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October 26, 2016

TO: Mr. Robert C. Gresens, P.E.,
District Engineer
Cambria Community Services District, Planning Department
1316 Tamson Drive, Suite 201
Cambria, CA 93428

VIA EMAIL: bgresens@cambriacsd.org

RE: Comments on Draft Subsequent Environmental Impact Report (“DSEIR”) for the Cambria Community Service District’s (“CCSD’s”) proposed Cambria Sustainable Water Facility Project (SCH #2014061073)

Dear Mr. Gresens:

Thank you for the opportunity to comment on the above-referenced document, which evaluates the CCSD’s proposed water supply project. The DSEIR describes two versions of the project – first, the project as it was constructed and operated by the CCSD pursuant to an emergency Coastal Development Permit (“CDP”) issued in 2014 by the County of San Luis Obispo; and second, the same project with modifications the CCSD is proposing that would change the project from providing a short-term emergency water supply to providing a longer term supply. For purposes of clarity, we refer herein where necessary to the project as currently constructed and operating as the “existing” project and to the project as proposed to be modified as the “proposed” project – i.e., as it is described in the DSEIR’s Section 3.5.2 with a “repurposed” evaporation basin, modified treatment system, alternative discharge disposal methods, etc. The DSEIR’s main focus is on the proposed project, and our comments are similarly focused on the proposed project. However, some of our comments will refer to concerns or questions about the existing project.

The project is subject to CDP review and approval by San Luis Obispo County for conformity to the County’s certified Local Coastal Program (“LCP”). The project is also subject to the Coastal Commission’s federal consistency review, with portions of it subject to CDP review and approval by the Commission. Our comments below are focused primarily on project components that have a known or potential effect on coastal resources. We are also incorporating by reference relevant comments we previously provided in our April 6, 2015 comment letter on the CCSD’s 2015 *Notice of Preparation of a Draft Environmental Impact Report* for the previous version of the proposed project and in our July 22, 2014 letter on the CCSD’s 2014 *Initial Study/Mitigated Negative Declaration* (“IS/MND”) for another previous version of the proposed project.

Our overall recommendation is that the CCSD substantially revise the DSEIR to incorporate more complete and accurate data and information and to use this information to fully re-evaluate the project's known and expected adverse effects. Given the need for significant revision of the document, our comments below cover just certain key aspects of the DSEIR, not each of the analyses within it. Our primary concerns, elaborated below, are: (1) The San Simeon watershed does not appear to have adequate water available for the proposed project; (2) Both the existing project and the proposed project will have significant adverse impacts on habitat and biological resources, including listed species, that have not been adequately analyzed in the DSEIR; and (3) The new growth anticipated by the proposed project and analyzed in the DSEIR would not be supported by the project once the constraints of the water available in the San Simeon watershed are adequately analyzed. Even if this growth were sustainable in the short run, the DSEIR does not analyze how such new growth would be provided with water beyond the project's expected 20-25 years of operations and it does not evaluate the adverse effects that would result from that situation.

Specific Comments

Section 2.3 – Notice of Preparation/Early Consultation (Scoping): The DSEIR states that the project results in “no impacts” or “less than significant impacts” in several issue areas, including “Geology and Soils,” “Hazards and Hazardous Materials,” and “Traffic and Transportation.” We believe, however, that the project could result in significant adverse effects related to each of these issue areas, as described in our comments below on the DSEIR's Section 8.0.

Section 3.1 – Project Location: The DSEIR's project description states that development associated with the project will occur on two parcels owned by the CCSD. We understand, however, that the project's monitoring equipment will extend onto adjoining State Parks property and that the CCSD may also need to conduct additional well monitoring at other nearby properties. We recommend the DSEIR be revised to describe all offsite components of the project along with analyses of any adverse effects that may result from placement and operation of that equipment.

Section 3.2.1 – Project History, Water Supplies and Drought: The DSEIR's descriptions and analyses of the project's available and expected water volumes appear to be incomplete and inaccurate. We recommend the DSEIR be revised to correct and clarify the actual water volumes available to the CCSD and that it incorporate relevant stream flow data and groundwater volumes into its assessments, including as described in the examples below. The revised DSEIR should also include a complete description of the San Simeon watershed water balance based on these corrected volume and flow values.

- **Incorrect description and analyses of available water rights:** The DSEIR states (at page 3-7) that the CCSD is able to pump a maximum of 1,118 acre-feet from the San Simeon and Santa Rosa groundwater basins during the wet season and a maximum of 630 acre-feet from those basins during the dry season.¹ However, the actual water volumes

¹ The DSEIR also acknowledges that Coastal Commission CDP #428-10 limits the total combined production from both creeks to no more than 1,230 acre-feet per year and further limits production from Santa Rosa Creek to no more than 260 acre-feet between July 1 and November 20 of any year and no more than 147 acre-feet during the rest of any year, with at least 20% of the CCSD supply required to be made available for visitor-serving purposes.

available to the CCSD are substantially less than those stated in the DSEIR and the associated pumping and diversion requirements are more complex than described in the DSEIR.² The CCSD's water rights permit for San Simeon Creek also requires that the CCSD "maintain water levels in the lower basin" to sustain stream flow to the lagoon and maintain fish and riparian wildlife habitat, to provide irrigation to maintain riparian vegetation along the shoreline of the CCSD-owned property, and to obtain a determination from the California Department of Fish and Wildlife that measures necessary to protect fish and wildlife resources are incorporated into any water diversion. Further, and pursuant to a separate 2006 settlement, the CCSD must separately provide approximately 205 acre-feet per year from the San Simeon basin to a neighboring property, which, presumably, would further reduce the water available to the CCSD for the proposed project. The DSEIR does not adequately analyze the adverse impacts of the project on the watershed and how it would comply with the requirement that water levels in the lower basin be sustained.

