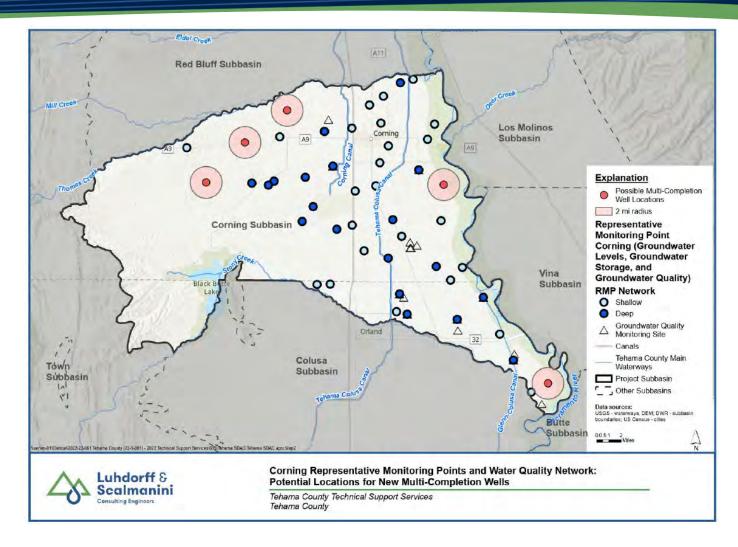
# Corning Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

- Expand groundwater level monitoring network to cover localized spatial data gaps
- Expand groundwater quality network to include domestic wells
- Videolog wells within monitoring network without construction information
- Perform aquifer tests
- Expand geologic understanding with AEM data and geophysical surveys
- Create well permitting and land use policy updates





# Corning Enhancements to Monitoring Networks to Fill Data Gaps (Component 2)

#### Budget

- ► Installation of multi-completion wells \$1.2 Million
- ► Install SW/GW monitoring equipment- \$450K
- ► Synoptic Stream Gaging \$125K
- ► Conduct Biological Survey- \$110K
- ▶ Develop Community Domestic Monitoring Program \$210K
- ► Groundwater monitoring network enhancements \$260K
- ► Expand groundwater quality network \$315K
- ► Videolog wells with unknown construction \$150K
- ► Perform aquifer tests \$275K
- ► Expand geologic understanding with AEM \$135K
- ► Well permitting and ordinance update \$225K
- ► Grant Administration 10%

#### Schedule

► Complete all enhancements – Start October 2022 Finish by April 2026

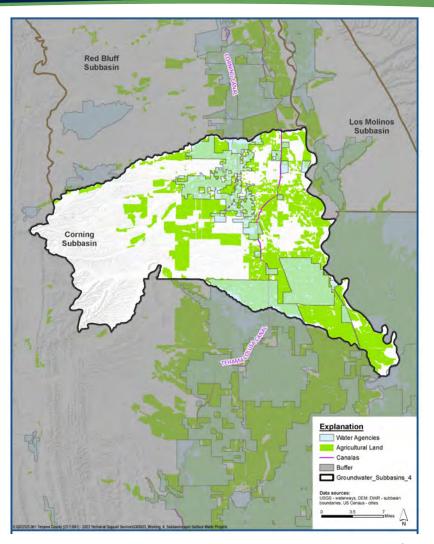
Total: \$3,531,000



# Regional Conjunctive Use Project (Component 3)

### Background/Summary

- Groundwater is preferred to surface water for irrigation
  - ▶ Cheaper
  - Arrives pressurized
- Current surface water allocations are not fully used
- ► This project would aim to:
  - Create incentive program for use of surface water
  - Upgrade water districts conveyance systems to deliver pressurized water
  - Upgrade irrigation systems for dual source irrigation





