

Pajaro Valley Water Resources Management

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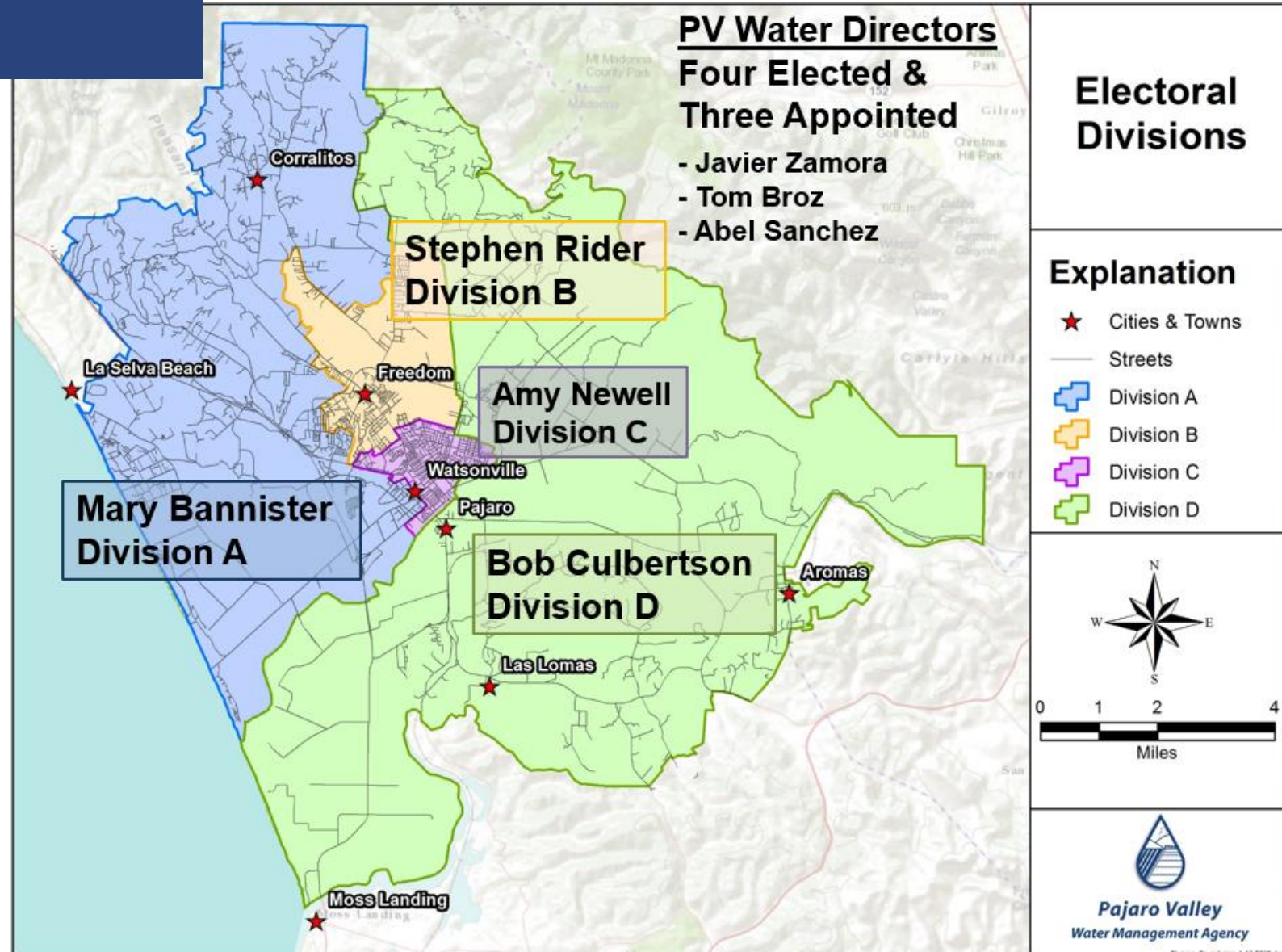
Pajaro Valley
Water Management Agency

Presentation Outline

- Acknowledgements
- Governance
- State of the Basin
- Summary of Management Actions & Water Supply Projects
- College Lake Integrated Resources Management Project
- Watsonville Slough System Managed Aquifer Recharge & Recovery Project
- Questions



