

Sustainable Management Criteria

Sustainable Management Criteria (SMCs) are defined locally based on **basin conditions** to avoid *significant and unreasonable Undesirable Results* for SGMA **Sustainability Indicators**.

Iterative Process which will involve significant stakeholder engagement, modeling of future climate, growth, and projects and actions

Sustainability Indicators



Lowering
Groundwater
Levels



Seawater
Intrusion



Reduction of
Storage



Land
Subsidence



Degraded
Quality



Surface
Water
Depletion

Each of the Six Sustainability Indicators have Three Primary Sustainable Management Criteria Terms



Lowering
Groundwater
Levels



Seawater
Intrusion



Reduction of
Storage



Land
Subsidence



Degraded
Quality



Surface
Water
Depletion

- **Undesirable Results**

- **Minimum Thresholds**



Together these two terms **define what is unacceptable** within the basin and **determine whether the basin is being managed sustainably**

- **Measurable Objectives**



This term defines what is **desirable** within the basin and the conditions which the **GSA must strive to achieve**

Guiding Questions to Advisory Committee for Lowering of Groundwater-Levels

- 1. What would you consider unacceptable or intolerable when it comes to groundwater level declines?** For example: Groundwater-levels falling below pumping depths of water supply wells
- 2. What would be desirable conditions in the basin related to groundwater-levels?** For example: Groundwater levels always recover after droughts or groundwater levels increase to enhance basin habitat
- 3. What particular elements potentially affected by groundwater levels are you most concerned about?** For example, a particular well type or specific beneficial use/user? Long-term versus short-term, seasonal, or drought?
- 4. Do you think that there are specific areas of the basin that have unique or different concerns or issues, than other parts of the basin?**

What Are Significant and Unreasonable Effects?

For Lowering of Groundwater Levels, SGMA defines an “undesirable result” as the chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon.

- Qualitative (narrative) description of conditions that are deemed to be unacceptable within the basin
- Include description of geographic area over which conditions need to be evaluated to inform monitoring network needs
- Consider beneficial uses and users of groundwater
- Must have a correlation with groundwater conditions (eg, cause and effect must exist)

Draft Examples of Significant and Unreasonable Effects for Lowering of Groundwater Levels- Other Basins

- **Santa Cruz – GW-Levels:** *“A significant number of private, agricultural, industrial, and municipal production wells can no longer provide enough groundwater to supply beneficial uses”*
- **Cuyama:** *“significant and unreasonable reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses over the planning and implementation horizon of GSP”*
- **Borrego:** *“Groundwater level declines would be significant and unreasonable if they are sufficient in magnitude to lower the rate of production of pre-existing groundwater extraction wells below that needed to meet the minimum required to support the overlying beneficial use(s), and that alternative means of obtaining sufficient groundwater resources are not technically or financially feasible”*

Initial Advisory Committee feedback

Significant and Unreasonable (what we don't want to happen)

- *Groundwater level declines would be significant and unreasonable if they drop below historical groundwater levels.*
- *Groundwater level declines would be significant and unreasonable if they are sufficient in magnitude to lower the rate of production of pre-existing groundwater extraction wells below that needed to meet the minimum required to support the overlying beneficial use(s).*

Measurable Objectives (the ideal destination)

- *Bring El Verano groundwater levels up to adjacent surrounding areas*

Next steps on Lowering of Groundwater Levels

- Advisory Committee is providing written feedback and additional comments.
- Staff is turning qualitative statements into options for quantitative measures, as required by SGMA.
- Advisory Committee will review and continue discussion in February and March.
- Recommendations from the Advisory Committee will be brought to Board for discussion and feedback at March meeting.
- Throughout 2020, Board can expect to discuss one or two Sustainability Indicators at each meeting.