

Salinas Valley Groundwater Basin Investigation Report

County of Monterey Board of Supervisors

August 27, 2024

LEG ID 24-554

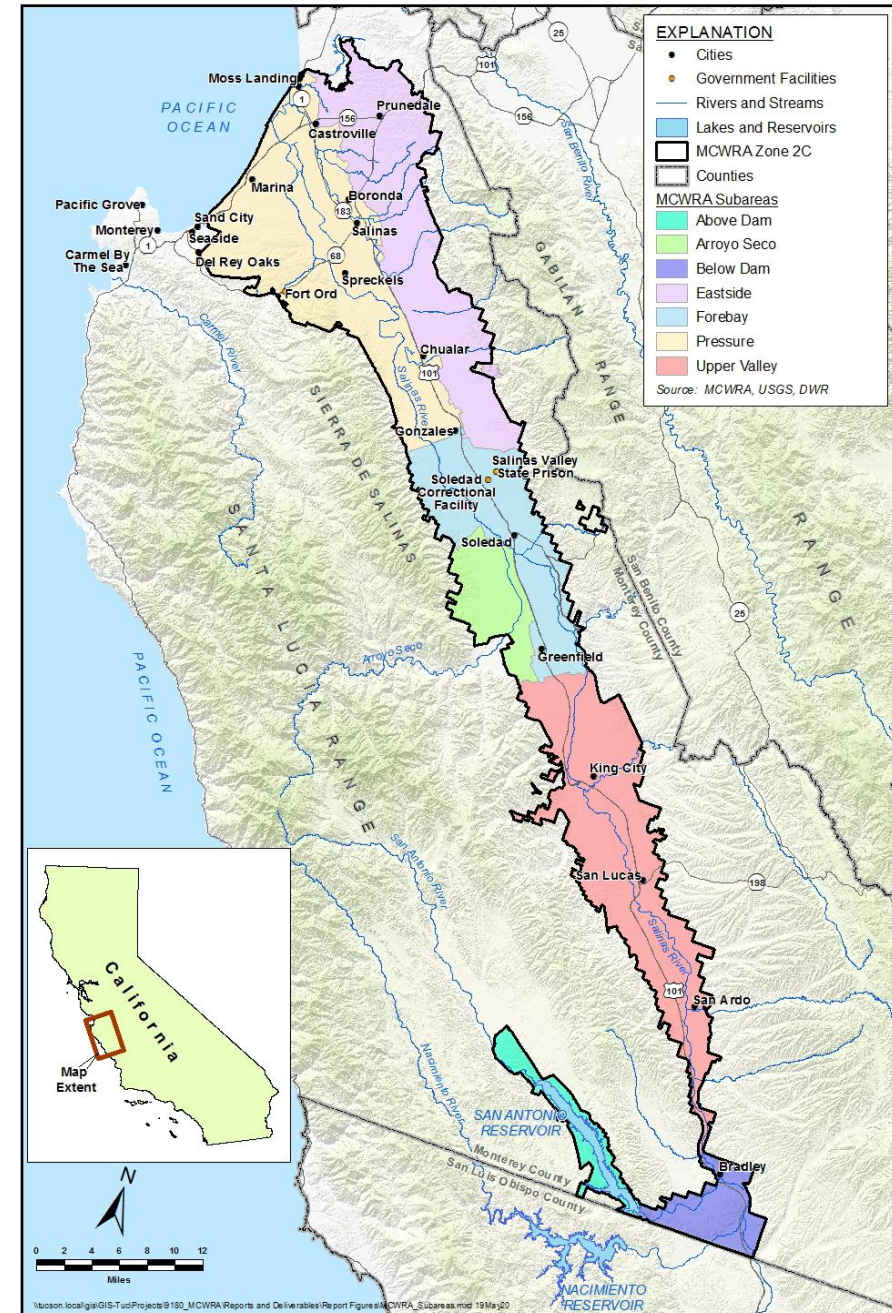
Action:

It is recommended that the Monterey County Board of Supervisors:

- a. Find that this action is not a project under CEQA Guidelines section 15378(b)(5);
- b. Receive a report on the Salinas Valley Groundwater Basin Investigation prepared pursuant to Policy PS-3.1 of the 2010 General Plan; and
- c. Provide direction to staff.

Background:

- Litigation resulted from the 2010 General Plan and led the County to revise the General Plan Policies PS-3.1 and PS-3.3.
- PS-3.1 required the County to prepare a study
- The SVGBI Report meets this requirement



Monterey County 2010 General Plan

PS-3.1:

6. should the study conclude that

- i) total water demand for all uses designated in the General Plan for the year 2030 is likely to be exceeded; or
- ii) groundwater elevations are likely to decline by the year 2030 and
- iii) the seawater intrusion boundary is likely to advance inland by the year 2030, **the study shall make recommendations on measures the County could take to address any or all of those conditions;** and

If the study reaches the conclusions for Zone 2C identified in subsection 6) i or 6) ii and 6) iii, **the Board of Supervisors shall adopt one or more measures identified in the study, or other appropriate measures, to address the identified conditions.**

Following completion of the study, and the adoption of measures as may be recommended in the study, if any, the County shall prepare a report to the Board of Supervisors every five (5) years for Zone 2C that examines the degree to which a) total water demand for all uses predicted in the General Plan EIR for year 2030 will be reached; or b) groundwater elevations, the seawater intrusion boundary have changed since the prior reporting period; and c) other sources of water supply are available.