PV Water Governance



Pajaro Valley Water Use

2021 Valley-wide Water Use

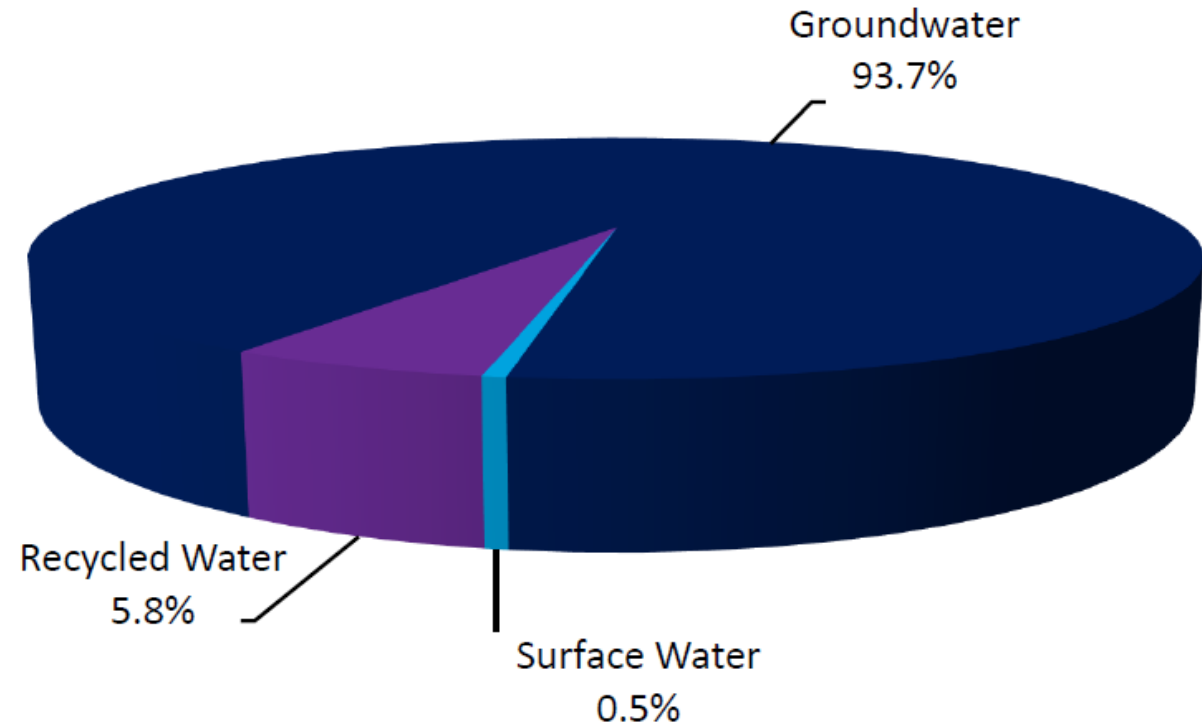
- Agriculture ~ 81%
- M & I ~ 19%

Water Sources

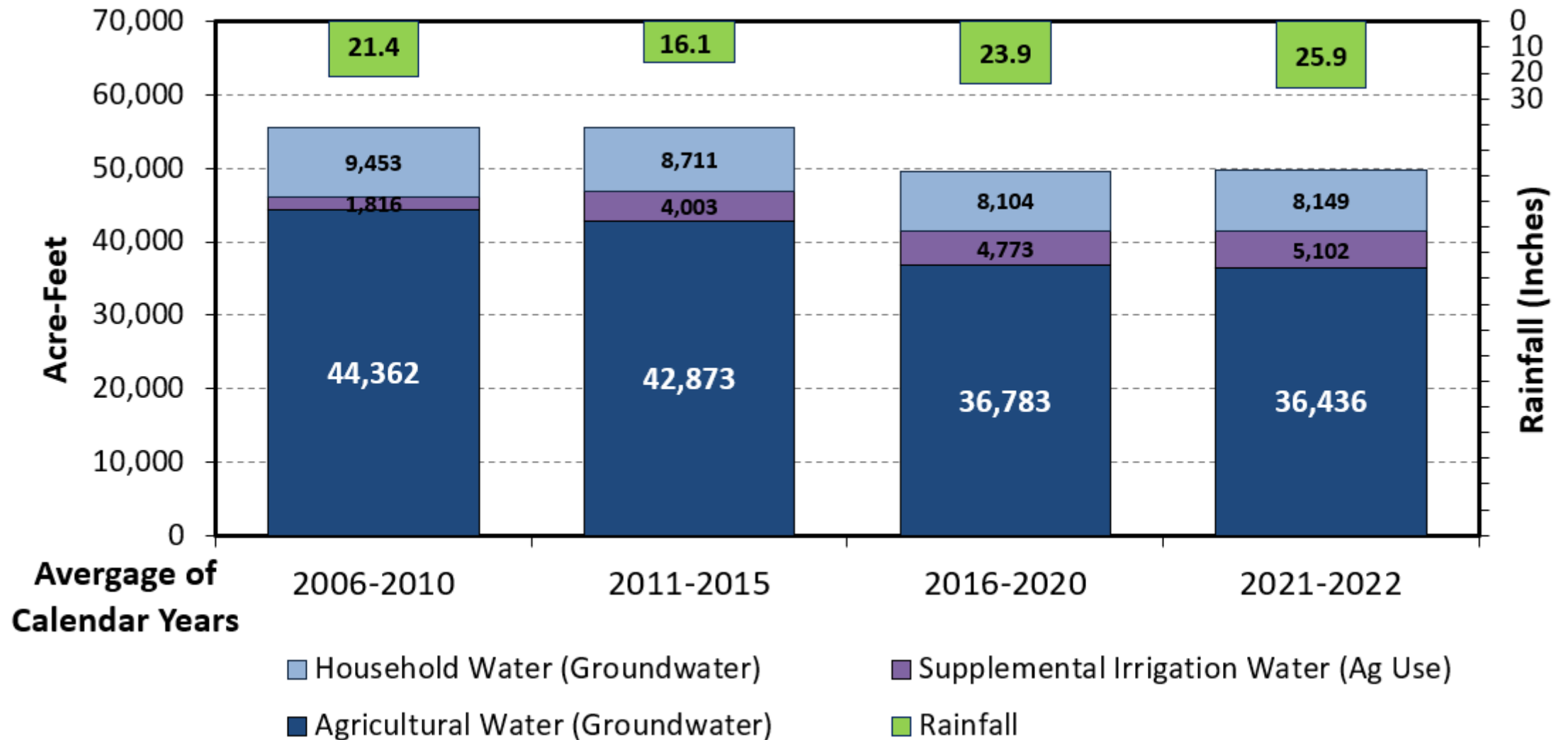
- 93.7% Groundwater
 - ~850 Ag Wells
 - ~1,200 RR Wells
- 5.8% Recycled Water
- 0.5% Surface Water

