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Via Hand Delivery and E-mail

City Council
City of Seaside
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Re: Campus Town

Dear Members of the City Council:

I write on behalf of LandWatch Monterey County (“LandWatch”) regarding the Campus Town project (the “Project”) and the water supply impact analysis in its draft and final Environmental Impact Report (“DEIR” and “FEIR,” collectively “EIR”).

The Campus Town project has a lot to recommend it. It removes 123 acres of urban blight that has stood for decades and replaces it with a mixed use, walkable urban village with hundreds of affordable housing units and jobs.

Indeed, LandWatch worked hard to find a way to support the Project. LandWatch and its counsel met with the City Manager, supported the City’s attorney when he sought approval of a water transfer from the Seaside Basin Watermaster, drafted a mitigation measure that would commit the Project to a sustainable water supply, and agreed to support the Project if the City committed to providing its 442 acre-foot water supply without increasing groundwater pumping.

Regrettably, the final EIR lets the Project be supplied with groundwater from the Seaside Subbasin and therefore to continue to overdraft the aquifer. The City’s mitigation measure only requires a water offset or replacement supply for a portion of the water supply, not the entire amount the Project will use. And to LandWatch’s great disappointment, the final EIR assumes that the first 181 AFY can be pumped from the groundwater basin without impact because it is part of the unused Seaside share of the 6,600 AFY “paper water” supply.

LandWatch is not singling Seaside out. For many years now, LandWatch has been consistent in opposing developments on the former Fort Ord where there is no safe, sustainable source of drinking and agricultural water. LandWatch opposed Monterey Downs on this basis. The decision is consistent with our current complaint against Del

Rey Oaks, our legal settlement with Marina Coast Water District, and every comment letter LandWatch has submitted to FORA, Marina, Seaside, Monterey, Del Rey Oaks and Monterey County.

Housing and jobs are essential to Seaside's future. But so is a safe, reliable drinking water supply for current and future residents. As proposed, Campus Town does not have a reliable water supply. LandWatch offered a feasible solution: use water from the Seaside Basin golf course made available via a recycled water swap or fully offset the Project's water use with pumping reductions elsewhere. The final EIR does not commit to that solution. Until it does, LandWatch cannot support this Project because it puts current and future residents' needs for drinking water at risk.

As set forth in public comments on the draft EIR and as detailed below, the EIR does not adequately address the planned use of groundwater from the Monterey Subbasin in the Pressure Subarea for the Project, which will exacerbate seawater intrusion and overdraft and further deplete the Deep Aquifers. LandWatch asks that the City Council not approve the Campus Town project or certify its EIR unless and until the City is prepared to adopt mitigation that would preclude the use of groundwater from the Monterey Subbasin.

LandWatch has drafted and previously proposed to the City Manager a revised mitigation measure to replace Mitigation Measure UTIL-1. The revised UTIL-1 would require the Project not to increase pumping in the Monterey Subbasin by committing it to use alternative water sources or by obtaining verified offsets. The revised UTIL-1 is set out again in section VI below for the Council's consideration. The mitigation is clearly feasible because sustainable water supplies are available, e.g., via the recently approved arrangements to swap non-potable water for golf course irrigation in exchange for Seaside Subbasin groundwater.

- I. Neither the Army EIS/SEIS nor the FORA Reuse Plan EIR assumed 6,600 AFY of groundwater pumping would be permitted if seawater intrusion continued. Both the Army and FORA assumed that a replacement water supply would be provided and that groundwater pumping would cease. Decades later, that replacement supply has not been provided, and pumping and seawater intrusion continue.**
- A. The 1993 Army/MCWRA Annexation Agreement permitted the Army to continue groundwater pumping pending completion of a replacement water supply that was expected by 1999.**

In 1993, the United States Army, planning to dispose of property in Fort Ord, entered into the Agreement Between the United States of America and the Monterey County Water Resources Agency Concerning Annexation of Fort Ord Into Zones 2 and 2A of the Monterey County Water Resource Agency. (Agreement No. A-06404 between U.S.A.

and MCWRA, Sept 21, 1993 [“1993 Army/MCWRA Annexation Agreement”].) In that agreement, the Army sought annexation of Fort Ord into MCWRA Zones 2 and 2A, the benefit assessment areas for the Nacimiento and San Antonio reservoirs. The agreement required that the Army pay MCWRA \$7,400,000 and that MCWRA develop a project to provide at least 6,600 AFY of long-term potable water supply because “stopping all pumping from the Salinas Basin on Fort Ord lands is necessary to mitigate seawater intrusion.” Until that project was implemented, MCWRA agreed that the Army or its successors in interest could withdraw 6,600 AFY with a maximum of 5,200 AFY from the 180-foot and 400-foot Aquifers.

The 1993 Army/MCWRA Annexation Agreement contemplated a 6,600 AFY potable water supply replacement project by 2000. Thus, it provided that the Army could terminate the agreement if MCWRA had not made reasonable progress by December 31, 1999 on that project. Although MCWRA has not developed the 6,600 AFY potable water project, the Army did not terminate the agreement.

B. In 2001, the Army assigned a portion of its groundwater interest to MCWD, reserving 1,729 AFY for its own use.

In 1998, FORA and MCWD entered into the Water/Wastewater Facilities Agreement, in which FORA agreed to permit MCWD to acquire the Fort Ord water distribution system from the Army and MCWD agreed to provide water under FORA’s supervision and oversight. In the 1998 Water/Wastewater Facilities Agreement, FORA retained primary authority over the Ord community water supply management, including authority to administer groundwater supply capacity rights consistent with the 1993 Army/MCWRA Annexation Agreement, to determine what additional facilities are necessary, to approve capital spending budgets, and to oversee MCWD’s operations through a FORA staff Water/Wastewater Oversight Committee. The 1998 Facilities Agreement reaffirms MCWD’s earlier commitment not to pump more than 1,400 AFY from the Deep Aquifer for use on Fort Ord.

In June 2000, the Army and FORA entered a Memorandum of Agreement for disposal of the Army’s interests in Fort Ord. In 2001, consistent with that agreement and the provisions of the FORA/MCWD 1998 Water/Wastewater Facilities Agreement, the Army through FORA granted the Fort Ord waters supply infrastructure facilities to MCWD in the Assignments Of Easements On Former Fort Ord and Ord Military Community, County of Monterey, And Quitclaim Deed For Water And Wastewater Systems. This Assignment requires MCWD to assume and comply with the terms and conditions of the 2001 conveyance of the water systems from the Army to FORA in the Easement to FORA for Water And Wastewater Distribution Systems Located On Former Fort Ord, including the obligation “to cooperate and coordinate with parcel recipients, MCWRA, FORA, MCWD, and others to ensure that all owners of property at the former Fort will continue to be provided an equitable supply of water at equitable rates.” The meaning of

“equitable supply” is not defined, but presumably equity would not permit groundwater pumping that causes harm to other users.

When the Army conveyed its interest in the Fort Ord property, it assigned its interest in groundwater under the 1993 Army/MCWRA Annexation Agreement to MCWD, reserving 1,729 AFY of water exclusively for the Federal Government use. (MOA between Army and FORA, June 20, 2000, Article 5.) The Army has apparently subsequently conveyed some portion of this reserved interest to others, because the Fort Ord Reuse Authority reports that the Army now retains an interest of only 1,577 AFY. (FORA, Annual Report, Fiscal Year 2017-2018, p. 12, available at <https://www.fora.org/Reports/AR/AnnualReport2018-Full.pdf>.) FORA reports that the Army consumed 460.45 AFY in 2017, and that it has a remaining 1,116.55 AFY “allocation.” (*Id.*)

C. Army environmental review of Fort Ord reuse acknowledges that the right to pump groundwater for Fort Ord is limited in time and that a replacement water supply is required to support civilian reuse of Fort Ord.

To evaluate the impacts, mitigation, and alternatives for the disposal and likely civilian reuse of Fort Ord, the Army prepared an Environmental Impact Statement (EIS) in 1993¹ and a Supplemental EIS (SEIS) in 1996.²

1. 1993 EIS assumes mitigation for civilian reuse will include a replacement water supply.

The 1993 EIS acknowledges that water demand for civilian reuse will exceed existing water use, “which already exceeds safe yield of the groundwater system in the vicinity of Fort Ord.” (1993 EIS, p. 6-56.) The EIS concludes that “[i]f the increase were supplied by local wells, seawater intrusion would be accelerated.” (*Id.*) The EIS recommends as non-Army responsibility mitigation for the reuse scenarios in the 1993 EIS that the local civilian agencies “Increase Water Supply or Decrease Total Water Demand to Achieve a Balance.”³ (1993 ROD, p. 6 and Attachment 2, pp. 8, 10; 1993 EIS, pp. 6-57 to 6-59.) The 1993 EIR identifies several proposed water projects to supply potable water for reuse, including the Salinas Valley Water Transfer project, which would have piped well-water from the Arroyo Seco cone to coastal areas; desalination of brackish water; a new dam on the Arroyo Seco; and new reservoirs on the Fort Ord site. (1993 EIS, pp. 6-57 to 6-58.) None of these projects has been completed or are now being planned.

¹ U.S. Army, Final EIS, Fort Ord Disposal and Reuse, June 1993 (“1993 EIS”)

² U.S. Army, Final SEIS, Fort Ord Disposal and Reuse, June 1996 (“1996 SEIS”)

³ U. S. Army, Fort Ord, California Dispose and Reuse EIS Record of Decision, Dec. 23, 1993, (“1993 ROD”) available at http://docs.fortordcleanup.com/ar_pdfs/AR-BW-0486/BW-0486.pdf/

Reflecting the analysis in the 1993 EIS, the 1993 Record of Decision states that “implementation of the Fort Ord Base Reuse Plan will be contingent upon the provision of a long-term, reliable potable water system.” (1993 ROD, Attachment 2, p. 15.) The 1993 ROD identifies under the heading “Local Commitment to Mitigation Measures” those mitigation measures that the “community has indicated it will implement.” (1993 ROD, Attachment 2, p. 14.) The community commitment to water supply mitigation recited in the Record of Decision includes provision of a replacement water supply through a 9,000 AFY desalination project and/or the 11,000 AFY Salinas Valley Water Transfer Project:

Water Supply Mitigation Measures

The implementation of the Fort Ord Base Reuse Plan will be contingent upon the provision of a long-term, reliable potable water system. All development will be phased based upon the following framework for water availability that was approved in a memorandum of understanding between the Army and the Monterey County Water Resources Agency. The initial phases of the plan will have approximately 6,600 acre-feet available for the POM annex, the Army Reserve Center, McKinney Act users, the California State University, and other uses, based on water availability and approved by the Fort Ord reuse group (FORG). Latter stages of development will make use of desalination, approximately 9,000 acre-feet and water recycling, approximately 9,000 acre-feet. Water supplies beyond the year 2000 could be augmented by additional development or substitute for those above based on the availability of 11,000 acre-feet of water from the Salinas Valley Water Transfer Project, which is part of the Sea Water Intrusion Program.

(1993 ROD, Attachment 2, p. 15.)

Note that the Army’s 1992 “Other Physical Attributes Baseline Study of Ford Ord,” used for the 1993 EIS and incorporated by reference in the Campus Town EIR, also states that MCWD intended to obtain its long term water supply for Fort Ord and the City of Marina through the Salinas Valley Seawater Intrusion program rather than through groundwater pumping. (Other Physical Attributes Baseline Study of Ford Ord, pp. 1-7 to 1-8, 1-16.)

- 2. The 1996 SEIS acknowledges that there is no right to pump the 6,600 AFY of groundwater if it causes seawater intrusion and that civilian reuse requires a replacement water supply.**

The Record of Decision for the 1996 SEIS explains that supplemental environmental review was intended to evaluate changed conditions, which then included the conveyance

of additional assets in excess of the Army's needs and the completion of the Base Reuse Plan.⁴ (1997 ROD, p. 1.)

The 1996 SEIS acknowledges that “[t]he water demand for Alternative 7 (with or without the newly excessed lands and revised use areas) would be large enough to result in seawater intrusion if it is supplied by local wells.” (1996 SEIS, p. 5-20.) Alternative 7 is the alternative that reflects reuse according to the Base Reuse Plan.

The 1996 SEIS acknowledges that its 1993 agreement with MCWRA allows it to “pump up to 6,600 af/yr from its existing wells to meet Army water demands, *provided the pumping does not result in seawater intrusion.*” (1996 SEIS, p. 5-20, emphasis added.) In short, the 1996 SEIS assumed that this interim use of the 6,600 AFY interest in groundwater pumping was contingent on halting seawater intrusion.

The 1996 SEIS states that the water supply for reuse must come from new water supply projects:

The great majority of the water demand for Alternative 7 derives from civilian reuse of former Fort Ord lands. These users will need to cooperate with MCWRA in developing new water supply projects or develop their own water supplies from other sources (e.g., desalination).

(1996 SEIR, p. 5-20.) The 1996 SEIS states that the member agencies of the Fort Ord Reuse Group had entered into a Mitigation Agreement in 1994 that provides that “[t]he reuse of former Fort Ord lands will be planned and implemented in coordination with the Monterey County Water Resources Agency (MCWRA) and other appropriate agencies to ensure adequate water supplies for all reuse areas.” (1996 SEIS, p. 3-11.)

In its discussion of cumulative water supply impacts, the 1996 SEIS again states that the 1994 Mitigation Agreement requires the civilian agencies to develop alternative water supplies to support phased future development, because the 1993 Agreement between the Army and MCWRA requires that groundwater pumping cease:

Alternative 7 includes a provision that development will be in phases subject to the availability of adequate water supplies as coordinated with the MCWRA (see the "Mitigation Agreement" portion of Section 3.2.2). The initial phase will use existing supplies that are in excess of Army needs. However, *these resources will not be available after the MCWRA project is completed. Under the terms of agreement between the Army and MCWRA, pumping from the Fort Ord wells in the Salinas aquifer will cease unless environmental and national defense*

⁴ U.S. Army, Fort Ord, California Dispose and Reuse Final SEIS Record of Decision, June 18, 1997 (“1997 ROD”).

requirements like the project are met. Later phases will be contingent on development of new water sources. Some combination of new water supplies, wastewater reclamation, and aggressive water conservation would be needed to implement Alternative 7 without substantially increasing the rate of seawater intrusion. The FORA Final Base Reuse Plan (December 1994) suggests that all these water supply alternatives will be considered in the early phases of reuse but that desalination will be the likely water source for long-term development of former Fort Ord (Fort Ord Reuse Authority 1994).

(1996 SEIS, p. 5-54, emphasis added.)

3. The Army's 1996 Record of Decision recognizes the MCWD water supply allocations are based only on the "short-term" use of groundwater.

After quoting the SEIS language regarding the 1994 Mitigation Agreement by the Fort Ord Working Group, the 1996 Record of Decision acknowledges that the FORA water supply allocation is based only on the short-term water supply available under the 1993 Annexation Agreement.

FORA has developed and coordinated a water allocation plan for reuse based on the *short-term water supply* available as a result of the Army/MCWRA agreement.

(1997 ROD, Table 3, p. 1, emphasis added.)

4. The Base Reuse Plan EIR conditions continued use of groundwater on avoiding seawater intrusion pending provision of a replacement water supply.

The 1996 Base Reuse Plan EIR refers to the Army's EIS for a detailed discussion of water supply conditions and impacts from development. (Base Reuse Plan EIR, p. 4-46.) The Base Reuse Plan EIR states that by the terms of the 1993 Army/MCWRA agreement "a potable water supply of 6,600 AFY is assumed to be assured from well water *until a replacement is made available by the MCWRA (provided that such withdrawals do not accelerate the overdraft and seawater intrusion problems in the Salinas Valley groundwater aquifer).*" (Base Reuse Plan EIR, p. 4-53, emphasis added.)

The Fort Ord Reuse Authority's 1996 Base Reuse Plan EIR states that "given the existing condition of the groundwater aquifer, there is public concern over the ability of the water wells to 'assure' even 6,600 AFY." (*Id.*) It then identifies policies and programs that must be adopted by cities and the County "to ensure the water supply issue is resolved and the proposed project does not aggravate or increase the seawater intrusion problem." (*Id.*, p. 4-54.) These are the Hydrology and Water Quality Policies and Programs that

mandate ensuring additional water supply, conditioning development on an assured long-term water supply, and cooperation to mitigate further seawater intrusion.⁵ For example, Program C-3.1 requires determination of the safe yield. As discussed below and in the attached technical memorandum by hydrologist Timothy Parker, the current pumping from the Deep Aquifer, from which MCWD would obtain water for the Project, exceeds the safe yield. Program C-3.2 requires implementation of measures to prevent further seawater intrusion. Seawater intrusion continues. Approval of the Project relying on continued groundwater pumping from the Monterey Subbasin would violate the Base Reuse Plan policies.

The 1996 Base Reuse Plan EIR identifies and discusses the impacts of various options for obtaining additional water supplies. (*Id.*, pp. 4-59 to 4-61.) The replacement water supply has not been provided.

In 1998, MCWRA released an EIR for the Salinas Valley Water Project, which recounts the history of planning through the 1990s for a project that would halt seawater intrusion and provide potable water supplies to various urban users including Fort Ord, consistent with the 1993 Annexation Agreement, with the discussion in the Army's EIS, and with the discussion in the Base Reuse Plan EIR.⁶ However, by 2001, in response to public concerns about cost and other issues, the Salinas Valley Water Project was revised to exclude urban deliveries.⁷ No replacement potable water supply project has been provided for Fort Ord.

