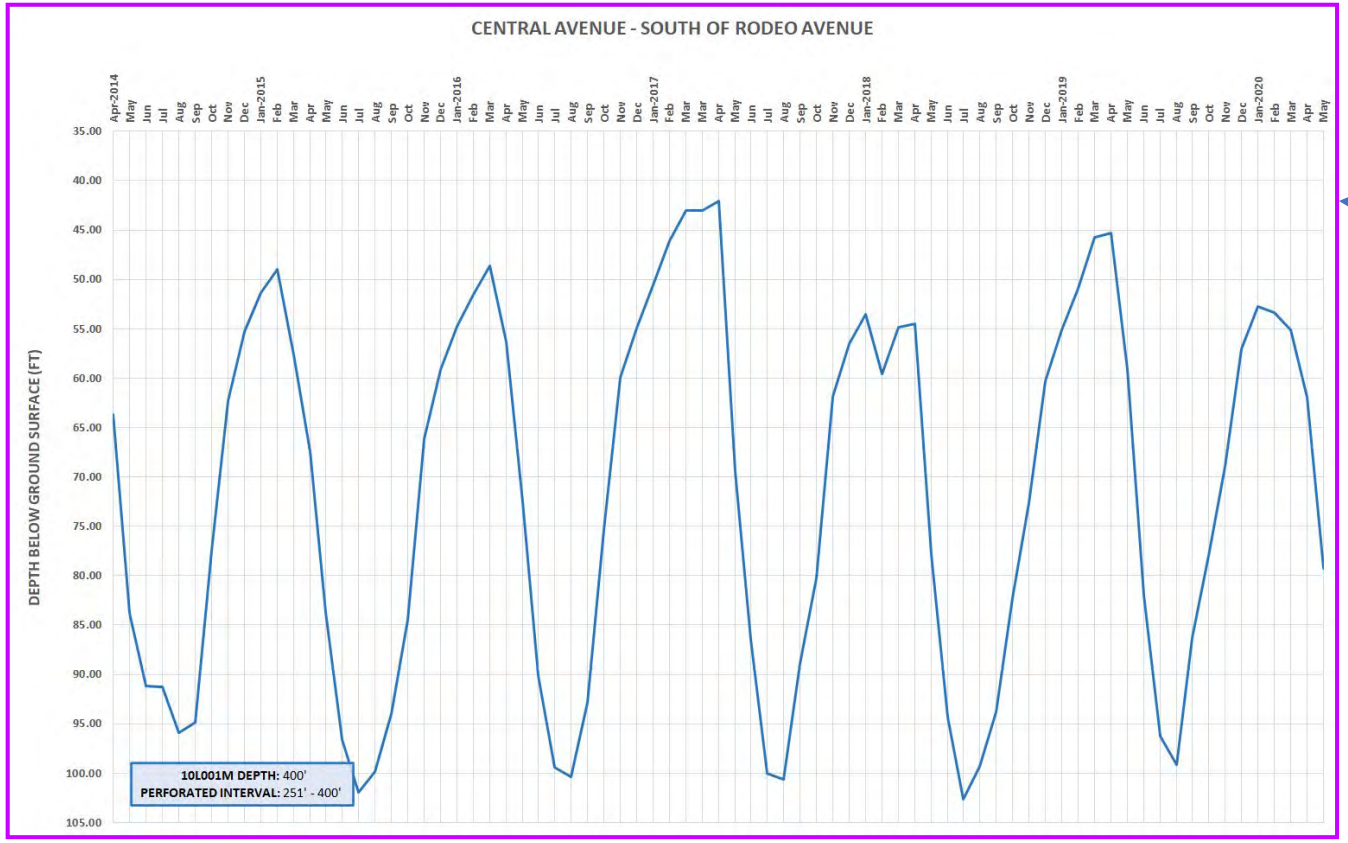


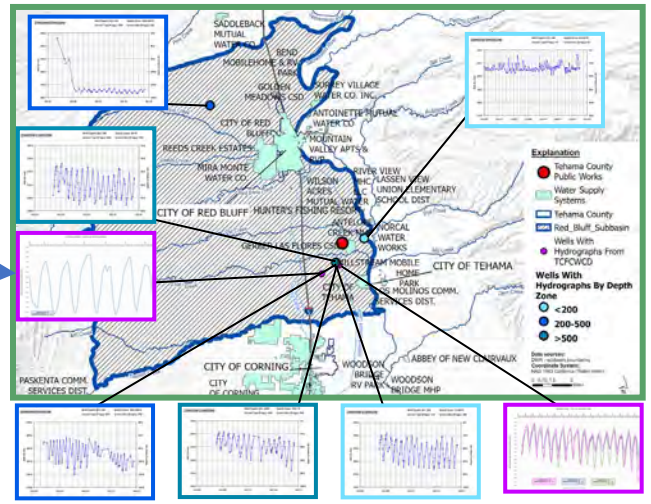
Red Bluff Subbasin Hydrographs



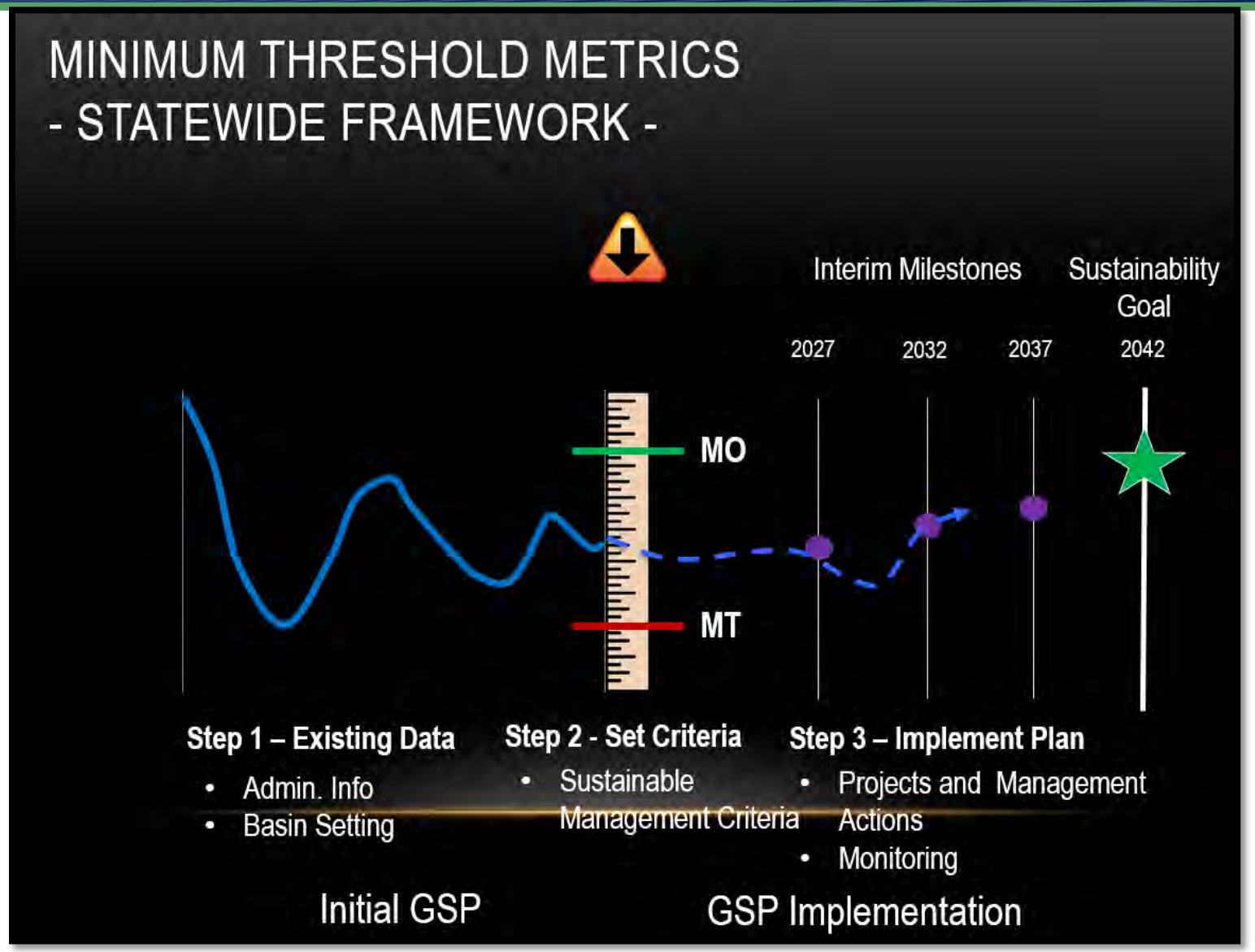


Red Bluff Subbasin Hydrographs



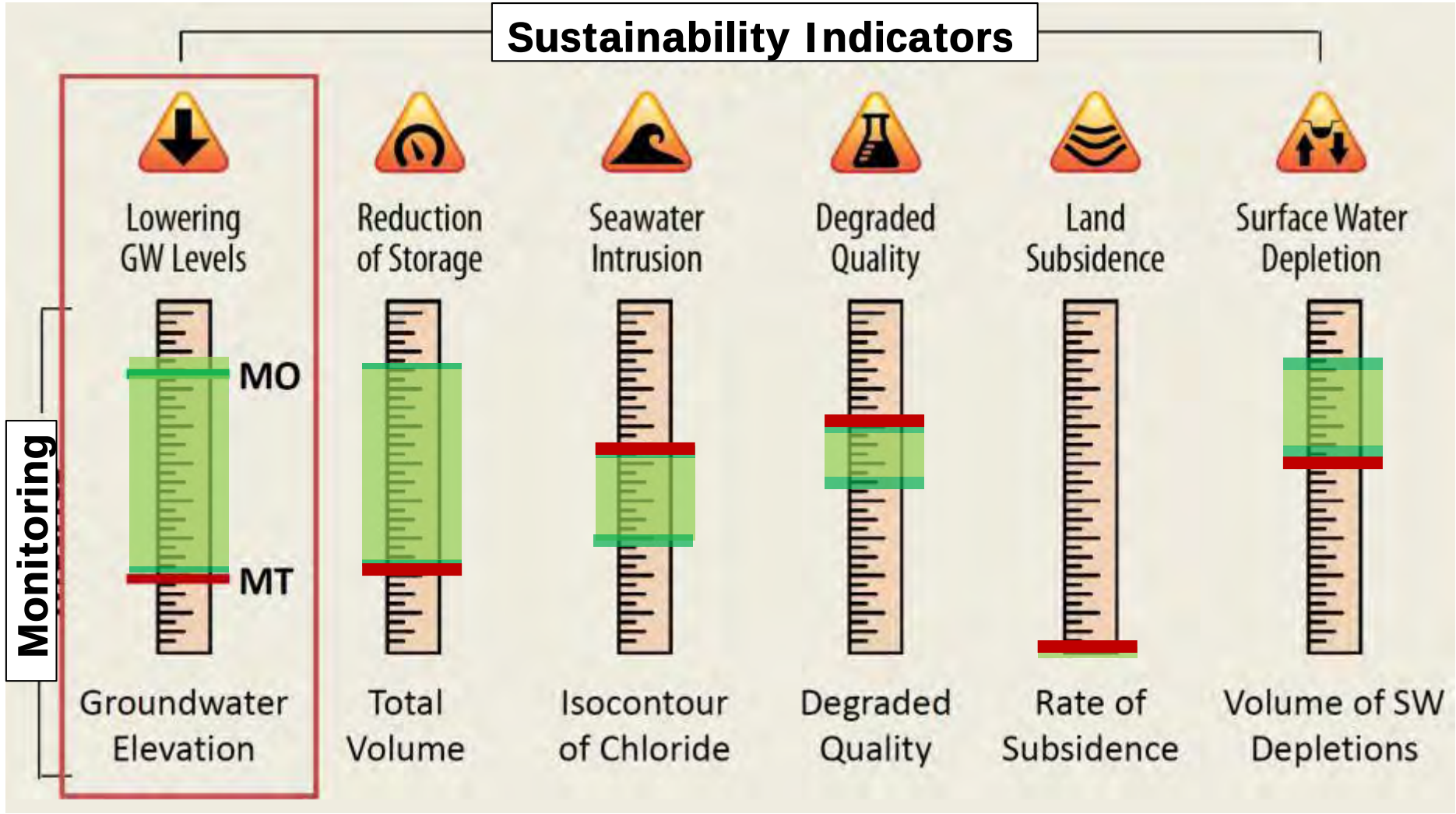