Pajaro Valley Water Sources

51,330 acre-feet
of water use in 2021

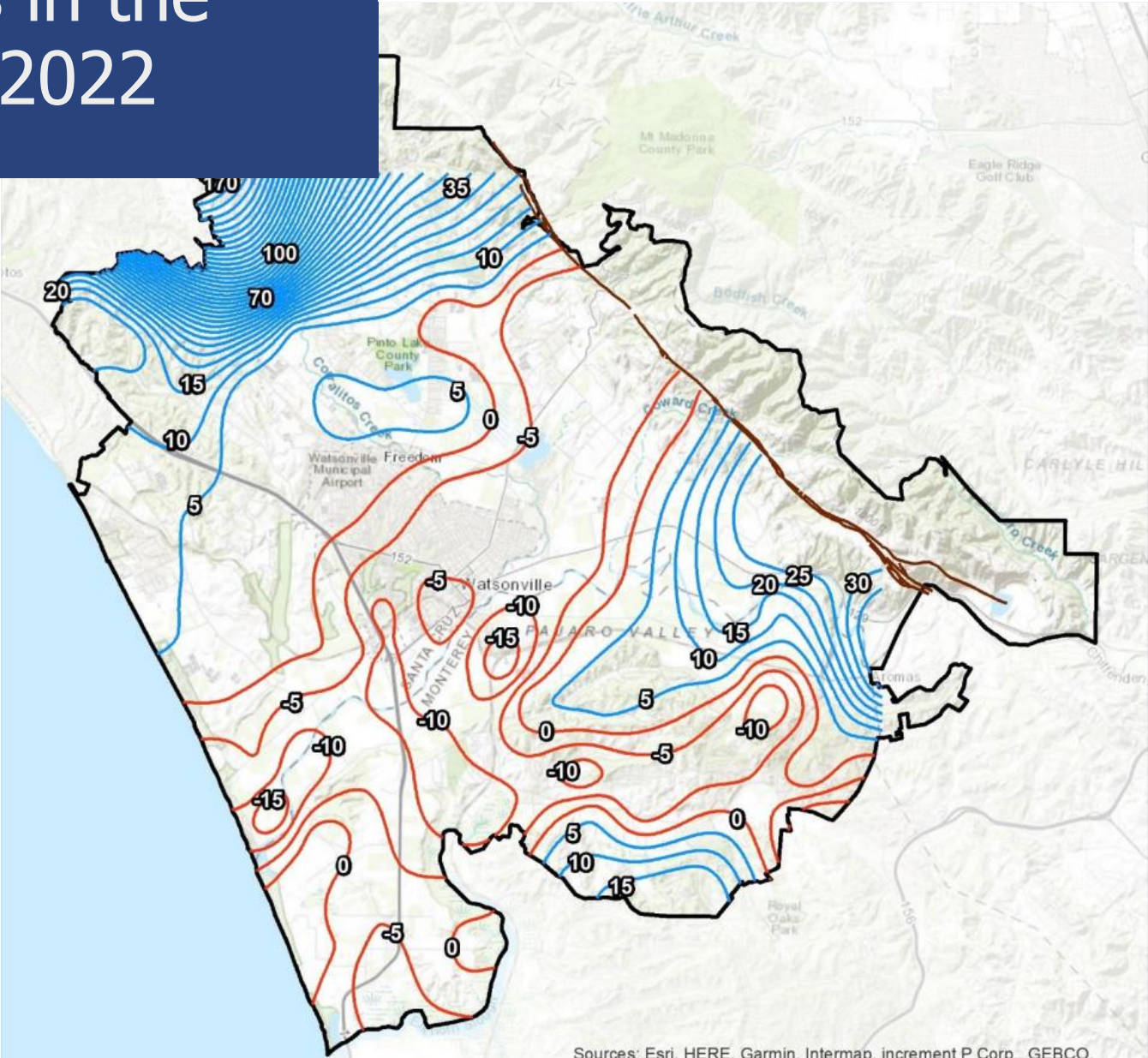


Pajaro Valley Water Use



Groundwater Levels in the Pajaro Valley – Fall 2022

Groundwater levels are regularly below sea level from ocean to the San Andreas Fault.



Pajaro Valley Basin Groundwater Elevation Fall 2022

Explanation

Groundwater Contours (ft NAVD88)

- Above Mean Sea Level
- Below Mean Sea Level
- San Andreas Fault
- PV Water Boundary

