Santa Margarita Basin GSP Information Session

Projects and Management Actions

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Objectives

1. Review role of Projects and Management Actions (PMA) in SGMA compliance.
2. Discuss SMGWA timing and process for PMA decisions.
3. Discuss preliminary “problem statements” that PMAs could address.
4. Discuss potential PMAs and questions for the Basin.

What is a PMA?

- A physical project and/or activity that is done to eliminate an Undesirable Result and stay above a Minimum Threshold in one or more of the six Sustainability Indicators.

  Implementation of a Project and/or Management Action must result in data that shows a GSA has achieved and maintains sustainability.

Why are PMAs Needed in the Basin?

- To comply with SGMA.
- To reach measurable objectives for any/all sustainability indicators that are determined to reach undesirable results.
- To avoid going below the minimum thresholds for a sustainability indicator.

SGMA Compliance

1. PMAs are required under the GSP Regulations.
2. PMAs are selected by a GSA to achieve the sustainability goal(s) for a basin.
3. The GSP must include a description of:
   - Criteria to start/stop a PMA.
   - GSA process to notice the public and agencies that a PMA is being considered / has been implemented.

SGMA Compliance

The GSP must include a description of (cont):

- Permitting and regulatory process required for each PMA.
- Status of each PMA including time-table for start and completion, and accrual of expected benefits.
- Benefits to be realized and how benefits will be evaluated.
- An explanation of how the project or management action will be accomplished.

SGMA Compliance

The GSP must include a description of (*cont*):

- The source and reliability of water if the PMA relies on water from outside the GSA.
- Legal authority required for each PMA and the basis for the GSA's authority.
- Estimated cost for each PMA and how the GSA will meet those costs.
- Management of GW extractions and recharge to ensure that chronic lowering of GW levels / depletion of supply during drought is offset by increases in GW levels or storage during other periods.

Why Discuss PMAs Now?

1. PMAs will potentially differ in:
    a) Geographic location of implementation.
    b) Geographic location of benefits.
    c) Costs.
    d) Funders and beneficiaries, etc.
2. Consideration of potential PMA's adds helpful context to ongoing discussion of technical issues.
3. These will be complex discussions. It is prudent to start now and not get rushed near the end of GSP preparation.

Preliminary Problem Statements

Problems facing the Basin will determine what PMAs are needed. Preliminary considerations could include but are not limited to:

1. Lowered groundwater levels:
    a) Prevent Beneficial Users from meeting their normal demand.
    b) Result in reduced groundwater contributions to streamflow that impact low flows and the flora/fauna that rely on it.
    c) Cause terrestrial groundwater dependent ecosystems to be impacted.
2. Nitrate from septic systems may impact flora and fauna in streams and/or the quality of drinking water supplies.

Potential PMAs

1. Continued and enhanced water use efficiency programs: *Management Action*
2. Redistribution of pumping: *Management Action OR Project* (If new wells are required)
3. Conjunctive use/ Use of surface water in lieu of groundwater pumping: *Project*
4. Groundwater recharge with surface water/ Aquifer Storage and Recovery (ASR): *Project*

Potential PMAs (cont.)

5. Groundwater recharge with recycled water/ Indirect Potable Reuse (IPR): *Project*
6. Surface water augmentation with recycled water/ Indirect Potable Reuse (IPR): *Project*
7. Groundwater recharge with stormwater/ Low Impact Development (LID): *Project*
8. Groundwater augmentation with stormwater via percolation ponds/ Managed Aquifer Recharge (MAR): *Project*

PMA Questions

How are PMAs selected?

1. SGMA does not mandate a specific evaluation process of PMA alternatives (e.g. CEQA/NEPA)
2. The GSA must assess and select PMAs that:
    a) Address Undesirable Results.
    b) Aid in achieving Measurable Objectives
3. The GSA must describe the PMA in the GSP as required by SGMA

PMA Questions

Could PMAs lead to water quality impairments?

1. Potential WQ impacts will be evaluated through the groundwater model.
2. PMAs are not allowed to negatively impact any sustainability indicator.
3. The GSA will need to monitor water quality to ensure that PMAs do not mobilize existing pollutant plumes or exacerbate Nitrate contamination problems.

PMA Questions

Where will PMAs be located?

1. PMAs location is important to ensure maximum benefits(e.g. GW level increase).
2. The groundwater model will be used to estimate PMA impacts to all Beneficial Users in the Basin and optimize PMA locations.

PMA Questions

How long will it take to plan and implement PMAs?

1. Many years. PMA implementation requires:
    a) GSA or GSA member land ownership or acquisition.
    b) Statutory/Regulatory Compliance (e.g. CEQA/NEPA, State/Federal ESA, Streambed Alteration Agreements, Section 401 of CWA, etc.).
    c) Funding.
    d) Beneficial User / Stakeholder Support.

PMA Questions

How long will it take to see benefits of PMAs?

1. Many years. Requires:
    a) GSA or GSA member monitoring (including funding).
    b) Annual and 5-Year Reporting on Sustainability Goals.
    c) Adaptive options if PMA is not providing benefits.

QUESTIONS / DISCUSSION

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