

# CHAPTER 4

## Environmental Setting (Affected Environment), Impacts, and Mitigation Measures

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### 4.1 Overview

This chapter summarizes the environmental setting (“affected environment”) and assesses the environmental impacts or consequences that would result from building the Monterey Peninsula Water Supply Project (MPWSP or proposed project<sup>1</sup>) described in Chapter 3, Description of the Proposed Project, which consists of 10 subsurface slant wells at CEMEX. This chapter provides the CEQA- and NEPA-required analysis of the physical, biological, social, and economic issues associated with implementation of the proposed project. This introductory subsection is followed by issue-specific analyses of the potential effects of the proposed project. CEQA defines “effects” or “impacts” as the “[d]irect or primary effects which are caused by the project and occur at the same time and place” or the “[i]ndirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable.” (CEQA Guidelines § 15358). Further, under CEQA, the term “significant effect on the environment” means “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected [directly or indirectly] by the project, including land, air, water, minerals, flora, fauna, ambient noise and objects of historic or aesthetic significance” (CEQA Guidelines § 15382).

<sup>1</sup> The CEQA terminology of “proposed project” is used when referring to the CalAm project and its impacts. When discussing impacts from both the federal action and CalAm project, the term “proposed project” is also used.

Under NEPA, the term effects (or impacts) includes “ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial” (40 Code of Federal Regulations (CFR) § 1508.8).

This chapter documents the Lead Agencies’ analysis of the direct, indirect, and cumulative effects that the proposed project might cause. It considers the impacts of short-term uses, such as construction-related truck traffic, air quality and noise. It also considers the impacts that would occur over the longer-term operation and maintenance period or that would persist after an initial occurrence, such as the discharge of brine into MBNMS from the desalination process. Finally, it identifies mitigation measures that could avoid or reduce adverse impacts, and summarizes the residual significant and unavoidable adverse impacts on an issue-by-issue basis.

The sections in this chapter are referred to as issue areas or topics. Each issue area section:

- defines the study area for the specific topic covered in the section;
- describes the regional and local environmental setting (the “affected environment”);
- summarizes the applicable laws, regulations, plans, and standards (the “regulatory framework”);
- identifies the thresholds and other criteria applied to determine whether a potential change to the environment as a result of the project would be significant;
- summarizes the analytical methodology used;
- analyzes direct, indirect, and cumulative effects;
- identifies mitigation measures to address adverse effects; and
- explains the residual impacts that would remain after the implementation of all recommended mitigation measures.

See Chapter 5, Alternatives Screening and Analysis, for descriptions and analyses of the alternatives. A summary of the alternatives is provided in **Table 4.1-1** for reference.

**TABLE 4.1-1  
OVERVIEW OF ALTERNATIVES EVALUATED IN DETAIL**

Alternative	Components				
	Seawater Intake Facilities	Brine Discharge/ Outfall Discharge Facilities	Desalination Plant	Conveyance Pipelines	Ground Water Replenishment Project Water Purchase Agreement
<b>Proposed Project</b> <i>Described in Chapter 3</i>	9 new subsurface slant wells at CEMEX and conversion of test slant well to production well (10 total wells)	Existing MRWPCA ocean outfall pipeline and diffuser	New 9.6 mgd desalination plant on 25 acres at Charles Benson Rd. site	Source Water pipeline, Brine Discharge pipeline, Castroville pipeline, Pipeline to CSIP Pond, new Desalinated Water Pipeline, new Transmission Main, ASR facilities, and Highway 68 interconnection improvements. Approximately 21 total miles of pipelines.	Not part of proposed project
<b>No Project Alternative</b> <i>Described in Section 5.4.2</i>	No new facilities would be constructed; payback to the Seaside Groundwater Basin would not occur; reliance on existing and planned water conservation and recycling programs; likely implementation of mandatory rationing and conservation measures.				CalAm would purchase and extract 3,500 afy of GWR water from the Seaside Groundwater Basin
<b>Alternative 1 – Slant Wells at Potrero Road</b> <i>Described in Section 5.4.3</i>	10 new subsurface slant wells at Potrero Rd.	Same as proposed project		Same as proposed project, plus an additional 5.5 miles of source water pipeline. Approximately 26 miles of pipelines.	Not part of alternative
<b>Alternative 2 – Open-Water Intake at Moss Landing</b> <i>Described in Section 5.4.4</i>	New Screened Open-Water Intake at Moss Landing – one 36” diameter intake pipeline (HDD <sup>1</sup> installation)			Source Water pipeline, Brine Discharge pipeline, new Desalinated Water Pipeline, new Transmission Main, ASR facilities, and Highway 68 interconnection improvements, plus an additional 6.5 miles of source water pipeline. Approximately 21 total miles of pipelines.	
<b>Alternative 3 – Monterey Bay Regional Water Project (MBRWP or DeepWater Desal Project)</b> <i>Described in Section 5.4.5</i>	New Screened Open-Water Intake at Moss Landing – same location as Alt. 2; <ul style="list-style-type: none"> <li>two 42” diameter intake pipelines (HDD installation) and</li> <li>a 110’ L x 30’ W x 12’ tall intake structure</li> </ul>	New Outfall at Moss Landing; <ul style="list-style-type: none"> <li>two 36” diameter discharge pipelines (HDD installation) and</li> <li>a 140’L x 10’ W x 15’ tall discharge structure</li> </ul>	New 22 mgd desalination plant and co-located data center at 110-acre “East Tank Farm Parcel” off Dolan Road, Moss Landing	New Desalinated Water Pipeline, new Transmission Main, ASR facilities, and Highway 68 interconnection improvements, plus an 8 mi source water pipeline, transfer and brine discharge pipelines, and two new pipelines to serve other areas (Salinas and Santa Cruz Co; approximately 25 miles). Approximately 48 total miles of pipelines.	