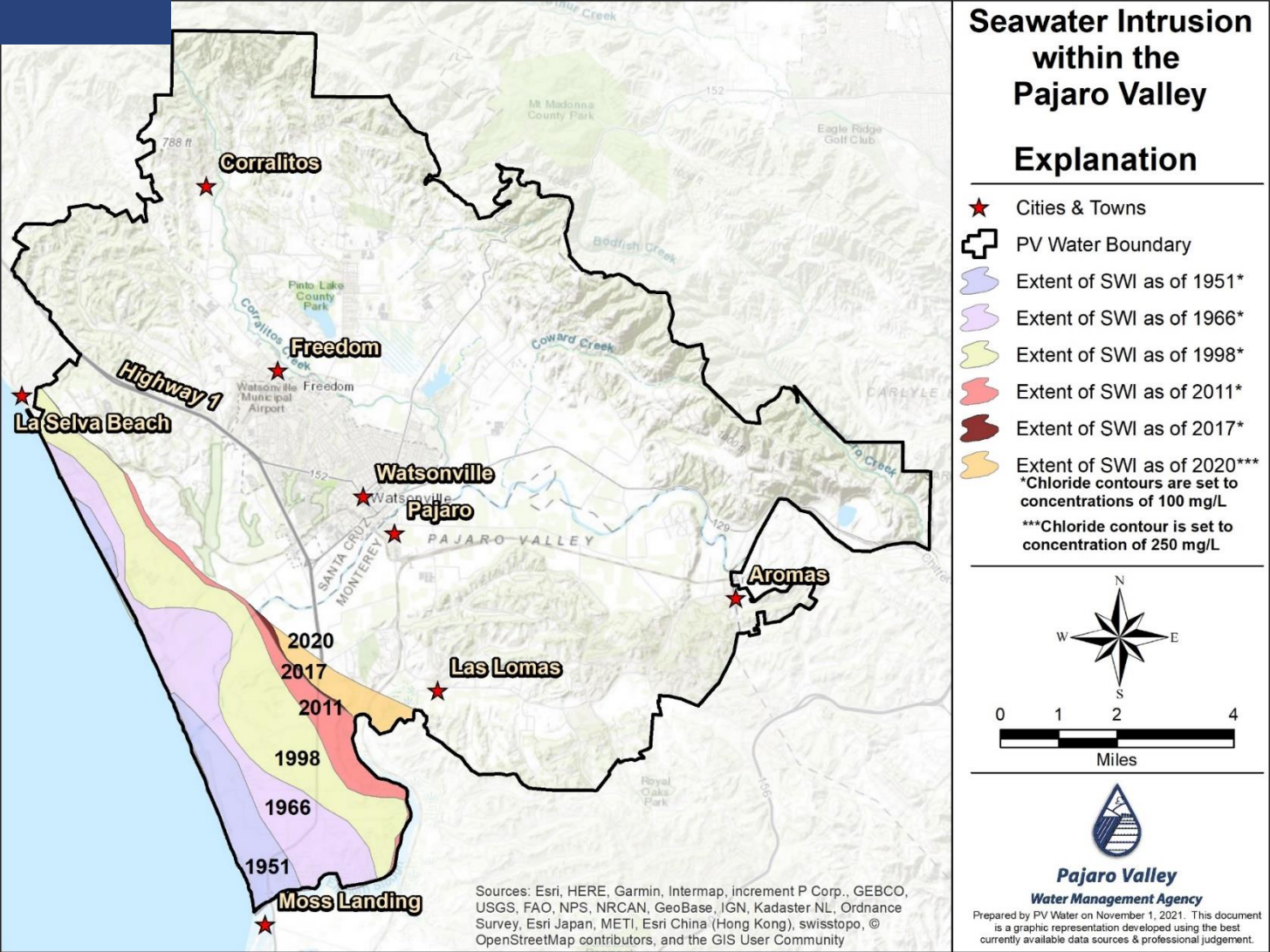
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Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

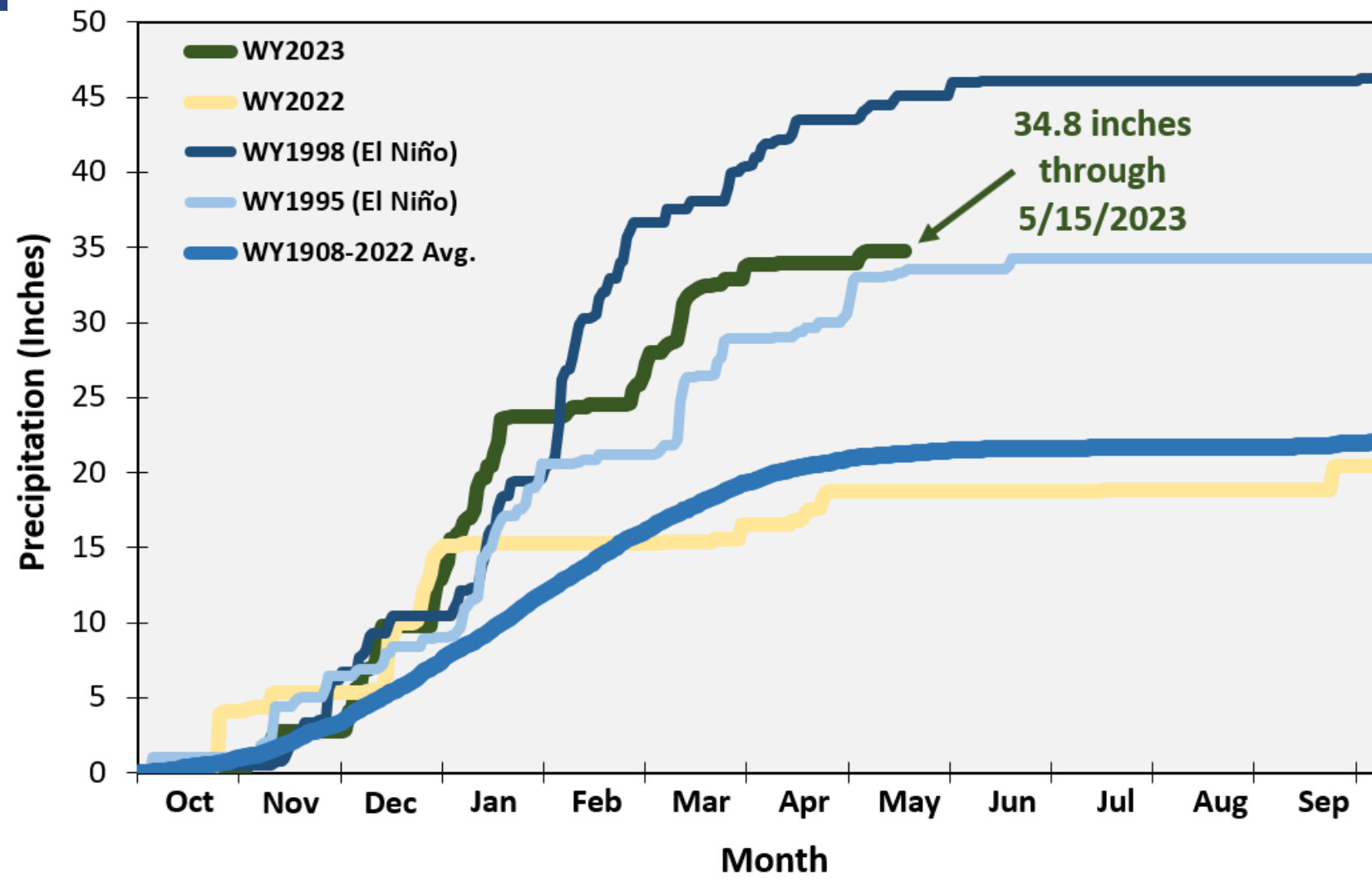
Prepared by PV Water on February 9, 2023.
This Document is a graphic representation developed using the best currently available data sources & professional judgement.