- **Excessive proposed project diversions:** The DSEIR descriptions of expected project water use and the accompanying analyses (see, for example, Section 3.5.1.2 – Project Flows and Water Quality) are based on the proposed project diverting 629 gallons per minute ("gpm") from Well 9P7 during its six months of annual dry season operations. This would total about 500 acre-feet during that period, or about 130 acre-feet more than the 370 acre-feet permitted during the dry season. Of that total diversion, the CCSD proposes to reinject up to 452 gpm (equal to about 360 acre-feet over a six-month period) of treated water higher in the aquifer, and divert up to 100 gpm (or about 80 acre-feet total) as mitigation flows to San Simeon Lagoon. The DSEIR does not adequately address how the CCSD will obtain up to 100 gpm for use as mitigation flows when its water rights are about 130 acre-feet less than what the DSEIR assumes is available to the CCSD. Given that the proposed project requires water both for extraction to be provided to customers and to mitigate for the adverse impacts of the project, it is important that the DSEIR accurately reflect how the CCSD will obtain all of the water necessary for the project and required mitigation. As we have discussed with you previously, recent independent stream flow studies have indicated that the existing levels of diversions from San Simeon Creek are adversely affecting the watershed's habitat values.³ Additionally, and as noted in our comments below, the DSEIR's analyses are not sufficient to support its conclusion that "up to 100 gpm" is an adequate mitigation flow to address the project's adverse effects.

² According to the State Water Resources Control Board Division of Water Rights, the CCSD initially requested through its application for Water Rights Diversion Permit #20387 a diversion of 518 acre-feet per year from Santa Rosa Creek, though we understand the CCSD perfected only about 217 acre-feet of that requested annual diversion prior to expiration of its application. Similarly, the CCSD initially requested through its application for Water Rights Diversion Permit #17827 a diversion of up to 1,230 acre-feet per year from San Simeon Creek, though we understand the CCSD perfected only about 798 of that requested annual diversion before expiration of its application. These permits also include other conditions that further limit the amount of water the CCSD may divert any year.

³ See, for example, *San Luis Obispo County Regional Instream Flow Assessment*, Stillwater Sciences, January 2014 and the *San Luis Obispo County Watershed Management Planning Project Phase 1*, Resource Conservation District, January, 2014.

- Most of the DSEIR's analyses appear to be based primarily on a "net" diversion of 452 gpm instead of the proposed "gross" diversion of 629 gpm. This leads to underestimates of the project's potential impacts – for example, the higher extraction volume would presumably lead to greater dewatering and drawdown in the lower basin of San Simeon Creek than described or evaluated in the DSEIR, which would lead to the project causing greater adverse effects than described to surface water characteristics, riparian and wetland areas, and seawater intrusion beneath the San Simeon Lagoon. The analyses should be based on the "gross" withdrawals and should describe expected drawdowns and the extent of the "cone of depression" around the extraction well to identify potential adverse effects to streamflow and nearby riparian and wetland habitats.
- The project depends in part on percolated treated wastewater from the CCSD's wastewater treatment facility, but the DSEIR does not appear to incorporate the contributions of this water source into its analyses. The DSEIR should describe the expected volumes, seasonal and daily timing, flow rates, and other relevant characteristics regarding the project's reliance on this water source, and should describe the effects of withdrawing this water source from the aquifer. The DSEIR is also not clear as to how the CCSD's water rights might be influenced by wastewater it introduces back into the basin.

We understand, too, that the CCSD's current (September-October 2016) tracer test to determine the suitability of the proposed facility as a drinking water supply source is using substantially lower water volumes than those described and evaluated in the DSEIR – i.e., the tracer test is being run at a pumping and injection rate of 400 gpm, not the project's proposed 452 gpm described and evaluated in the DSEIR. This suggests, at the very least, that any conclusions resulting from the tracer test regarding the effects of project pumping and injection would be undercharacterized. These tracer test results will therefore be unreliable predictors of the adverse impacts of the proposed project. We recommend that any revised DSEIR or final SEIR not rely on these tracer test results to characterize project effects on the aquifer or nearby habitats.

Section 3.5.1.2 – Advanced Water Treatment Plant: Table 3-4 in this Section summarizes the expected constituent levels for lagoon discharge, RO permeate, and RO concentrate water quality based on "an assumed mid-year membrane life following three years of operations." We recommend the DSEIR be modified to include the expected water quality during the full range of membrane life – i.e., provide the expected water qualities at the beginning and end of membrane service life, so that the environmental effects of these discharges can be fully analyzed.