⁵ The City is required to conform its development in Fort Ord to the BRP policies and programs. In addition, the City was required to adopt policies in its own General Plan to conform its development to the BRP policies and programs. For example, General Plan Policy COS-2.1 requires provision of adequate water supply. General Plan Implementation Plan COS-2.1.2 requires that development be conditions on an assured long-term water supply. General Plan Implementation Plan COS-2.1.3 requires development of new water sources. Approval of the Project relying on continued groundwater pumping from the Monterey Subbasin would violate these policies.

⁶ MCWRA, Salinas Valley Water Project Draft Master EIR, SCH# 97-121020, Oct. 1998, pp. 1-3 to 1-5 [history], 3-36 [project description includes delivery of water supplies to Fort Ord].

⁷ MCWRA and USACE, Salinas Valley Water Project Draft EIR/EIS, SCH# 200034007, June 2001, p. 1-9.

II. The Campus Town EIR materially misstates the 1991 baseline for impact assessment as 6,600 AFY, consisting of 5,200 AFY from the upper aquifers and 1,400 AFY from the Deep Aquifers. However, the actual groundwater pumping at the time of the base closure decision was 4,700 AFY from the upper aquifers and zero from the Deep Aquifers.

An EIR must describe the existing environmental setting (“baseline”) so that it considers impacts “in the full environmental context.” (Guidelines, § 15125(a), (c).) An accurate baseline is critical because impact assessment must be based on “changes in the existing physical conditions in the affected area.” (Guidelines, § 15126.2(a); see *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.) Baseline information must be presented in the draft EIR, not later in the EIR process. (Guidelines, § 15120(c) (draft EIR must contain information required by Guidelines, § 15125); *Save our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 120-124, 128; *Communities for a Better Env't v. City of Richmond* (2010) 184 Cal. App. 4th 70, 89.)

The DEIR purports to rely on the provisions of CEQA § 21083.8.1 whereby (i) all activities to implement the base reuse are treated as a single project and (ii) the baseline for impact analysis would be the physical conditions present “at the time that the federal decision became final for the closure or realignment of the base.” (DEIR, p. 3-4.) The FEIR acknowledges that the base closure decision was made in September 1991 and the DEIR incorporates the baseline documents referenced by the FORA Base Reuse Plan EIR by reference. (DEIR, p. 3-4.)

Preliminarily, FORA did not actually fulfill the conditions required by CEQA to elect to use 1991 physical conditions to determine if impacts are significant is not valid. The DEIR asserts that pursuant to Guidelines § 15229, impacts that do not exceed the baseline physical conditions shall not be considered significant.⁸ However, the FEIR admits that

⁸ The City waived reliance on the 6,600 AFY as a baseline for analysis in its response to LandWatch’s comments on the Monterey Downs DSEIR. In response to LandWatch’s comments, the Monterey Downs FSEIR denies that 6,600 AFY was intended to represent either a baseline or safe yield. (Monterey Downs FSEIR, p. 11.4-1027.) The Monterey Downs FSEIR’s Master Response 11.3.9 identifies baseline conditions for MCWD’s Fort Ord area as the 2015 consumption of 1,650 AFY. (Monterey Downs, FSEIR, p. 11.3-9.) Section 4.19 of the DSEIR reports baseline pumping in the Ord Community Service Area from 2001 to 2010 as 2,311 AFY, based on the MCWD Water Supply Assessment. (Monterey Downs DSEIR, p. 4.19-1 to 4.19-2.) Regardless whether baseline pumping was assumed to be the 1,650 pumped in 2015 or the 2,311 AFY average from 2001 to 2010, it is clear that the City did not assume that the baseline is 6,600 AFY. It cannot consistently claim that the baseline is 6,600 AFY now.

Guidelines § 15229 does not apply to the BRP because it had not been enacted at the time of the BRP adoption. (FEIR, p. 3-172.) Furthermore, the EIR fails to establish that the BRP EIS actually took advantage of the *option* to treat existing physical conditions at the time of the base closure decision as the baseline for analysis. Regardless whether Guidelines § 15229 applies to the Base Reuse Plan EIR, the statutory provisions in § 21083.8.1 for electing that baseline did apply. The FEIR argues that the time for challenging the Base Reuse Plan EIR has passed. But that is not the issue here. The issue is to determine *whether* the Base Reuse Plan EIR did in fact employ a 1991 baseline. The evidence that FORA did not comply with each of the statutory conditions for electing that baseline, and the lack of evidence that it did comply, both compel the conclusion that the Base Reuse Plan EIR did not adopt 1991 conditions as the baseline. Furthermore, the FEIR fails to provide responses to the specific comments on this issue. (FEIR, pp. 3-174 to 3-175.) This violates CEQA. (Guidelines, § 15088.)

Even if FORA had fulfilled the conditions to employ a 1991 baseline in the Base Reuse Plan EIR, the Campus Town EIR here fails to *set out* the actual 1991 baseline conditions, but instead materially misrepresents those conditions. The FEIR claims that the DEIR provided baseline information, quoting the DEIR Appendix M1 at page 22, as follows:

Under the “Agreement between the United States of America and the Monterey County Water Resources Agency concerning Annexation of Fort Ord into Zones 2 and 2A of the Monterey County Water Resources Agency, Agreement No. A-06404”, dated September 21, 1993, the District (successor to the United States) may withdraw up to 6,600 acre-feet per year from the Salinas Valley Groundwater Basin for use in the District’s Ord Community service area. The 6,600 acre-feet per year figure is derived from the 1984 peak and the 1988-1992 average amount of potable water Fort Ord withdrew from the Salinas Basin, not including pumping from a nonpotable golf course well.

(FEIR, p. 3-174.) There is no substantial evidence that the 1991 baseline for the Base Reuse Plan was 6,600 AFY, and there are both factual and legal errors in the EIR’s approach to setting out the actual baseline for the Base Reuse Plan EIR.

The EIR confuses the 1993 agreement to temporarily *use* 6,600 AFY of water *in the future* with a 1991 baseline to determine the *impacts* of using that water. The EIR repeatedly fails to distinguish questions about the availability of supply with questions about the impacts of using that supply. *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 434 establishes that the availability of a water supply and the impacts of using it are distinct questions, and that an EIR must address both questions. The “ultimate question under CEQA . . . is not whether an EIR establishes a likely source of water, but whether it addresses the reasonably foreseeable

impacts of supplying water to the project.” (*Id.*) Here, the 1993 agreement between the Army and MCWRA provided that the Army could temporarily use up to 6,600 AFY of groundwater pending the expected provision of a replacement potable water supply, at which time all groundwater pumping for Fort Ord was to cease in order to mitigate seawater intrusion. But that 1993 agreement concerning a future water *supply* does not establish a 1991 baseline to determine the *impacts of using* that supply.

If, as the EIR claims, CEQA § 21083.8.1 applies, then the baseline would be “the physical conditions that were present at the time that the federal decision became final for the closure or realignment of the base.” The closure decision was made in 1991 and the Base Reuse Plan EIR states that water demand in 1991 averaged 4,700 AFY. (Base Reuse Plan EIR, p. 4-53.) The Army’s June 1993 EIS identifies the baseline at base closure as 4,700 AFY, stating that the “yield available to Fort Ord and other Seaside Basin users may be less than the *present total pumpage of 4,700 acre-feet per year.*” (U.S. Army Corps of Engineers, Fort Ord Dispose and Reuse Final EIR, USACE, 1993, p. 4-57.) *In short, the baseline at the time of 1991 base closure decision was at most 4,700 AFY, not 6,600 AFY.*

The Base Reuse Plan EIR references 6,600 AFY in connection with its analysis of the *need for a future water supply*, not as the baseline for analysis of seawater intrusion impacts. (Base Reuse Plan EIR, pp. 4-53.) Indeed, as discussed above, the Base Reuse Plan EIR and the Army EIS both acknowledge that continued use of groundwater is contingent on that pumping not causing further seawater intrusion. (Base Reuse Plan EIR, pp. 4-53 to 4-54; USACE, 1993 EIS, pp. 4-56 to 4-60.) Mitigation measures in the BRP PEIR, including BRP policies, require the determination of the safe yield and require that land use approvals be conditioned on a sustainable water supply. Had FORA and the Base Reuse Plan EIR concluded that there would be no impact as long as groundwater pumping did not exceed 6,600 AFY, FORA would not have been required or allowed to impose such mitigation. (CEQA Guidelines, § 15126.4(a)(3).) Acknowledging that pumping for future development shall be conditioned on not aggravating seawater intrusion, even if that pumping remained below 6,600 AFY, is consistent with the provision in CEQA § 21083.8.1(c)(C) that the lead agency explain how it “intends to integrate the baseline for analysis with the reuse planning and environmental review process.”

The FEIR and draft findings also claim that a 6,600 AFY baseline is somehow supported by the “1988-1992 average amount of potable water Fort Ord withdrew from the Salinas Basin.” (FEIR, p. 3-174; see draft CEQA Findings at Council Packet p. 178.) This is not true. CEQA is clear that the baseline would be the condition in the year the decision was made to close the base. (See, e.g., *City of Vernon v Board of Harbor Commissioners* (1998) 63 Cal.App.4th 677, 691-693.) But even if a multi-year average were relevant, that average is not 6,600 AFY. The Base Reuse Plan EIR states that demand between 1986 and 1989 averaged only 5,100 AFY. (Base Reuse Plan EIR, p. 4-53.) *In fact,*

6,600 AFY was a single year peak use, not an average, and that peak use year was 1994, seven years before the 1991 decision to close Fort Ord.

The FEIR misrepresents the record when it claims that the Army's "Other Physical Attributes Baseline Study of Ford Ord" supports a 6,600 AFY baseline. The FEIR claims:

The Draft EIR incorporated by reference the "Other Physical Attributes Baseline Study of Ford Ord" as discussed in Draft EIR Section 3.3 (CEQA Guidelines Section 15150). Similar discussion of historic water use from Fort is provided on page 1-8 of that document.

(FEIR, p. 3-174.) In fact the Army Other Physical Attributes Baseline Study of Ford Ord indicates that historic use between 1988-1990 was only 5,023 AFY. (USACE, Other Physical Attributes Baseline Study of Ford Ord, p. 1-6, Table 1-1.) The reference to 6,600 AFY at page 1-8 is not to baseline water use at the time of the closure decision, but to the amount of the potable water for Fort Ord that the Army assumed would be provided in the future through the Salinas Valley Seawater Intrusion Program.

The Campus Town DEIR also materially misrepresents baseline water use by claiming that the 6,600 AFY baseline includes 1,400 AFY of pumping from the Deep Aquifer:

The 6,600 AFY is considered the 1991 Statutory Baseline under the Base Reuse Plan. The 6,600 acre-feet per year amount includes 5,200 acre-feet from the 180-foot and 400-foot aquifers, along with 1,400 acre-feet per year from the 900-foot or Deep Aquifer (FORA 1998).

(DEIR, p. 4.16-3.) This claim is simply not true. *Fort Ord did not use any water from the Deep Aquifers in 1991 or at any time before 1991, and as of 1992, there were not even any plans that it would do so.* The Army's 1992 Other Physical Attributes Baseline Study of Ford Ord, incorporated by reference in the Campus Town EIR, confirms this:

... the 900-foot aquifer has been used only for groundwater by the City of Marina, which has a deep well tapping this water resource. There are no current plans by any jurisdiction to dig additional deep wells to use this aquifer."

(USACE, Other Physical Attributes Baseline Study of Ford Ord, p. 1-3, emphasis added.) The Army's study indicates that Marina's water demand was only 2,500 AFY. (*Id.*, p. 1-15.)

The DEIR does not identify actual baseline pumping in 1991 and the FEIR simply refuses to provide baseline information requested by commenters. For example, LandWatch asked for baseline pumping from the aquifers that have been used to support Fort Ord in

the past, the “upper aquifers (i.e., the 180-foot aquifer and the 400-foot aquifer) and the Deep Aquifers. (LandWatch comment 10.11.)

- The FEIR Response 10.11 refers LandWatch to Responses 9.9 and 10.9 and to a website at https://www.mcwd.org/gsa_water_consumption.html.
- Response 9.9 does not provide any data related to the purported 1991 baseline and also references the website at https://www.mcwd.org/gsa_water_consumption.html.
- Response 10.9 asserts that the baseline is 6,600 AFY. As discussed, 6,600 AFY does not represent 1991 pumping.
- Even though the EIR claims that the baseline is 1991, the website at https://www.mcwd.org/gsa_water_consumption.html provides only the groundwater consumption *from 2009 to 2018*.

In sum, despite requests for this information, *the FEIR provides no actual data on baseline groundwater pumping in 1991*. This violates CEQA. (Guidelines, §§ 15125 [requiring adequate setting description], 15088 [requiring adequate comment responses].)

The baseline conditions description should include the conditions in the project vicinity. (Guidelines, § 15125.) The test of an adequate setting description is whether it is sufficient to support further analysis. (*County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 954 [baseline information insufficient if it does not “make further analysis possible”].) Where the issue is the impact to an aquifer that may be in overdraft, determination of pre-project baseline groundwater conditions is critical. (*County of Inyo v. City of Los Angeles* (1981) 124 Cal.App.3d 1, 9 [“project must be compared with its pre-project conditions in order, inter alia, to provide a uniform baseline for the measurement of its impact and to ‘assess the advantage of terminating the proposal’”]; see Remy et al, Guide to California Environmental Quality Act (2007 11th ed.) p. 785.)

Baseline information is also critical to evaluation of cumulative impacts because that analysis must consider the effects of all past, present projects, and future projects that affect the same resource. (Guidelines, §§ 15355(b), 15065(a)(3), 15130(b)(1)(A); see *Friends of the Eel River v. Sonoma Cty. Water Agency* (2003) 108 Cal. App. 4th 859, 874-75 [incomplete setting description “fails to set the stage for a discussion of the cumulative impact”].)

LandWatch comments 10.14, 10.16, and 10.19 sought information about cumulative historic, existing, and projected pumping from the upper aquifers and the Deep Aquifers. The FEIR refuses to set out this information. And the DEIR materially misrepresents the environmental setting by claiming that MCWD is the only significant user of the Deep Aquifer:

The District is the only significant user of the Deep Aquifer, although there are Deep Aquifer wells serving the Monterey Dunes Colony (120 homes) and the Armstrong Ranch (MCWD 2015 UWMP, Section 4.1 at pp. 31–32).

(DEIR, p. 4.16-3.) As hydrologist Timothy Parker explains and documents, the MCWD UWMP is simply incorrect in this claim.

In particular, by 2016, Deep Aquifer extractions had increased from 2,151 AFY in 1999 to 8,901 AFY. (*See* MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017, p. 52, available at <https://www.co.monterey.ca.us/home/showdocument?id=57394>.) Since 2016, the County has permitted numerous additional wells in the Deep Aquifers, as Parker documents.

The EIR’s failure to provide baseline and cumulative groundwater pumping is prejudicial to public participation and informed decision making for several reasons. First, the EIR fails to consider the impacts of groundwater pumping in excess of the actual 1991 groundwater pumping of 4,700 AFY. The EIR assumes that pumping less than 6,600 AFY would have no significant impact and only acknowledges the possibility of significant seawater intrusion impacts if groundwater pumping exceeds the purported “Statutory Baseline” of 6,600 AFY. (FEIR, p. 3-181, 3-182; DEIR, p. 4.16-22.)

Second, the EIR makes inconsistent claims about the baseline, claiming that it is derived from the 1988-1992 average when in fact it is well in excess of the data that the EIR incorporates by reference.

Third, the EIR claims that baseline pumping included 1,400 AFY of Deep Aquifer pumping for Fort Ord use when in fact there was no Fort Ord use of Deep Aquifer pumping in 1991. As discussed below, the EIR fails to disclose and misrepresents the impacts to the Deep Aquifers from increased pumping over baseline pumping.

Fourth, the EIR fails to state baseline pumping data separately for the Deep Aquifers and the upper aquifers, despite requests for this information, and despite its relevance to Deep Aquifer impacts that were neither assumed nor evaluated in the Base Reuse Plan EIR.

The EIR must be revised and recirculated to provide timely and accurate baseline and cumulative groundwater pumping information as required by CEQA. (Guidelines, § 15088.5(a).) Without that information, the public is denied a meaningful opportunity to comment and to receive responses in a final EIR, and the EIR itself fails to disclose significant impacts and substantially more severe cumulative impacts.

III. The EIR fails to disclose and misrepresents critical setting and cumulative impact information and fails to make a coherent significance determination regarding impacts to the Deep Aquifers.

An EIR must carefully determine if a project may cause, or risk exacerbating, significant environmental effects, and it should do so with reference to baseline physical conditions. (Guidelines, §15126.2.) The EIR fails to do so with respect to the Deep Aquifers.

An EIR must also consider cumulative impacts to which the project may contribute. (Guidelines, §15130.) Cumulative impact analysis requires an agency to make two determinations: (1) whether the impacts of the project in combination with those from other past, present, and future projects are cumulatively significant, and (2) if so, whether the project's own effect is a considerable contribution. (Guidelines, § 15130(a); *see* Kostka and Zischke, Practice Under the California Environmental Quality Act (2nd Ed., 2014 Update), § 13.39.) CEQA requires an agency to support both its step one and step two determinations with “facts and analysis.” (Guidelines, §15130(a)(2) [step one], (a)(3) [step two].)