Seawater Intrusion

Seawater Intrusion
as indicated by
minimum groundwater
chloride concentrations
of 250 mg/L



Pajaro Valley Cumulative Precipitation



Data Source: Station WTW operated by City of Watsonville, <https://xmacis.rcc-acis.org/>

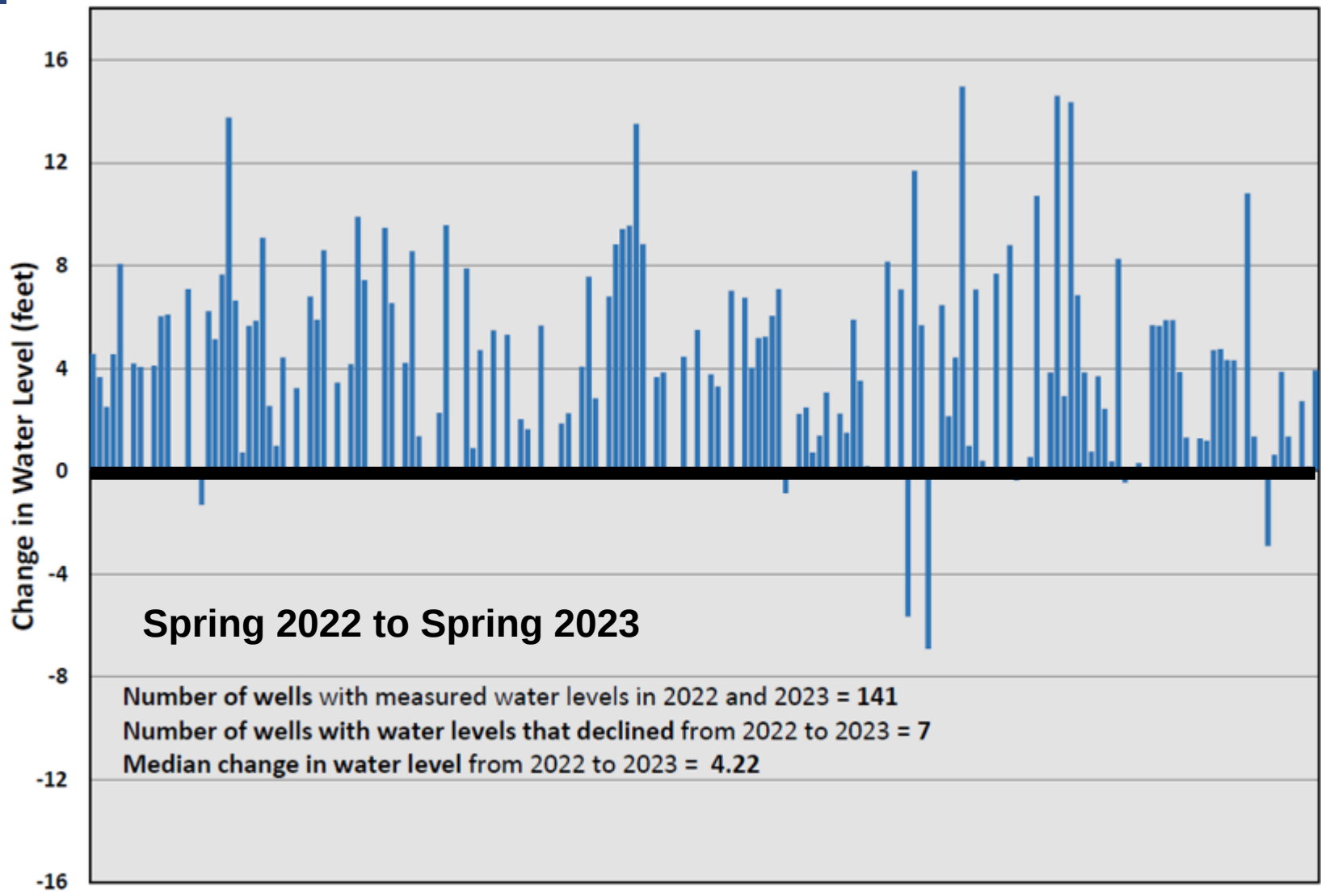
Existing Water Supply Facilities to Reduce Overdraft & Seawater Intrusion

- **Harkins Slough Facility**
 - Managed Aquifer Recharge & Recovery
 - Stream flow diversion
 - Over 10,000 AF recharged since 2002
- **Recycled Water Facility**
 - Average of 3,180 AFY, 2018 through 2022
 - Drought tolerant supply
 - Reduced discharge of secondary effluent to Monterey Bay National Marine Sanctuary
- **Coastal Distribution System**
 - Over 22 miles of water conveyance pipeline
- **Blend Supplies**



One-Year Change in Groundwater Levels

Groundwater levels have increased 4.2 feet in the since spring 2022.