**TABLE 4.1-1 (Continued)**  
**OVERVIEW OF ALTERNATIVES EVALUATED IN DETAIL**

Alternative	Components				
	Seawater Intake Facilities	Brine Discharge/ Outfall Discharge Facilities	Desalination Plant	Conveyance Pipelines	Ground Water Replenishment Project Water Purchase Agreement
<b>Alternative 4</b> – <i>People's Moss Landing Water Desalination Project (People's Project)</i> <i>Described in Section 5.4.6</i>	New Screened Open-Water Intake at Moss Landing – same general location as Alt. 2, but different installation <ul style="list-style-type: none"> <li>40" diameter pipeline, combination HDD and laid on seafloor (for 1,100')</li> <li>two 96" diameter screened intakes</li> </ul>	New Outfall at Moss Landing; extension of existing outfall <ul style="list-style-type: none"> <li>36" diameter pipeline, combination HDD and laid on seafloor (for 700')</li> <li>two 16" diameter diffuser ports</li> </ul>	New 12 mgd desalination plant at former National Refractories facility in Moss Landing	New Desalinated Water Pipeline, new Transmission Main, ASR facilities, and Highway 68 interconnection improvements, plus an alternative 8-mile-long source water pipeline. Approximately 20 total miles of pipelines.	
<b>Alternative 5a<sup>2</sup></b> – <i>Reduced Project 6.4-mgd Desalination Plant (Intake Slant Wells at CEMEX)</i> <i>Described in Section 5.4.7</i>	Same as proposed project, but fewer slant wells (7) at CEMEX	Same as proposed project except there would be less brine discharged.	New 6.4 mgd desalination plant at Charles Benson Rd site.	Same as proposed project, approximately 21 total miles of pipelines.	CalAm's purchase and extraction 3,500 afy of GWR water from the Seaside Groundwater Basin is considered in the cumulative analysis
<b>Alternative 5b</b> – <i>Reduced Project 6.4-mgd Desalination Plant (Intake Slant Wells at Potrero Road)</i> <i>Described in Section 5.4.8</i>	Same as Alternative 1, but fewer slant wells (7) at Potrero Road			Same as proposed project, plus an additional 5.5 miles of source water pipeline, approximately 26 miles of pipelines.	

## NOTES:

<sup>1</sup> Horizontal Directional Drilling (HDD) is described in Section 3.3.4.3 in Chapter 3, Description of the Proposed Project

<sup>2</sup> Alternative 5 includes a reduced size desalination plant. The CPUC authorized CalAm to enter into a water purchase agreement for 3,500 afy from the GWR Project, and to build the new Monterey Pipeline and associated pump station needed for the GWR project, in September 2016. As a result, the GWR project is a reasonably foreseeable future project, and the cumulative impact scenario evaluated for Alternatives 5a and 5b includes implementation of the GWR project. The GWR project is not considered for cumulative impacts in conjunction with the proposed project or Alternatives 1, 2, or 4 because if a desalination option is selected that is of a size sufficient to fully satisfy the project objectives in terms of water supply, such choice would presumably mean that the GWR project was not successful in securing funding, completing construction and undertaking operations. The GWR project is conservatively considered for cumulative impacts with Alternative 3 because under that option, CalAm could meet its full project water supply objectives via the DeepWater Desal project, or could obtain water from a combination of the DeepWater Desal project and the GWR Project. See Table 4.1-2 in Section 4.1.

## 4.1.1 Scope of Analysis

Chapter 4 is organized by issue area or topic, as follows:

Sections			
4.2	Geology, Soils, and Seismicity	4.11	Greenhouse Gas Emissions
4.3	Surface Water Hydrology and Water Quality	4.12	Noise and Vibration*
4.4	Groundwater Resources	4.13	Public Services and Utilities
4.5	Marine Biological Resources	4.14	Aesthetic Resources
4.6	Terrestrial Biological Resources	4.15	Cultural and Paleontological Resources
4.7	Hazards and Hazardous Materials*	4.16	Agricultural Resources*
4.8	Land Use, Land Use Planning, and Recreation*	4.17	Mineral Resources
4.9	Traffic and Transportation*	4.18	Energy Conservation*
4.10	Air Quality	4.19	Population and Housing*
		4.20	Socioeconomics and Environmental Justice

\* Issue areas in which MBNMS resources would not be affected.

Each section of Chapter 4 contains the following elements:

- Table of Contents and Introduction.** This section presents a table listing the subsections, figures, and tables within the resource section. It also briefly introduces the resource topic. During the public scoping process and during the public comment period for the April 2015 Draft EIR, comments received from parties and members of the public raised issues and concerns and made suggestions regarding the scope of the analysis. These scoping and Draft EIR comments were carefully reviewed. To the extent that the issues raised or suggestions made were relevant to the EIR/EIS, they are described in this introductory text and addressed in the analysis.
- Setting/Affected Environment.** This section presents a description of the existing environmental conditions near the project with respect to each resource topic at a level of detail that allows the reader to understand the impact analysis. This section provides the environmental baseline for the impact analysis. The focus of the affected environment description is on those resources or uses that may be affected by specific proposed project components. The study area for the EIR/EIS varies by topic, but is generally the proposed project area and adjacent properties. In some issue areas, the study area is necessarily larger than the project area because there is potential for impacts to occur beyond the project boundaries. The nature of existing conditions in the study area is interpreted from available literature and site-specific surveys, summarized in the resource sections. Where sufficient location-specific information is available, these data are primarily utilized. Where location-specific data are lacking, general conditions for the study area are utilized with appropriate qualifications.
- Regulatory Framework.** This section describes the relevant laws and regulations that protect the environmental resources within the project area, and the governmental agencies that enforce those laws and regulations. The discussion of pertinent laws and regulations also evaluates the project's consistency with such regulatory requirements that were enacted for environmental protection purposes. Where a potential inconsistency with such regulations is identified, readers are referred to the discussion of the direct and indirect effects of the project within that topical area for further analysis of the issue.

- **Evaluation Criteria.** This section lists the specific criteria, also known as thresholds of significance, that were applied when evaluating the environmental impacts of the proposed project (10 wells at CEMEX) in Chapter 4, as well as the impacts of the alternatives, which are described and evaluated in Chapter 5, Alternatives Screening and Analysis. The list is based on Appendices G and F of the CEQA Guidelines with some modifications to account for NEPA considerations and to ensure that the criteria correlate to and measure the expected effects of the project. For certain resource topics, the Lead Agencies developed additional criteria to capture the environmental effects of the proposed project or its alternatives, as set forth in Chapter 5.
- **Approach to Analysis.** This section explains how the Lead Agencies applied the significance criteria to evaluate the proposed project (10 wells at CEMEX) in Chapter 4 and to the alternatives in Chapter 5. This section also describes modeling or other methodology used to quantify impacts.
- **Direct and Indirect Effects of the Proposed Project.** This section evaluates the potential for the proposed project (10 wells at CEMEX) to adversely affect the physical and human environment described in the setting, draws impact conclusions, discusses consistency with plans and policies and describes mitigation.

CEQA and NEPA both require consideration of direct and indirect effects. Under CEQA, direct effects are those caused by the project itself and that occur at the same time and place; indirect impacts are those caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable (CEQA Guidelines § 15358). The definitions under NEPA are substantially similar (40 CFR § 1508.8). Under NEPA, direct effects “are caused by the action and occur at the same time and place” (40 CFR § 1508.8(a)); indirect effects “are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems” (40 CFR § 1508.8(b)). The overall methodology for each issue area or topic is consistent with Council on Environmental Quality (CEQ) guidance and NOAA NEPA guidelines (NAO 216 6), as well as with the CEQA Guidelines.

The impact analysis for each issue area includes a description of how the proposed project/action would result in a change in the environment relative to existing conditions, and the current regulatory framework. The analysis within each topic focuses on components of the proposed project that could result in potentially significant effects. Both adverse and beneficial impacts are identified, where relevant. For most resource topics, all construction-related impacts are discussed first, followed by all operations/facility siting impacts. For purposes of CEQA, the conclusion of each impact analysis is expressed in terms of impact significance, which is discussed further in Section 4.1.4, below.

