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## Central Coast Regional Water Quality Control Board

October 22, 2013

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### **COMMENTS FOR THE AUGUST 1, 2013 PUBLIC REVIEW DRAFT OF THE BASIN PLAN FOR THE LOS OSOS GROUNDWATER BASIN (LOS OSOS BASIN PLAN), SAN LUIS OBISPO COUNTY**

Dear Ms. Kivley, Mr. Ogren, Mr. Peterson, and Mr. Garfinkel:

Central Coast Regional Water Quality Control Board (Central Coast Water Board) staff reviewed the *Public Review Draft, Basin Plan for the Los Osos Groundwater Basin (Los Osos Basin Plan (LOBP))*. Thank you for the opportunity to comment on the LOBP.

We understand that the primary goal of the LOBP is to establish a long-term, sustainable approach to manage and protect the water resources of the Los Osos Groundwater Basin. The groundwater basin is the only source of residential, commercial, industrial, and agricultural uses in Los Osos and the surrounding areas. We recognize that the groundwater basin is faced with immediate issues: 1) upper aquifer degradation by nitrate from septic systems and 2) lower aquifer degradation due to seawater intrusion as a result of overproduction of the groundwater basin.

The LOBP includes immediate and continuing goals to manage the basin; more specifically, to halt seawater intrusion and provide sustainable water supplies for existing and future water demand in the Los Osos community. In addition, the LOBP describes current baseline groundwater conditions (i.e., water quantity and quality); describes the legal and regulatory framework surrounding management of the basin (i.e., Interlocutory Stipulated Judgment); and identifies current challenges facing the

purveyors (Los Osos Community Services District, Golden State Water, and S&T Mutual Water Company or Parties) to cooperatively manage the basin. The LOBP further identifies various management programs for implementation, such as the Urban Water Use Efficiency Program, Basin Infrastructure program, the Water Reinvestment Program and Supplemental Water Program, Well Head Protection Program, and a myriad of other programs that are intended to achieve long-term sustainable groundwater basin management.

In order to better understand the efficacy of these programs or combinations of these programs, the LOBP identifies basin metrics to assess the status of nitrate concentrations and seawater intrusion in the Basin over time. The LOBP further breaks the basin metrics into four basic categories: 1) nitrate metrics – measure nitrate concentrations in the upper basin over time, 2) water level metrics – measure basin levels to evaluate freshwater pressure gradients, 3) chloride metrics – measure chloride concentrations in the lower basin over time, and 4) basin management metrics – measure the overall basin yield over time. The LOBP also provides discussions of programs recommended for immediate implementation and continued implementation as well as program funding.

The Central Coast Water Board recognizes that the Los Osos Basin Plan is not subject to a formal public review process. That being said, we appreciate the opportunity to review and comment on the LOBP. In general, we support this plan as it is an integral part for the management of water quantity and water quality in the Los Osos basin.

## **GENERAL OBSERVATIONS AND COMMENTS**

Comprehensiveness and Completeness – We recognize that the LOBP is very comprehensive and covers a variety of areas necessary to understand and establish the current status of the basin. In addition, the LOBP includes a comprehensive evaluation of historical studies, groundwater monitoring data, groundwater modeling, census data, and other relevant documents to establish a baseline for the immediate and continued management goals. However, we observe various assumptions that must be made in order to establish the basin's current production and demand. For example, water use estimates for private water users are based on high, medium, or low water usage depending on square feet of irrigated turf. Even though the LOBP establishes a 20 percent safety factor on such estimates, the LOBP should develop a scheme that can identify methods for obtaining better and more accurate data.

Iterative Process – We recognize that the LOBP is a living and dynamic document that will improve over time (i.e., increased data quantity and quality, increased basin information, increased understanding of consumption over time). As such, we believe that if the LOBP is updated on a regular basis, the information contained will improve and thus the basis for which programs are developed will improve. This iterative process will allow each of the purveyors to evaluate and improve their individual and collective activities to benefit the basin.

Data Reliability – A key LOBP component is the accuracy of the data used to establish the baseline groundwater conditions and associated programs. We understand that the LOBP is not detailed enough to discuss data reliability as it pertains to existing meters and pumping records. We also believe that the LOBP should be an overarching management plan and should not necessarily dictate the specific daily operations of each water purveyor or user (agricultural and private well owners). However, we encourage water purveyors to establish a quality assurance program that will ensure the quality and accuracy of the data. Frequent quality assurance checks might be administered to create a strong foundation for the implementation of proposed programs. For example, the groundwater monitoring program might incorporate a quality assurance program that will establish trust when evaluating the nitrate and chloride metrics.