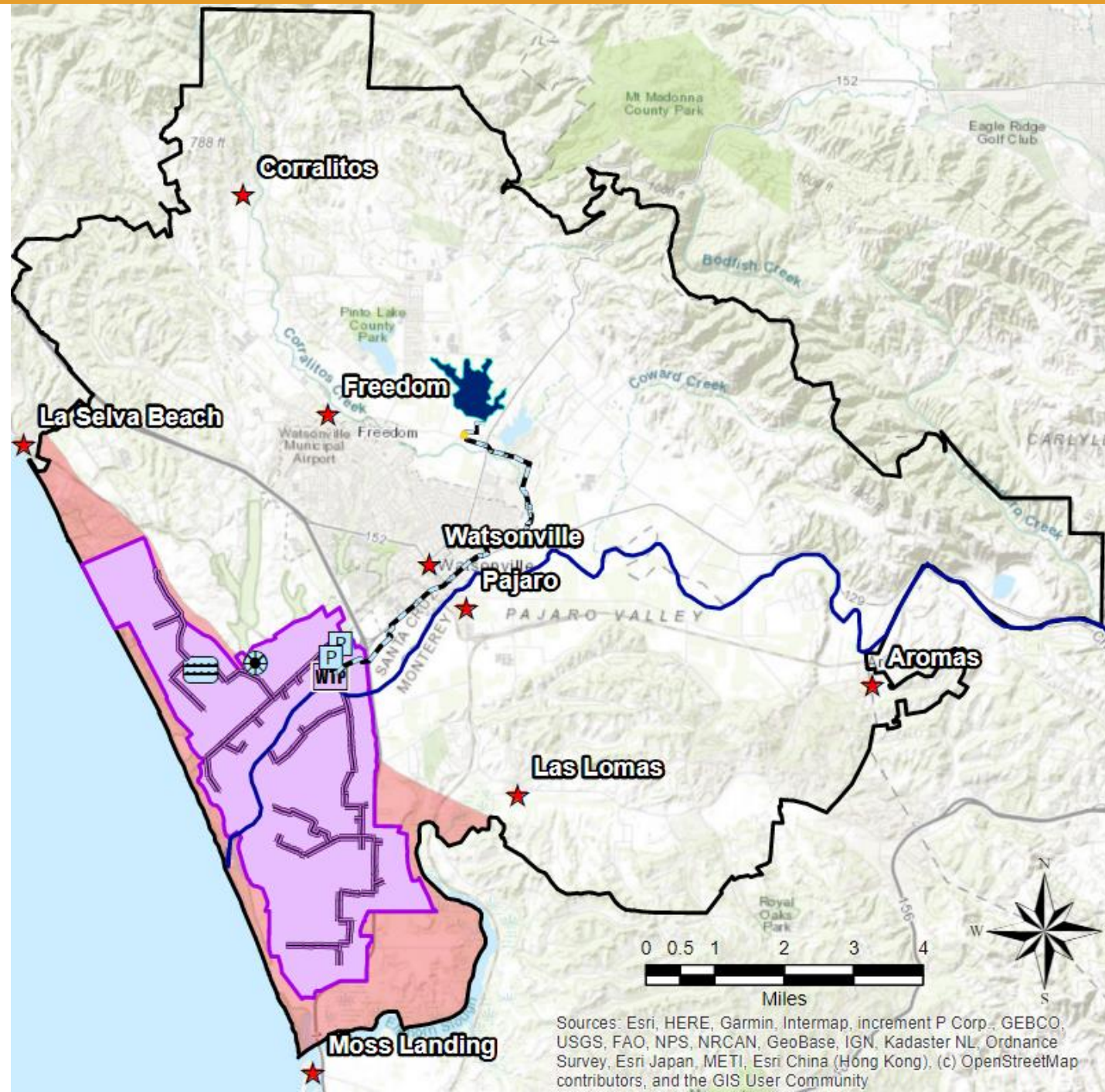


To Further Protect our
Shared Water Resources

Agricultural Water
Demand in Delivered
Water Zone ~ 10,000 AFY

Existing Facilities
Produce ~ 5,000 AFY

College Lake Project will
yield an average of
1,800 to 2,300 AFY



College Lake Project & Existing Water Supply Facilities

Explanation

- Blend Wells
- Harkins Slough Diversion
- Recharge Basin
- Recycled Water Facility
- Coastal Distribution System
- College Lake Pipeline
- Pajaro River
- Delivered Water Zone
- PV Water Boundary
- Water Treatment Plant
- College Lake
- Seawater Intrusion*