## Regional Conjunctive Use Project (Component 3)

#### Key Tasks

- ► Planning and design
  - ► Identify WD willing to be part of project
  - ► Identify upgrades needed
  - Create incentive program
  - Create 100% design plans
  - Complete all permits and environmental compliance documentation
- Construction
  - ► Install conveyance system upgrades
  - Install dual source irrigation systems
- Outreach
  - Establish coordination with growers willing to participate
- Monitoring
  - ► Monitor the amount of surface water used in-lieu of groundwater



## Regional Conjunctive Use Project (Component 3)

#### Budget

- ▶ Planning and design \$225K
- ► Construction \$915K
- ► Outreach \$30K
- ► Monitoring \$45K

### Schedule

- ▶ Planning and design Start October 2022 Finish by April 2026
- Construction Start October 2022 Finish by April 2026
- ▶ Outreach Start October 2022 Finish by April 2026
- ► Monitoring Start October 2022 Finish by April 2026

Total: \$1,336,500



### **Background/Summary**

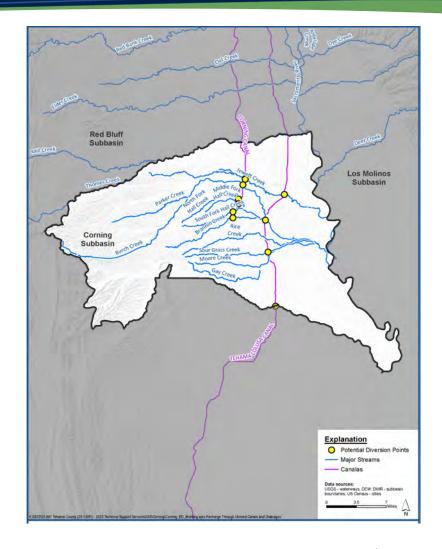
Corning Subbasin is interested in pursuing five different recharge related projects:

- ► Recharge through unlined canals and drainages
  - ▶ Direct recharge through unlined canals during high flow periods. Water is diverted from Sacramento River in the off season.
- Groundwater recharge pond south of corning
  - Use the current USBR runoff and stormwater pond for holding water for irrigation (in-lieu) or direct recharge
- Multi-Benefit recharge project
  - Create an incentive program for farmers to maintain flooded fields to proved direct recharge and migratory bird habitat
- ► California Olive Ranch groundwater recharge
  - ▶ Divert water from the Tehama-Colusa Canal via existing irrigation canals for direct recharge
- ► Thomes Creek flood water diversions for recharge
  - ▶ Divert flood flows from Thomes Creek to be used for irrigation purposes



### Key Tasks

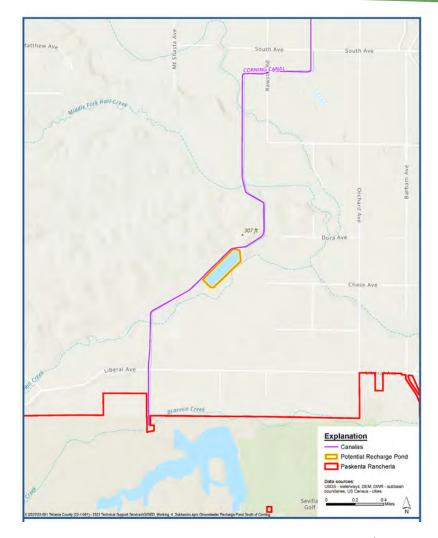
- Recharge through unlined canals and drainages
  - Conduct feasibility study, planning, and preliminary design activities associated with necessary infrastructure installation
  - ► Identify necessary CVPIA legislature updates required for this project.
  - Develop planning and design documents for conveying water to recharge areas
  - Acquire environmental permits and completion of CEQA-NEPA documentation.
  - Complete 100% design documents