This section also discusses the proposed project’s (10 wells at CEMEX) consistency with plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect as well as a discussion of the possible conflicts between the proposed project and the objectives of federal, regional, state, and local land use plans and policies that are imposed for the protection of the environment, and is described in Section 4.1.5, below.

This section also identifies mitigation measures for all of the impacts considered significant or potentially significant, as well as for some impacts that are less than significant. This is consistent with CEQA and NEPA, as discussed further in Section 4.1.6.

- **Cumulative Effects of the Project.** This section evaluates the cumulative direct and indirect impacts of the construction, operation, and maintenance of the proposed project. Details on CEQA/NEPA requirements and the cumulative effects methodology are provided in Section 4.1.7. If the proposed project/action would have no direct or indirect effects on a resource, then it could not cause or contribute to potential cumulative effects on that resource. In these instances, the Lead Agencies did not perform a cumulative effects analysis. See, for example, Section 4.1.2, Resources/Issues Not Affected.

## 4.1.2 Resources/Issues Not Affected

Of the issues commonly analyzed in a CEQA or NEPA process, the following list summarizes issues not analyzed in this EIR/EIS and why the proposed project or alternatives would not affect these resources. Resources that are not present on the project site, or resources that the project will not significantly affect, include Forestry Resources and Military and Homeland Security Uses. Neither the proposed project nor any of the alternatives would cause or contribute to any cumulative effects on these resources.

### 4.1.2.1 Forestry Resources

Implementation of the proposed project would have a significant impact on forestry resources if it:

- Conflicts with existing zoning for, or cause rezoning of, forest land (as defined in Cal. Public Resources Code § 12220(g)), timberland (as defined by Cal. Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Cal. Government Code § 51104(g));
- Results in the loss of forest land or conversion of forest land to non-forest use; or
- Involves other changes in the existing environment that, due to their location or nature, could result in conversion of forest land to non-forest use.

None of the land in the project area is zoned as forest land, timberland, or included in a Timberland Protection Zone, and no rezoning of any kind would be required to build the proposed project. Cal. Public Resources Code § 12220(g) defines “forest land” as “land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.” Cal. Public Resources Code § 4526 defines “timberland” as “land, other than land owned by the federal government and land designated by the board [of the California Department of Forestry and Fire Protection (CAL FIRE)] as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.”

In Monterey County, CAL FIRE has designated the following as qualifying commercial timber species: coast redwood, Douglas fir, Monterey pine, Coulter pine, Ponderosa pine, Jeffrey pine, white alder, cottonwood, Pacific madrone, California black oak, and tanoak. Timberland includes areas where the qualifying species are now growing naturally or have grown naturally in the

recorded past, even if they are not currently present. Cal. Government Code § 51104(g) defines “Timberland production zone” as “an area which has been zoned pursuant to [Government Code] Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses,” which include uses that do not “significantly detract from the use of the property for, or inhibit, growing and harvesting timber” (Gov’t Code § 51104[g]). Because none of the project area land is zoned for forestry use, and the project needs no forestry-related rezoning, the proposed project would not conflict with such zoning. Similarly, no forest land would be lost or converted to non-forest use as a result of the proposed project, and the project would not involve other changes in the existing environment that, due to their location or nature, could result in conversion of forest land to non-forest use. Therefore, the proposed project would not impact forestry resources.

#### **4.1.2.2 Military and Homeland Security Uses**

A portion of the new Transmission Main would be located on military lands and the ASR-5 and ASR-6 Wells would be located in the Fitch Park military housing community. The construction impacts associated with the new Transmission Main and ASR-5 and ASR-6 Wells are analyzed throughout this document. Construction impacts on military and homeland security uses would be temporary and negligible. Furthermore, construction and operation of project components in MBNMS would not interfere with any military or homeland security uses of MBNMS. Therefore, this document does not further discuss military and homeland security uses.

#### **4.1.3 Baseline Conditions**

The baseline for this EIR/EIS is the existing condition on or about October 5, 2012, which is when the CPUC issued a Notice of Preparation (NOP) for the proposed project to local, state, and federal agencies, Native American tribal organizations, and other interested parties. Although the Notice of Intent for the NEPA review contained within this document was issued in 2015, use of the 2012 baseline is appropriate and reasonable because (i) 2012 is a very recent point in time; (ii) the CPUC invested considerable resources amassing 2012 background/baseline data for the April 2015 Draft EIR; and (iii) environmental conditions in the study area have been relatively static such that 2012 conditions remain representative of meaningful baseline conditions. The environmental baseline reflects the pre-project environmental conditions to which the potential impacts of the proposed project and all alternatives are compared.

Since the CPUC issued its NOP in 2012, the Lead Agencies have developed or received new data on some of the resource areas, so they have updated the baseline data as appropriate. This document notes those updates in its discussions of the Setting/Affected Environment for the various resource areas and applies them in the pertinent analyses. For instance, in Section 4.6, Terrestrial Biological Resources, updates to survey information for biological resources are described in Section 4.6.1.2, Information Sources and Survey Methodology.



## 4.1.4 Impact Terminology

CEQA requires agencies to use their best judgment to determine whether an impact is significant; it's not a mechanical process. The agency must base its decision in light of the whole record, and must consider the impact's setting: "For example, an activity which may not be significant in an urban area may be significant in a rural area." (CEQA Guidelines § 15064(a)(1), (b)). Similarly, to determine whether an impact is significant, CEQ regulations (40 CFR § 1508.27) require the consideration of the context and intensity of potential impacts. Context normally refers to the setting, whether local or regional, and intensity refers to the severity of the impact. Also, the analysis includes a discussion of the possible conflicts between the proposed project and the objectives of federal, regional, state, and local land use plans and policies for the area concerned (40 CFR § 1502.16(c)).

Consistent with both CEQA and NEPA requirements and guidance, determinations regarding an impact's significance in this EIR/EIS are made on the basis of high quality, credible scientific information and professional judgment. Where a significant impact is reasonably expected to occur, this analysis discloses that information. All impact determinations are projections based on the expectation that the described impacts, or lack thereof, will occur if the proposed project is approved and implemented. Therefore, the impacts are conditioned upon approval and implementation of the project, and the term "would/would not occur" is used to describe the reasonable expectation of the impacts of the project.

The categories used to designate impact significance are:

- **No Impact (NI).** There would be no impact if there is no potential for impacts, or if the environmental resource does not occur within the project area or the area of potential effect. For example, there would be no impact related to tree removal if no tree removal is proposed in the project area.
- **Less than Significant impact (LS).** This determination applies if there is a potential for some limited impact, but not a substantial adverse effect that qualifies under the applicable significance criterion as a significant impact.
- **Less than Significant impact with Mitigation (LSM).** This determination applies if the project would result in an adverse effect that exceeds/qualifies under the applicable significance criterion, but feasible mitigation is available that would eliminate the impact or reduce it to a less-than-significant level.
- **Significant and Unavoidable impact even with implementation of Mitigation (SU).** This determination applies if the proposed project would result in an adverse effect that exceeds/qualifies under the applicable significance criterion and even with mitigation implemented to lessen the impact, if available, the residual effect would remain significant. Therefore, the impact would be significant and unavoidable.