Section 3.5.1.2 – Lagoon Surface Discharge: The project includes a proposed mitigation flow of up to 100 gallons per minute into the San Simeon Lagoon; however, the DSEIR does not provide the necessary data or analyses to support its contentions that this flow would be available for use as mitigation or that it would adequately mitigate for project effects. For example, and as described elsewhere in these comments, the DSEIR does not adequately describe or assess the extent of surface water and aquifer drawdowns that would occur due to the proposed project's pumping rates, and it is therefore not clear whether 100 gallons per minute would provide adequate mitigation. The document also does not describe how the mitigation pumping rates would be determined – i.e., how the CCSD would determine whether to provide the full "up to" 100 gallons per minute or some lesser volume. While the DSEIR refers to an "Adaptive Management Plan" regarding this and other mitigation measures, that Plan has not yet been made available for public or agency review.

Additionally, the selected site for the proposed flow mitigation would not provide the levels of protection required by the CCSD's water rights permit, which establishes that the CCSD is to maintain water levels in the San Simeon lower basin that will sustain stream flow to the lagoon and provide for fish and riparian wildlife habitat. The San Simeon Creek lower basin extends about three-quarters of a mile upstream from the proposed flow mitigation site and consists of a riparian and wetland corridor that is likely to be adversely affected by drawdown resulting from project pumping.⁴ Any mitigation flows meant to provide the required support of lower basin habitat should be introduced at the upstream end of the lower basin, and likely at substantially higher volumes than are currently proposed. We recommend the DSEIR be revised to fully identify the expected extent of project-related drawdowns, to assess the water volumes needed to support the lower basin's riparian and wetland habitats, and to identify the timing and volume of mitigation flows needed to provide the water needed for these habitat areas.

Section 3.5.2 – Mitigation Measures (Project Modifications) – “Repurposing” the Evaporation Basin and adding a Surface Water Treatment Plant: The DSEIR describes “repurposing” the existing project's evaporation basin to instead serve as a potable water supply storage basin. The document also describes adding a surface water treatment plant (“SWTP”) to treat the water stored in the basin before distributing it to the CCSD's water customers. The DSEIR states that the potable water supply storage basin “would be seasonally filled during the wet season when there is adequate flow occurring in the local creeks.” It also states that the repurposed basin and SWTP would allow the CCSD to produce not only the currently proposed 400 gpm from the San Simeon well field but an additional 500 gpm from the SWTP to “meet the projected maximum day demand.” The document, however, does not explain how this proposed production is consistent with the CCSD's actual water rights or the overall water balance for the San Simeon watershed. For example, the document does not describe the amount or timing of the diversions proposed under this “mitigation measure,” and it does not analyze the impact of these diversions. This description is also inconsistent with others in the DSEIR that describe the project as operating just during the six-month dry season. We recommend the document be revised to include consistent definitions of the proposed project and that if wet season diversions are proposed that their impacts are adequately analyzed. It is also not clear why the DSEIR describes the SWTP as a “mitigation measure,” since it appears that it would exacerbate adverse effects on San Simeon Creek and nearby habitats. We recommend the DSEIR evaluate the proposed SWTP as a project component that will need mitigation measures to avoid or reduce the impacts of its operations.

Additionally, and as part of the “repurposed” basin proposal, the DSEIR describes two scenarios to transport the project's effluent to a hazardous waste facility instead of storing it in the basin. These scenarios would involve four to 10 truck trips per day during six to 12 months of annual operations, and both assume 6,000 gallons of effluent per truck and 170 miles for each round trip. The DSEIR does not adequately evaluate potential adverse effects that would result from

⁴ The DSEIR cites a 1998 USGS report that describes the lower basin of San Simeon Creek as extending upstream to Well 9L1, which is located about three-quarters of a mile upstream of the location that the CCSD proposes to have mitigation flows enter San Simeon Creek. See Yates and Konyenburg, *Hydrogeology, Water Quality, Water Budgets, and Simulated Responses to Hydrologic Changes in Santa Rosa and San Simeon Creek Ground-Water Basins, San Luis Obispo County, California*, by U.S Geological Survey Water Resources Investigations Report 98-4061, prepared in cooperation with the San Luis Obispo County Flood Control and Water Conservation District, 1998.

spills or releases that occur during transport of the project effluent. We recommend that the DSEIR be revised to include descriptions and evaluations of the likely effects of spills or releases along the potential transport routes. The analyses should include a description of maximum expected volumes of any spills or releases, measures that would be implemented to avoid or reduce the potential for spills or releases, the measures needed to respond to any spills or releases, and the likely impacts of spills or releases on coastal biological resources, public access to the shoreline, and other coastal resources.

Section 3.5.2 – Mitigation Measures (Project Modifications) – Lagoon Surface Discharge Extension: Section 3.5.2.7 of the DSEIR proposes moving the lagoon surface discharge extension closer to the San Simeon Lagoon. The DSEIR, however, fails to conduct an adequate alternatives analysis for this mitigation feature. The DSEIR should also analyze a discharge location about three quarters of a mile further upstream of this proposed location, so that the discharge could provide benefits to the upper end of the lower San Simeon watershed.