Implementation Goals and Timelines – The Central Coast Water Board understands that this is a general planning document to provide guidance and analysis for the protection and safe production of the Los Osos Groundwater Basin. That being said, the LOBP does not include any implementation schedules or key milestones that are required for recommended program implementation. We believe that a key component to establishing a strong program is to establish a schedule to implement the recommended “immediate” programs. Do the Parties plan to develop an implementation schedule subsequent to the LOBP? We encourage them to do so and to implement the recommended projects as quickly as possible.

#### **SPECIFIC COMMENTS OR QUESTIONS:**

Stream Seepage – Section 5.5 identifies four elements that allow recharge to the basin. One of the four elements includes recharge as a result of in-stream seepage from Los Osos Creek. In addition, Section 5.4.5. explains that the principal sources of recharge to the Lower Aquifer (Zones D and E) are leakage through the regional aquitard and in-stream recharge through the Los Osos Creek stream seepage. However, we did not find estimated recharge rates through Los Osos Creek stream seepage. Do the Parties plan to conduct a study to better understand stream seepage recharge?

Basin Production Estimates– In order to establish accurate groundwater production values, it is vital that accurate data be used. We recognize that the agricultural water users and private well owners are not metered, and, therefore, precise data may not be available. The LOBP and supplemental studies attempt to establish a process to evaluate production rates generating from agricultural water users and private well users through the use of crop type, land area, estimated irrigation requirements, as well as other factors. In addition, Section 4.6 establishes a safety factor of 20 percent to account for inaccuracies with the water production data. A fundamental aspect of the LOBP will be the annual evaluation of the basin yield metrics. According to Section 6.3.2, the Basin Yield Metrics utilize annual groundwater production to evaluate the annual basin yield. If inaccurate data are used to calculate the annual basin yield (Basin Yield Metrics), then the results of the evaluation may not be representative and therefore may decrease the effectiveness of a specific program’s implementation.

Section 7.5.2. of the LOBP discusses two solutions to obtain accurate information from the agricultural water users: 1) voluntary reporting and 2) mandatory reporting. We recommend that the County implement the second option, requiring registration and metering of wells and reporting of groundwater production.

Brine Disposal – According to the Basin Infrastructure Program, Section 10.3.4., one of the options to address nitrate in the upper basin is to use a community nitrate removal facility. This section adds that the nitrate removal system will generate brine at approximately 15,000 gallons per day (or three truck loads per day). Further, the LOBP explains that South SLO County Sanitation District wastewater treatment facility is the nearest brine disposal facility. However, this section does not include a discussion regarding establishing an institutional agreement with South SLO County Sanitation District, which would likely need to occur prior to trucking and disposing brine waste. Depending on the current situation with South SLO County Sanitation District, an agreement may take added time and effort on the water purveyors' part. In addition, hauling and disposing of brine waste at SLO County Sanitation District wastewater plant may generate additional greenhouse gas emissions, which would counter the efforts of Assembly Bill 32.

In addition, Section 11.5.1 includes a discussion of desalination for the purpose of creating supplemental water. This section includes a discussion of the generation of brine as a result of the filtration process and the construction of necessary infrastructure options, such as: 1) dispose of brine to Estero Bay, 2) connect with the existing Morro Bay desalinization plant to dispose of brine, or 3) connect with the Morro Bay/Cayucos wastewater treatment facility. All of these options will be very expensive. In addition, disposal of brine may require a waste discharge requirements permit from the Central Coast Water Board. However, Morro Bay/Cayucos wastewater treatment facility is currently going through the process of constructing a new treatment facility. Being that a new wastewater treatment facility will be constructed, the purveyors might coordinate with Morro Bay/Cayucos staff and evaluate the possibility for brine disposal at the new facility.

The Central Coast Water Board appreciates the opportunity to comment on the Los Osos Basin Plan. We understand that this document is a living document and that there are many assumptions built into the evaluation of future water demand. We understand that estimated costs, future groundwater conditions, estimated growth rates, and other external factors play a role in the difficult process to best develop a guidance document for the future needs. It is our hope that the LOBP will be updated on a frequent basis to allow the integration of current data and information into the proposed matrices in order to fine-tune the recommended programs.

We welcome the opportunity to discuss any of the above comments. If you have questions, please contact **David LaCaro at (805) 549-3892** or at [dlacaro@waterboards.ca.gov](mailto:dlacaro@waterboards.ca.gov).

Sincerely,



Digitally signed by Kenneth A Harris Jr.  
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Kenneth A. Harris Jr.  
Executive Officer