Within each issue area section in this chapter, there is a table at the beginning of the impact discussion that summarizes the potential impacts and indicates the level of impact significance. Environmental impacts are numbered throughout this EIR/EIS, using the section number followed by sequentially numbered impacts. Mitigation measures are numbered to correspond with the impact numbers; for example, Mitigation Measure 4.3-1 addresses Impact 4.3-1. In some

cases, mitigation measures are used again to address sequentially later impacts. When this occurs, the measures are not renumbered or repeated in full; rather, the reader is directed to review the mitigation measure where it is first introduced.

### 4.1.5 Project Consistency Analysis

Consistent with CEQA, the EIR/EIS includes a discussion of any inconsistencies between the project and applicable general plans, specific plans, and regional plans and any conflicts between the project and applicable plans, policies, and regulations of agencies with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect (CEQA Guidelines section 15125 and Appendix G). Also, per NEPA, the analysis includes a discussion of the possible conflicts between the proposed project and the objectives of federal, regional, state, and local land use plans and policies for the area concerned that are imposed for the protection of the environment (40 CFR § 1502.16(c) and 40 CFR § 1508.27(b)(10)).

The discussion of project consistency appears within each topical section's Regulatory Framework subsection. Federal and state requirements related to the subject topic are presented in a narrative format, followed by the analysis of project consistency. Owing to their relatively larger number of specific requirements, regional and local plans, policies, and regulations, and the associated consistency analyses, are presented in a table format. The table appears after the discussion of federal and state requirements within each topical section.

Where the consistency analysis concludes the MPWSP would not conflict with the applicable plan, policy, or regulation, the finding is noted and no further discussion is provided. Where the analysis concludes that the MPWSP may conflict with the applicable plan, policy, or regulation, the reader is referred to the respective topic's Direct and Indirect Effects of the Project subsection, where the issue is discussed further. In that subsection, the significance of the potential conflict is evaluated. Where the effect of the potential conflict would be significant, feasible mitigation is identified to resolve or minimize that conflict.

The proposed project's consistency with the full set of MBNMS Desalination Guidelines is addressed separately in Section 6.4 since the Guidelines are relevant to multiple issue areas.

### 4.1.6 Mitigation Measures

This chapter identifies feasible mitigation measures to avoid, minimize, or compensate for impacts of the proposed project consistent with CEQA and NEPA requirements. Regardless of the effect of the measure – whether to avoid, minimize, or mitigate for an impact – this document uses the term “mitigation measure” to label these measures, consistent with CEQA and NEPA guidance described below.

CEQA Guidelines Section 15126.4(a)(1) states that an EIR “shall describe feasible measures which could minimize significant adverse impacts.” Section 15041 describes the authority of a CEQA lead agency to “require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable

constitutional requirements such as the ‘nexus’ and ‘rough proportionality’ standards established by case law (citations omitted).” Section 15092(b)(2) states that a public agency shall not decide to approve or carry out a project for which an EIR was prepared unless the agency has “Eliminated or substantially lessened all significant effects on the environment where feasible” and determined that any remaining significant and unavoidable impacts are acceptable due to overriding considerations. Thus, a CEQA lead agency must describe and adopt all feasible mitigation measures for impacts found to be significant, but is limited to requiring mitigation only for significant impacts and within the limitations of the nexus and rough proportionality standards.

CEQ NEPA guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation (76 Fed. Reg. 3843) clarifies that when an agency premises its environmental analysis on a commitment to mitigate the environmental impacts of a proposed action, it should adhere to those commitments, monitor how they are implemented, and monitor the effectiveness of the mitigation. For example, the agency could impose appropriate conditions on permits or other agency approvals, or could make approvals contingent on implementation of the mitigation commitments. Although NEPA does not impose a similar procedural obligation on federal agencies as CEQA requires, the practice to adopt feasible mitigation whenever possible to reduce a project’s significant impact is consistent with NEPA’s intent that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated. Consistent with the federal agency’s authority and responsibility under NEPA, this chapter identifies some feasible mitigation measures to lessen impacts that are adverse but do not rise to the level of being classified as significant impacts.

Mitigation measures included in this EIS/EIR are considered to be potentially feasible by the authors of the document; however, the ultimate determination of feasibility can be made only by agency decision-makers. This EIS/EIR addresses whether mitigation presented would reduce an impact to a less-than-significant level, based on the thresholds of significance presented in each resource chapter, except in those cases where the NEPA lead agency identifies feasible mitigation for adverse impacts that are not significant.

The Lead Agencies will prepare a Mitigation, Monitoring, Reporting, and Compliance Program (MMRCP)/ Environmental and Construction Compliance Monitoring Plan (ECCMP) if they approve the proposed project or an alternative analyzed in Chapter 5. This will ensure that any mitigation measures are effectively implemented. Such document would be prepared at or after the time that the Final EIR/EIS is completed so as to capture all mitigation measures and would be made available to the public prior to adoption.

### 4.1.7 Cumulative Effects

Cumulative impacts, as defined in Section 15355 of the CEQA Guidelines, refer to two or more individual effects that, when taken together, are “considerable,” or that compound or increase other environmental impacts. Cumulative impacts can result from projects that are individually minor but collectively significant when added to the impacts of other closely related past, present, or reasonably foreseeable future projects. Section 15130 of the CEQA Guidelines states:

- An EIR shall discuss cumulative impacts of a project when the project's incremental effects are "cumulatively considerable" (i.e., the incremental effects of an individual project are considerable when viewed in combination with the effects of past, current, and probable future projects, including those outside the control of the agency, if necessary).
- An EIR should not discuss impacts that do not result in part from implementation of the project being evaluated in the EIR.
- A project's contribution is less than cumulatively considerable, and thus ultimately less than significant, 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 discussion of cumulative impact severity and likelihood of occurrence need not be as detailed as that presented for effects attributable to the project alone.
- The focus of analysis should be on the cumulative impact to which the identified other projects contribute, rather than on attributes of the other projects that do not contribute to the cumulative impact.

The CEQ's NEPA regulations also require agencies to assess a proposed action's cumulative impacts (40 CFR Parts 1500-1508). Both CEQ regulations and NOAA Administrative Order Series (NAO) 216-6A define a cumulative impact as an "impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR 1508.7, NAO 216-6). Cumulative impacts can result from individually minor but collectively significant actions taking place over time (40 CFR § 1508.7).

The CEQ states that NEPA documents "should compare the cumulative effects of multiple actions with appropriate national, regional, state, or community goals to determine whether the total effect is significant" (CEQ, 1997). Cumulative effects may arise from single or multiple actions and may result in additive or interactive effects. Interactive effects may be countervailing, where the adverse cumulative effect is less than the sum of the individual effects, or synergistic, where the net adverse effect is greater than the sum of the individual effects (CEQ, 1997).