SGMA Terms Explained



SGMA Terms Explained

Sustainable Management Criteria for
all applicable Sustainability Indicators



Tehama Subbasins Groundwater Sustainability Plan

Describe the Basin Conditions
Plan Area, Subbasin Setting & Water Supplies

What water sources are used in the basin and what are the basin conditions related to those uses?

Define Basin Sustainability
Sustainable Management Criteria & Monitoring

What is sustainable groundwater management?

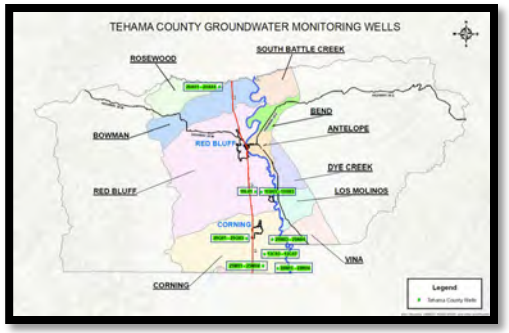
Develop Projects/Management Actions & Implementation Plan

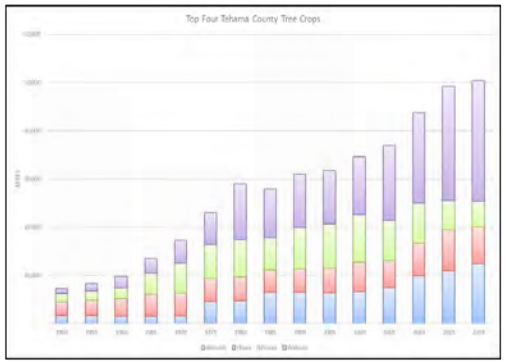
How can we ensure groundwater sustainability?

Develop & Adopt GSP
Submit GSP to DWR: January 31, 2022

Will this plan meet our sustainability goals?

