



County of Monterey

Item No.

Board Report

Board of Supervisors
Chambers
168 W. Alisal St., 1st Floor
Salinas, CA 93901

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Consider receiving a report on the Salinas Valley Groundwater Basin Investigation pursuant to Policy PS-3.1 of the 2010 Monterey County General Plan and provide direction to staff. [REF150103]

CALIFORNIA ENVIRONMENTAL QUALITY ACT ("CEQA") action: Find that this action is not a project under CEQA Guidelines section 15378(b)(5), as this activity is administrative and will not result in direct or indirect physical changes in the environment.

RECOMMENDATION:

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;
- c. Direct staff to prepare a General Plan amendment to update Policy PS-3.1 in light of the completed investigation; and
- d. Provide direction to staff.

SUMMARY:

In October 2010, the County of Monterey ("County") adopted a comprehensive update to its General Plan known as the 2010 Monterey County General Plan ("General Plan"). Subsequently, numerous plaintiffs filed lawsuits concerning the Board's action. Relevant here, some of these plaintiffs included the Salinas Valley Water Coalition, LandWatch Monterey County, and the Open Monterey Project. As it relates to groundwater policies, the lawsuits were settled through consideration of revisions to General Plan Policies PS-3.1 and PS-3.3, some of which were adopted by the Board. Revised Policy PS-3.1 required the County prepare or caused to be prepared a study of Zone 2C of the Salinas Valley Groundwater Basin that does all the following:

- 1) Evaluates existing data for sea water intrusion and groundwater levels collected by the Monterey County Water Resources Agency ("MCWRA") as of the date the study in commenced;
- 2) Evaluates the total water demand for all existing uses and future uses designated in the General Plan EIR for the year 2030;
- 3) Assesses and provides conclusions regarding the degree to which the total water demand for all uses designated in the General Plan for the year 2030 are likely to be reached or exceeded;
- 4) Evaluates on an annual basis during the study period groundwater elevations and the seawater intrusion boundary;
- 5) Based on historical data and the data produced by the study, evaluates and provides

- conclusions regarding future trends and any expected movement of groundwater elevations and the sea water intrusion boundary;
- 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
 - 7) Addresses such other matters as the Board of Supervisors determines appropriate.

In June 2023, the County's consultant completed the Salinas Valley Groundwater Basin Investigation Report ("Investigation Report") (Attachment A). The Investigation Report estimates that 2030 water demands and groundwater conditions, under average climate conditions, will result in groundwater level declines and movement of the seawater intrusion boundary inland within Zone 2C. This result is largely due to increases in agricultural water use beyond those anticipated in the 2010 General Plan Environmental Impact Report ("EIR").

Policy PS-3.1 states that "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." Attachment B to this report includes measures recommended in the Investigation Report to address the declining groundwater levels and advancing seawater intrusion. Staff is recommending that the Board consider the recommended measures and direct staff to return for adoption of appropriate measures in the form of a General Plan amendment. At a minimum, the language of General Plan Policy PS-3.1 should be updated to reflect the completion of the Investigation Report and to provide appropriate language that reflects current groundwater regulations and conditions. In particular, since Policy PS-3.1 was adopted, groundwater regulation have changed dramatically with the enactment of the Sustainable Groundwater Management Act ("SGMA") by the California legislature in 2015. If the Board directs staff to process an amendment to the General Plan, such work will likely to take years given the need for outreach, environmental review, a Planning Commission recommendation, and Board consideration.

DISCUSSION:

As detailed above, the County's adoption of the 2010 General Plan resulted in litigation. As a result of that litigation, in 2013 the Board of Supervisors adopted amendments to the 2010 General Plan, including amending Policy PS-3.1 to direct preparation of a five-year study to evaluate groundwater levels and seawater intrusion relative to total water demand for existing and projected future uses within the MCWRA Zone 2C assessment district area, which encompasses a large part of the Salinas Valley Groundwater Basin. A primary objective of the Investigation Report is to assess the general health of the Salinas Valley Groundwater Basin ("SVGB") with regard to its ability to provide a sustainable supply of water for land-use activities projected through Year 2030 under the General Plan.

As part of the Investigation, the County entered into a cooperative agreement (Joint Funding Agreement No. 16WSCA600466210) with the United States Geological Survey ("USGS") to configure and calibrate an integrated comprehensive hydrologic model to assess the general health of the SVGB. A preliminary model, the Salinas Valley Integrated Hydrologic Model ("SVIHM") was

developed and calibrated using historical data for hydrologic conditions, reservoir releases, and seawater intrusion for the period 1967 - 2014. Subsequently, the USGS developed the Salinas Valley Operational Model (“SVOM”) in partnership with MCWRA. The SVOM is a derivative of the SVIHM that inherits the calibrated properties and structure of the SVIHM and couples that with a module that allows the model to operate Nacimiento and San Antonio Reservoirs. Throughout the period from 2018 to 2023, the USGS completed additional updates and calibration of the SVIHM and SVOM. In 2021, the County and the Salinas Valley Basin Groundwater Sustainability Agency (“SVBGSA”) partnered on development of the Salinas Valley Seawater Intrusion Model (“SWI Model”), a tool that is based on the SVIHM but which is enhanced to allow for modeling of density-dependent groundwater flow, allowing for simulation of the extent of seawater intrusion over time and under varying hydrologic conditions. The timelines for development of the SVIHM, SVOM, and SWI Model were extended longer than originally anticipated due to USGS delays, the complex nature of the model domain, the extensive geographic area of the model, and the need to develop new approaches for simulating reservoir operations and capturing land use practices within the Salinas Valley.