This section presents the methods used to evaluate cumulative impacts, and lists projects that may have cumulative effects when combined with the impacts from the proposed project or alternatives discussed in this EIR/EIS. The MPWSP's cumulative effects analysis is provided by topical section throughout Chapter 4. Where appropriate, additional measures are identified to mitigate potentially significant cumulative impacts. The cumulative effects of project alternatives are analyzed in Chapter 5, Alternatives Screening and Analysis, Sections 5.5 and 5.6.

#### **4.1.7.1 Approach to the Analysis of Cumulative Effects**

CEQ's cumulative effects guidance sets out several different assessment methods, such as checklists, modeling, forecasting, and economic impact assessment, that evaluate changes in employment, income and population (CEQ, 1997).

This EIR/EIS uses a variety of methods, depending on the resource area, to determine cumulative effects. Consistent with CEQA and NEPA, this EIR/EIS considers the direct and indirect effects

of the proposed project combined with the effects of the other projects that could combine geographically and temporally (i.e., would be causing similar impacts in the same area at the same time as the proposed project) and, thereby, cause or contribute to a cumulative effect. For each resource or issue considered in this chapter, the cumulative effects analysis identifies the relevant geographic area and time period within which cumulative effects could occur and then considers existing conditions (which are the combination of the natural condition and the effects of past projects) and describes the effects of other past, present and reasonably foreseeable future projects in combination with the effects of the proposed project. Where relevant, the cumulative effects analysis also describes the relationship of the cumulative effects to any established thresholds. A quantitative analysis is provided where possible; where quantification is infeasible, qualitative effects are described. Where the analysis finds that the cumulative effects of past, present and future projects would be significant and adverse, the analysis then identifies whether the proposed project's contribution to the overall adverse effect would be of a considerable nature such that the project's contribution to cumulative effects in that area is deemed significant. If the proposed project would make a meaningful contribution to the adverse cumulative effect so as to be considered a significant effect associated with project implementation, mitigation measures are explored and identified.

#### 4.1.7.2 Cumulative Scenario

CEQA Guidelines Section 15130(b)(1) discusses two approaches to a cumulative effects analysis. First, the analysis can be based on a list of past, present, and probable future projects producing related or cumulative impacts. Second, a summary of projections contained in a general plan or related planning document or in an adopted or certified environmental document that described or evaluated regional or area-wide conditions contributing to the cumulative impact can be used to determine cumulative impacts. This EIR/EIS employs the list-based approach, except where specifically discussed in individual resource sections in Chapter 4, where a summary of projections approach is more appropriate. To determine an appropriate list of projects for the cumulative analyses, the Lead Agencies considered three factors: similar environmental impacts, geographic scope and location, and timing and duration of implementation. The effects of relevant projects (e.g., short-term construction or demolition, or long-term operations) could happen at the same time as the MPWSP's effects.

The projects that could contribute to cumulative impacts are listed in **Table 4.1-2**. The projects in Table 4.1-2 have occurred<sup>2</sup> or are anticipated to occur in the reasonably foreseeable future within the study area. This list was compiled from several sources. Only those projects that might contribute to cumulative impacts are listed. These projects are similar in scope to the proposed project, have similar types of impacts within the study area, affect similar resources, or are large enough to have far-reaching effects on a resource. This approach includes both projects for which detailed descriptions and expected impacts are known, as well as projects that have less defined impacts but may contribute to the regional impacts. The Lead Agencies have considered the

<sup>2</sup> While a cumulative analysis includes past, present and reasonably foreseeable future projects, the category of past projects is captured within the existing setting, or baseline, against which impacts are judged throughout the EIR/EIS, including the cumulative analysis. However, where projects were implemented after 2012 (the baseline year), those projects are set forth within Table 4.1-2 and included in the cumulative analysis.

effects of these projects along with the proposed project's impacts to determine the overall cumulative impact on the resources in the study area. The numbering of projects in Table 4.1-2 provides a key to the locations of the projects shown in **Figure 4-1**; some projects are listed out of numeric order in Table 4.1-2 due to additions throughout the preparation of this EIR/EIS.

### ***Similar Environmental Impacts***

Projects that are relevant to the cumulative analysis include those that could incrementally affect the same environmental resources that the MPWSP would directly or indirectly affect. The cumulative impact discussions in the issue area sections of Chapter 4 analyze the cumulative impacts that could occur when the effects of the MPWSP combine with the effects of other past, present, and reasonably foreseeable future projects. Because these other projects are subject to independent environmental review and approval processes, funding constraints, or other challenges, it is possible that some of the projects identified as reasonably foreseeable future projects will not be approved (or if already approved, will not be implemented) or will be modified prior to approval. To assess worst-case cumulative impacts, however, the cumulative impact analysis in this EIR/EIS assumes that all of the reasonably foreseeable projects identified in this analysis will be approved and built.

### ***Geographic Scope and Location***

For each affected resource, the geographic scope of the cumulative impacts analysis depends on the natural boundaries and physical conditions relevant to the resource, rather than jurisdictional boundaries. The geographic scope of cumulative effects often extends beyond the scope of the direct impacts, but not beyond the scope of the indirect impacts of the proposed project and alternatives.

### ***Timing and Duration of Implementation***

Potential temporary (e.g., construction-related noise and vibration) and permanent (e.g., visible permanent structures) MPWSP impacts are considered in the cumulative impacts analysis if they could combine in space and time with similar impacts of cumulative projects identified in Table 4.1-2.

Because of the limited water supply available in the CalAm Monterey District, many development projects in the service area have been put on hold until supplemental supplies can be secured. As discussed in Chapter 2, Water Demand, Supplies, and Water Rights, there is a moratorium on new water service connections. Because of the moratorium, some of the reasonably foreseeable future projects may not be approved or built until the moratorium is lifted. Therefore, with the moratorium in place, the potential for simultaneous construction-related impacts is less likely. However, because the timing of construction for many cumulative projects is unknown, and because some of the cumulative projects may have water allocations, this analysis conservatively assumes that the incremental impacts of the construction, operation, and maintenance of some of these projects may overlap with those of the MPWSP. As a result, the cumulative impacts analysis and conclusions presented in each section may overstate some potentially cumulatively considerable impacts.