Section 3.7 – Agreements, Permits, and Approvals: The DSEIR states that approvals “may” be required from several agencies, including the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. As described in our comments below on Biological Resources, and the comments the CCSD received previously from state and federal wildlife agencies, it appears that the project as proposed would result, or already has resulted, in “take” of listed species and therefore is subject to review and approval of “take” permits from one or both of those agencies, as well as from the National Marine Fisheries Service.⁵

We recommend the DSEIR be revised to describe approvals from the wildlife agencies as being required for the project and that the document’s analyses be modified to address the likely requirements of these approvals.⁶ For example, because the proposed project would pump and transport water in a way that is likely to further reduce surface and subsurface creek flows within lower San Simeon Creek, we recommend the DSEIR be revised to identify what mitigation measures are needed to avoid the “take” of steelhead and other listed species and to protect other riparian and wetland functions. We also recommend that the DSEIR identify the U.S. Army Corps of Engineers as an agency with jurisdiction, both through the Section 404 permit that the project will require and through the ongoing funding the Corps has provided for the project.⁷ The project is also subject to the Coastal Commission’s federal consistency review.

Section 4.0 – Basis of Cumulative Analysis: This section of the DSEIR describes a number of nearby projects that, along with the CCSD’s proposed water project, may result in cumulative adverse impacts. However, the DSEIR does not include in its list or assessment of nearby

⁵ See CDFW letter of August 6, 2015, USFWS letters of April 6, 2015 and July 22, 2014, and NMFS letters of April 6, 2015 and August 14, 2014. Additionally, and as noted above, the proposed project is subject to a determination by the CDFW to ensure that any measures needed to protect fish and wildlife resources are incorporated into the proposed water diversion.

⁶ Alternatively, the CCSD may wish to provide confirmation from the agencies that no such approvals are needed.

⁷ The DSEIR acknowledges the Corps’ role in project design (see Section 3.2.1) and the Corps has identified ongoing funding for the project (see, for example, the Corps’ Project Cooperation Agreement at: <http://cdm16021.contentdm.oclc.org/cdm/ref/collection/p16021coll7/id/1509>, the Amendment to the Agreement at: <http://cdm16021.contentdm.oclc.org/cdm/ref/collection/p16021coll7/id/1510>, and the 2016 federal funding of \$190,000 at <http://www.spl.usace.army.mil/Media/Fact-Sheets/Article/477360/cambria-seawater-desalination/>).

projects the 2013 National Marine Fisheries Service’s *South-Central California Steelhead Recovery Plan* and does not adequately describe or assess the effects of the project site being within designated critical habitat for steelhead.⁸ This *Recovery Plan* identifies several Critical Recovery Actions for the San Simeon Creek watershed, including:

Develop and implement operating criteria to ensure the pattern and magnitude of groundwater extractions and water releases, including bypass flows around diversions, provide the essential habitat functions to support the life history and habitat requirements of adult and juvenile steelhead. Remove or modify instream fish passage impediments to allow steelhead natural rates of migration to upstream spawning and rearing habitats, and passage of smolts and kelts downstream to the estuary and ocean. Manage instream mining to minimize impacts to migration, spawning and rearing habitat. Identify, protect, and where necessary, restore estuarine rearing habitat, including management of artificial sandbar breaching at the river’s mouth, and upstream freshwater spawning and rearing habitats.

We recommend the DSEIR be revised to include a comprehensive assessment of the cumulative impacts the proposed project is likely to cause as they relate to relevant components of the *Recovery Plan*. These should include an assessment of whether the project’s effects on streamflow and the aquifer due to groundwater extraction will result in take of listed species and the adequacy of the proposed mitigation flows for addressing any adverse effects in the lower basin of the San Simeon watershed. [See also our comments below on Section 5.3 – Biological Resources.]

Section 5.0 – Environmental Analysis

This section of the DSEIR describes the analyses conducted for each environmental issue area for which the CCSD determined the project could result in significant adverse impacts. It also states that no significant impacts are anticipated for some issue areas including “Hazards and Hazardous Materials,” “Traffic and Transportation,” and “Geology and Soils.” However, because the proposed project would involve increased chemical use, would generate hazardous materials in the form of waste brine, and would require transport of those materials over a substantial distance (up to about 160 miles) to a landfill or suitable disposal facility, we recommend the document be revised to include a full evaluation of the potential significant impacts in these issue areas, as described below in our comments on Section 8.0 – Effects Found Not To Be Significant.

⁸ Section 21065 of the CEQA regulations defines “project” as “an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following:

- (a) An activity directly undertaken by any public agency.
- (b) An activity undertaken by a person which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- (c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.”

Section 5.3 – Biological Resources

The project site is within designated critical habitat for four listed species – Central Coast steelhead, tidewater goby, California red-legged frog, and Western snowy plover – yet the DSEIR does not adequately evaluate the project’s effects on these species or their habitats.⁹ Our comments below focus on just two main components of the project’s adverse effects on biological resources – its effects on sensitive habitat areas and on steelhead, but the DSEIR should be revised to evaluate the project’s effects on all of these species.

