

John Laird
Senate District 17
Senator.Laird@senate.ca.gov

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We, the members of the Los Osos Community Advisory Council, are writing to you regarding Supervisor Gibson's efforts to include the Los Osos Water Basin in the upcoming AEM survey by the Department of Water Resources. Prior to 2019, DWR had identified the Los Osos Valley groundwater basin as a High Priority basin subject to critical conditions of overdraft due to seawater intrusion and nitrate impairment (DWR, 2014, 2016, 2018a). However, due to the fact that our Basin is under a 2015 Interlocutory Stipulated Judgement, we are no longer classified under SGMA as "High Priority". As a result, we are not automatically included in the AEM survey for the San Luis Obispo area.

Clearly the critical nature of the Los Osos Basin has not changed. The basin remains the sole source of drinking water for the 16,500 people who live here. According to the latest annual report of the Basin Management Committee, the condition of the basin continues to deteriorate and has yet to meet the target values set out by the management committee in 2015.

A survey by AEM would vastly improve our understanding of the efforts by the BMC to mitigate both seawater intrusion and nitrate contamination. The AEM surveying could provide information that would help resolve uncertainty surrounding three critically important components of basin management.

As the former Secretary of California Natural Resources Agency, we believe you are uniquely qualified to assist us with the DWR. Can we count on your support to work with Supervisor Gibson in urging them to include our basin in the upcoming surveys?

Respectfully,

The Los Osos Community Advisory Council:

Chair Trish Bartel, Vice Chair Sandra Sarrouf, Secretary Sue Morgenthaler, Communications Officer Lynette Tornatzky, Larry Bender, Yael Korin, Jan Harper, Deborah Howe, James Bishop, Jim Stanfill, Tim Carstairs.

The Ad-hoc Water Committee:

Deborah Howe, James Bishop

Specific Benefits of AEM Surveying in Los Osos

The AEM surveying could provide information that would help resolve uncertainty surrounding three critically important components of basin management

EXTENT OF SEAWATER INTRUSION

AEM surveying is widely known to be very sensitive to differences in salinity and is an excellent tool for mapping the spatial extent of seawater intrusion. Although it is commonly known that the Los Osos groundwater basin is experiencing seawater intrusion, the discrete salinity data collected from individual wells makes it difficult to understand how laterally and vertically extensive seawater intrusion is. AEM surveying could provide spatially continuous information to complement the discrete data collected from wells and aid the Basin Management Committee in better understanding the severity of the seawater intrusion problem.

THE EFFECTIVENESS OF RECHARGE AT BRODERSON LEACHFIELD

AEM surveying has proven valuable in mapping subsurface stratigraphy and in particular, the spatial extent of hydraulically confining clay units. With respect to Broderon Leachfield, it is unclear whether the regional aquitards that separate the upper and lower aquifers in many parts of the basin are sufficiently transmissive/leaky beneath Broderon Leachfield to allow the use of recycled water to recharge lower aquifers and thus mitigate seawater intrusion. AEM surveying may prove useful in understanding the degree to which hydraulic connectivity exists between the ground surface and the lower aquifers at Broderon Leachfield.

NITRATE CONTAMINATION OF WATER SUPPLY WELLS

Since AEM surveying has proven valuable in mapping subsurface stratigraphy and in particular, the spatial extent of hydraulically confining clay units. This information can help to resolve uncertainty regarding hydraulic connectivity leading to nitrate contamination of water supply wells owned by S & T Mutual Water Company. At issue is whether the nitrate contamination is caused by the unsewered portions of Los Osos. There is a question whether the regional aquitards are sufficiently transmissive/leaky to allow sources of nitrate located at the ground surface in proximity to the S&T Mutual Water Company wells to migrate to the lower aquifers where the wells are screened