**TABLE 4.1-2  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
<b>Monterey County</b>			
1	Salinas River near the City of Marina	<p><b>Salinas Valley Water Project Phase II</b> – The project would allow the Monterey County Water Resources Agency (MCWRA) to further offset groundwater pumping by delivering additional surface water to the Pressure and East Side subareas. The project would divert up to 135,000 acre-feet per year (afy) of water from the Salinas River for municipal, industrial, and/or agricultural uses in the Pressure and East Side subareas. Continued reductions in groundwater pumping through use of the diverted surface water would help combat seawater intrusion in Monterey County.</p> <p>The project proposes two new surface water diversion points and related facilities to capture, convey, and deliver the water. The capture and diversion facilities would consist of either a surface water diversion facility, similar to the Salinas River Diversion Facility, or subsurface collectors, such as radial arm wells. The conveyance facilities would be composed of pipelines and pump stations. The pipeline diameter, length, destination, number and location of turnouts, locations of pump stations, and physical layout of the conveyance facilities have not been determined.</p> <p>The delivery facilities may consist of injection wells for aquifer storage and recovery (ASR), percolation ponds, turnouts for direct use of the water, or other options. The design and location of the delivery facilities would depend on the type of facility, the end-users' intended application of the water (agricultural versus urban), and the need for water treatment (MCWRA, 2014).</p>	Construction anticipated to begin after 2018; Project operation anticipated 2026
2	Former Fort Ord Military Base, East Garrison Area	<b>East Garrison Specific Plan</b> – Mixed-use development project comprising residential, commercial, office, institutional, and recreational uses on approximately 244 acres. The project includes the construction of up to 1,470 dwelling units, 75,000 square feet of commercial uses, 11,000 square feet of public and institutional uses, 100,000 square feet of art/cultural/educational uses, and approximately 50 acres of open space. Development under the Specific Plan will be implemented in three phases. (Michael Brandman Associates, 2004; FORA, 2013; East Garrison, 2015).	Ongoing / Full Build-out Scheduled for 2025
3	24491 Citation Court	<b>Laguna Seca Villas</b> – Construction of 20,306 square feet of professional office space on the Laguna Seca Office Park subdivision (Monterey County Planning Department, 2015, 2016a).	Unknown. Permit extended for three years in September 2015.
4	5 Corral De Tierra Road at Highway 68	<b>Omni Enterprises, LLC</b> – Development of a new 99,970-square-foot shopping center on 11 acres that includes retail and office space. Construction would start following demolition of an existing gas station on the site and cleanup of contaminated soils. (. 2016b; Monterey Herald, 2015).	Construction anticipated to begin in 2017.
5	South side of State Highway 68, between River Road and San Benancio Road	<b>Ferrini Ranch Subdivision</b> – Subdivision of an approximately 866-acre property into 212 residential lots, including 146 market rate single-family residential lots, 23 clustered market rate residential lots, and 43 lots for inclusionary housing units; three open space parcels of approximately 600 acres; and one agricultural-industrial parcel (Monterey County Planning Department, 2016e).	Unknown
33	Monterey County Water Resources Agency / Prunedale	<b>Granite Ridge Water Supply Project</b> – Includes a new 1,000 gallons per minute groundwater production well and associated backup well near Manzanita Regional Park, both drilled to a depth of up to 635 feet; up to 87,700 linear feet of 6- to 12-inch-diameter water transmission pipelines; two booster pump stations; two water storage tanks (350,000 and 250,000 gallons); and associated facilities. The project would consolidate existing water distribution infrastructure, including up to 119 existing water systems and 500 individual well users (MCWRA, 2010a; 2010b).	Unknown
24	Monterey County Water Resources Agency / southern Monterey County and northern San Luis Obispo County	<b>Interlake Tunnel</b> - The MCWRA Interlake Tunnel Project would build an 11,000-foot-long tunnel to divert approximately 50,000 afy of water from Nacimiento Reservoir to San Antonio Reservoir that would have otherwise been spilled at Nacimiento Dam. The Nacimiento River basin produces nearly three times the average annual flow of the San Antonio River basin. During the winter season, the Interlake Tunnel would transfer excess Nacimiento River flows to San Antonio Reservoir, thereby increasing the overall storage capacity of the system (MCWRA, 2016). The water stored in San Antonio Reservoir would then be used for downstream groundwater recharge and abatement of saltwater intrusion in the Salinas Valley Groundwater Basin (RWMG, 2014).	Anticipated to be completed by 2018 (KCBXFM, 2016).

**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
<b>Monterey County (cont.)</b>			
48	Congress Road and SFB Morse Drive, Pebble Beach	<b>Pebble Beach Company Inclusionary Housing Project</b> – The project would involve the construction of 24 affordable housing units, ranging in size from 1,078 square feet to 1,343 square feet (Monterey County Planning Department, 2016g).	Approved August 2016
49	Highway 68 at Corral de Tierra Road	<b>State Route 68/Corral de Tierra Road Intersection Improvement Project</b> – The project would widen the approaches to the Highway 68/Corral de Tierra Road intersection to accommodate a second left turn lane from westbound Highway 68 to southbound Corral de Tierra Road by shifting the through lane to the north. A second southbound receiving lane would also be built on Corral de Tierra Road departing the intersection to receive traffic from the second left-turn lane (Caltrans, 2015).	Construction anticipated to start fall of 2017 and be completed 2018
<b>City of Sand City</b>			
6	330 Shasta Street	<b>City of Sand City Coastal Desalination Plant</b> – This existing desalination facility can produce 300 afy of potable water supplies. Four seawater extraction wells pump brackish water to the plant, where reverse-osmosis technologies desalinate the water. Brine concentrate is disposed of by injecting the concentrate into a subsurface slant well beneath the coastal bluff (City of Sand City, 2016).	Completed in 2010
19	Former Sand Mine site, near the Fremont / Highway 1 interchange.	<b>Monterey Bay Shores Resort</b> – The project consists of a 341-unit "eco-resort" on 39 acres approved. The proposal calls for 161 hotel rooms, 180 condominiums, a restaurant, conference center, spa, and three swimming pools (SNG, 2008).	Unknown
43	Redwood Avenue and John Street	<b>90-Inch Bay Avenue Outfall Phase 1</b> – Improvement project involving: (1) installation of a discharge valve at the Bay Avenue outfall; (2) maintenance and manual breaching of the sand bar to allow gravity flow through the culvert; (3) creation of an infiltration basin at John Street and Redwood Avenue to mitigate flooding; (4) reconstruction of the existing elevated emergency outlet structure, including doubling the size of the box to increase the width of the emergency outlet structure; and (5) building a curb channel along the top of the existing 90-inch-diameter culvert from the emergency outlet to the check valve (MPWMD, 2014).	Unknown
56	Highway 1 between Tioga Avenue and Playa Avenue	<b>The Collection at Monterey Bay Resort</b> – Approved 340-room visitor-serving coastal resort on a 26.46-acre site located west of Highway and north of Tioga Avenue, that may be built in two phases. Phase I is a 135 hotel room on a 7.9-acre parcel known as the "Sterling" Site. Phase II is a coastal resort on the 16.25 acre "McDonald" site consisting of 205 visitor rooms, a restaurant with banquet facilities, a health/wellness spa, parking, and other related improvements. Primary access will be via Tioga Avenue for Phase I and Playa Avenue and an extension of Sand Dunes Drive for Phase II access. (Sand City, 2012)	Unknown
<b>City of Marina</b>			
7	Former Fort Ord Military Base Highway 2 / Imjin Parkway	<b>The Dunes on Monterey Bay</b> – Mixed-use development project comprising 1,237 residential units, 500 hotel rooms, and retail and office space on 297 acres. Phase 1 (378,000-square-foot retail center) built in 2007-2008. Phase 2 includes the following: (1) South County Housing to develop and build 108 low- and very low-income affordable apartments, many of which were completed by spring/summer 2014; (2) Cinemark multiple screen movie theater completed 2015; (3) Plans approved for two approximately 15,000 square foot retail buildings to be built near the movie theater; (4) Veterans Affairs Monterey Health Care Center located on a 14.31-acre project site within the Dunes on Monterey Bay Specific Plan area completed 2016; and (5) Springhill Suites, a 67,328-square-foot, 4-story hotel with 106 hotel rooms (under construction). The hotel includes a 1,750-square-foot meeting room and guest parking and is scheduled to open in April 2017 (City of Marina, 2015, 2016f; FORA, 2013; FORA, 2015; Marriott, 2016).	Under construction / Full Buildout Scheduled for 2020