In step one, the agency must determine whether the combined effect of the project and other projects is significant, because those impacts may be “individually minor but collectively significant.” (*Communities for a Better Environment v. California Resources Agency* (“*CBE v. CRA*”) (2002) 103 Cal.App.4th 98, 119-120.) Thus, step one must identify all sources of “related impacts,” either by listing projects causing the cumulative impact or by providing “a summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.” (Guidelines, § 15130(b)(1)(A), (B).) Identifying these *sources* of the cumulative effect is a distinct requirement from identifying the cumulative effect itself. (Guidelines, § 15130(b)(1), (4).) Omission of sources of cumulative impact without justification is error. (*Citizens To Preserve the Ojai v. County of Ventura* (1985) 176 Cal. App. 3d 421, 428-432.) In particular, where it is relevant to cumulative impacts, an EIR must disclose cumulative water supply and demand. (*Vineyard, supra*, 40 Cal.4th at 441; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 728-729.) The agency must “define the scope of the area affected by the cumulative effect,” explain “the geographic limitation used,” and provide a “summary of the expected environmental effects to be produced by those projects.” (Guidelines, § 15130(b)(3), (4).)

In step two, if there *is* a significant cumulative effect, the agency must determine whether the project's contribution is “considerable,” i.e., “whether ‘any additional amount’ of effect should be considered significant in the context of the existing cumulative effect.” (*CBE v. CRA, supra*, 103 Cal.App.4th at 119.) This determination must be made in the “context of the existing cumulative effect” because “the greater the existing environmental problems are, the lower the threshold should be for treating a project's

contribution to cumulative impacts as significant.” (*CBE v. CRA, supra*, 103 Cal.App.4th at 119-120.) Thus, an EIR may not dismiss a project’s contribution simply because it is relatively small. (*Id.* at 117-118, 121; *Kings County, supra*, 221 Cal.App.3d at 720-721; *Los Angeles Unified School Dist. v. City of Los Angeles (“LAUSD”)* (1997) 58 Cal.App.4th 1019, 1025-1026.) If the project contribution is considerable, required mitigation may be provided through impact fees (Guidelines, § 15130(a)(3)); but “payment of fees must be tied to a functioning mitigation program.” (*California Native Plant Society v. County of Eldorado* (2009) 170 Cal.App.4th 1026, 1055.)

The EIR fails to comply with CEQA’s requirements for an adequate cumulative analysis of impacts to the Deep Aquifers.

As explained by hydrologist Parker, the Project would take water from the 400-Foot Aquifer and the Deep Aquifers of the Pressure Subarea. The Pressure Subarea includes hydrologically interconnected aquifers common to the Monterey Subbasin and 180/400-Foot Aquifer Subbasin (which are contained within the Pressure Subarea), including the 400-Foot Aquifer and the Deep Aquifers.

The 400-Foot Aquifer and the Deep Aquifers underlying the Pressure Subarea are distinct aquifers for analysis because they are subject to distinct impacts. As Parker explains, the 400-Foot Aquifer has already suffered substantial seawater intrusion because cumulative pumping has resulted in groundwater levels below sea level, which induces seawater intrusion. Unlike the 400-Foot Aquifer, the Deep Aquifers are not connected to Monterey Bay and have not yet been found to be intruded by seawater. However, the Deep Aquifers are at risk for seawater intrusion because they are connected to the 400-Foot and 180-Foot Aquifers by well perforations that permit leakage or vertical migration of groundwater from these upper aquifers. Furthermore, there is no known source of recharge to the Deep Aquifers other than this migration. Thus, pumping from the Deep Aquifers

- induces leakage from the 180-Foot and 400-Foot Aquifers into the Deep Aquifers,
- lowers groundwater in the 180-Foot , 400-Foot Aquifers, and Deep Aquifers,
- induces seawater intrusion into the 180-Foot and 400-Foot Aquifers,
- depletes the Deep Aquifers themselves, and
- puts the Deep Aquifers at risk of salination from vertical migration of seawater-intruded waters from the 180-Foot and 400-Foot Aquifers.

The EIR fails to disclose the information that CEQA requires regarding the environmental setting, cumulative conditions, and Project impacts related to the Deep Aquifers.

First, the EIR fails to identify or justify a geographic scope of analysis for cumulative impacts to the Deep Aquifers. No part of the EIR’s discussion of impacts to the Deep

Aquifer describes the geographic scope of cumulative analysis. No part of the EIR's discussion of cumulative water supply impacts mentions the Deep Aquifers.

The only reference to a geographic scope of cumulative analysis of water supply impacts in Section 4.9, the section of the EIR that concerns Hydrology and Water Quality impacts, is the identification of the "southern portion of the Monterey Bay HU watershed" as the geographic scope of analysis.⁹ While this geographic scope may be relevant to impacts related to *surface water* flows (e.g., flooding, drainage systems), it is not relevant to the analysis of impacts to groundwater aquifers. The relevant scope of cumulative analysis of the Project impacts to the Deep Aquifers is *the Deep Aquifers themselves*, which underlie the Pressure Subarea. The Monterey Bay HU watershed includes areas outside the Pressure Subarea and does not include all of the Pressure Subarea. As hydrologist Parker explains, the 1997 Base Reuse Plan EIR uses an aquifer-based geographic scope of cumulative analysis in its discussion of impacts from supplying groundwater. The Campus Town EIR provides no justification for changing the Base Reuse Plan EIR's scope of cumulative analysis.

Furthermore, MCWD, the Project's water supplier, acknowledges that the relevant scope of analysis to evaluate cumulative impacts to the Deep Aquifers is the Pressure Subarea. In MCWD's CEQA petition in Monterey Superior Court challenging the County's failure to evaluate impacts from permitting increased pumping of the Deep Aquifers, MCWD asserts that the increase in Deep Aquifer pumping has the "potential to adversely impact groundwater in the 180/400 Subbasin and the adjoining Monterey Subbasin and MCWD's wells, both directly and cumulatively, unless enforceable mitigation measures are made conditions of the County's approval." (MCWD, Petition for Writ of Mandate and Complaint for Injunctive Relief, Monterey County Superior Court Case No. 18CV000816, March 5, 2018, paragraph 56.) In his opinion letter in support of MCWD's CEQA challenge, MCWD's hydrologist clearly identifies the Deep Aquifer in the Pressure Subarea containing the 180/400 Aquifer Subbasin and the Monterey Subbasin as the relevant scope of analysis. (Curtis J. Hopkins, letter to MCWD, March 1, 2018, pp. 2-5.) The EIR's failure to explain and justify the geographic scope of analysis violates CEQA. (Guidelines, § 15130(b)(1), (3).)

Second, even if the EIR had identified a relevant geographic scope of analysis, it fails to provide either baseline or cumulative pumping, either in the DEIR or in the FEIR in response to specific requests for this information. The FEIR justifies its refusal to supply

⁹ In section 4.16 (Utilities and Service Systems), the FEIR identifies the geographic scope of analysis for water supply impacts as the MCWD's service area. (DEIR, p. 4.16-28; FEIR, p. 3-187.) That scope of analysis might be appropriate to address the availability of a water *supply*, but it is not relevant to the issue of whether the *use* of that supply will result in *impacts* to the aquifers from which the supply is taken. Those aquifers are not confined to the MCWD service area.

baseline and cumulative groundwater data by citing *Watsonville Pilots Association v. City of Watsonville* (2010) 183 Cal.App.4th 1059 for the proposition that “The FEIR was not required to resolve the [existing] overdraft problem, a feat that was far beyond its scope.” (FEIR, p. 3-177.) The citation is inapt for several reasons. LandWatch has not requested this Project to *resolve* the existing overdraft problem, but to provide the *disclosures* about that problem that CEQA requires, to make an informed significance determination, and to propose mitigation as required. Furthermore, unlike in *Watsonville Pilots* where the project fully offset its water use by reducing other uses and by conservation, this Project does not do so. Instead, it proposes to pump an additional 181 AFY from the groundwater supply. CEQA only permits an agency to rely on a brief explanation of cumulative impacts if there is *no significant cumulative impact* from all projects taken together or, alternatively, if the project under review makes *no contribution* to that cumulative impact. (Guidelines, § 15130(a)(1), (2)). Otherwise an EIR must provide the “elements . . . necessary to an adequate discussion of significant cumulative impacts,” which includes either a list of projects producing related cumulative impacts or a summary of projections of those cumulative impact sources. (Guidelines, § 15130(b).) So *Watsonville Pilots* simply does not stand for the proposition that a project that will in fact cause some incremental impact to a significant cumulative impact need not comply with Guidelines §15130(b). Case law is clear that an agency must meet the requirements of Guidelines §15130(b) to account for cumulative impact sources when there is a significant cumulative impact from all projects taken together, and the project under review makes some contribution to it.¹⁰ The EIR’s failure to provide a list of related

¹⁰ *Citizens To Preserve the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 428-429 holds that a cumulative analysis “must at minimum include certain elements,” including the cumulative impact sources information required by § 15130(b). (emphasis added.) *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1213, 1218 identifies case law and Guidelines, § 15130(b)(1) as authority for the Court to hold a cumulative analysis is under-inclusive where it omits relevant projects and holds that this omission is an “overarching legal flaw.” *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 868–869, 872 holds that failure to include available information about cumulative impact sources mandated by § 15130(b)(1) “makes the EIR an inadequate informational document.” *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 740-741 holds that the “FEIR does not comply with CEQA because it fails to contain a list of ‘past, present and reasonably anticipated future projects,’ or a summary of projections contained in an adopted general plan for a summary of cumulative development as is required by State CEQA Guidelines section 15130” and thus “the cumulative discussion is inadequate as a matter of law.” *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 72 holds that cumulative impact analyses “are legally defective” because they omit foreseeable future highrise projects. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d

projects or a summary of projections of cumulative impact sources violates CEQA. (Guidelines, §15130(b)(1).)

Third, as discussed above, the EIR affirmatively misrepresents baseline pumping from the Deep Aquifers by claiming that there was 1,400 AFY of pumping for Fort Ord in that baseline, when the truth is that, as of the 1991 baseline year, Fort Ord had never used Deep Aquifers pumping. The EIR's misstatement of the baseline conditions violates CEQA. (Guidelines, §15125; CEQA §21083.8.1.)

Fourth, the EIR affirmatively misrepresents the facts of current and projected cumulative pumping from the Deep Aquifers. The DEIR repeatedly claims that pumping from the Deep Aquifers is "not expected" to reach the level of "two to five times the baseline rate" discussed in the 2003 WRIME study of the Deep Aquifers. (DEIR, pp. pp. 4.9-5, 4.9-25, 4.16-20; *see also* FEIR, p. 2-9 ["such increases are not anticipated"].) MCWD's 2015 Urban Water Management Plan, incorporated in the EIR by reference, also misrepresents Deep Aquifer pumping by claiming that "only a small number of wells tap the deep aquifer" and that "MCWD is currently the only significant user of the Deep Aquifer" (MCWD, UMWP, p. 31.) *Hydrologist Parker documents that the claims regarding cumulative pumping of the Deep Aquifers made by the EIR and the UWMP are not true:*

- contrary to the UWMP, the baseline rate used in the WRIME study was 2,400 AFY, not 4,800 AFY;
- as of 2016, there were more than 40 wells in the Deep Aquifer;
- 2016 pumping from the Deep Aquifers was already 8,901 AFY, which is 3.7 times that 2,400 AFY baseline rate;
- MCWD's 2015 UWMP projects that MCWD will increase its pumping from the Deep Aquifers from 4,174 AFY in 2015 to 10,505 AFY in 2035, an increase of another 6,331 af; ¹¹ and
- numerous new wells have been permitted or completed by parties other than MCWD in the Deep Aquifers since 2016, and pumping from those wells is not included in the 8,901 AFY reported for 2016.

692, 722–723 holds omission of cumulative air quality impact sources outside the County rendered the EIR inadequate.

¹¹ The EIR argues that not all pumping allocations are currently being used. However, those allocations are made when development projects are entitled. When those projects are built, the water will be claimed. Allocated uses are foreseeable, and MCWD's 2015 UWMP projects that the entire 6,600 AFY allocation for the Ord Community will in fact be used.

The EIR's misrepresentation of current and projected cumulative pumping from the Deep Aquifers violates CEQA. (Guidelines, §15130(b)(1).)

Fifth, the current and foreseeable future level of cumulative pumping is critically relevant to an assessment of project-level and cumulative impacts to the Deep Aquifers, which impacts the EIR fails to disclose. The groundwater in the Deep Aquifers is not a sustainable water supply because it has no known source of recharge other than leakage from the overlying aquifers. Thus, any increased pumping, including proposed pumping for the Project, accelerates the ongoing depletion of the Deep Aquifers. Furthermore, the 2003 WRIME study concluded that increasing Deep Aquifer pumping from 2,400 AFY to just 8,000 AFY would reduce groundwater levels at coastal monitoring locations in the 180-Foot Aquifer, the 400-Foot Aquifer and the Deep Aquifers by 4 to 7 feet and would induce additional seawater intrusion to the 180-Foot Aquifer and the 400-Foot Aquifer. Such an increase would also induce an additional flow of 4,152 AFY from the 400-Foot Aquifer to the upper Deep Aquifer, which is a potential source of salination to the Deep Aquifer. As noted, by 2016, Deep Aquifer pumping had already exceeded the 8,000 AFY pumping modeled by WRIME, and further increases by MCWD and other parties are planned, projected, and foreseeable.

Conditions in the Deep Aquifer are already more severe than WRIME assessed and will substantially worsen based on foreseeable pumping increases. The most recent MCWRA report, *Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin*, recommends a moratorium on new wells in the Deep Aquifers and a study to determine the viability of the Deep Aquifers.¹² Although a moratorium was adopted in 2018, it will not protect the Deep Aquifer from substantial pumping increases. As Parker explains, the moratorium does not apply to so-called "replacement wells," which the moratorium ordinance continues to permit in the Deep Aquifers to replace previous wells in the upper aquifers that have become salinated. Parker documents that numerous new wells have been completed or permitted since 2016, when pumping the Deep Aquifer was already over the 8,000 AFY threshold at which WRIME projected lowered groundwater, aquifer depletion, and inducement of seawater intrusion into the upper aquifers.

In light of this, the Project's additional pumping of the Deep Aquifers must be treated as a significant impact and a considerable contribution to a significant cumulative impact: "the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant." (*CBE v. CRA*, *supra*, 103 Cal.App.4th at 119-120.) The EIR's failure to discuss and disclose the

¹² *Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin*, Oct. 2017, pp. 1-2, available at <https://www.co.monterey.ca.us/home/showdocument?id=57394>

project-level and cumulative impacts to the Deep Aquifer violates CEQA. (Guidelines §§15126.4, 15130.)

Sixth, the Campus Town EIR is required to disclose the environmental setting, the cumulative context and the Project's impact to the Deep Aquifers because this information was not disclosed in the 1997 Base Reuse Plan EIR. The EIR claims that its analysis does not tier from a previous EIR (FEIR, p. 3-187), so it is obliged to provide this information. However, even if the EIR did purport to tier from or rely on the Base Reuse Plan EIR, CEQA § 21083.8.1(c)(A) requires further environmental review for a base reuse project when any of the events specified in CEQA § 21166 have occurred. The CEQA § 21166 triggers for additional review include substantial changes to the project or to the circumstances under which the project is being undertaken, or new information becomes available that was not known and could not have been known at the time the original EIR was certified. Reliance on Deep Aquifer pumping constitutes a change to the BRP because the Base Reuse Plan EIR did not contemplate use of Deep Aquifer groundwater for Ord Community development or the continued use of any groundwater source if that use aggravated seawater intrusion. (Base Reuse Plan EIR, pp. 4-53, 4-54, 5-5.) The failure of the agencies to implement the expected replacement water supply to allow the cessation of groundwater pumping in Fort Ord and the substantial increase in Deep Aquifer pumping by MCWD and other parties constitutes a change in circumstances. And the information about the post-1991 and currently projected increases in Deep Aquifers pumping and the expert analyses of the impacts of that increased pumping (e.g., WRIME 2003; Parker; Hopkins) was not known and could not have been known at the time of the 1997 Base Reuse Plan EIR.

In sum, the EIR fails to comply with CEQA because it fails to disclose and misrepresents critical setting and cumulative impact information and fails to make a coherent significance determination regarding impacts to the Deep Aquifers. Because its analysis of impacts to the Deep Aquifers is flawed, the EIR also fails to provide substantial evidence in support of the proposed CEQA significance findings. The EIR must be revised and recirculated to provide timely and accurate project-specific and cumulative analysis of impacts to the Deep Aquifers as required by CEQA. (Guidelines, § 15088.5(a).) Without that information, the public is denied a meaningful opportunity to comment and to receive responses in a final EIR, and the EIR itself fails to disclose significant impacts and substantially more severe cumulative impacts.

IV. The EIR fails to disclose critical environmental setting and cumulative impact information regarding the upper aquifers and fails to make a coherent determination of significance.