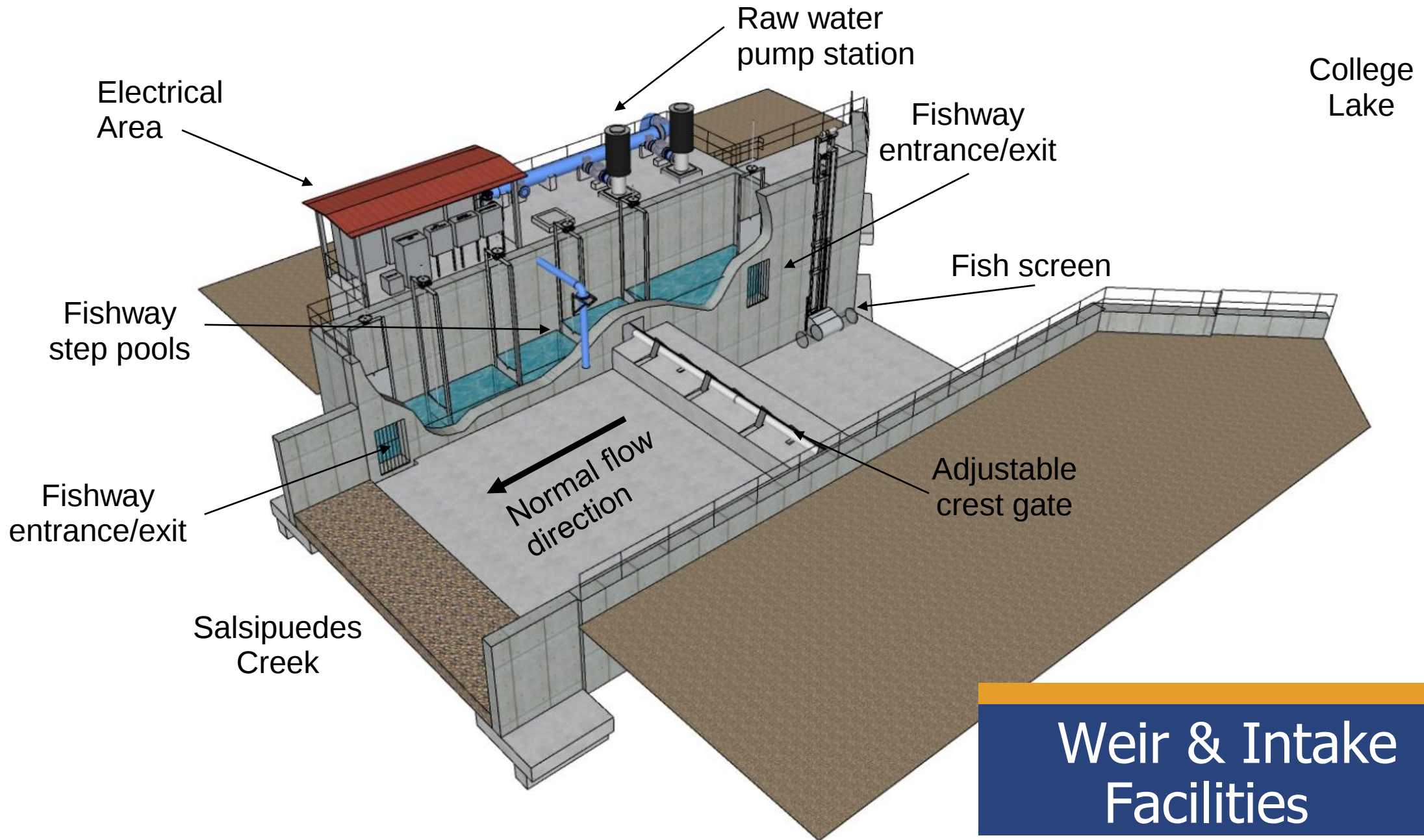
*Extent of seawater intrusion area represents chloride concentrations greater than 250 mg/L.



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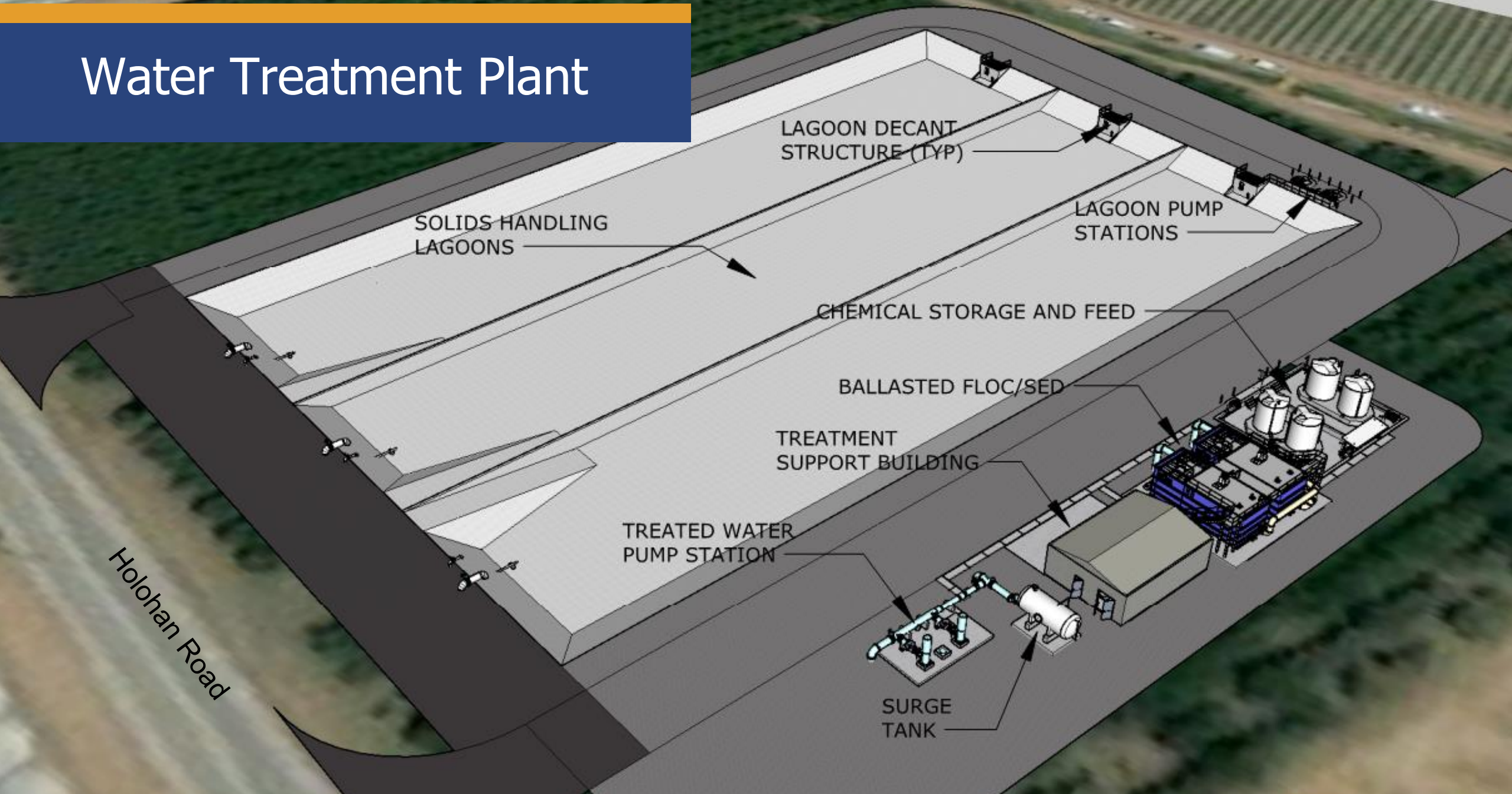
Prepared by PV Water on October 28, 2022.
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Weir & Intake Facilities