**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
City of Marina (cont.)			
8	Former Fort Ord Military Base 3rd Avenue / Imjin Parkway	<b>Cypress Knolls Senior Residential Project</b> – Senior residential community with active-adult housing, care services, senior community center, and supportive amenities and services on 188 acres (City of Marina, 2012; City of Marina, 2016b).	Unknown; project on hold
9	Former Fort Ord Military Base Imjin Parkway / California Avenue	<b>Marina Heights</b> – Removal of 828 abandoned residential units and replacement with a combination of 1,050 new townhouse, cottage, estate homes, and single-family residential units. The project also includes 35 acres of parks, greenbelts, and open space (City of Marina, 2010; City of Marina, 2016d).	Phase I Under Construction
10	Reservation Road between Del Monte Boulevard and De Forest Avenue	<b>Marina Downtown Vitalization Specific Plan</b> – Redevelopment plan for Marina’s 225-acre downtown area comprising mixed-use commercial, residential, educational, and civic uses (City of Marina, 2011b; City of Marina, 2016c).	Unknown / Full Buildout Scheduled for 2040
11	Marina Airport Reservation Road / Blanco Road	<b>Marina Airport Economic Development Area</b> – Airport development project aimed at promoting growth of the airport. Individual projects include: <ul style="list-style-type: none"> <li>• Airfield Electrical System Upgrades</li> <li>• Runway Rehabilitation and Extension</li> <li>• Taxiway Rehabilitation and Extension</li> <li>• Airfield NAVAIDS Improvements (City of Marina, 2011a; City of Marina 2016a).</li> </ul>	Completed
39	3012-3032 Lexington Court, Marina (east of Abrams Drive on the former Fort Ord Military Base)	<b>Rockrose Gardens</b> – 20 units of permanent, affordable, supportive housing for people with psychiatric disabilities (FORA, 2013; FORA, 2015).	Completed
12	Armstrong Ranch, Marina (Along the northern limits of the city of Marina, on either side of Del Monte Avenue)	<b>Marina Station</b> – Development project comprising 1,360 residential units, approximately 60,000 square feet of retail space, 144,000 square feet of office space, and 652,000 square feet of business park/industrial uses. The 1,360 residential units comprise approximately 887 single-family lots and 473 multi-family units (City of Marina, 2011c; City of Marina, 2016e).	Unknown
13	California State University Monterey Bay Campus	<b>CSUMB North Campus Housing Master Plan</b> – Includes 583 student housing units, leasing office, community center on 8 acres (more recently known as the Promontory Housing Project) (City of Marina, 2015; FORA, 2013; FORA, 2015).	Completed
40	California State University Monterey Bay Campus (Divarty Street, east of General Jim Moore Boulevard)	<b>ITCD Academic Building (CSUMB)</b> – New 58,000-square-foot Information Technology and Communications Design (ITCD) and the School of Business academic building (FORA, 2013; CSUMB, 2016).	Completed
47	CEMEX Sand Mining Facility (east of Highway 1 on Lapis Road)	<b>CalAm Slant Test Well at CEMEX</b> – Construction and operation of a test slant well and associated monitoring wells. The project purpose is to develop the geologic, hydrologic, and water quality data needed to confirm the feasibility of using slant wells in the CEMEX active mining area as a Seawater Intake System for the MPWSP Desalination Plant. The test slant well extends diagonally beneath the sea floor through the Dune Sand Aquifer and the 180-Foot Aquifer Equivalent and is permitted to operate until February 2018 (CCC, 2014). As explained in Chapter 3 and where relevant in Chapter 4 cumulative analyses, this test well would be incorporated into the proposed project for long-term operation; if the CPCN and MBNMS approval of the proposed project is denied, the test well would be removed consistent with the terms of the Coastal Development Permit.	2015 Construction completed, pilot program currently underway

**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
City of Seaside			
14	West of Fremont Boulevard, along Broadway Avenue, Del Monte Boulevard, and Canyon Del Rey Boulevard	<b>The West Broadway Urban Village Specific Plan</b> – Mixed-use, transit-oriented development comprising residential with ground-floor retail and commercial uses along Broadway Avenue, with supporting future transit-oriented development along the west side of Del Monte Boulevard. Includes a public library and parking structure on Broadway Boulevard and a hotel/conference center mixed-use development at the southeast corner of Canyon Del Rey and Del Monte Boulevards (City of Seaside, 2016a).	Ongoing construction due to redevelopment plans
15	Broadway Avenue / Fremont Boulevard	<b>City Center Shopping Center Redevelopment Project</b> – Approximately 40,000 square feet of retail and restaurant space (City of Seaside, 2016c).	Construction completed in 2012
16	Former Fort Ord Military Base Monterey Road / Coe Avenue	<b>The Seaside Resort</b> – The first phase, completed in 2009, involved upgrades to the Bayonet and Black Horse Golf Courses. The next phase of development features a four-star hotel with approximately 275 hotel rooms, 175 timeshare units, and 125 residential units (City of Seaside, 2016c).	Stage 1 2017-2018
17	Former Fort Ord Military Base (East of General Jim Moore Boulevard, south of Inter-Garrison Road and north of Eucalyptus Road)	<b>Monterey Downs and Horse Park and Central Coast Veteran's Cemetery Specific Plan</b> – The Specific Plan project would include a 225,000-square-foot horse training facility comprising a track and stabling area, ancillary buildings, and a 6,500-seat sports arena and grandstand; a 330,000-square-foot commercial center; a 15,000-square-foot horse park with a visitors center, office space, veterinary clinic, and horse stables; two affordable extended-stay hotels with a total of 256 units; 1,280 residential units ranging from apartments to single-family residential homes; a 100,000-square-foot office park; a 200-room (100,000-square-foot) hotel; a 5,000-square-foot tennis and swim club; a 73-acre habitat preservation area; and 74 acres dedicated to open space and parks and infrastructure.  The Central Coast Veterans Cemetery component of the Specific Plan project includes 13,838 burial sites for 20 years of interments, an administration building, a maintenance yard and building, memorial areas, veterans' hall, cultural history museum, chapel, and a 300-seat amphitheater for special events. An adjacent 45.9-acre parcel is proposed as a habitat restoration area (City of Seaside, 2016d).	Phased construction over a 13-year period; dates unknown
18	Former Fort Ord Military Base Between Highway 1 and 2nd Avenue, and Light Fighter Drive and 1st Street	<b>Main Gate Specific Plan</b> – Mixed-use development project featuring approximately 500,000 square feet of retail and entertainment space, and a 250-room hotel/conference center with spa amenities (City of Seaside, 2016b).	Unknown
41	Broadway Avenue between Del Monte Boulevard and Fremont Boulevard, and Del Monte Boulevard between Broadway Avenue and Contra Costa Street	<b>West Broadway Stormwater Retention</b> – The project involves construction of a stormwater treatment and diversion system in Broadway Avenue between Del Monte Boulevard and Fremont Boulevard and at Del Monte Boulevard. Treated water would be diverted to retention structures for groundwater recharge (MPWMD, 2014).	Unknown
42	Laguna Grande and Roberts Lake (Near the intersection of Highway 218 [aka Canyon Del Rey Boulevard] and Del Monte Boulevard)	<b>Dredge Laguna Grande and Roberts Lake</b> <sup>3</sup> – The project would create additional storage capacity, visitor-serving amenities, and habitat enhancements at Laguna Grande and Roberts Lake (MPWMD, 2014).	Unknown