As noted above, an EIR must carefully determine if a project may cause or risk exacerbating significant environmental effects, and should do so with reference to baseline physical conditions. (Guidelines, §15126.2.) Citing the baseline provisions of

CEQA § 21083.8.1, the EIR assumes that as long as groundwater pumping is within the City's remaining share of the purported 6,600 AFY baseline 1991 pumping, there could be no significant impact. (See, e.g., FEIR, p. 3-181, 3-182; DEIR, p. 4.16-22.) The EIR repeatedly and expressly relies on the purported 6,600 AFY baseline to justify its conclusion that impacts are less than significant. However, the 1991 pumping was only 4,700 AFY. Because the EIR misstates the baseline, it fails to consider that groundwater use in excess of the *actual* 1991 baseline pumping causes significant impacts and makes a considerable contribution to significant cumulative impacts.

Because the FEIR admits that any pumping in excess of the *purported* 6,600 AFY baseline *would be* a significant impact (DEIR, p. 4.9-27; FEIR, p. 3-18), there is no reason to suppose that pumping amounts in excess of the *actual* 4,700 AFY baseline would *not* cause a significant impact or a considerable contribution to a significant cumulative impact. The EIR's analysis is just not that fine, and in any event *it simply does not address this possibility*.

However, hydrologist Parker provides substantial evidence that the Project's increase in pumping of the upper aquifers in the Pressure Subarea *would* cause a significant impact and *would make* a considerable contribution to a significant cumulative impact. It is now acknowledged that pumping must be reduced from existing levels in the Pressure Subarea to halt seawater intrusion. For example, the *State of the Salinas River Groundwater Basin* concludes that the Pressure Subarea suffers seawater intrusion due to an average annual reduction in storage of 2,000 AFY, and it recommends pumping reductions in that Subarea in order to attain hydrologic balance.¹³ Similarly, *Protective Elevations to Control Seawater Intrusion in the Salinas Valley* recommends reduction of pumping in the Pressure Subarea of at least 60,000 AFY in order to restore protective elevations to halt seawater intrusion.¹⁴

As with the Deep Aquifer, the EIR fails to define or justify a relevant scope of analysis for cumulative impacts to the upper aquifers. As Parker explains, the relevant scope of analysis of impacts to an aquifer cannot be meaningfully defined with reference to a topographical watershed area such as the southern portion of the Monterey Bay HU

¹³ Brown and Caldwell, *State of the Salinas River Groundwater Basin*, Jan. 16, 2015, pp. ES-11, ES-15, ES-16, available at https://digitalcommons.csUMB.edu/cgi/viewcontent.cgi?article=1020&context=hornbeck_cgb_6_a.

¹⁴ *Protective Elevations to Control Seawater Intrusion in the Salinas Valley*, Nov. 19, 2013, pp. 1, 11, available at <https://www.co.monterey.ca.us/home/showdocument?id=19014>.

watershed. Here, the relevant scope of analysis of seawater intrusion impacts to the upper aquifers in the Pressure Subarea *is those upper aquifers*.

As with the Deep Aquifer, the EIR fails to provide data for either baseline or cumulative pumping. As noted, the EIR misrepresents baseline pumping for the Ord Community as 6,600 AFY, when in fact the 1991 baseline was 4,700 AFY. The DEIR's section 4.16 (Utilities and Service Systems) and Appendix M Table 3-3 provide cumulative pumping data only for MCWD's *service area*. (DEIR, pp. 4.16-3, 4.16-28; DEIR App. M, p. 18.) That service areas is not coextensive with the Monterey Subbasin, the 180/400-Foot Aquifer Subbasin, or the Pressure Subarea. The EIR provides no cumulative pumping data or projections for the Monterey Subbasin, the Pressure Subarea, or even the southern portion of the Monterey Bay HU watershed that the EIR identifies as the geographic scope of analysis. Despite comments seeking this information, the FEIR simply declines to provide cumulative pumping data for the upper aquifers. (FEIR, p. 3-177.) This violates CEQA. (Guidelines §§ 15125, 15130(b), 15088.)

Reporting only the MCWD pumping fails to disclose the magnitude of the cumulative pumping that is in fact driving seawater intrusion, which is a material factor in assessing seawater intrusion impacts and in determining whether existing and committed projects can halt it. As Parker has explained, seawater intrusion will not be controlled by current groundwater management projects because existing and projected groundwater pumping substantially exceeds the pumping that was projected by MCWRA in developing those projects.¹⁵ Parker explains that MCWRA did not expect that seawater intrusion would be halted under 2030 conditions by its suite of groundwater management projects, the most recent of which has been the Salinas Valley Water Project. Furthermore, in evaluating the efficacy of its suite of groundwater management projects, MCWRA assumed that groundwater pumping in the Salinas Valley Groundwater Basin would decline substantially from 1995 to 2030, from 463,000 AFY to 443,00 AFY, based on expected reductions in agricultural pumping. However, pumping has not declined, and has in fact averaged well over 500,000 AFY since 1995. MCWRA now admits that existing groundwater management projects are not sufficient to prevent seawater intrusion and that additional projects are required. As discussed in Section V below,

¹⁵ Timothy K. Parker, Technical Review of Draft Subsequent Environmental Impact Report for the Monterey Downs and Monterey Horse Park and Central Coast Veterans Cemetery Specific Plan (DSEIR) and the Final Subsequent Environmental Impact Report for the Monterey Downs and Monterey Horse Park and Central Coast Veterans Cemetery Specific Plan (DSEIR), Oct. 8, 2016, pp. 4-5 and Attachment 1 ["Modeling assumptions and outcomes for the SVWP; MCWRA's acknowledgment that the SVWP will not halt seawater intrusion"]; Timothy K. Parker, letter to John Farrow re Groundwater Impacts from Increased Pumping to Support Ord Community Development, Feb. 15, 2018, pp. 1-3.

these necessary additional projects have not been approved, environmentally reviewed, or funded.

The FEIR does identify existing (but not foreseeable future) cumulative pumping for the entire Salinas Valley Groundwater Basin. However, the FEIR mentions this statistic not to support any analysis of impacts in the EIR's purported geographic scope of cumulative analysis, but simply in order to trivialize the Project's impacts. The FEIR claims that MCWD's coastal pumping represents less than one percent of the 524,000 AFY total average pumping from the Salinas Valley Ground Water Basin, apparently in order to imply that the Project's pumping impact would not be significant. (FEIR, p. 2-3.) The statistic is not a meaningful description of the environmental setting because FEIR does not actually *use* this statistic in any legally or factually relevant analysis of cumulative impacts. (*See County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931 [purpose of setting information is to support further analysis].) For example, the EIR offers no comparison of that aggregate current pumping level to the *sustainable yield* of the Basin.

Even if the EIR had provided some analysis in which a statistic for the current groundwater pumping for the entire Salinas Valley Groundwater Basin were relevant, as a legal matter, an EIR may not conclude a cumulative impact is insignificant merely because the project's individual contribution to an unacceptable existing condition is relatively small. (*LAUSD, supra*, 58 Cal.App.4th at 1025-1026; *CBE v. CRA, supra*, 103 Cal.App.4th at 117-118, 121; *Cleveland National Forest Foundation v. San Diego Association of Governments* (2017) 3 Cal.5th 497, 515.) In *Kings County, supra*, 221 Cal.App.3d at 720, the court specifically rejected the agency's "ratio" theory, under which the agency held impacts not to be a considerable contribution merely because they were a relatively small percent of the total impact. The relevant question is "whether any additional amount" of incremental impact "should be considered significant in light of the serious nature" of the problem. (*Id.* at 718.)

Furthermore, as a factual matter, if the MCWD or the Project's own pumping were to be meaningfully compared to a groundwater pumping statistic, the relevant statistic would be the magnitude of the *overdraft*, not the magnitude of *total pumping*. It is the marginal pumping in excess of sustainable yield that causes lowered groundwater levels and seawater intrusion. Thus, the MCWRA-commissioned studies (e.g., *State of the Salinas Valley Groundwater Basin, Protective Elevations to Control Seawater Intrusion in the Salinas Valley; Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin*) recommend pumping reductions in the Pressure Subarea in order to halt overdraft and to restore the protective groundwater levels needed to mitigate seawater intrusion.

As discussed above, the Campus Town EIR is required to disclose the environmental setting, the cumulative context and the Project's impact to the Deep Aquifers because this information was not disclosed in the 1997 Base Reuse Plan EIR. So too must the

Campus Town EIR disclose and discuss the cumulative context and the Project's impact to the upper aquifers because this information was not adequately disclosed in the 1997 Base Reuse Plan EIR. The EIR claims that its analysis does not tier from a previous EIR (FEIR, p. 3-187), so it is obliged to provide this information. However, even if the EIR did purport to tier from or rely on the Base Reuse Plan EIR, CEQA § 21083.8.1(c)(A) requires further environmental review for a base reuse project when any of the events specified in CEQA § 21166 have occurred. The CEQA § 21166 triggers for additional review include substantial changes to the project or to the circumstances under which the project is being undertaken, or new information becomes available that was not known and could not have been known at the time the original EIR was certified. Consider the following:

- The Army EIS and the BRP EIR were based on the assumption that existing pumping from the 180-foot and 400-foot aquifers could continue temporarily, but not if that pumping aggravated seawater intrusion, and only until MCWRA provided the expected replacement water supply to support reuse of Fort Ord. Because the replacement water supply project has not been implemented decades later, and because existing and proposed groundwater pumping for Fort Ord aggravates seawater intrusion, there has been a change in circumstances, a change in the Base Reuse Plan, and new information that warrant an SEIR.
- The agencies have not implemented the Base Reuse Plan policies to mitigate seawater intrusion. This, too, is a change in the project, new information, and changed circumstance that warrant subsequent environmental review.
- Overdraft and seawater intrusion into the 180-foot and 400-foot aquifers have continued due to cumulative groundwater pumping in excess of sustainable yield, especially in coastal areas such as Fort Ord. This, too, is a change in circumstance and new information that warrant an SEIR.
- The long-term availability of a water supply for Fort Ord development and the Fort Ord Housing Element can no longer be assured because seawater intrusion has advanced toward the MCWD's remaining wells in the 400-Foot Aquifer. This, too, is a change in circumstance and new information that warrant an SEIR.

In sum, the EIR fails to comply with CEQA because it fails to disclose and misrepresents critical setting and cumulative impact information and fails to make a coherent significance determination regarding impacts to the upper aquifers. Because its analysis of impacts to the upper aquifers is flawed, the EIR also fails to provide substantial evidence in support of the proposed CEQA significance findings. The EIR must be revised and recirculated to provide timely and accurate project-specific and cumulative analysis of impacts to the upper aquifers as required by CEQA. (Guidelines, § 15088.5(a).) Without that information, the public is denied a meaningful opportunity to comment and to receive responses in a final EIR, and the EIR itself fails to disclose significant impacts and substantially more severe cumulative impacts.

V. The EIR's reliance on the groundwater sustainability planning process and the MCWRA Long-Term Management Plan to support a determination that groundwater impacts are less than significant is misplaced.

The EIR identifies as a threshold of significance whether the Project would “conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.” (DEIR, p. 4.9-16.) The threshold is inapplicable here because there *are* no adopted or effective plans in place to halt seawater intrusion with which the Project *could* conflict.

The DEIR states that the Salinas Valley Groundwater Sustainability Agency (SVBGSA) and MCWD *plan* to develop a Sustainable Groundwater Management Plan that would be expected to meet the statutory mandate under the Sustainable Groundwater Management Act to attain sustainability by 2040. (DEIR, pp. 4.9-11, 4.9-26 to 4.9-27, 4.16-11.) The DEIR claims that these *future* groundwater sustainability plans for the Monterey Subbasin will combine with the “*future* plans” that may be developed consistent with MCWRA’s Long-Term Management Plan for the Salinas River Valley to ensure a less than significant impact:

These groundwater sustainability plans will work to manage the Monterey Subbasin in combination with MCWRA’s Long-Term Management Plan for the Salinas River Valley which is incorporated by reference (MCWRA 2019). [footnoted citation omitted] This long-term management plan sets forth strategies, both currently employed and future plans, that are designed to manage the Salinas River and its interaction with groundwater resources within the Salinas Valley. Together, the activities of the MCWRA with those of the SVGSA and the District, implementing groundwater sustainability plans, will curtail future seawater intrusion and ensure sustainable management of the Salinas Valley groundwater supplies, and ensure the reliability of the 6,600 AFY. The MCWD wells are not in imminent threat of seawater intrusion, and the actions employed and planned by the MCWRA, the SVGSA, and District will ensure that these wells are able to provide water to serve Fort Ord in perpetuity.

Because the potable water demands of the Proposed Project would be offset by the City, the Proposed Project would not interfere with sustainable groundwater management planning efforts. Impacts related to sustainable groundwater management would be less than significant with mitigation.

(DEIR, p. 4.9-27; *see also* 4.16-20.) The proposed CEQA findings cite “MCWRA’s Long-Term Management Plan and the groundwater sustainability planning process which are designed to ensure the reliability of the 6,600 AFY” as an “independent basis for upholding the EIR’s conclusion that Impact HWQ-5 and UTIL-1 would be mitigated to less than significant with mitigation.” (Council Packet, pp. 177-178.)

As a preliminary matter, the DEIR's claim that "the potable water demands of the Proposed Project would be offset by the City" is not accurate (DEIR, p. 4.9-27), because the City does not propose to offset the *first* 181 AFY of water used by the Project. But a more fundamental problem is that the EIR and proposed findings rely on the expectation of future, as yet-to-be-adopted plans for possible future projects to mitigate the seawater intrusion effects of the Project's groundwater pumping. CEQA does not permit this.

CEQA permits an agency to make the determination that a project's contribution to a significant cumulative impact "is less than cumulatively considerable *if* the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable." (Guidelines, § 15130(a)(3), emphasis added.) CEQA also permits an agency to rely on a programmatic plan document for an adopted plan, but only *if* the impacts from the project under review have already been addressed by that plan and an EIR has been certified for that plan:

Previously approved land use documents, including, but not limited to, general plans, specific plans, regional transportation plans, plans for the reduction of greenhouse gas emissions, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impacts analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or areawide cumulative impacts of the proposed project have already been adequately addressed, as defined in section 15152(f), in a certified EIR for that plan.

(Guidelines, § 15130(d).) Reliance on impact fee programs and programmatic plans as the basis to determine that cumulative impacts are less than significant requires something more than the existence of a planning *process*.

Where an agency purports to rely on an impact fee program, as for example, the MCWRA assessments for its past groundwater management projects, the impact fees must include a fair share of all the improvements necessary to mitigate the cumulative impact because "payment of fees must be tied to a functioning mitigation program." (*California Native Plant Society v. City of Santa Cruz* ("CNPS") 170 Cal.App.4th 957, 1055-1056.) CNPS cites *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1188, which holds that an impact fee was not adequate mitigation because it did not include a share of the second phase of the improvements needed to mitigate cumulative impacts. "*Anderson* did not hold that any impact fee program is

necessarily or presumptively ‘full’ mitigation.” (CNPS at 1055.) Mitigation must be “fully enforceable.” (Guidelines, §15126.4(a)(2).) Thus, an agency’s mere *intent* to make necessary improvements, without a “definite commitment,” is insufficient. (*Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1122; *Anderson, supra*, 130 Cal.App.4th at 1188-1189 [stated plan to update impact fee to include needed project was insufficient].) Here, MCWRA admits that additional future water projects are needed to mitigate cumulative seawater impacts. However, there is no enforceable commitment to construct or fund these necessary projects.

Furthermore, to rely on future impact fee programs, an agency must have demonstrated the efficacy of those mitigation programs through CEQA review:

For an in-lieu fee system to satisfy the duty to mitigate, either that system must be evaluated by CEQA (two tier approval for later, more specific, projects) or the in-lieu fees or other mitigation must be evaluated on a project-specific basis.

(*CNPS, supra*, 170 Cal.App.4th at 1055; *see also California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 199; *Center for Sierra Nevada Conservation v. County of El Dorado* (2012) 202 Cal.App.4th 1156, 1176.) Where an EIR’s significance conclusion relies on future groundwater mitigation projects, it must discuss those projects and show them to be feasible; failure is “fatal to a meaningful evaluation by the city council and the public.” (*Kings County, supra*, 221 Cal.App.3d at 728.) Here, as discussed below, despite comments seeking this information, the EIR fails to demonstrate that groundwater management projects necessary to halt seawater intrusion have been committed, funded, and environmentally reviewed.

The EIR’s references to *future* SGMA plans that have not been adopted, and which will not be reviewed under CEQA, fails to meet the requirements of Guidelines, § 15130(d), which permits reliance on a plan only if it has been adopted and a CEQA review has been certified for it.

The EIR’s reliance on MCWRA’s Long-Term Management Plan for the Salinas River Valley (“LTMP”) also fails to meet the requirements for reliance on a plan document to conclude that a project’s cumulative impacts have been adequately addressed. The LTMP is a plan for the study and analysis tasks needed in order to *develop* future projects and management actions to meet various objectives, including habitat management and water resources management. It is not a commitment to any particular project to address seawater intrusion; the LTMP acknowledges that there is no identified funding source and that there is no agreement even as to the agency that would be responsible to coordinate its implementation; and the LTMP has not been reviewed in a certified CEQA document.