Using the SVOM and the SWI Model, the Investigation Report analyzed how 2030 water demands impact groundwater levels and seawater intrusion (Attachment A). Informed by the SVIHM that was developed by the County and USGS, the Investigation Report found that groundwater levels will decline, and seawater intrusion will likely continue under average climate conditions through 2030. The 2010 General Plan EIR projected that agricultural water demand would decrease by 2030, and urban demand would increase, with a net projected decrease in water demand. The Investigation Report finds that as of 2020, total water demands have increased. Agricultural water use has increased, and the 2010 EIR predicted it would decrease. At the same time, urban water use has decreased; however, in total, more groundwater is being pumped than assumed in the EIR and 2010 General Plan.

The Investigation Report recommends several measures that can reduce impact on groundwater levels and reduce seawater intrusion (also see Attachment B for more detail). These measures include the following:

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.
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.

Completion of the Investigation Report meets the terms for completion of a study as stated in PS-3.1 of the General Plan. As described above, the adopted General Plan policy directs the County to adopt

measures recommended in the report, or other appropriate measures, to address the conditions identified. Many of the recommended measures in the investigation are already being undertaken by other agencies such as MCWRA and the SVBGSA. This highlights the significant changes in groundwater management that has occurred since the time the General Plan policy was adopted, most notably the adoption of SGMA.

HCD implements Policy PS-3.1 on discretionary land use development projects. As written, development is prohibited in the unincorporated County without proof, based on specific findings and supported by substantial evidence, that there is a long-term, sustainable water supply, both in quality and quantity to serve the development. Exceptions for the first single family dwelling on a lot, public infrastructure, and development in Zone 2C are provided. Guidance on what constitutes proof of a long-term water supply is provided in Policy PS 3.2 of the General Plan. In determining a long-term sustainable water supply, one of the factors listed in PS-3.2 is the cumulative impacts of existing and projected future demand for water from the source and the ability to reverse trend contributing to an overdraft condition. The investigation provided in the Investigation Report identifies lowering groundwater levels in some areas. In those areas experiencing declining groundwater levels, it would be difficult to support land use development given the policies in place without a long-term solution to the problem. With the adoption of SGMA, the solution to groundwater sustainability lies with the groundwater sustainability management agencies (GSAs). Given the situation, with many of the recommendations in the investigation being measures that are being carried out by MCWRA and the GSAs (e.g., SVBGSA, Marina Groundwater Sustainability Agency, Arroyo Seco Groundwater Sustainability Agency), and with a focus on General Plan land use policy, the recommendation that the County “consider groundwater in land use planning” by coordinating with the GSAs, appears to be the most relevant and actionable course forward. Other measures or actions may be considered but if directed by the Board to coordinate land use with the GSAs, the details of how this translates to policy language would need to be developed.

In the near term, staff could work on amendments to PS-3.1 to memorialize that the Investigation Report is complete and direct County staff to analyze projects using GSA’s groundwater sustainability plans (a general measure in the Investigation Report). Longer term, County staff could coordinate with local groundwater sustainability agencies and water districts to develop a threshold to analyze long term sustainable water supply and its impacts on development.

OTHER AGENCY INVOLVEMENT:

MCWRA performed project management for the Investigation. The U.S. Geological Survey is a cooperator in development of the SVIHM. The Housing and Community Development (HCD) Department administers the contracts with the consultants. SVBGSA was a cooperator on development of the Seawater Intrusion Model. The Office of County Counsel reviewed this report.

ENVIRONMENTAL REVIEW:

Receiving this Report is not a Project under CEQA Guidelines section 15378(b)(5), as this activity is administrative and will not result in direct or indirect physical changes in the environment. Any potential future amendment to the 2010 General Plan would require further environmental review. The Monterey County 2010 General Plan Environmental Impact Report was certified on October 26, 2010 (SCH#2007121001).

FINANCING:

A total amount of \$2,195,527 has been spent to prepare the SVGB Investigation Report between Fiscal Year (FY) 2014-2015 to FY 2022-2023. The MCWRA and USGS provided a total of \$114,503 in matching funds for the Investigation Report. Staff time between 2018 and 2020 for administration of the Investigation was budgeted under the RMA/HCD Budget and cost \$27,384. Staff time to bring this report forward to the Board is budgeted in adopted Budget FY 2024-2025, Appropriation Unit HCD002, Unit 8543. Updating the General Plan will be added to the Long-Range Work Program and may require staff time or cost to contract a vendor for staff time support. The scope and cost of the vendor support is unknown at this time and will be developed if the Board directs staff to prepare a General Plan amendment.

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Approved by: Craig Spencer, Director HCD CS

The following attachments are on file with the Clerk of the Board:

Attachment A - Salinas Valley Groundwater Basin Investigation Report

Attachment B - List of recommended measures from the Report