GSP Section Preparation

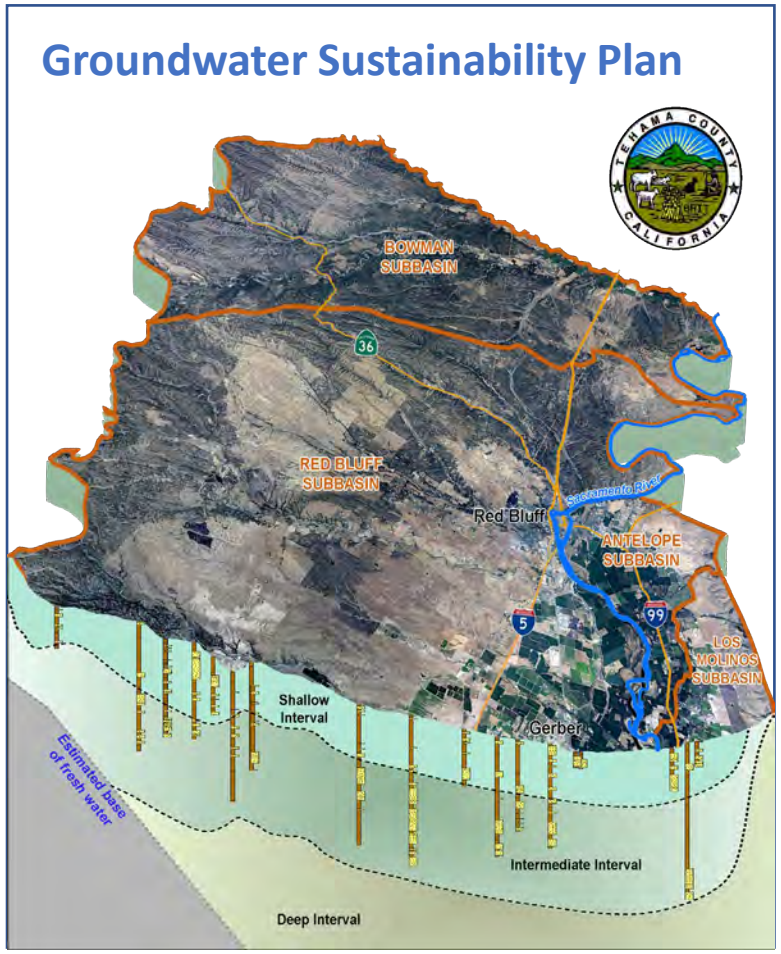




- A friendly, “good read”
- Supported by Technical Memorandums and other appendices
- Draft Sections: Periodic Review in Advance of Full Draft GSP Delivery

Looking Ahead: Draft GSP in 2021

- Outreach (Oct. and Nov. 2020)
- Draft GSP Sections (Jan. – July 2021)
- Modeling: anticipate completion of model calibration and running project-related and future conditions scenarios in Fall 2020/Spring 2021
- Draft GSPs Early Fall 2021



Multiple Opportunities to be Involved

EMAIL UPDATES

Sign Up for the interested parties email list and/or to receive meeting agendas - contact nbethurem@tcpw.ca.gov

MEETINGS – October 2020

Outdoor Tailgates | October 14, 15, 21, and 22 | 5:30-6:30 pm

(Specific to the Bowman, Red Bluff, Antelope, and Los Molinos Subbasins)

Oct 15 – Evergreen Middle School, Cottonwood

Oct 21 – Tehama County Public Works, 9380 San Benito Ave., Gerber

Oct 22 – Los Molinos Veterans Hall, 7980 Sherwood Blvd., Los Molinos

Corning Subbasin tailgate meeting dates and locations TBD

MEETINGS – October/November/December 2020

Board of Supervisors Informational Presentation | October 20| 1:30 pm

Next Round of Public Meetings | November & December| Date & Time TBD

County-wide and subbasin-specific groundwater conditions

REGULAR MEETINGS

Groundwater Commission Meetings | 4th Wednesdays | 8:30 am

District Board Meetings | 3rd Monday, every other month (Next meeting 11/16/20) | 11:00 am

Corning Subbasin Advisory Board Meetings | 1st Wednesdays | 1:30 pm

TehamaCountyPublicWorks.CA.gov and CorningSubbasinGSP.org

Thank you! | General Questions?

Project Team

Tehama County GSA

- Ryan Teubert, GSA Project Manager
- rteubert@tcpw.ca.gov or 385-1462 x3020

Technical Consultants, LSCE

- Eddy Teasdale

COMMON TERMS

SGMA ***("Sigma")***: Sustainable Groundwater Management Act • **GSA:** Groundwater Sustainability Agency • **GSP**: Groundwater Sustainability Plan

TehamaCountyPublicWorks.CA.gov and CorningSubbasinGSP.org