The LTMP makes it clear that MCWRA has no mandate to implement or resources to implement the plan:

Participants discussed that while the Monterey County Water Resources Agency (MCWRA) does currently have extensive authorities under the Agency Act, *its current funding is limited and targeted at a narrower set of responsibilities.*

(LTMP, p. 5-1, emphasis added.) The LTMP then provides a discussion of how the plan *might* be implemented, but that discussion is at best vague and tentative, representing no actual commitment by any particular agency to implement the plan:

This chapter provides a discussion of how the Salinas River Long-Term Management Plan (LTMP) *could* be implemented. Throughout development of the LTMP, stakeholders emphasized that *successful implementation of the LTMP would depend on multiple agencies, organizations, and other stakeholders coming together* to manage the resources of the Salinas River. Because *no entity has been identified to coordinate such collaboration*, many stakeholders advocate the formation of a regional entity—*possibly* a special district, joint powers authority, state conservancy, nonprofit organization, or a coalition—that could not only manage the LTMP, but also support other planning efforts in the region. This entity would also serve as a conduit for funding and hold responsibilities for coordinating and/or executing LTMP actions, tracking progress of LTMP implementation, reviewing and revising the LTMP through adaptive management, and retaining and managing all data associated with implementation

(*Id.*, emphasis added.) The LTMP then goes on to discuss the “*potential* responsibilities of an implementing entity,” making it clear that there is neither a committed set of actions nor a responsible agency. (*Id.*, emphasis added.) The LTMP admits that there is simply no agreement on how to proceed:

There was no firm agreement on the appropriate structure of a long-term administrative approach to LTMP implementation, but many stakeholders agreed that the approach could—and likely would—evolve over time. The success of a single entity leading LTMP implementation would depend on the entity’s ability to add value to existing organizations. Stakeholders also advocated strongly for the entity to be established only after a clear purpose and need are defined. Once established, this entity could—in addition to the responsibilities listed previously—work to prioritize, schedule, advocate, facilitate, and monitor the implementation of the LTMP and other river management activities

(*Id.*, p. 5-2.)

In sum, the FEIR fails to respond substantively to LandWatch's request that the EIR identify committed, funded, and environmentally reviewed projects that will halt seawater intrusion. However, it is evident that neither MCWRA nor any other agency has adopted such projects.

Consider the following.

SGMA plans not adopted: In comments on the DEIR, LandWatch objected that no Sustainable Groundwater Management Plan had actually been adopted and asked that the EIR identify the management actions or projects to which SVGBGSA or MCWD had committed. (FEIR, p. 3-158, Comment 10.24.) The FEIR claims that "the SGMA requirements and actions relevant to the Proposed Project are discussed in Sections 4.9 and 4.16 of the Draft EIR." (FEIR, p. 3-183.) *The FEIR's response simply evades the fact that there is no adopted SGMA plan yet.*

LTMP is a plan for planning that makes no project commitments, has not been reviewed under CEQA, and lacks funding: In comments on the DEIR, LandWatch pointed out that MCWRA's LTMP contains *proposed* management actions with no firm agreements on implementation or adequate funding. (FEIR, p. 3-158 Comment 10.23.) LandWatch asked that the FEIR identify those management actions listed in Table 4-1 of the LTMP that have actually been approved, funded and environmentally reviewed under CEQA. In response, the FEIR referred LandWatch back to the LTMP document and to section 5.3 of the Water Supply Assessment in DEIR Appendix M. (FEIR, p. 3-183.) This inadequate comment response violates CEQA. (Guidelines, § 15088.)

Review of the LTMP reveals that it is not a commitment to any actual groundwater management projects by any identified agency. The stated goals of the LTMP are to *identify* solutions for management of the Salinas River, to *investigate* the Salinas Lagoon flooding and habitat issues, to *develop* the framework for implementing the plan and forthcoming groundwater sustainability plans, to *build on* public/private partnerships, to *document* historical conditions, and to *describe* existing conditions. (LTMP, pp. ES-1 and ES-2.) The LTMP is not a commitment to actually implement specific groundwater management projects or actions that will demonstrably halt seawater intrusion.

For example, in its Table 4-1, the LTMP lists all of its Management Objectives and Actions, sorted into various categories, including General, Lagoon Management, Stream Maintenance, Water Resources Management, Ecosystem Health and Habitat Connectivity, South Central Coast Steelhead, Tidewater Goby, California Red-Legged Frog, California Tiger Salamander, Least Bell's Viero, Wesern Snowy Plover, San Joaquin Kit Fox, Monterey Spineflower, and Sand Gilia. It provides subheadings for each category for "Research and Analysis," Planning Tasks, and "Projects or Activities." Under the categories for Stream Maintenance and Water Resources Management, the

document lists some research and analysis and planning tasks, *but for the subcategory “Projects or Activities” it states “none identified.”* (LTMP, pp. 4-12 to 4-16.)

The LTMP Table 4-1 Water Resources section calls for some *planning* tasks in support of operating the Salinas River and its reservoirs to balance environmental and economic needs and to meet fish regulatory requirements and water rights. (*Id.*, p. 4-15.) The section sets out the objective “to achieve sustainable groundwater management as defined by SGMA,” which the LTMP proposes to support with further *planning* tasks to provide data and information to ensure financial equity and HCP [Habitat Conservation Plan] compatibility. As is evident from these Management Objectives and Actions, the primary focus of the Long-Term Management Plan for the Salinas River Valley itself to organize further planning efforts, largely in support of ecosystems and species protections and of other agencies’ eventual SGMA plans. The document states that these “[m]anagement actions implemented in support of the LTMP will be *subject to*” regulatory requirements intended to address seawater intrusion, such as the SGMA regulations. (LTMP, p. 4-29, emphasis added.) However, MCWRA is not the agency responsible to *implement* SGMA, and the LTMP does not purport to be a blueprint for, much less a commitment to, SGMA projects and management actions.

Chapter 2 of the LTMP, captioned “*Background*,” discusses Water Resources Management in order “to provide context for the Salinas River Long-Term Management Plan.” (LTMP, p. 2-1.) Chapter 2 outlines *past* MCWRA projects including the Salinas River reservoirs, the Salinas Valley Water Project, and the Castroville Seawater Intrusion Project, i.e., the projects that MCWRA no longer believes to be sufficient to halt seawater intrusion. The document also discusses the proposed Interlake Tunnel project which has been “under consideration since the late 1970’s” and for which the urgency has been recently “revitalized.” (*Id.*, p. 2-19.) The document states that the Interlake Tunnel project is still in the feasibility stage, and that in 2016 it was thought it “could be completed by the end of 2021,” “depending on several factors,” including “pre-construction tasks, including environmental review, permit applications, geotechnical and final design, right-of-way acquisition, and financing arrangements.” As is evident from the LTMP and is discussed in more detail below, the Interlake Tunnel has not been committed, funded, or environmentally reviewed by MCWRA.

Chapter 2 of the Long-Term Management Plan for the Salinas River Valley also discusses projects being considered by *other* agencies that MCWRA. These include the to-be-developed Groundwater Sustainability Plans under SGMA; the WaterSMART Basin Study, a climate change *study*, not a project; and the Greater Monterey County Integrated Regional Water Management Plan, a plan adopted by a group of local agencies with “no special legal or regulatory power” (*id.*, p. 2-27) to *recommend* projects for funding.

In sum, while it provides a discussion of past groundwater management projects and identifies some plans for uncommitted, and unfunded future projects, nothing in the Long-Term Management Plan for the Salinas River Valley identifies additional projects that have been funded and committed and for which there are environmental reviews that support a determination that future projects will halt seawater intrusion.

The Project's Water Supply Assessment does not identify committed, funded, environmentally reviewed projects that will halt seawater intrusion: Responding to LandWatch's request for the committed projects to address seawater intrusion, the FEIR also references section 5.3 of the Water Supply Assessment in DEIR Appendix M. (FEIR, p. 3-183) as a "detailed discussion of the ongoing water supply projects." Section 5.3 of the WSA references the existence of plans for "recycled wastewater and seawater desalination." However, there is no funded or committed desalination project, and there is no plan to *substitute* desalinated water for the 6,600 AFY of groundwater or for the Project's 181 AFY of groundwater. Similarly, the MCWD plans for use of recycle water are not to replace the 6,600 AFY of groundwater but to supplement it. The only project mentioned in Section 5.3 of the WSA intended to halt seawater intrusion is the Salinas Valley Water project:

"[t]he Salinas Valley Water Project has reduced groundwater pumping in the 180/400 Foot Aquifer Subbasin. Therefore, MCWD's groundwater supply is fully available in annual average, single dry year and multiple dry years." (MCWD 2015 UWMP § 5.1, at p. 72.)

(DEIR, App. M, p. 29.) However, as explained by Parker, MCWRA no longer believes that the Salinas Valley Water Project, even in combination with prior projects, is sufficient to halt seawater intrusion. Furthermore, the FEIR declined to respond substantively to LandWatch's request for an explanation of the DEIR's claim that the Salinas Valley Water Project has reduced pumping. (FEIR, pp. 3-177 to 3-178.) Instead of providing the requested information, the FEIR argued that the studies indicating that the Salinas Valley Water Project is not adequate to halt seawater intrusion are "referencing a different subbasin" and that they pertain to the 180/400-Foot Aquifer Subbasin, which is "not within the Monterey Subbasin (the subbasin that is utilized by MCWD, the water provide for this Project.)" (FEIR, pp. 3-178, 3-177.) However, the FEIR then declines to explain the DEIR's claim that the Salinas Valley Water Project has reduced pumping in the Monterey Subbasin or to discuss the hydrologic connectivity of the Monterey Subbasin and the 180/400-Foot Aquifer Subbasin, making the red herring argument that "basin-wide hydrologic modeling is beyond the required scope of CEQA analysis for the Proposed Project." (FEIR, p. 3-177 to 3-178.) But LandWatch did not ask for de novo basin-wide hydrologic modeling; it asked for evidence that, contrary to available studies, the existing or committed, funded, and environmentally reviewed groundwater management projects are sufficient to halt seawater intrusion.

MCWRA's proposed groundwater management projects are neither funded nor environmentally reviewed: The FEIR references a proposed groundwater management project called the Salinas Valley Water Project Phase II.¹⁶ (FEIR, p. 3-178.) The purpose of the project is to provide the coastal water supply that MCWRA has determined is necessary to establish protective groundwater elevations to prevent seawater intrusion.¹⁷ However, the project is not committed, funded, or environmentally reviewed. It is in fact stalled with no prospect of funding. The County issued a Notice of Preparation for an EIR for the Phase II project on June 25, 2014.¹⁸ On February 29, 2016, a presentation to the MCWRA Board of Directors indicated that there had been “no resources to move forward” on the SVWP Phase II project since June 2014 presentation at which the Supervisors decided to issue the Notice of Preparation, and that that the County Board of Supervisors had instead moved the Interlake Tunnel project to the highest priority.¹⁹ The presentation indicated that the State Water Resources Control Board had not yet even agreed to extend the Water Right #11043, which would be necessary for the SVWP Phase II project.

The MCWRA had proposed the Interlake Tunnel project in order to connect the San Antonio and Nacimiento reservoirs to increase available storage.²⁰ As of July 2018, no

¹⁶ The FEIR's URL at <https://www.co.monterey.ca.us/government/government-links/water-resources-agency/projects-facilities/salinas-valleywater-%20project-phase-ii#wra> is inactive. There is an active link to a status report at <https://www.co.monterey.ca.us/government/government-links/water-resources-agency/projects-facilities/salinas-valley-water-project-phase-ii>. The Water Right # 11043 is available at <https://www.co.monterey.ca.us/home/showdocument?id=19020>.

¹⁷ See MCWRA website, Salinas Valley Water Project Phase II, available at <https://www.co.monterey.ca.us/government/government-links/water-resources-agency/projects-facilities/salinas-valley-water-project-phase-ii>; *see also* the referenced Technical memorandum at that web-site, Geoscience, Protective Elevations to Control Seawater Intrusion in the Salinas Valley, Nov. 19, 2013, pp. 1, 11, available at <https://www.co.monterey.ca.us/home/showdocument?id=19014>.

¹⁸ MCWRA, Notice of Preparation, Salinas Valley Water Project, Phase II, June 25, 2014, available at <https://www.co.monterey.ca.us/home/showdocument?id=24254>.

¹⁹ Presentation to MCWRA Board of Supervisors, February 29, 2016, p. 3.

²⁰ See MCWRA web page for the Interlake Tunnel at <https://www.co.monterey.ca.us/government/government-links/water-resources-agency/projects-facilities/interlake-tunnel>.

environmental review had been completed and funding had not been obtained.²¹ Hydrological review to demonstrate benefits, environmental review, and funding have had to take a back burner to a more urgent problem. Since 2018, the County has had to focus its efforts instead on trying to determine how to raise an estimated \$145 million to implement needed remedial repairs to the San Antonio and Nacimiento dams through a Proposition 218 process.²² That funding would *not* include the estimated \$143.9 million required to construct the Interlake Tunnel project.²³

In sum, the EIR fails to comply with CEQA's requirements for reliance on impact fee mitigation programs and for making a determination of significance on the basis of an adopted plan. The EIR also fails to provide substantial evidence in support of the proposed CEQA significance findings. The EIR fails to respond adequately to LandWatch's comments seeking information relevant to the EIR's claims. If the City intends to rely on the claim that groundwater projects funded by impact fees, SGMA plans, or other plans support a determination that groundwater impacts are less than significant, the EIR must be revised and recirculated provide relevant information that demonstrates that the City is in fact entitled to this reliance. (Guidelines, § 15088.5(a).) Without that information, the public is denied a meaningful opportunity to comment and to receive responses in a final EIR, and the EIR itself fails to disclose significant impacts and substantially more severe cumulative impacts.

VI. The City should adopt mitigation that prevents the Project from increasing groundwater pumping in the Seaside Subbasin.

LandWatch has previously proposed a revision of Mitigation Measure UTIL-1 to the City Manager. In effect, the revision would treat the *first* 181 AFY of Project water the same way that that the City proposes to treat the Project's *final* 260 AFY of water demand. The revision also ensures that water offsets would be hydrologically relevant, additive, permanent, limited, and verified. It is clear that the revised mitigation is feasible because

²¹ MCWRA presentation, Interlake Tunnel and Spillway Modification, Project Status Report, July 6, 2018, available at <https://www.co.monterey.ca.us/home/showdocument?id=67222> [projecting completion of environmental review in 2019 and a Proposition 218 funding election in April 2019, neither of which has occurred].

²² Monterey Herald, Dam repair funding options considered, Feb. 25, 2020, available at <https://www.montereyherald.com/2020/02/25/dam-repair-funding-options-considered/>; see also Brent Buche, MCWRA, e-mail to John Farrow, Feb. 13, 2020.

²³ Monterey Herald, Reservoir bond measure gets water agency support, Oct. 23, 2019, available at <https://www.montereyherald.com/2019/10/23/reservoirs-bond-measure-gets-water-agency-support/>

the City has already obtained permission for the Bayonet and Blackhorse Golf Courses water swap. The City should adopt the following feasible mitigation to avoid and minimize impacts to the Deep Aquifers and the upper aquifers of the Pressure Subarea:

UTIL-1 Water Supply Programs

To ensure that the Proposed Project does not result in any increase in groundwater pumping in the Monterey Subbasin, the 180/400 Foot Aquifer Subbasin, or the Deep Aquifer of the Salinas Valley Groundwater Basin, the City shall secure the additional potable water supplies needed for the Proposed Project. To do so, the City shall implement programs to supply a minimum of 441.6 AFY of potable water. Programs to achieve this include

- Obtaining desalinated water from the MCWD facility, if operation of that facility is resumed.
- Obtaining water from an expansion of the Monterey 1 Water potable water supply facility, if that expansion is adopted.
- Obtaining other new potable water supplies from other sources that do not increase groundwater pumping in the Monterey Subbasin, the 180/400 Foot Aquifer Subbasin, or the Deep Aquifer. For example, a potable water supply for the Proposed Project might be made available from the Bayonet and Blackhorse Golf Courses if, and to the extent that, those uses are permitted to replace their existing potable groundwater pumping with recycled water and then to supply the Proposed Project with an amount equal to the discontinued groundwater pumping.
- Implementing water offset programs such as the following, provided that these offsets or other offsets are found by the Seaside City Council to be Hydrologically Relevant, Additive, Permanent, Limited, and Verified as defined below. Possible examples of water offset programs might include:
 - Seaside Highlands and Soper Field recycled water substitution program to offset 53.1 AFY of potable water use. The Seaside Highlands development was constructed with recycled water mains to supply the landscape irrigation systems. This system is currently fed with potable water, but recycled water will be available within the next few years. Providing recycled water for irrigation of that project would make up to 43.1 AFY of potable supply available for reallocation from Seaside Highlands. An additional 10 AFY may be made available by converting the City's Soper Field sports complex (adjacent to Seaside Highlands) to recycled water.
 - Main-Gate offset program, which would require the previously approved Main-Gate project to utilize 42.99 AFY of recycled water in lieu of previously allocated potable water supply.

- The City may also require dual-plumbing of buildings to use recycled water for sanitary fixture flushing (toilets and urinals), which will offset potable water demand with recycled water.

A water offset program may create a water offset by supplying a specific amount of an alternative source of supply that is not pumped from the Monterey Subbasin, the 180/400 Foot Aquifer Subbasin, or the Deep Aquifer of the Salinas Valley Groundwater Basin (the “Offset Supply”) to a water user (the “Existing User”) who is currently supplied, or entitled to be supplied in project approvals, with a specific amount of potable groundwater pumped from the Monterey Subbasin, the 180/400 Foot Aquifer Subbasin, or the Deep Aquifer of the Salinas Valley Groundwater Basin (“Previously Committed Local Groundwater Supply”).