- **Environmentally Sensitive Habitat Areas and Waterbodies:** The DSEIR identifies eight plant communities within and adjacent to the project area, several of which are likely considered environmentally sensitive habitat areas (ESHAs) for purposes of the County’s LCP and the Coastal Act. It also describes wetlands and stream habitats onsite and adjacent to the project that are protected by LCP and Coastal Act policies. While the DSEIR lists a number of relevant LCP and Coastal Act policies (in both Section 5.3 and in Section 5.6 – Land Use), it does not adequately describe whether the project is consistent with these policies.¹⁰ In some instances, the DSEIR does not address project nonconformity at all, or does not identify mitigation measures that would likely be needed for the project to conform to relevant LCP and Coastal Act policies. For example, the DSEIR does not address project development in the form of water withdrawals and changes in intensity of use within these habitat areas that are likely to significantly disrupt or degrade their habitat values. It also does not fully describe some of the habitat areas affected by the project – for example, while the document states that there are approximately 54.65 acres of Commission-jurisdictional wetlands within and adjacent to the project area, it does not fully illustrate their location or describe the different types of wetlands and the different wetland functions likely to be adversely affected by the project. We recommend the DSEIR be substantially revised to address these issues, including a full evaluation of the adverse effects of project development on these areas and a description of the mitigation measures needed to avoid or minimize those effects.
- **Steelhead:** The DSEIR appears to discount the presence of steelhead in San Simeon Creek and provides an inadequate evaluation of the proposed project’s adverse effects on this listed species. The DSEIR cites only a limited amount of the full set of available data applicable to the species’ presence in the watershed and does not provide the comprehensive analysis required to identify and avoid effects on a listed sensitive species such as the Central Coast steelhead. It also does not fully acknowledge the designation by the National Marine Fisheries Service of the lower San Simeon watershed as listed critical habitat for the species¹¹ and does not evaluate the project for conformity to provisions of the *South-Central California Steelhead Recovery Plan*. For example, the

⁹ The project site is also in or adjacent to, and would affect, habitat used by a number of California species of special concern or CDFW “watch list” species, including the Western pond turtle, foothill yellow-legged frog, Coast Range newt, two-striped garter snake, and others.

¹⁰ The DSEIR at page 5.3-27 also erroneously cites Coastal Act Section 30007.5, which is related to conflicts between Coastal Act provisions but is not applicable to this project.

¹¹ See National Marine Fisheries Service, *South-Central California Coast Steelhead Recovery Plan*, Southwest Region, Protected Resources Division, Long Beach, California, 2013.

DSEIR implies that suitable habitat for steelhead exists only in the perennial reaches of San Simeon Creek, not in the lower reaches adjacent to the project site where flows are not always perennial.¹² This is inconsistent with the more complete data available in the *Recovery Plan* regarding steelhead life history and evidence of the steelhead's extended presence in the watershed during periods of drought and low flows. The *Recovery Plan* states, for example, that steelhead exhibit several basic life history strategies regarding the amount of time they spend in fresh, estuarine, and marine water habitats, and that the substantial variation among these strategies has allowed the steelhead "to persist in the highly variable and challenging south-central California environment." While some of these strategies depend on summer flows, others allow for survival in fresh water or estuarine refugia during times of low or no flows. Further, the *Recovery Plan* notes that progeny of fish that exhibit one particular strategy can exhibit the other strategies and states that this "switching of life-history strategies is an important adaptive response" in these highly variable environments. This appears to help explain the persistence of steelhead in San Simeon Creek not only during the 18 years of streamflow records referenced in the DSEIR, but during the preceding millennia that included a number of multiple-year droughts and low/no streamflow conditions in the lower San Simeon Creek watershed.

The *Recovery Plan* also identifies threats to the steelhead and identifies a number of "Critical Recovery Actions", several of which relate to the CCSD's proposed project. For example, the project is largely a groundwater extraction project, and the *Recovery Plan* specifically designates groundwater extraction in San Simeon Creek as a "Very High Threat" to ongoing survival of steelhead within the watershed. The *Recovery Plan* also includes at least one specific Critical Recovery Action related to the proposed project: "Implement operating criteria to ensure the pattern and magnitude of groundwater extractions and water releases, including bypass flows around diversions in San Simeon, Santa Rosa, San Luis Obispo, Pismo, and Arroyo Grande Creeks provide the essential habitat functions to support the life history and habitat requirements of adult and juvenile steelhead."¹³ While the DSEIR identifies at least two CEQA "Significance Criteria" that appear to apply to the project's adverse effects on steelhead – i.e., would the project have a substantial direct or indirect adverse effect on listed species, and would the project interfere substantially with the movement of native fish or impede the use of native wildlife nursery sites – the document's analyses do not adequately evaluate the project against these criteria. We recommend that the DSEIR be revised so that its

¹² See, for example, the DSEIR's Appendix E6, which is an October 2015 technical memorandum from CDM Smith prepared in response to Coastal Commission staff's April 2015 comment letter on the CCSD's previous version of the project. In response to concerns raised about the environmental flows needed to support critical habitat in the lower portion of San Simeon Creek, the memo states that "[l]ower San Simeon Creek should not be designated as steelhead critical habitat, due to predominant dry conditions during the critical summer period."

¹³ The *Recovery Plan* also includes the following additional Critical Recovery Actions:

- Remove or modify instream fish passage barriers to allow steelhead natural rates of migration to upstream spawning and rearing habitats, and passage of smolts and kelts downstream to the estuary and ocean.
- Minimize erosion and sedimentation caused by upslope development and land uses (including roads, overgrazing, and agricultural and urban development).
- Restore channel morphology and riparian habitats affected by urban and agricultural floodplain encroachment and related flood control activities.
- Identify, protect, and where necessary, restore estuarine and freshwater rearing habitats.

analyses of these two criteria also acknowledge and incorporate the Critical Recovery Actions identified in the *Recovery Plan*.

