SWIG TAC Deep Aquifers Study Recommendations

Seawater Intrusion Working Group November 23, 2020







SWIG TAC's Charge

Provide recommendations to the SWIG

Identify tasks that could be included in the Deep Aquifers Study RFP

Do not write the scope of work for the RFP



Process Details

- The TAC comprises technical members. Therefore the recommendations are something of a technical wish list.
- We have attempted to restrict the wish list to reasonable activities
- The recommendations do not include specific details, to avoid writing the RFP scope of work
- The SWIG can accept or reject any or all of the recommendations

SWIG TAC Recommendations: Structure of RFP and Deep Aquifers Study

- The RFP should include a list of available data sources for the Deep Aquifers
- Some TAC members suggested that the study be phased
 - Address critical issues early, such as local overdraft
 - However, do not focus on one part of the Deep Aquifers at the expense of the rest of the Deep Aquifers
 - Current recommendation: Consultant should provide interim reports, and not hold all results until the final project report



SWIG TAC Recommendations: Activities 1

- Describe the Deep Aquifers geology, hydrogeology and extents
 - Geologically, the Deep Aquifers extend beyond the Salinas Valley
 - Hydrogeologically, the Deep Aquifers are often identified by the presence of the aquitard that separates it from the 400-Foot Aquifer. The extent of this Aquitard is poorly mapped
 - The study should provide a clear definition of what constitutes the Deep Aquifers
 - We anticipate that the study will address whether, and to what degree, the deep aquifers exist in the 180/400, Monterey, Langley, and Forebay subbasins



SWIG TAC Recommendations: Activities 2

- Develop a water budget for the Deep Aquifers
 - Where does Deep Aquifers recharge come from?
 - How does Deep Aquifers recharge affect other aquifers?
 - Are the Deep Aquifers in overdraft, and by how much?
 - Differentiate between local overdraft and regional overdraft in the Deep Aquifers.

SWIG TAC Recommendations: Activities 3 & 4: (Not part of the strict, scientific investigation)

Address the economic value of the Deep Aquifers

- Who can use the Deep Aquifers economically?
- What existing agreements limit the use, or reserve the use, of the Deep Aquifers?
- Practical aspects of managing the Deep Aquifers
 - How does management outside the Salinas Valley impact the Deep Aquifers?
 - Describe limitations of managing the Deep Aquifers only within the Salinas Valley



SWIG TAC Recommendations: Activities 4

- Propose and Initiate a Deep Aquifers monitoring program
 - Use existing data and infrastructure as much as possible
 - Existing wells
 - Geophysical data
 - Address uncertainty
 - Manage risk
- Some TAC members stated that the improved monitoring should be initiated immediately
 - Is it practical to initiate a monitoring program without having analyzed what we already know?
 - Can a consultant estimate the cost of gathering data from an improved monitoring program?

Questions