The Proposed Project may be credited with a water offset (“Offset Supply Credit”) and allowed to use a Previously Committed Local Groundwater Supply only in the amount of the Hydrologically Relevant, Additive, Permanent, Limited, and Verified reduction in groundwater pumping as those terms are defined below.

HYDROLOGICALLY RELEVANT AMOUNT: An Offset Supply Credit shall be deemed Hydrologically Relevant only, and only to the extent that, it reduces the amount of an existing or entitled use of a Previously Committed Local Groundwater Supply, i.e., a supply from the Monterey Subbasin, the 180/400 Foot Aquifer Subbasin, or the Deep Aquifer of the Salinas Valley Groundwater Basin. An entitled use amount is the amount assumed in the environmental review of an Existing User’s project.

ADDITIVE AMOUNT: The amount of an Offset Supply Credit shall be deemed Additive only if, and only to the extent that, the Existing User’s project (1) is currently entitled to use the Previously Committed Local Groundwater Supply for an indefinite term, or (2) has been granted a sub-allocation of the Fort Ord Reuse Authority allocation to a local land use agency.

For any Existing User’s project that is not fully occupied, the amount of credit for an Offset Supply shall be limited to the lesser of (1) the amount assumed in the environmental review of the Existing User’s project or (2) the sub-allocation for the Existing User’s project from the Fort Ord Reuse Authority allocation to a local land use agency. For any Existing User’s project that is fully occupied, or has been fully occupied, and that has commenced the use of a Previously Committed Local Groundwater Supply, the amount of a water offset shall be limited to the lesser of (1) the amount assumed in the environmental review of the Existing User’s project or (2) the sub-allocation for the Existing User’s project from the Fort Ord Reuse Authority allocation to a local land use agency, or (3) actual average use by the Existing User’s project for the prior ten years.

PERMANENT AMOUNT: The amount of an Offset Supply Credit shall be deemed Permanent only if, and only to the extent that, the Existing User contractually commits to the City not to use the Previously Committed Local Groundwater Supply for an indefinite period.

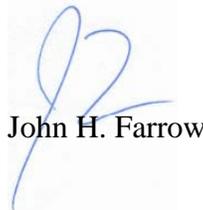
LIMITED AMOUNT: The amount of an Offset Supply Credit shall be limited to an amount equal to at most the Hydrologically Relevant, Additive, and Permanent reduction in groundwater pumping (the “Limited Amount”). The limitation shall be enforceable through a condition on the final map.

VERIFIED AMOUNT: The amount of an Offset Supply Credit shall be deemed Verified only if, and only to the extent that, the City Council finds, based on substantial evidence after noticed public hearing, that the Offset Supply Credit is based on a Hydrologically Relevant, Additive, and Permanent reduction in groundwater pumping that shall be enforceable as a Limited Amount through a condition on the final map.

Again, LandWatch very much wants to support the Campus Town project and will do so actively if the Council commits not to use Monterey Subbasin groundwater for the Project.

Yours sincerely,

M. R. WOLFE & ASSOCIATES, P.C.



John H. Farrow

JHF:hs

Cc: Michael DeLapa

Attachment 1: Timothy K. Parker, Technical Memorandum to John H. Farrow, March 4, 2020.

Reference documents without URLs submitted to City Clerk in electronic format:

1. Agreement No. A-06404 between U.S.A. and MCWRA, Sept 21, 1993
2. Memorandum of Agreement between U.S. Army and FOR A, June 20, 2000
3. U.S. Army, Other Physical Attributes Baseline Study of Ford Ord, 1992, excerpts
4. U.S. Army, Final EIS, Fort Ord Disposal and Reuse, June 1993
5. U.S. Army, Final SEIS, Fort Ord Disposal and Reuse, June 1996
6. U. S. Army, Fort Ord, California Dispose and Reuse EIS Record of Decision, Dec. 23, 1993

7. U.S. Army, Fort Ord, California Dispose and Reuse Final SEIS Record of Decision, June 18, 1997
8. MCWRA, Salinas Valley Water Project Draft Master EIR, SCH# 97-121020, Oct. 1998, excerpts
9. MCWRA and USACE, Salinas Valley Water Project Draft EIR/EIS, SCH# 200034007, June 2001, excerpts
10. City of Seaside, Final SEIR, Monterey Downs, July 2016, excerpts
11. MCWRA, Presentation to MCWRA Board of Supervisors re SVWP Phase II and Permit # 11043, February 29, 2016.
12. MCWRA, Presentation to MCWRA Board of Supervisors re SVWP Phase II, June 2014
13. MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017
14. Brent Buche, MCWRA, e-mail to John Farrow, Feb. 13, 2020
15. Curtis J. Hopkins, letter to MCWD, March 1, 2018
16. WRIME, Deep Aquifer Investigative Study, May 2003
17. MCWD v. County of Monterey (Bill Armstrong et al., Real Parties in Interest), Petition for Writ of Mandate and Complaint for Injunctive Relief, March 5, 2018
18. John Farrow, letter to MCWD, April 10, 2019 (PRA request)
19. MCWD, All Well Production Summaries 2008-2019
20. MCWD, Central Marina Well Production 1993-2007
21. MCWD, Ord Production Summary 1999-2007
22. Timothy K. Parker, Technical Memorandum to John H. Farrow, October 8, 2016
23. Timothy K. Parker, letter to John H. Farrow, February 15, 2018
24. Timothy K. Parker, Technical Memorandum to John H. Farrow, November 14, 2019.
25. Permit Status and Notes, Permit # 19-13245
26. Woodrow and VanHorn e-mails exchange re status of Permit 16-12765. Dec 7 and 10, 2018
27. Well Completion Report for Permit 16-12765, May 15, 2017
28. Application to Construct Well, General Farm, Oct 13, 2017, Permit 17-12916
29. Well Construction Permit 18-12982, June 11, 2018
30. Well Construction Application Review – Permit #18-12983 May 23, 2018
31. Well Construction Application Review – Permit #18-12984, May 23, 2018 [
32. Well Construction Application Review – Permit #18-12988, October 3, 2018
33. Well Construction Application Review – Permit #18-13043, July 31, 2018
34. Well Construction Application Review – Permit #18-13060, September 5, 2018
35. Water Well Construction Permit, Replacement Well Permit No. 18-13073, Oct. 4, 2018

ATTACHMENT 1

Technical Memorandum

March 5, 2020

To: John Farrow
M.R. Wolfe & Associates, P.C
555 Sutter Street, Suite 405
San Francisco, CA 94102

From: Timothy K. Parker, PG, CEG, CHG, Parker Groundwater

Subject: Groundwater impacts from increased pumping to support Campus Town Specific Plan development in the Ord Community

At your request, I have reviewed the draft EIR and final EIR for the City of Seaside's proposed Campus Town Specific Plan (DEIR and FEIR) together with the documents cited below. Seaside is proposing to adopt a specific plan that would require the provision of a 442 acre/feet per year (afy) water supply.

The EIR concludes that there would be no significant impact, and no considerable contribution to a significant cumulative impact, if the first 181 afy were supplied by groundwater pumping from the Monterey Subbasin of the Salinas Valley Groundwater Basin. The EIR only acknowledges a significant impact, and a considerable contribution to a significant cumulative impact, if the remaining 261 afy were pumped from the Monterey Subbasin. (FEIR, p. 4-29.) To mitigate this, the EIR proposes Mitigation Measure UTIL-1, which requires the provision of a water source other than groundwater from the Monterey Subbasin, but only after the first 181 afy has been supplied by groundwater from the Monterey Subbasin. The EIR's conclusion is based on the assumption that there would be no significant impacts from groundwater pumping as long as total pumping for the Ord Community does not exceed the 6,600 afy allocated by the Fort Ord Reuse Authority to the Ord Community jurisdictions. The 181 afy that the EIR assumes can be pumped without significant impact represents the remainder of the City of Seaside's share of that 6,600 afy.

This letter reiterates and updates the conclusions set out in my October 8, 2016 memorandum regarding the proposal to increase groundwater pumping to support the Monterey Downs project in the Fort Ord community, my February 15, 2018 letter regarding the proposal to increase groundwater pumping through annexation of additional areas within Fort Ord into the service area for Marina Coast Water District (MCWD), and my November 14, 2019 memorandum regarding the proposal to increase groundwater pumping to support housing development for the City of Del Rey Oaks. Consistent with my earlier conclusions and as updated in the discussion below, increased pumping to support the Campus Town project in the Ord Community would aggravate existing seawater intrusion and further deplete the Deep Aquifers.

I am a California Professional Geologist (License #5584), Certified Engineering Geologist

(License # EG 1926), and Certified Hydrogeologist (License #HG 12), with over 30 years of geologic and hydrologic professional experience. I served as a member of the Technical Advisory Committee to the Monterey County Water Resources Agency (MCWRA) in connection with its study of the Salinas Valley Groundwater Basin that is mandated by Policy PS 3.1 of the 2010 Monterey County General Plan. The purpose of that study is to evaluate historic data and trends in seawater intrusion and groundwater levels in the Salinas Valley Groundwater Basin, to evaluate the likely future groundwater demand, to determine whether groundwater level declines and seawater intrusion are likely to continue through 2030, and to make recommendations for action. This study has not been concluded, but a preliminary report was released in January 2015 by the prime consultant for the PS-3.1 study.¹ My Resume and Project Experience are attached.

1. The affected subbasins and management subarea

The water system that the Marina Coast Water District (MCWD) uses to supply groundwater for Marina and Fort Ord development relies on an intertidal set of wells in the 400-Foot Aquifer and the Deep Aquifers within what is now termed the Monterey Subbasin.² The California DWR's Bulletin 118, which defines basin and subbasin boundaries, was updated in 2018 to divide the areas previously identified as the Seaside Subbasin into two separate subbasins, the Seaside Subbasin and the Monterey Subbasin.³ The reasons for this revision is that hydrologic studies of the Marina and Seaside areas have shown that the northern portion of the area formerly designated as the Seaside Subbasin and now designated as the Monterey Subbasin is connected to the 180/400 Foot Aquifer

¹ MCWRA, State of the Salinas River Groundwater Basin, January, 2015, available at

https://digitalcommons.csumb.edu/cgi/viewcontent.cgi?article=1020&context=hornbeck_gb_6_a.

² Marina Coast Water District, 2015 Urban Water Management Plan, June 6, 2016 (MCWD, 2015 UWMP), pp. 31-38,75 available at

https://www.mcwd.org/docs/engr_files/MCWD_2015_UWMP_Final.pdf; City of Seaside, Campus Town Specific Plan DEIR, p. 4.9-5, available at <https://www.ci.seaside.ca.us/DocumentCenter/View/9742/Seaside-Campus-Town-Specific-Plan-DEIR-July-2019>.

³ Department of Water Resources, Basin Boundary Description, 3-004.10 Salinas Valley – Monterey, February 5, 2018, available at [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/B118-Basin-Boundary-Descriptions-2016/B118-Basin-Boundary-Description-2016---](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/B118-Basin-Boundary-Descriptions-2016/B118-Basin-Boundary-Description-2016---3_004_10.pdf)

[3_004_10.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/B118-Basin-Boundary-Descriptions-2016/B118-Basin-Boundary-Description-2016---3_004_10.pdf); see also Department of Water Resources, California's Groundwater Bulletin 118 – Interim Update 2016, available at http://www.water.ca.gov/groundwater/bulletin118/docs/Bulletin_118_Interim_Update_2016.pdf.

Subbasin, while the southern portion, which remains designated as the Seaside Subbasin, is separate from the Salinas Valley due to a ridge in the water-bearing formations.⁴

Monterey County Water Resources Agency (MCWRA) designates management subareas in the Salinas Valley Groundwater Basin, the boundaries of which are not identical to the DWR subbasin boundaries. The MCWRA-designated Pressure Subarea includes the DWR-defined 180/400-Foot Aquifer Subbasin and most of the DWR-defined Monterey Subbasin and includes part of the DWR-defined Seaside Subbasin.⁵

MCWRA's 2016 State of the Salinas Valley Groundwater Basin reports basin hydrogeology, aquifer interactions, groundwater level trends and groundwater balance for the aquifers in the management subareas, including the 180-Foot Aquifer, the 400-Foot Aquifer, and the Deep Aquifers in the Pressure Subarea.⁶ Because the 180-Foot Aquifer, the 400-Foot Aquifer, and the Deep Aquifers in the Pressure Subarea underlie both the Monterey Subbasin and the 180/400-Foot Aquifer Subbasin, reported statistics for the Pressure Subarea are relevant to both Subbasins. In some instances, the aggregate data for the Pressure Subarea can be disaggregated as between the Monterey Subbasin and the 180/400-Foot Aquifer Subbasin. For example, the annual volume of seawater intrusion can be allocated between the Monterey Subbasin and the 180/400-Foot Aquifer Subbasin based on the relative length of their coastlines that are subject to seawater intrusion:

The State of the Salinas River Groundwater Basin report estimated that approximately 11,000 acre-feet of seawater flows into the Pressure subarea every year. Previous estimates have ranged between 14,000 and 18,000 acre-feet per year (AF/yr.) of seawater intrusion (Brown and Caldwell, 2016). These seawater inflow estimates include portions of the Monterey Subbasin. The length of coastline subject to seawater intrusion is approximately 75% in the 180/400-Foot Aquifer Subbasin and therefore we estimate the flow into the 180/400-Foot Aquifer Subbasin is approximately 8,250 to 13,500 AF/yr.⁷

⁴ MCWD, 2015 UWMP, p. 34.

⁵ Salinas Valley Groundwater Basin Groundwater Sustainability Agency (SVBGSA), 180/400-Foot Aquifer Subbasin GSP, January 3, 2020, pp. 5-28, 5-30 [Figure 5-23], available at <https://svbgsa.org/wp-content/uploads/2020/01/SVBGSA-Combined-GSP-2020-0123-optimized.pdf>; see also MCWD, 2015 UWMP, pp. 34-36 [proposed modification of DWR subbasins; Pressure Subarea combines DWR subbasins; southwest corner of Pressure Subarea includes Fort Ord]; Curtis J. Hopkins, letter to MCWD, March 1, 2018, pp. 2-5 [background information on Pressure Subarea]; WRIME, Deep Aquifer Investigative Study, May 2003, p. 3-13.

⁶ MCWRA, State of the Salinas Valley Groundwater Basin.

⁷ SVBGSA, 180/400-Foot Aquifer Subbasin GSP, January 3, 2020, p. 5-45.

However, disaggregation of these statistics should not obscure the fact that the 180-Foot Aquifer, the 400-Foot Aquifer, and the Deep Aquifers are common to, and hydrologically contiguous within, the Monterey Subbasin and the 180/400-Foot Aquifer Subbasin. Thus, pumping from these aquifers from wells within the former Fort Ord in the DWR-defined Monterey Subbasin contributes to the decreased groundwater elevations that cause seawater intrusion in the hydrologically interconnected DWR-defined 180/400-Foot Aquifer Subbasin. Even if seawater intrusion in the 400-Foot Aquifer is not advancing as rapidly in the Monterey Subbasin as it is in the 180/400-Foot Aquifer Subbasin, pumping from the Monterey Subbasin contributes to the intrusion in the 180/400-Foot Aquifer Subbasin. And, as discussed below, pumping from the Deep Aquifers underlying the Monterey Subbasin and the 180/400-Foot Aquifer Subbasin lowers groundwater levels, causes seawater intrusion in the upper aquifers, and depletes the Deep Aquifers.

Thus, an analysis of cumulative impacts from groundwater pumping should consider the effects of all sources of groundwater pumping within the interconnected aquifers, not just the effects from those wells that happen to be located in the Monterey Subbasin or the 180/400-Foot Aquifer Subbasin. However, the Campus Town EIR defines the geographic scope of its cumulative impact analysis based on a watershed area that does not include all of the relevant aquifers:

The geographic scope for cumulative hydrology and water quality impacts is the southern portion of the Monterey Bay HU watershed in which the Plan Area is located, which extends from the slopes of the Fort Ord National Monument on the east to the Pacific Ocean on the west. This portion of the watershed encompasses the cities of Marina, Sand City, Seaside, and Monterey. In this portion of the watershed, water generally flows from east to west or southeast to northwest, downhill towards the Monterey Bay. This geographic scope is appropriate for hydrology and water quality because water quality impacts are localized in the watershed where the impact occurs.⁸

A watershed-based geographic scope of analysis is relevant to such impacts as flood flows and drainage, which are separately discussed in the DEIR. However, the southern portion of the Monterey Bay HU watershed is not a meaningful geographic scope to evaluate cumulative impacts from groundwater pumping. The relevant scope of cumulative analysis of groundwater pumping should include the hydrologically interconnected aquifers that are affected by the groundwater pumping to support a project, here the 180-Foot Aquifer, the 400-Foot Aquifer, and the Deep Aquifers underlying the Pressure Subarea. Thus, the DEIR's claim that cumulative impacts to groundwater are "localized in the watershed where the impact occurs" is not accurate. The southern portion of the Monterey Bay HU is both over-inclusive and under-inclusive for the analysis of cumulative groundwater impacts because it includes areas that do not overlie the Pressure Subarea, and it does not include all areas

⁸ DEIR, p. 4.9-27.

that do overlie the Pressure Subarea.⁹ The EIR's restricted scope of geographic analysis is particularly problematic with respect to its discussion of the Deep Aquifers, because the EIR fails to disclose the increased cumulative pumping in the Deep Aquifers that has occurred since the 1997 Fort Ord Reuse Plan EIR, which is now causing significant cumulative impacts.