Water Treatment Plant



Watsonville Slough System Managed Aquifer Recharge and Recovery Project

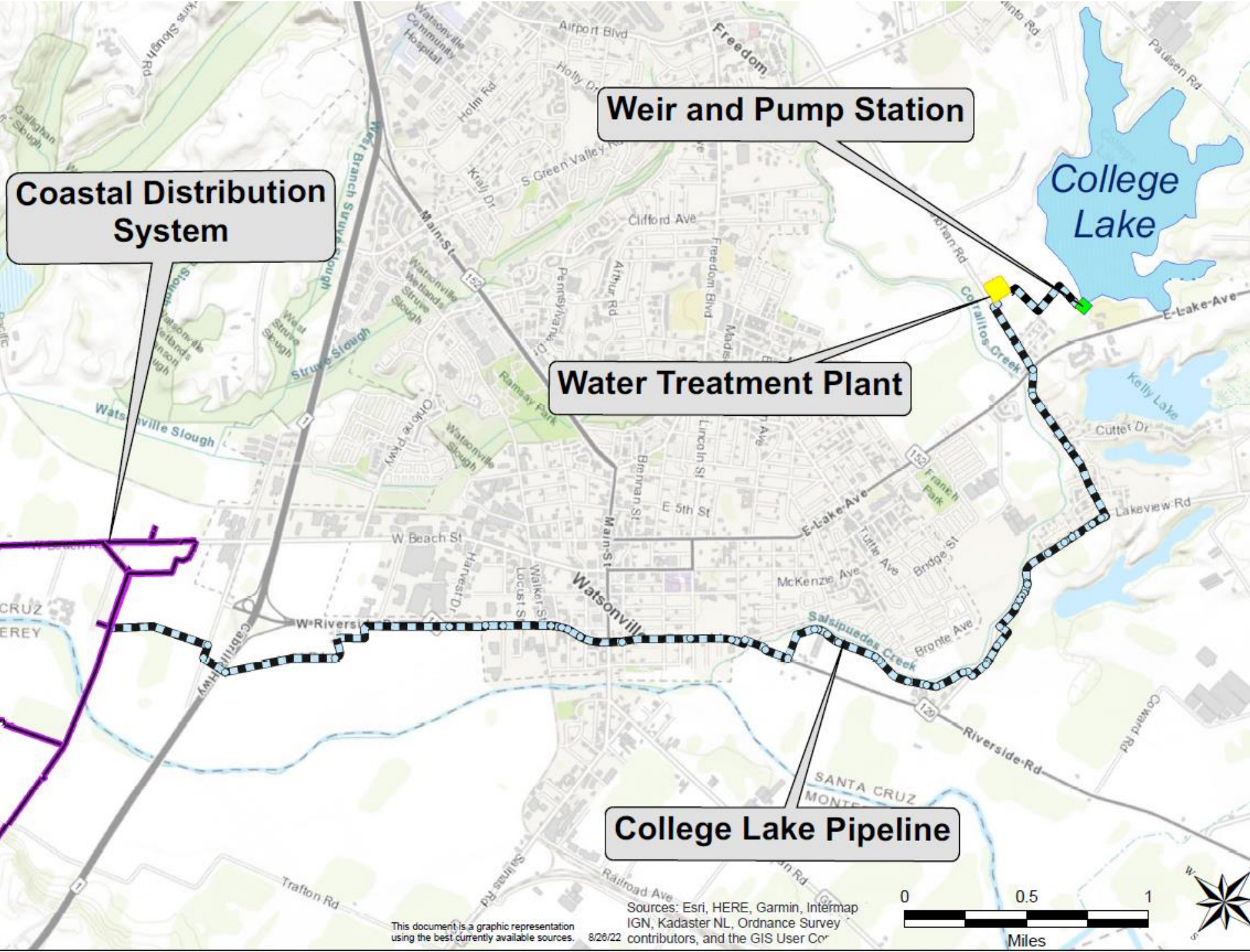
- Harkins Slough Facilities Upgrade Project
- Struve Slough Project
- Goals:
 - Diversion, recharge & recovery of up to 4,000 AFY



Pipeline Route - 6 miles

Traffic management during construction on the following roads:

- Holohan Rd
- East Lake Ave
- College Rd
- Lakeview Rd
- Riverside Rd/ HWY129
- All intersections of the above roadways



Thank you.

Comments / Questions?

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College Lake Guide



College Lake Page