We specifically recommend these criteria be applied to the CCSD's proposed mitigation flows. As noted above, the "up to 100 gpm" proposed flows do not appear to be adequate to support fish and riparian wildlife habitat in the lower basin and appear to be similarly inadequate to protect steelhead and other listed species. For example, introducing the proposed mitigation flows at the estuary instead of the upper reach of the lower basin would not support refugia that may be located between the upper reach and the estuary.

Section 5.5 – Hydrology and Water Quality: The DSEIR identifies several reasons for decreases in surface water and groundwater levels, including seasonal differences in precipitation, natural dry-season drainage, and groundwater pumping by the CCSD and other water users in the watershed, but does not provide the full suite of analyses needed to assess the project's adverse effects on watershed hydrology and water quality. However, the DSEIR relies primarily on studies and models done just in the vicinity of the project, which do not adequately characterize project-related effects that may result in part from effects in other parts of the watershed (e.g., upstream pumping or diversions that reduce streamflows should be evaluated as to how their timing and volumes may affect instream flows near the project site). The CCSD has not yet conducted the instream flow study needed prior to approval of any new water project, as required pursuant to relevant provisions of the North Coast Area Plan. We recommend the necessary study be conducted as part of a revised DSEIR.

We additionally recommend the DSEIR be revised to include the following analyses:

- **Identify extent of drawdown/"cone of depression":** Our previous comment letters requested that the CCSD identify the extent of the drawdown resulting from use of the project's extraction well and evaluate the effects of this drawdown related to the biological integrity of the nearby stream, wetlands, and estuary. We note, too, that the emergency CDP issued by the County includes a Special Condition requiring the CCSD to "provide results of hydrogeologic modeling showing the expected extent and elevations of aquifer drawdown from project operations and the extent of any "cone of depression" in relation to nearby wetlands, streams, and other coastal waters."

The DSEIR does not adequately characterize these elements of the project and their potential adverse effect. We recommend it be revised to include descriptions and analyses showing the extent of the expected project drawdowns and cones of depression under different proposed operating scenarios, especially as they extend to areas within or beneath the nearby coastal waters, as described above.

- **Identify expected/potential changes to estuary:** The proposed project has the potential to cause long-term changes to the San Simeon Creek estuary. Under some circumstances, the project's extraction well is likely to move the salt water "wedge" underlying the estuary to locations further inland, possibly creating more saline surface waters in the estuary than would otherwise occur and possibly affecting species dependent on the estuary. We recommend the DSEIR more fully describe and evaluate these likely changes and identify mitigation measures that could be implemented to avoid degradation of estuarine waters.

- **Identify modified drainage patterns and loss of water from watershed:** The DSEIR does not assess the loss of water from the San Simeon Creek watershed resulting from construction of the evaporation/storage basin and from transport of water from that basin to areas outside of the watershed. For example, the basin creates about 3.3 acres of impervious surface on a portion of the project site that would otherwise contribute to the aquifer and nearby streams. At an average area rainfall of about 20 inches per year, the new impervious surface prevents between five and six acre-feet of water from reaching the lower watershed's aquifer, creek, wetlands, and estuary. This loss does not appear to be included in the evaluation of the project's proposed 100 gpm mitigation flows, which as noted above, do not appear sufficient to fully mitigate for the project's adverse effects, even without considering this additional adverse effect of the project. As we recommended in our April 2015 comments, we request the DSEIR assess the effects of the loss of this water from the lower watershed area and identify measures that will fully mitigate for this loss.
- **Identify project effects on listed beneficial uses:** The document partially describes water quality beneficial uses of San Simeon Creek and its estuary, but does not assess how the project operations would be consistent with those beneficial uses.¹⁴ As noted above, the project is likely to have more significant adverse effects that are currently described in the DSEIR, with some of those adverse effects potentially leading to nonconformity to the required beneficial uses of these waterbodies. We recommend the DSEIR be revised to fully evaluate whether the project conforms to these uses and what mitigation measures the CCSD would need to implement to ensure full conformity.

Section 5.5 – Hydrology and Water Quality, Coastal Hazards – Tsunami, Seiches, Flooding: We recommend the DSEIR be revised to include additional analysis of the potential for these coastal hazards to adversely affect the project and for the project to result in adverse effects to coastal resources due to these hazards. Regarding tsunamis, the DSEIR acknowledges that portions of the project and site would be located in a tsunami runup zone, though it concludes that the project would result in less than significant impacts and would not contribute to cumulative impacts because it does not include habitable structures and would not have people residing at the site. Both the County's April 2016 Tsunami Emergency Response Plan and the state's 2009 Tsunami Inundation Map for the area identify much of the site as susceptible to tsunami runup and damage. Additionally, the County's Hazard Mitigation Plan states specifically that development and infrastructure near the mouth of San Simeon Creek would be

¹⁴ The beneficial uses of the San Simeon Creek Estuary include: Ground Water Recharge (GWR), Water Contact Recreation (REC-1), Non-Contact Water Recreation (REC-2), Wildlife Habitat (WILD), Cold Fresh Water Habitat (COLD), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), Preservation of Biological Habitats of Special Significance (BIOL), Rare, Threatened, or Endangered Species (RARE), Estuarine Habitat (EST), Commercial and Sport Fishing (COMM) and Shellfish Harvesting (SHELL).