Note that the geographic scope of the cumulative impact analysis in the Fort Ord Reuse Plan EIR was aquifer-based, not watershed based; it included the "Salinas Valley aquifer" and the "Seaside Valley aquifer."¹⁰ In 2018, MCWD sued the County of Monterey for failure to assess direct and cumulative impacts in a CEQA analysis when issuing a permit for a new well in the Deep Aquifers.¹¹ The geographic scope of analysis recommended by MCWD's hydrologist in connection with that permit was the Deep Aquifer of the Pressure Subarea, not a watershed-based area such as the southern portion of the Monterey HU watershed.¹²

Because the 180-Foot Aquifer, the 400-Foot Aquifer, and the Deep Aquifers represent distinct and largely confined aquifers, they are each subject to distinct impacts from pumping. For example, the aquifers do not suffer the same extent of seawater intrusion. And, for example, whereas the upper aquifers are hydraulically contiguous (open to) Monterey Bay and therefore easily subject to seawater intrusion, the Deep Aquifers are not. And for example, unlike the upper aquifers, the Deep Aquifers have no known source of recharge, other than man-made well perforations that connect these otherwise separated aquifers. Because these aquifers are distinct, and because groundwater pumping affects them differently, the analysis of impacts should consider them separately.

The previously designated "900-Foot Aquifer" or "Deep Aquifer," from which most of the pumping to support Fort Ord development is taken, is now understood to include at least two distinct aquifers:

Taken together, the overall conclusion that can be derived from the collected data and the preliminary analysis is that the deep aquifers from which MCWD extracts its water supply is actually two separate aquifer systems. Existing geologic and water chemistry data suggest that MCWD Well Nos. 10 and 11 produce primarily from the

⁹ Compare Monterey Bay HU map at <https://indicators.ucdavis.edu/cwip/huc/18060015> to Salinas Valley Groundwater Basin Groundwater Sustainability Agency (SVGBGSA), 180/400-Foot Aquifer Subbasin GSP, January 3, 2020, p. 5-30, Figure 5-23 [overlying MCWRA Pressure Subarea and the DWR-defined groundwater subbasins].

¹⁰ Fort Ord Reuse Authority, Fort Ord Reuse Plan EIR, certified June 13, 1977, p. 5-5.

¹¹ MCWD v. County of Monterey (Bill Armstrong et al., Real Parties in Interest), Petition for Writ of Mandate and Complaint for Injunctive Relief, March 5, 2018.

¹² Curtis J. Hopkins, letter to MCWD, March 1, 2018.

Paso Robles Formation, whereas MCWD Well No. 12 produces from the Purisima Formation.¹³

Accordingly the deeper aquifer system underlying the upper aquifers (the 180-Foot and 400-Foot aquifers) is now sometimes referred to as the Deep Aquifers.¹⁴

Note that the 1997 Fort Ord Reuse Plan EIR did not provide an analysis of impacts to the Deep Aquifers, which had not previously been used to supply water to Fort Ord.¹⁵ The Fort Ord Reuse Plan EIR stated

In the Salinas Valley groundwater basin, recent-pumpage in former Fort Ord exceeded safe yield in the 180-foot and 400-foot aquifers, as indicated by seawater intrusion and water levels below sea level. Conditions in the 900-foot aquifer are uncertain, although seawater has not intruded into any of the Marina wells there.¹⁶

As discussed below, new information and analysis since 1997 indicates that the cumulative pumping from the Deep Aquifers, including new pumping to support the Ord community, has increased substantially since 1997 and that this increase in pumping is causing aquifer depletion, lowered groundwater levels, seawater intrusion into the Upper Aquifers, and depletion of the Deep Aquifers. Neither the 1997 Fort Ord Reuse Plan EIR nor the Campus Town EIR disclose this.

2. Increased pumping for new development in the Ord community would aggravate seawater intrusion in the upper aquifers and further deplete the Deep Aquifers.

The proposal would permit an increase in Pressure Subarea groundwater pumping of 181 AFY. As noted, MCWD's groundwater pumping to service Fort Ord and Marina comes from its wells in the Deep Aquifer and the 400-Foot Aquifer.¹⁷ Wells 10, 11, 12, and 34 draw from the Deep Aquifers. Wells 29, 30, 31, and "WG" (the Watkins Gate well, aka well 35) draw from the upper aquifers. In 2018, MCWD pumped 2,508 af from the Deep Aquifer wells and

¹³ WRIME, Deep Aquifer Investigative Study, May 2013, p. 2-31; see also WRIME, p. 3-13; MCWD, 2015 UWMP, pp. 35, 37; MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017, pp. 45-46, available at <https://www.co.monterey.ca.us/home/showdocument?id=57394>.

¹⁴ MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017, pp. 45-46.

¹⁵ U.S. Army Corps of Engineers, Other Physical Attributes Baseline Study of Ford Ord, April 1992, p. 1-3.

¹⁶ Fort Ord Reuse Authority, Fort Ord Reuse Plan EIR, certified June 13, 1977, p. 4-63.

¹⁷ MCWD, 2015 UWMP, pp. 9 [Figure 2.2], 45.

895 af from the upper aquifer wells.¹⁸ Thus, about 74% of MCWD pumping comes from the Deep Aquifers and about 26% comes from the upper aquifers.

The impact of groundwater pumping on the aquifers includes cumulative effects from past, present and foreseeable future pumping. MCWRA has documented that Deep Aquifer pumping by all users, including MCWD, was 8,901 afy as of 2016.¹⁹ As discussed below, this pumping directly depletes the Deep Aquifers because there is no known recharge source other than leakage from the upper aquifers. Cumulative pumping from the Pressure Subarea, primarily from the 400-Foot Aquifer and 180-Foot Aquifer, averages 110,000 afy, which results in an ongoing annual overdraft of 2,000 afy.²⁰

Cumulative pumping is projected to increase. For example, MCWD identifies the Salinas Valley Groundwater Basin as its “sole source of water supply;” and it projects that its water demand for Marina and Fort Ord will increase from 4,174 afy in 2015 to 12,197 afy in 2035, consisting of 8,293 afy for the Ord Community and 3,905 afy for the City of Marina.²¹ MCVWD plans to supply the 3,905 afy Marina demand and 6,600 afy of the Ord Community demand from Pressure Subarea groundwater.²² This would increase MCWD’s pumping of the Pressure Subarea from 4,174 afy in 2015 to 10,505 afy in 2035, an increase of 6,331 afy. If MCWD continues to obtain 74% of its groundwater from the Deep Aquifers, MCWD will increase its cumulative pumping from the Deep Aquifers by 4,685 afy (74% of the 6,331 afy increase). As discussed below, despite the 2018 moratorium on new wells in the Deep Aquifers, it is foreseeable that Deep Aquifer pumping by other parties will also substantially increase over 2016 levels because numerous new wells have been completed or permitted in the Deep Aquifers since 2016, some permitted through pre-moratorium permits, and some permitted as “replacement wells,” a permitted exception to the moratorium. Any increase in groundwater pumping for the Campus Town project must be assessed with reference to its contribution to this foreseeable cumulative groundwater pumping from the Deep Aquifers and the 400-Foot Aquifer underlying the Pressure Subarea.

In summary, the conclusions in my October 8, 2016 memorandum, my February 15, 2018 letter, and my November 14, 2019 memorandum regarding proposals to increase

¹⁸ MCWD, 2018 Well Production Summary.

¹⁹ MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017, p. 52.

²⁰ MCWRA, State of the Salinas Valley Groundwater Basin, p. ES-11.

²¹ MCWD, 2015 UWMP, pp. 21-22, 30.

²² Id., pp. 30, 57.

groundwater pumping to support Ord Community development remain valid.²³ First, seawater intrusion into the 180-Foot and 400-Foot aquifers continues in the Pressure Subarea due to overdraft conditions, despite the groundwater management projects that are intended to halt it. Additional pumping of either the 180-Foot Aquifer or the 400-Foot Aquifer will directly induce additional seawater intrusion.

Second, additional pumping of the Deep Aquifers will deplete them and contribute to seawater intrusion of the 180-Foot and 400-Foot aquifers. This is because the Deep Aquifers have no known source of recharge other than induced leakage from the upper aquifers, and that leakage induces seawater intrusion into the upper aquifers. The leakage from the upper aquifers also threatens to degrade water quality and salinate the Deep Aquifers themselves.

Consistent with the conclusions in my earlier letters, the incremental 181 afy water demand for the Campus Town project would contribute considerably to the cumulative seawater intrusion of the upper aquifers and the depletion of the Deep Aquifers. The discussion below summarizes these conclusions and notes additional information that has become available since my previous letters.

a. Additional pumping from the Deep Aquifers would further deplete the Deep Aquifers and induce additional seawater intrusion.

According to MCWD's 2015 Urban Water Management Plan, "[o]ther than MCWD, only a small number of wells tap the deep aquifer . . ."²⁴ MCWD's 2015 UWMP claims that as of 2015 "MCWD is currently the only significant user of the Deep Aquifer . . ."²⁵ However, contrary to MCWD's UWMP, there are in fact other users of the Deep Aquifers and there has been a substantial increase in pumping from the Deep Aquifers as new wells have been installed to replace the seawater intruded wells in the upper aquifers.²⁶ Since 1995, new wells in the Deep Aquifer have been drilled at the rate of more than one per year, and, as of

²³ Timothy K. Parker, Technical Memorandum to John H. Farrow, October 8, 2016; Timothy K. Parker, letter to John H. Farrow, February 15, 2018; Timothy Parker, Technical Memorandum to John H. Farrow, November 14, 2019.

²⁴ MCWD, 2015 UWMP, p. 31.

²⁵ Ibid.

²⁶ MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017, p. 48.

2016, there were more than 40 wells in the Deep Aquifers.²⁷ Deep Aquifer extractions increased from 2,151 afy in 1999 to 8,901 afy in 2016.²⁸

New well drilling into the Deep Aquifers continues. As noted, MCWD brought a lawsuit against the County of Monterey in March 2018 challenging the September 2017 drilling permit for a Deep Aquifer well with the capacity to pump another 4,000 afy.²⁹ And although the County enacted Ordinance # 5302 imposing a moratorium on new wells in the Deep Aquifers in May 2018, that moratorium exempts both municipal supply wells and so-called "replacement wells," i.e., wells drilled to replace the water supply previously obtained from wells in the upper aquifers that have failed due to seawater intrusion.³⁰ The County has received applications for numerous wells in the Deep Aquifers since 2016, and has already approved many of them.³¹ Pumping from the Deep Aquifer wells approved or completed after 2016 was not included in the reported 8,901 afy cumulative pumping from the Deep Aquifers as of 2016. Thus, it is foreseeable that cumulative pumping from the Deep Aquifers by both MCWD and other parties will substantially increase from the reported 2016 level.

The Deep Aquifers are not a sustainable water source. MCWD acknowledges that the Deep Aquifer water "is not of recent origin" and that carbon dating reveals it to be "between

²⁷ Ibid.

²⁸ Id., p. 52.

²⁹ MCWD v. County of Monterey (Bill Armstrong et al., Real Parties in Interest), Petition for Writ of Mandate and Complaint for Injunctive Relief, March 5, 2018, paragraph 2.

³⁰ Monterey County Urgency Ordinance # 5302, available at <https://www.co.monterey.ca.us/government/departments-a-h/health/environmental-health/wells/interim-urgency-ordinance-5302>.

³¹ See, e.g., Permit Status and Notes, Permit # 19-13245 [status of application for new deep aquifer well]; Woodrow and VanHorn e-mails exchange re status of Permit 16-12765. Dec 7 and 10, 2018 [new well in Deep Aquifers sealed on May 15, 2017]; Well Completion Report for Permit 16-12765, May 15, 2017 [drilled to 1,645 feet]; Application to Construct Well, General Farm, Oct 13, 2017 [identified as proposed Permit 17-12916, proposed screens between 900 and 1600 feet]; Well Construction Permit 18-12982, June 11, 2018 [Deep Aquifers replacement well under Ordinance # 5302]; Well Construction Application Review – Permit #18-12983 May 23, 2018 [review of proposed Deep Aquifers well]; Well Construction Application Review – Permit #18-12984, May 23, 2018 [review of proposed Deep Aquifers well]; Well Construction Application Review – Permit #18-12988, October 3, 2018 [review of proposed Deep Aquifers well]; Well Construction Application Review – Permit #18-13043, July 31, 2018 [review of proposed Deep Aquifers well]; Well Construction Application Review – Permit #18-13060, September 5, 2018 [review of proposed Deep Aquifers well]; Water Well Construction Permit, Replacement Well Permit No. 18-13073, Oct. 4, 2018 [Deep Aquifers replacement well].

22,000 and 31,000 years old."³² In fact, the only known source of recharge to the Deep Aquifers is "leakage from the overlying aquifer system, i.e. the Pressure 180-Foot Aquifer and Pressure 400-Foot Aquifer."³³

The leakage from the upper aquifers caused by increased pumping from the Deep Aquifers induces seawater intrusion in the upper aquifers. The MCWD UWMP acknowledges this impact:

Another concern is that the Deep Aquifer may be connected to, and affect seawater intrusion in, the upper aquifers. Preliminary findings regarding the Deep Aquifer in the Ord Community area indicate that there is some vertical connectivity between the Deep Aquifer and the overlying aquifers. According to the Deep Aquifer Investigative Study, WRIME, May 2003, increased pumping of the Deep Aquifer would be expected to increase the rate of seawater intrusion in the middle and upper aquifers, but to a lesser extent than if the increased pumping occurred in the middle or upper aquifers. In that report, WRIME modeled the effect of increasing groundwater pumping from the Deep Aquifer by two to five times the baseline rate of 4,800 afy. The model predicted that, in the absence of other actions to control seawater intrusion, the landward flow of groundwater would increase as a result.³⁴

The 2003 WRIME study cited by MCWD does conclude that increasing the baseline rate of extraction would induce seawater intrusion. However, the UWMP misstates the "baseline rate" identified in the WRIME study as 4,800 afy. In fact, the 2003 WRIME study concluded that annual MCWD production from Deep Aquifer wells had averaged only about 2,000 afy since 1990.³⁵ The WRIME analysis of the effects of increased pumping over baseline conditions assumed that baseline pumping was 2,400 afy, not 4,800 afy.³⁶

Using the Salinas Valley Integrated Groundwater and Surface water Model (SVGISM) modified to reflect the best understanding of the structure of the Deep Aquifers, WRIME evaluated the effects of increased pumping of the Deep Aquifers on the 180-Foot Aquifer, the 400-Foot Aquifer, the upper aquifer of the Deep Aquifers, and the lower aquifer of the Deep Aquifers, which WRIME termed Aquifers 1, 2, 3, and 4.

³² MCWD, 2015 UWMP, p. 37.

³³ MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017, p. 52.

³⁴ MCWD, 2015 UWMP, p. 50.

³⁵ WRIME, Deep Aquifer Investigative Study, May 2013, pp. 2-14 [deep aquifer pumping since 1990 has been relatively constant at 2,000 afy since 1990], 2-15 [Figure 2.9a].

³⁶ Id., pp. 3-60, 4-1; 4-11.

WRIME evaluated the effects of increasing Deep Aquifer pumping from 2,400 afy to 8,000 afy, i.e., the Alternative 2 analysis in which the 2,400 afy baseline pumping from the Deep Aquifers was increased by 1,400 afy from the existing upper deep aquifer wells and by 4,200 afy from the upper deep aquifer at Well 32.³⁷ WRIME concluded that increasing Deep Aquifer pumping from the 2,400 afy baseline to 8,000 afy would reduce groundwater levels at coastal monitoring locations in all four aquifers by 4 to 7 feet and would induce additional seawater intrusion (coastal groundwater flows).³⁸ WRIME found that increasing Deep Aquifer pumping from 2,400 to 8,000 afy would induce additional vertical flows between the aquifers, including an additional flow of 4,152 afy from the 400-Foot Aquifer to the upper Deep Aquifer.³⁹

As noted, the level of Deep Aquifer pumping at 8,901 afy, now exceeds the 8,000 afy level modeled by WRIME.⁴⁰ Thus, the available analysis indicates that the current level of Deep Aquifer pumping is already contributing to seawater intrusion. Any further increase in Deep Aquifer Pumping will further induce seawater intrusion.

Because the Deep Aquifer is not known to be a sustainable aquifer with ongoing natural recharge, the Monterey County Water Resources Agency imposed a moratorium in 2018 on new wells in the Deep Aquifer pending a study to determine whether the Deep Aquifer has any sustainable yield.⁴¹ Although the moratorium exempts municipal supply wells and certain “replacement wells,” such wells have the same effect on aquifer depletion and seawater intrusion as other wells.

In support of its 2018 lawsuit against the County of Monterey for permitting additional pumping from the Deep Aquifers, MCWD submitted a hydrologist’s opinion that the Deep Aquifers are out of balance and in a state of overdraft, that increased pumping will likely significantly impact water supplies and perhaps quality, and that mitigation should be imposed, including a performance standard that limits the pumping of groundwater to sustainable levels.⁴² No agency has yet definitively determined the sustainable level of

³⁷ WRIME, Deep Aquifer Investigative Study, May 2013, p. 4-11, Table 4.1, Baseline Condition and Potential Water Supply Alternatives, Alternative 2.

³⁸ Id., p. 4-11, Tables 4.2 and 4.3.

³⁹Id., Table 4.4 [Alternative 2, change in flow from Aquifer 2 to Aquifer 3].