SVGB Investigation Report

- The study concludes that:
 - i) total water demand for all uses designated in the General Plan for the year 2030 is likely to be exceeded; and
 - ii) groundwater elevations are likely to decline by the year 2030; and
 - iii) the seawater intrusion boundary is likely to advance inland by the year 2030

Recommendations on measures the County could take to address any or all of those conditions are provided.

SVGB Investigation Report overview

- 2030 projected population in the General Plan EIR was re-evaluated using more recent data.
- Water demands for agriculture and urban needs were estimated for low, medium, and high growth scenarios.
- Modeling was used to estimate changes in groundwater elevations and the extent of seawater intrusion by 2030.
 - Modeling relied on tools developed with the U.S. Geological Survey, Monterey County Water Resources Agency, and Salinas Valley Basin GSA. Model development was a lengthy process that experienced delays.
- Climate conditions in 2030 were incorporated using a central tendency scenario for future climate.

SVGB Investigation Report findings

- 2030 projected population in the General Plan EIR was overestimated.
- Projected land use changes were evaluated:
 - Total acreage of agricultural land shows little change by 2030.
 - Significant conversion from annual to perennial crops is projected.
 - Urban land cover is projected to expand.
- Total water demands projected for 2030 are greater than in the EIR by 42,000 to 52,000 acre-feet.
 - Agricultural water demands for 2030 are projected to be higher than in the EIR due to land use changes and climate change.
 - Urban water demands for 2030 are projected to be lower due to smaller population estimates. Urban water use is based on population, not urban area.