The beneficial uses of San Simeon Creek include: Municipal & Domestic Supply (MUN), Agricultural Supply (AGR), Ground Water Recharge (GWR), Water Contact Recreation (REC-1), Non-Contact Water Recreation (REC-2), Wildlife Habitat (WILD), Cold Fresh Water Habitat (COLD), Warm Fresh Water Habitat (WARM), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), Preservation of Biological Habitats of Special Significance (BIOL), Rare, Threatened, or Endangered Species (RARE), Freshwater Replenishment (FRSH) and Commercial and Sport Fishing (COMM).

vulnerable to tsunami hazards.¹⁵ Regarding seiches, the DSEIR states only that the project would not be subject to seiches because it is not near an enclosed body of water. However, seiches occur in rivers and creeks, and the DSEIR ignores the potential for seiches to travel up San Simeon Creek. Regarding flooding, the DSEIR states that just a small part of the project site is within the 100-year floodplain, though we understand the project was damaged in January 2016 during a storm event that caused something less than a 100-year flood, so the project site is demonstrably vulnerable to flooding and those impacts should be analyzed.

The County's LCP requires that development such as the proposed project located in coastal hazard areas and tsunami runup zones be located outside of potential inundation areas where feasible, and if not feasible, that they be elevated or otherwise protected from inundation. This is particularly important for a project such as this that is meant to provide a reliable water supply in the face of emergencies and that stores substantial amounts of chemicals on site that could be released during inundation and could damage nearby sensitive waterbodies and habitat areas. We are not aware of the CCSD conducting the required feasibility analysis to determine whether the project could be located outside of this hazardous area or elevated above inundation levels. As we previously requested in our April 2015 comment letter, we recommend the DSEIR be revised to identify the full extent of these hazard areas as they relate to project components and that alternative project designs that minimize potential impacts and damage resulting from these hazards be analyzed. We also recommend, in particular, that the revised document describe all measures that will be included in the proposed project to avoid and respond to potential spills of hazardous chemicals from the project and to avoid and respond to the potential that project components damaged during tsunami, seiche, or flooding events could be transported to, and adversely affect nearby sensitive waterbodies and habitat areas. We also recommend that the project be evaluated for the effects of a 500-year flood, which is the level commonly conducted for hazard or risk assessments on what are considered "critical" facilities.

Section 5.6.2 – Land Use – Regulatory Setting, North Coast Area Plan: The DSEIR references a provision of the project's emergency CDP, which states that review of the project pursuant to the required follow-up CDP will be subject to provisions of the North Coast Area Plan Community Wide Policy related to desalination facilities for Cambria. However, the DSEIR contends that the proposed project is not subject to this Policy because the project is outside the Cambria Urban Area and because it "is a groundwater replenishment project – not a desalination facility."

For several reasons, including the following, the project is subject to the referenced policy. First, Community Wide Standard 4C, which provides a broad overview of requirements for any water supply project for Cambria, requires that "the project shall assure that CCSD water withdrawals from Santa Rosa and San Simeon Creeks will be sufficiently limited to protect: (1) adequate instream flows necessary to support species and other riparian/wetland habitats within the reach of the streams affected by CCSD pumping, (2) underlying groundwater aquifers, and (3) agricultural resources." Additionally, the project provides water to, and includes components within, the Cambria Urban Area, and therefore includes development within that area. As defined in the LCP and Coastal Act, "development" includes "discharge... of any... liquid...", "change in the density or intensity of use of land..." and "change in the intensity of use of water,

¹⁵ See *San Luis Obispo County and San Luis Obispo Flood Control and Water Conservation District Local Hazard Mitigation Plan*, page 138, December 2014.

or of access thereto...”, all of which are integral components of the project within the Cambria Urban Area. Additionally, project operations affect, and are affected by, conditions within the San Simeon watershed but also the Santa Rosa watersheds, which is within the Urban Area boundary – for example, the project’s pumping regime will vary based on pumping opportunities and constraints in the Santa Rosa watershed. Further, project development includes proposed mitigation measures within Cambria such as proposed build-out reductions, conservation measures, and others. Finally, the project is not a “groundwater replenishment project,” as it withdraws groundwater from the San Simeon watershed rather than replenishes it, though it is a desalination project, as it uses the same technology as other desalination facilities to remove salts and other contaminants from brackish water, seawater, treated wastewater, or groundwater. Therefore, the project is subject to the above-cited Community Wide Policy 4D. We recommend the DSEIR be revised to clarify this issue.

Section 6.3 – Growth-Inducing Impacts: The DSEIR concludes that the project would result in relatively limited growth-inducement effects primarily related to those growth elements described in the CCSD’s 2008 Water Master Plan or those resulting from economic benefits derived from the project providing improved water supply reliability. We agree that the existing project will likely have limited growth-inducement effects, since it is for existing development and for emergency situations only; however, the proposed project would clearly result in growth-inducing impacts that must be fully evaluated in a revised DSEIR (though, as noted above, there appears to be substantially less water available to the CCSD in the San Simeon watershed than needed for the project to support the proposed additional development in Cambria). The DSEIR references the CCSD’s 2008 Master Water Plan EIR as the basis for its conclusion that the proposed project will result in few growth-inducing impacts; however that previous EIR did not adequately evaluate these effects. That 2008 document states, in fact, that a future project specific EIR/EIS would need to determine potential impacts occurring resulting from growth and from other aspects of a proposed water supply project, which the current DSEIR does not do. Additionally, neither the project’s proposed 20-year operating life nor the DSEIR’s analyses that are based on that 20-year project life are sufficient to support potential new development, since most of that development would require water for far longer than the project is expected to provide it. For example, new residences and commercial developments, which have expected useful lives of about 75 years and 50 years, respectively, would not be able to rely on water provided by this project beyond its expected 20-year operating life – i.e., until about 2036 or 2037. Further, the CCSD expects some of the new development that would rely on water from this project to not be built until 2050,¹⁶ which would be long after the project’s expected operating life and well short of the 50 or 75 years of reliable water needed to support such development.