⁴⁰ MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017, p. 52.

⁴¹ Monterey County Urgency Ordinance # 5302.

⁴² Curtis J. Hopkins, letter to MCWD, March 1, 2018, pp. 6-7.

groundwater pumping from the Deep Aquifers.⁴³ However, the 2003 WRIME study includes a discussion of the “safe yield” and “sustainable yield” of the Deep Aquifers. That discussion concluded that increasing Deep Aquifer pumping from 2,400 to 8,000 afy would induce additional vertical flows between the aquifers and induce seawater intrusion. This by definition is not sustainable. For example, SGMA defines seawater intrusion as an “undesirable result” that must be avoided to attain a sustainable groundwater basin.

In sum, the available evidence indicates that use of the Deep Aquifers amounts to mining an ancient and non-sustainable resource, which will deplete that resource. Furthermore, increased pumping from the Deep Aquifers will also induce additional seawater intrusion in the upper aquifers and will increase the risk that the Deep Aquifers will themselves become saline due to induced vertical leakage from the upper aquifers. Under the circumstances, the Campus Town EIR should disclose that additional pumping from the Deep Aquifers to support new development would make a considerable contribution to the ongoing significant cumulative impacts from Deep Aquifer pumping. In addition, the EIR should propose mitigation, such as foregoing any additional groundwater pumping from the Deep Aquifers or limiting increased groundwater pumping to the amounts that are determined to be within the sustainable yield of the Deep Aquifers, as was proposed by MCWD’s hydrologist.⁴⁴

However, the Campus Town EIR does not disclose the evidence of impacts to the Deep Aquifers. The DEIR repeatedly states:

In 2003, a study modeled seawater intrusion resulting from increasing pumping from the Deep Aquifer by two to five times the baseline rate, and found that “in the absence of other action to control seawater intrusion, the landward flow of groundwater would increase...” (MCWD 2015 UWMP Section 4.2.5, at p. 50). No increases of such a magnitude in pumping from the Deep Aquifer are expected.⁴⁵

The FEIR acknowledges that the referenced 2003 study is the WRIME study.⁴⁶ As discussed above, the WRIME study modeled impacts from increasing the baseline pumping rate from 2,400 afy to 8,000 afy and found that such an increase would reduce groundwater levels at coastal monitoring locations in all four aquifers by 4 to 7 feet and would induce additional

⁴³ Salinas Valley Groundwater Basin Groundwater Sustainability Agency (SVGBGSA), 180/400-Foot Aquifer Subbasin GSP, January 3, 2020, p. 9-19 [MCWRA plans to do study if funding becomes available].

⁴⁴ Curtis J. Hopkins, letter to MCWD, March 1, 2018, p. 7.

⁴⁵ DEIR, pp. 4.9-5, 4.16-20.

⁴⁶ FEIR, p. 3-179.

seawater intrusion (coastal groundwater flows).⁴⁷ It is not true that the increased pumping from the Deep Aquifers of “two to five times the baseline rate” that would cause these impacts is “not expected.” As discussed above, the level of Deep Aquifer pumping by 2016, at 8,901 afy, already exceeds the 8,000 afy level modeled by WRIME, and was already 3.7 times the 2,400 afy baseline rate used in the WRIME analysis.⁴⁸ And as discussed above, the planned increases in MCWD Deep Aquifers pumping and the additional pumping from Deep Aquifers wells permitted or completed after 2016 will substantially increase the 8,901 afy pumping reported in 2016.

In light of the fact that cumulative pumping from the Deep Aquifers is already causing significant cumulative impacts, which will worsen with foreseeable pumping increases, the EIR should disclose that the incremental pumping for the Campus Town project will make a considerable contribution to those cumulative impacts.

b. Additional pumping from the upper aquifers would threaten existing MCWD wells, add to overdraft conditions, and induce additional seawater intrusion.

As noted, about 24% of current MCWD pumping for Marina and Fort Ord comes from the aquifers above the Deep Aquifers. Any additional pumping for new development from these upper aquifers is also problematic.

First, additional pumping to support Fort Ord development may not remain viable. MCWD's continued pumping from the 400-Foot Aquifer on Fort Ord is threatened by the advance of seawater intrusion. MCWD and the Army have frequently had to replace wells in the 180-Foot and 400-Foot aquifers that have become unusably saline since 1960, drilling new wells farther inland or to the Deep Aquifers as the seawater intrusion front advances.⁴⁹ MCWRA's mapping shows that the 500 mg/l Chloride concentration seawater intrusion front in 400-Foot Aquifer has advanced along Reservation Road to within a half mile of MCWD's only remaining upper aquifer wells, wells number 29, 30, 31 and 35.⁵⁰ Significantly, the area of Chloride concentrations between 250 mg/l and the 500 mg/l has also advanced ahead of the front for the for the 500 mg/l concentration.⁵¹ There is no assurance that MCWD's

⁴⁷ WRIME Deep Aquifer Investigative Study, May 2003, p. 4-11, Tables 4.2 and 4.3.

⁴⁸ MCWRA, Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin, Oct. 2017, p. 52.

⁴⁹ MCWD, 2015 UWMP, p. 45.

⁵⁰ Compare MCWD, 2015 UWMP, p. 9, Figure 2.2 [well maps] to MCWRA, Historic Seawater Intrusion Map, Pressure 400-Foot Aquifer, January 28, 2020 [seawater intrusion front], available at <https://www.co.monterey.ca.us/home/showdocument?id=87217>.

⁵¹ Presentation to MCWRA Board of Directors, February 19, 2020, p. 18, available at <https://www.co.monterey.ca.us/home/showdocument?id=87213>.

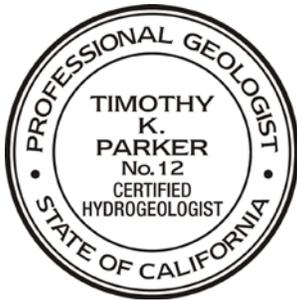
remaining wells in the 400-Foot Aquifer will remain viable to support the Campus Town project in the face of the advance of seawater intrusion.

Furthermore, even if the MCWD wells were not threatened, any additional pumping from those upper aquifer wells will add to the existing overdraft conditions in the Pressure Subarea. MCWRA reports that overdraft in the Pressure Subarea has averaged 2,000 afy from 1944 to 2013.⁵² This cumulative overdraft condition results in groundwater levels below sea level, which in turn cause seawater intrusion. Coastal groundwater levels in the Pressure Subarea 400-Foot Aquifer remain well below sea level.⁵³

Coastal pumping, such as MCWD's pumping for Fort Ord and Marina, induces seawater intrusion more than the same amount of pumping from further inland. Thus, to halt the advance of seawater intrusion, the most recent hydrological studies have recommended that pumping be reduced in the coastal aquifers or that pumping be shifted further away from the coast.⁵⁴

In sum, any additional pumping from MCWD's wells in the upper aquifers will exacerbate the existing overdraft, falling coastal groundwater levels, and seawater intrusion.

Finally, I understand that MCWRA agreed in 1993 that the Army could pump 6,600 afy to support Fort Ord use pending a new 6,600 afy potable water supply for Fort Ord. I understand that this 6,600 afy allocation has been sub-allocated to Fort Ord land use jurisdictions and to individual development projects, but that no new potable water supply for Fort Ord has been implemented. As I explained in my earlier letters, the real-world physical impacts to the aquifers is occurring, and will be aggravated by increased pumping, regardless of the availability of any portion of the 6,600 afy allocation. The right to pump groundwater is a distinct issue from the impacts from that pumping.



⁵² MCWRA, State of the Salinas River Groundwater Basin, 2017, p. ES-11.

⁵³ MCWRA, Presentation to Special Joint Meeting of MCWRA BOD and Monterey County BOS, re 2017 Groundwater Level Contours And Seawater Intrusion Maps, April 24, 2018, p. 20, available at <https://www.co.monterey.ca.us/home/showdocument?id=63777>.

⁵⁴ MCWRA, State of the Salinas River Groundwater Basin, 2017, pg. ES-16; Geoscience, Protective Elevations to Control Seawater Intrusion in the Salinas Valley, Nov. 19, 2013, pp. 1, 11, available at <https://www.co.monterey.ca.us/home/showdocument?id=19014>.

RESUME

Timothy K. Parker, PG, CEG, CHG
Principal

WORK EXPERIENCE

2009 – Present: Parker Groundwater, President/Principal. Sacramento, California. Privately owned business, specializing in strategic groundwater planning, groundwater monitoring, groundwater modeling, groundwater recharge and aquifer storage recovery projects, program implementation, stakeholder facilitation, groundwater monitoring, policy and regulatory analysis, environmental document review and litigation support. Provides strategic planning, policy consulting and groundwater technical expertise to public and private sector clients to develop effective, sustainable solutions to complex problems in the water and evolving environmental and energy industries.

2005 – 2009: Schlumberger Water Services, Principal Hydrogeologist. Sacramento, California. Provided hydrogeologic expertise and project management on groundwater recharge and aquifer storage recovery projects, groundwater monitoring, groundwater resources management, and groundwater contaminant projects for public and private sector clientele. Application of advanced oilfield tools and technologies to groundwater projects. Integration of groundwater quality monitoring and protection on CO2 sequestration projects; liaison to Schlumberger Carbon Services, including planning, scope development, technical implementation, facilitation, and oversight. **Business Development** activities included strategic planning, prospect assessments, sales presentations, targeted workshops, client development and exploitation. Mentored and provided direction to staff; developed, tracked and controlled projects; worked closely with clients and other public and private organizations to implement projects on schedule, on budget with high level of quality.

2001 – 2005: California Department of Water Resources, Division of Planning and Local Assistance, Conjunctive Water Management Branch, Senior Engineering Geologist. Provided local technical and economic assistance to Sacramento and San Joaquin Valley groundwater authorities and water districts planning, developing, and implementing conjunctive water projects, groundwater recharge and aquifer storage recovery projects, and local and regional groundwater monitoring programs. Elements include developing technical scope, implementing work, providing geologic and groundwater technical expertise, attending and speaking at public meetings. **Central District, Groundwater Planning Section,** Sacramento, California (early 2001 prior to joining CWMB). **Senior Engineering Geologist, Groundwater Planning Section.** Elements included: Integrated Storage Investigations Program conjunctive use project technical support, coordination, and project management; technical support

on local groundwater monitoring and subsidence programs; technical support on Bulletin 118; Proposition 13 groundwater grant applications screening and ranking process for Central District geographic area. Supervised and provided direction to staff; developed, tracked and controlled program budgets; worked closely with other DWR groups, agencies and outside organizations to develop additional local assistance opportunities for DWR.

2000-2001: California Department of Conservation, Division of Mines and Geology, Sacramento, California. **Associate Engineering Geologist**. Responsible for: multi-year aerial photograph review, identification of landslides and potentially unstable areas, field reconnaissance and confirmation, preparation of maps and images using MapInfo, Vertical Mapper, ArcView, Spatial Analyst, Model Builder, and ArcInfo working closely with GIS specialists; assisting in development of GIS methodologies and database for Northern California watersheds assessment/restoration project; review of timber harvest plans and pre-harvest inspections; review of regional CEQA documents as related to engineering geologic issues; watershed assessment; technical presentations at multi-agency meetings and landslide/mass wasting public workshops.

1997-2000: CalEPA Department of Toxic Substances Control, Stringfellow Branch, Sacramento, California. **Hazardous Substances Engineering Geologist**. Responsible for: groundwater monitoring and analysis; developing approach and preparing a work plan for a Stringfellow site revised hydrogeologic conceptual model; researching, providing, and maintaining a comprehensive environmental data management system; assembling and contracting with an expert panel for consultation on the site; evaluating an existing MODFLOW porous media groundwater flow model; providing direction on the strategy and approach for the development of a revised groundwater flow and fate & transport model for the Stringfellow site; providing input on an as needed basis in support of the litigation and community relations elements of the project.

1993 - 1997: Law Engineering & Environmental Services, Inc., Sacramento, California. **Manager Project Management**. Responsible for supervising and providing direction to senior project managers; maintaining appropriate tracking system and controls for assurance of successful execution of scope, schedule and budget of major projects; maintaining quality assurance and controls on projects. Responsibilities included development/implementation of group budget spending plan, establishing performance standards and evaluating program progress and quality, staff recruiting, mentoring, maintaining utilization, business development, proposal preparation, commercial and government project marketing, client maintenance. **Project Manager** and **Senior Hydrogeologist** on hydrogeologic evaluations, site and regional groundwater quality monitoring programs, hazardous substance site investigations and remediation. Responsibilities included technical direction of projects, project scoping, schedule, budget, supervision of field activities, preparation of documents, developing cost-effective strategies for follow-on

investigations and removal actions, and negotiating with state regulators on three Beale Air Force projects totaling more than \$15 million.

1988 - 1993: Dames & Moore, Sacramento and Los Angeles, California. **Senior Geologist**. Provided hydrogeologic technical support, project management, regulatory compliance, technical/regulatory strategy, and on a variety of commercial and industrial DTSC- and RWQCB-lead hazardous substance sites. Responsibilities included project technical direction, scope implementation, budgetary control, groundwater quality monitoring and analysis, supervision of field investigations, document preparation, client interface, negotiation with regulatory agencies on projects totaling approximately \$5 million.

1986 - 1988: California Department of Health Services, Toxic Substances Control Division, Southern California Region, Assessment and Mitigation Unit, Los Angeles, California. **Project Manager** in the Assessment and Mitigation Unit. Responsibilities included development and implementation of work plans and reports for, and regulatory oversight of, State Superfund preliminary site assessments, groundwater quality monitoring and analysis, remedial investigations, feasibility studies, remedial action, and interim remedial measures. **Engineering Geologist**. Provided technical support to Permitting, Enforcement, and Site Mitigation Unit staff, including evaluation of hydrogeologic assessments, groundwater quality monitoring programs, work plans, and reports on federal and state Superfund sites and active facilities; assistance in budget preparation; assistance in zone drilling contract review.

1983-86: Independent Consultant, Sacramento, California. Provided technical assistance on variety of geologic and geophysics projects to other independent consultants in local area.

1982: Gasch & Associates, Sacramento, California. Geologic assistant conducting shallow seismic reflection surveys in the Sierra Nevada for buried gold-bearing stream deposits.

1981 - 1982: Geologic Assistant, Coast Ranges, Avawatz Mountains, White Mountains, and Kinston Peak Range. Geologic Assistant on various geological field studies, including gravity surveys, magnetic surveys, landslide and geologic mapping projects.

PROFESSIONAL REGISTRATION

California Professional Geologist No. 5594

California Certified Engineering Geologist No. 1926

California Certified Hydrogeologist No. 0012

PROFESSIONAL AFFILIATIONS

California Department of Water Resources, Public Advisory Committee, Water Plan Update 2013

2010-2013: Appointed to participate on PAC and to lead new Groundwater Caucus

Department of Interior, Advisory Committee on Water Information, Subcommittee on Ground Water

2010-Present: Member – Work Group for Pilot Project Implementation, Nationwide Groundwater Monitoring Network

2007-2010: Co-Chair - Work Group on Implementation for development of the Framework for a Nationwide Ground Water Monitoring Network

2007-2010: Member - Work Group on Network Design for development of the Framework for a Nationwide Ground Water Monitoring Network

National Ground Water Association

2014-Present: Director - Scientists and Engineers Division

2007- 2010: Director - Scientists and Engineers Division

2007 - 2009: Member - Government Affairs Committee

2007 - Present: Chair - Groundwater Protection and Management Subcommittee

2005 – Present: Chair - Regional Groundwater Management Task Force, Government Affairs Committee

2004 – 2005, 2007,2009-10: Chair – Theis Conference Committee

2002 – Present: Member – Theis Conference Committee

2002 – Present: Member - Regional Groundwater Management Task Force, Government Affairs Committee

2003 – Present: Member – Groundwater Protection and Management Subcommittee

2009 – Present: Member - ASR Task Force

2009 – Present: Member - Hydraulic Fracturing Task Force

2008 – 2009: Member – CO2 Sequestration Task Force

American Ground Water Trust

2009 – 2012: Chair

2005 - 2013: Director

California Groundwater Coalition

2007-Present: Director

Groundwater Resources Association of California

2000 – Present: Director

2000 – 2001: President State Organization

2001 – Present: Legislative Committee Chair

1998-1999 Vice President

1996-1997 Secretary

1995-1996 President Sacramento Branch

1993-1994 Member-at-Large Sacramento Branch

ACADEMIC BACKGROUND

BS 1983, Geology, University of California, Davis

Graduate studies in hydrogeology, hydrology, engineering geology, waste management engineering

Selected Publications

California Groundwater Management, Second Edition, Groundwater Resources Association of California, co-author and project manager, 2005.

Water Contamination by Low Level Organic Waste Compounds in the Hydrologic System, in *Water Encyclopedia*, Wiley, 2004.

Potential Groundwater Quality Impacts Resulting from Geologic Carbon Sequestration, Water Research Foundation, co-author, 2009.

Aquifer Storage and Recovery in the US, ASR 9, American Ground Water Trust, Orlando Florida, September 2009 – a compilation of key ASR issues on DVD, contributing editor and speaker, 2010.

Sustainability From The Ground Up – Groundwater Management In California – A Framework, Association of California Water Agencies, principal author, 2011.

ISMAR9 Call to Action: Sustainable Groundwater Management Policy Directives, Principal Author, 2016.