

Technical Memorandum

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To: Bob Gresens, District Engineer, Cambria Community Services District

Subject: Sustainable Water Facility Adaptive Management Program

The Sustainable Water Facility (SWF) Project Subsequent Environmental Impact Report (SEIR) was prepared to evaluate the Project's potentially significant environmental effects and identify ways to avoid or lessen these effects. SEIR Mitigation Measure BIO-7 requires that the Cambria Community Services District (CCSD) develop and implement an Adaptive Management Program for post construction operations upon commencement of SWF operations. The AMP is required to be incorporated while the SWF is operating and indefinitely until the SWF is no longer in use or until deemed no longer necessary by applicable regulatory agencies.

In compliance with Mitigation Measure BIO-7, the CCSD has developed and implemented the Sustainable Water Facility Adaptive Management Program (AMP), which is intended to monitor and protect the lagoon, creek, and riparian habitats adjacent to the Project site and, by extension, protect the species that inhabit them. The AMP's primary goal is to monitor the responses of the lagoon, creeks, and riparian habitats to SWF operations. As specified in BIO-7, based on the results of the biological monitoring and any noted adverse changes in these habitats, SWF operations shall be adjusted such that the amount of treated water that is re-injected into the system, is either increased or decreased to restore affected habitat features.

The AMP consists of the following components:

- Background – contains Project background and existing facilities information, and SWF/Project Modification characteristics;
- Environmental Setting – contains existing environmental conditions information (including soils, vegetation, wildlife, and hydrology);
- Potential Impacts – identifies environmental impacts of concern (including those concerning hydrology, habitats, and species);
- Monitoring Program – provides programs for establishing baseline conditions and monitoring the following: groundwaters; surface waters; habitats; and species;

- Implementation – provides an inventory of monitoring procedures and implementation recommendations;
- Adaptive Management Process – establishes format and outline of annual AMP reports;
- Conclusions – provides conclusionary statements concerning the Project’s potential impacts to habitats and species occurring in San Simeon Creek, Van Gordon Creek, and San Simeon Creek Lagoon, and the AMP;
- Process to Revise the AMP – establishes a process for revisions to the monitoring program, provides recommendations for corrective actions related to the groundwater extraction, and other procedural requirements;
- Corrective Measures – inventories potential mitigation measures for evaluation, in the event significant/adverse deviations and/or trends are noted, as part of the annual monitoring program.

In an effort to ensure that no SWF-related impacts to habitats or species occur in San Simeon Creek, Van Gordon Creek, and San Simeon Creek Lagoon, the CCSD has implemented a long-term monitoring program that specifies procedures for monitoring groundwater levels, surface water levels/flows, in-stream and riparian habitats, and presence of listed species. As specified in the AMP, based on the results of the biological monitoring and any noted adverse changes in these habitats, SWF operations will be adjusted such that the amount of treated water that is re-injected into the system, is either increased or decreased to restore affected habitat features. It is expected that the filtrate product water flow returned at any time would be approximately 100 gallons per minute (gpm), as deemed necessary by the AMP.

The Project Design Feature’s (PDF) approximate 100 gpm riparian flow is discharged into the upper San Simeon Creek Lagoon area for species and habitat protection. AMP Appendix B, Technical Memorandum – San Simeon Creek Flows, (TM) (CDM Smith, October 16, 2016) includes an analysis of instream flows, which supports the conclusion that the approximate 100 gallons per minute (gpm) flow rate would be sufficient to maintain habitat within the San Simeon Creek and San Simeon Creek Lagoon. AMP Appendix A, Cambria Emergency Water Supply Project San Simeon Creek Basin Groundwater Modeling Report, (GMR) (CDM Smith, May 2014) includes the detailed results of this hydrogeological modeling. The GMR found that while the SWF is operating, the PDF’s 100 gpm of filtrate product water flow discharged to the San Simeon Creek Lagoon would maintain water levels in the lagoon, thereby avoiding potential impacts to lagoon habitat. Further, the TM concluded that under normal climatic conditions, flows of 50 gpm, which would be one-half of the 100 gpm flow, would be sufficient to maintain lagoon levels similar to conditions without the SWF. The TM also included simulations under extreme drought conditions, comparing the zero (0) gpm, 50 gpm, and 100 gpm flow to conditions without the SWF. During the first year of simulated drought, the 100 gpm flow would maintain lagoon levels similar to conditions without the SWF. During the

second year of simulated drought, both the 50 gpm and 100 gpm flows would result in higher lagoon levels than conditions without the SWF. Under extreme drought conditions without the SWF, the CCSD well field would not be capable of producing the permitted quantities, while under conditions with the SWF, production at permitted rates could continue. Based on the GMR's and TM's findings, while the SWF is operating, the PDF's approximate 100 gpm filtrate product water flow to the San Simeon Creek Lagoon would maintain water levels in the lagoon. Notwithstanding, the AMP is proposed as a security measure to monitor and protect the lagoon, creek, and riparian habitats and, by extension, protect the species that inhabit them. The AMP's primary goal is to monitor the response of the lagoon, creeks, and riparian habitats to SWF operations. Monitoring is required as part of the AMP to ensure that creek and lagoon levels are maintained during SWF operations. The GMR and TM analyses concluded that the 100 gpm flow provides greater protection to the San Simeon Creek Lagoon area than a no project alternative would offer. Therefore, given the GMR and TM findings, and the long-term monitoring required by the AMP, the lagoon, creek, and riparian habitats and, by extension, the species that inhabit them would be protected.