#### Key Tasks

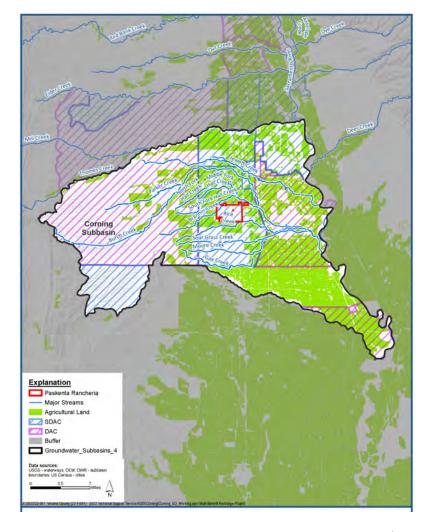
- Groundwater recharge pond south of Corning
  - Conduct planning and design activities associated with the use of the USBR storm control pond.
  - Develop planning and design documents necessary to update the existing pond.
  - Work with USBR to assess the feasibility and capacity of the existing pond as storage for in-lieu recharge.
  - Environmental permits and completion of CEQA documentation.
  - ► Acquire necessary access agreements required for GSA use of the pond.
  - Prepare final implementation report.





### Key Tasks

- ► Multi-Benefit recharge project
  - Conduct feasibility study, planning, and design to identify potential sites for recharge
  - Coordinate with growers willing to participate in this project.
  - Develop planning and design documents necessary for site preparation to enhance recharge potential and wetland habitat and conveyance system upgrades.
  - ► Install necessary conveyance infrastructure updates based on a technical assessment .
  - Prepare selected fields for flooding and install any necessary monitoring equipment.





### Key Tasks

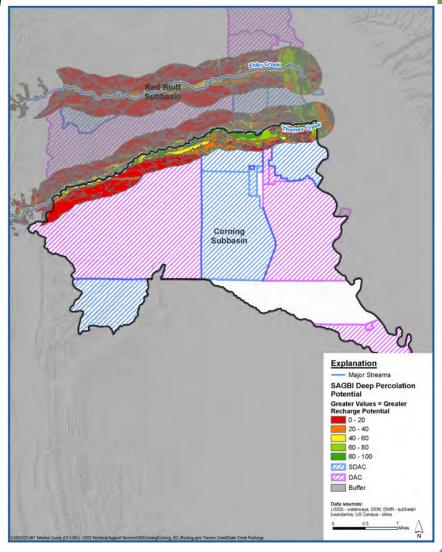
- California Olive Ranch groundwater recharge
  - Conduct planning and design activities associated with installation of necessary infrastructure
  - Develop planning and design documents
  - Work with the California Olive Ranch to assess the feasibility and capacity of the recharge project for in-lieu recharge
  - Acquire necessary permits and access agreements required for GSA monitoring of infiltration.
  - Prepare final implementation report.





#### Key Tasks

- ► Thomes Creek flood water diversions for recharge
  - Conduct feasibility study, planning, and design activities
  - Develop planning and design documents Complete permitting and environmental/CEQA documentation
  - ► Install necessary recharge infrastructure, which may be ASR wells, recharge basins, detention structures, or fallowed fields.



#### Budget

- ► Recharge through unlined canals and drainages \$200K
- ► Groundwater recharge pond south of corning \$150K
- Multi-Benefit recharge project \$430K
- California Olive Ranch groundwater recharge \$230K
- ► Thomes Creek flood water diversions for recharge \$480K

#### **►** Timeline

- ▶ Recharge through unlined canals and drainages Start October 2022 Finish by April 2026
- ► Groundwater recharge pond south of corning Start October 2022 Finish by April 2026
- Multi-Benefit recharge project Start October 2022 Finish by April 2026
- ► California Olive Ranch groundwater recharge Start October 2022 Finish by April 2026
- ▶ Thomes Creek flood water diversions for recharge Start October 2022 Finish by April 2026

Total: \$1,638,450



### **Corning Components**

### Components

- ► Component 1 \$968,000
- Component 2 \$3,531,000
- ► Component 3 \$1,336,500
- Component 4 \$1,638,450
- ► Total \$7,605,950

### Ranking

► Give each component score 1-4 from highest priority to least