SVGB Investigation Report findings

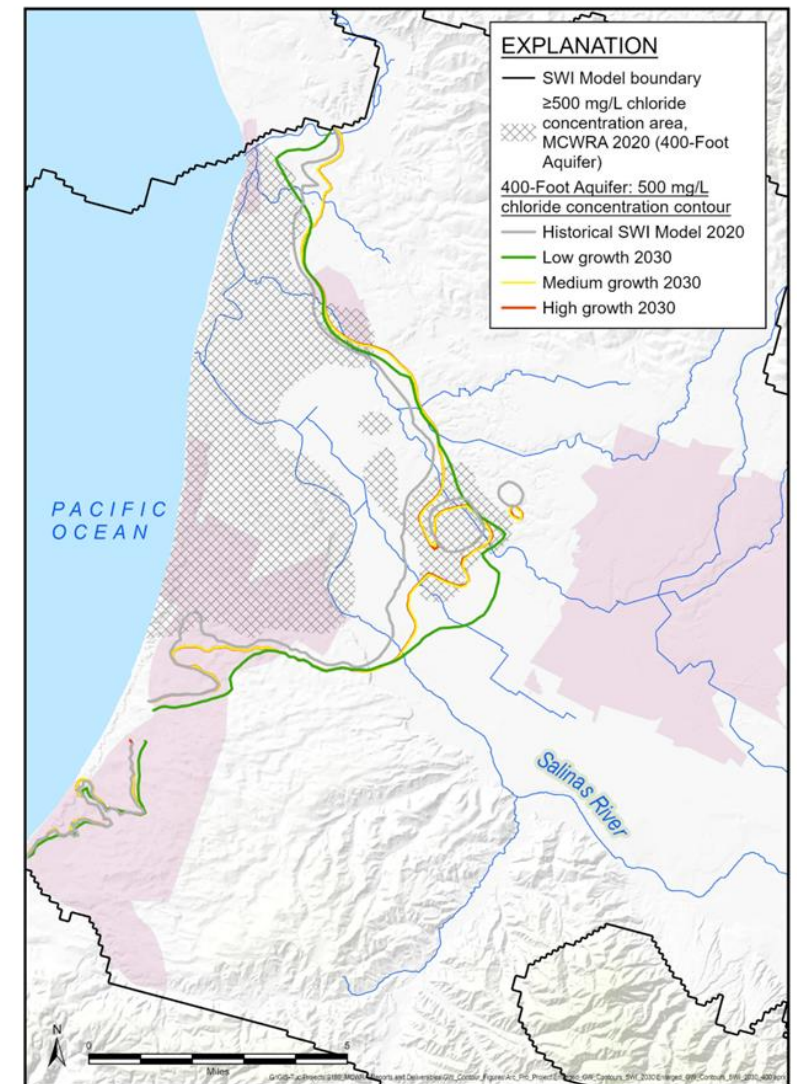
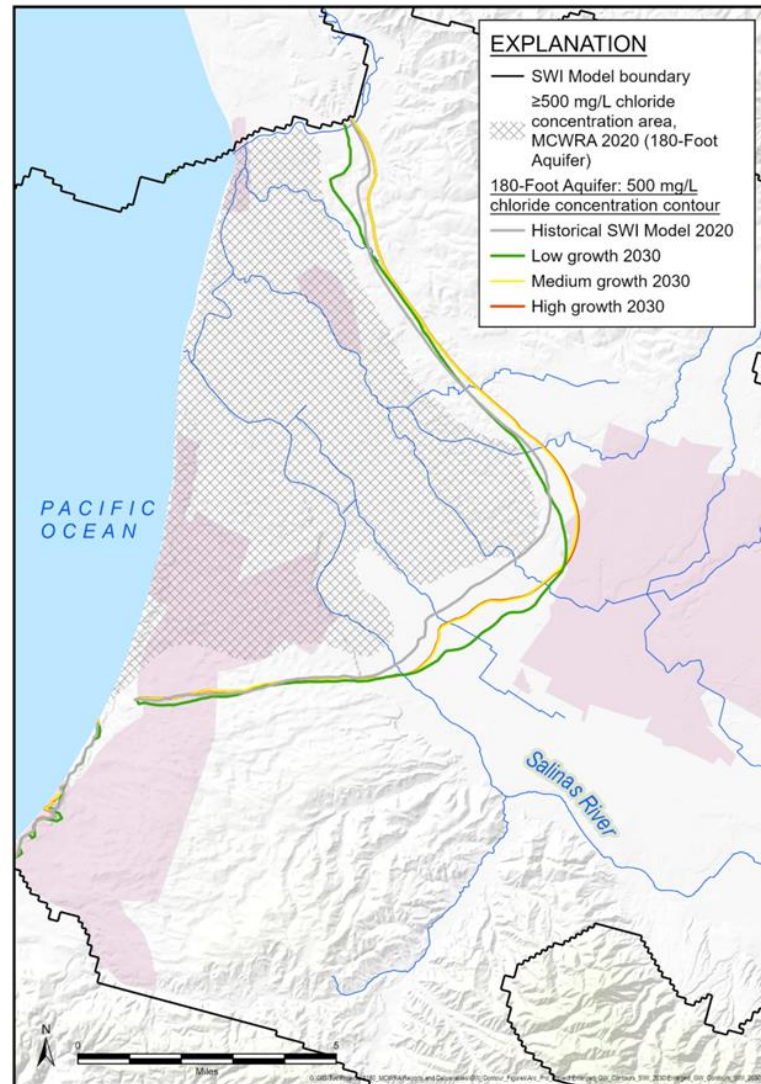
- Groundwater elevations are projected to decline, with variation by hydrologic subarea.

Table 4-12. Projected Average Groundwater Elevation Change 2021 to 2030

| Subarea | Total Groundwater Elevation Change 2021 to 2030 (feet) | | | Rate of Groundwater Elevation Change 2021 to 2030 (feet/year) | | |
|--------------|---|------------------|----------------|--|------------------|----------------|
| | Low Growth | Medium Growth | High Growth | Low Growth | Medium Growth | High Growth |
| Eastside | -4.3 | -4.5 | -4.4 | -0.43 | -0.45 | -0.44 |
| Forebay | -0.4 | -0.5 | -0.5 | -0.04 | -0.05 | -0.05 |
| Pressure | -3.1 | -3.6 | -3.5 | -0.31 | -0.36 | -0.35 |
| Upper Valley | -1.1 | -1.2 | -1.2 | -0.11 | -0.12 | -0.12 |

SVGB Investigation Report findings

- Seawater intrusion is projected to continue advancing in the 180-Foot and 400-Foot Aquifers.





Recommended Measures

1. Maintain current infrastructure, included regulatory required work at San Antonio and Nacimiento Reservoirs.
 - 2. Consider groundwater conditions in Land Use Planning.**
 3. Prevent declines in groundwater recharge.
 4. Support conservation to reduce groundwater demand.
 5. Prevent seawater intrusion leakage between aquifers.
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Recommended Measures

6. Reservoir operations: Balance reservoir needs with groundwater recharge
 7. Reduce groundwater extraction through collaboration and data collection with a variety of interested parties.
 8. Provide alternative supplies: surface water diversions.
 9. Increase groundwater recharge.
 10. Reduce groundwater extraction near seawater intrusion boundary.
 11. Install seawater extraction barrier.
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Next steps: Provide Direction to staff



Amend PS-3.1 to memorialize that the SVGB Investigation Report is complete



Direct staff to analyze projects using GSA's groundwater sustainability plans.



Direct staff to coordinate with local groundwater sustainability agencies, water districts, and stakeholders to develop a coordinated approach to evaluating land use decisions and groundwater sustainability together.

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