We therefore recommend that the DSEIR be revised to acknowledge these limitations on the project’s expected growth-inducement. Alternatively, the document could be revised to identify project changes that would be needed to provide the long-term water supply needed to support the CCSD’s anticipated growth levels, to assess the impacts resulting from these project changes, and to identify the mitigation measures that would be implemented to avoid or minimize these impacts.

¹⁶ See CCSD *Progress Reports for Proposition 84 Grant* identifying January 1, 2050 as expected time to reach build-out.

Section 7.3 – Alternatives to the Proposed Project – “RO Concentrate Ocean Outfall Disposal” Alternative (and Section 7.4 – “Environmentally Superior” Alternative): The DSEIR describes the potential for disposing of the project’s effluent by trucking it to any of 16 existing facilities with permitted ocean outfalls within about 150 miles of the proposed project. It concludes that the proposed discharge alternative would be the “environmentally superior” alternative for the project. However, as described below, the DSEIR does not adequately evaluate components of this alternative that could result in significant adverse effects or could result in all or some elements of this alternative being infeasible. As a result, the DSEIR does not provide adequate support for its conclusion that this alternative is environmentally superior.

Regarding adverse effects, and similar to our comments above on transportation risks, the analyses of this alternative do not adequately evaluate potential adverse effects that would result from spills or releases that occur during transport of the project effluent to any of the 16 proposed locations. Most, if not all, of the transport routes would be along the Pacific Coast Highway adjacent to coastal waters where spills or releases could result in significant adverse effects on coastal resources. We recommend that the DSEIR be revised to include descriptions and evaluations of the likely effects of spills or releases on coastal resources along each of the transport routes. The analyses should include a description of maximum expected volumes of any spills or releases, measures that would be implemented to avoid or reduce the potential for spills or releases, the measures needed to respond to any spills or releases, and the likely impacts of spills or releases on coastal biological resources, public access to the shoreline, and other coastal resources.

Regarding feasibility, the DSEIR states that the identified facilities being considered for disposing of the project effluent have permitted ocean outfalls, but it does not identify the relevant permit conditions at these facilities or whether those permits or facilities would need to be modified to accept effluent from the project. All or some of these facilities may have limits on the types, concentrations, or volumes of wastes they can accept or discharge, and they may need to modify their treatment methods or outfall structures to ensure that discharging this project’s effluent will meet water quality standards, mixing zone or dilution requirements, and will be otherwise consistent with state and federal water quality standards. The DSEIR should be revised to include sufficient information about these components of the 16 facilities to determine whether they would provide a feasible disposal alternative and what modifications would be required for them to serve as a feasible alternative.

Section 8 – Effects Found Not To Be Significant: The DSEIR states that several issue areas are not likely to result in significant adverse effects; however, and as noted in our comments above, we recommend the DSEIR be revised to include full evaluations of the potentially significant adverse effects on coastal resources that may result from project-related traffic and hazardous wastes, including waste storage, potential releases and spills and spill response both onsite and during transport.

We additionally recommend the DSEIR be revised to more fully evaluate effects associated with the project’s geologic risks. As noted in the DSEIR’s Section 8.3 – Geology and Soils, the project site has the potential to experience strong ground shaking and project components could experience liquefaction. The DSEIR concludes these effects would not be significant, yet it does not provide the analyses needed to support that conclusion. For example, regarding seismic events, the DSEIR states that the project is likely to experience at least one moderate to severe

earthquake during its operating life, with the accompanying Geotechnical Evaluation conducted for the project identifying a peak ground acceleration at the site of up to 0.52g. The DSEIR states that the project will be built to withstand this type of event, but it does not identify the specific design standards that were used to construct the existing project or those that will be used to ensure the proposed project will be able to withstand this event. Similarly, the Geotechnical Evaluation states that liquefaction is likely (on page 11), though it does not specifically identify expected amounts of settlement or damage that might occur and what design standards or project components may be necessary to avoid or reduce effects of this hazard.

We recommend the DSEIR be revised to specifically state how the proposed project will be built to resist the expected levels of ground acceleration and liquefaction at the site, and that it include the analyses used to show the facility could withstand the expected forces. We particularly recommend that the document describe how the chemical storage facilities at the site will be constructed to withstand potential geologic and seismic forces and that it provide the analyses used to ensure those events would not result in release or spill of project chemicals.

Conclusion: In sum, we strongly recommend the CCSD substantially revise the DSEIR as described above to ensure the adverse environmental impacts of the existing and proposed projects are fully analyzed, that project alternatives are adequately evaluated, and that the project's cumulative effects are assessed. We would be happy to provide further comments or assistance in modifying the document or in considering alternatives to the project as currently proposed. Again, thank you for the opportunity to comment.

Sincerely,



Tom Luster
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