<sup>3</sup> Laguna Grande and Roberts Lake are collectively referred to as Laguna del Rey throughout this EIR/EIS.

**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
<b>City of Seaside (cont.)</b>			
44	Broadway Avenue between Del Monte Boulevard and Fremont Boulevard and at Del Monte Boulevard	<b>Del Monte Blvd Dry Weather Diversion</b> – The project consists of a dry weather runoff diversion at Del Monte Boulevard to the sanitary sewer system. Diverted water would be treated by the regional treatment plant and reused for existing non-potable and potential future potable uses (MPWMD, 2014).	Unknown
<b>City of Monterey</b>			
20	459 Alvarado Street	<b>459 Alvarado Street</b> – Development of 36 residential units and 12,000 square feet of commercial uses (City of Monterey, 2012).	Completed in 2016
21	480 Cannery Row	<b>Ocean View Plaza</b> – Approved mixed-use development project comprising 87,362 square feet of commercial space, 30,000 square feet of restaurant space, 8,408 square feet of coastal/community use, 38 market-rate condominiums, and 13 inclusionary housing units (City of Monterey, 2012). As of 2015, the property had gone into default and was listed for sale.	Unknown
50	200 Iris Canyon Road	<b>Iris Canyon Residential Care Facility for the Elderly</b> – The project consists of a 110-unit/136-bed residential care facility with studios, one and two bedroom rental units and services with one 114,316 square foot main building and three 2,284 square foot duplex building. The project covers a total of 46,076 square feet and the total floor area is 121,168 square feet (CEQAnet, 2014).	Construction anticipated completion in 2017
51	Throughout the City of Monterey	<b>Sanitary Sewer System Rehabilitation Program</b> – The project involves fixing 441 sewer pipes and 516 sewer manholes located in the streets throughout the City of Monterey. Repairs would begin in early 2016 and continue for 18 months (City of Monterey, 2016).	Under construction
52	Highway 68 and 17 Mile Drive	<b>Holman Highway 68/Highway 1 Roundabout</b> – The project would build a roundabout at the intersection of Holman Highway 68 and 17 Mile Drive near the entrance to Pebble Beach. (TAMC, 2016b).	Under construction
<b>City of Pacific Grove</b>			
22	Sunset Drive	<b>Pacific Grove Local Water Project</b> – Construction of a new local satellite recycled water treatment plant at the former Point Pinos Wastewater Treatment Plant and installation of 1,400 linear feet of conveyance pipeline. Initially, the project would provide 125 afy of non-potable recycled water to serve irrigation needs at the Pacific Grove Golf Links and the El Carmelo Cemetery. Potential expansion could increase output to 600 afy (City of Pacific Grove, 2014; City of Pacific Grove, 2015).	2017
23	Pacific Grove	<b>Pacific Grove Recycled Water</b> – Recycled water from the Pebble Beach Community Services District (PBCSD) and raw wastewater from 500 homes in the Del Monte Park area of Pacific Grove would be captured and diverted to the existing Carmel Area Wastewater District (CAWD) reclamation facility for treatment. Recycled water from CAWD would be stored in the Forest Lake Reservoir and returned to the city through existing CAWD and PBCSD recycled water systems to a delivery point near the Spanish Bay Golf Course in Pebble Beach. Approximately 10,000 to 13,500 linear feet of new 12-inch diameter recycled water pipeline would be built to deliver water to the golf links, cemetery and other irrigation demands (CPUC, 2012).	Unknown
<b>City of Carmel</b>			
25	2770 15th Avenue, Carmel	<b>Carmel Unified School District</b> – Construction of a 5,070-square-foot building to house six classrooms. The project also includes the removal of five onsite temporary modules and six non-native ornamental landscape trees (Monterey County Planning Department, 2016c).	Construction Complete
26	Del Monte Forest	<b>Pebble Beach Company Project</b> – The project builds out and preserves the remaining undeveloped Pebble Beach Company properties located within the Del Monte Forest. The project would renovate and expand visitor-serving uses, create 90 to 100 single-family residential lots, and preserve 635 acres as primarily forested open space. The proposed development would result in new construction at four primary sites: The Lodge at Pebble Beach, The Inn at Spanish Bay, Spyglass Hill, and the Pebble Beach Equestrian Center (Monterey County Planning Department, 2016f).	Unknown

**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
City of Carmel (cont.)			
27	Carmel Valley Road	<b>Rancho Cañada Village Specific Plan</b> –A previous proposal included 281 housing units. A recirculated Draft EIR analyzes a 130-Unit Alternative that would reduce the total number of residential units to fit within the 190-unit housing cap negotiated between the Carmel Valley Association and Monterey County as part of a 2010 general plan lawsuit settlement, The Ranch Canada Village would be built within the current west course of the Rancho Canada Golf Club. (Monterey County Planning Department, 2016h).	Unknown. Recirculated DEIR
28	Carmel Valley Road	<b>Rancho Cañada Golf Club East Course Closure</b> – Closure of the Rancho Canada Golf Club's east course and transfer of 140 acres of land to the Monterey Peninsula Regional Park District. Tentative plans for the land include additional parking and access to Palo Corona Regional Park, hiking trails, and restored riparian habitat (The Trust for Public Land, 2016; The Carmel Pine Cone, 2016).	East Course closure to occur in 2017. Restoration work schedule unknown.
Monterey Peninsula Water Management District			
29	Former Fort Ord Military Base General Jim Moore Boulevard/ Eucalyptus Boulevard	<b>Seaside Groundwater Basin Aquifer Storage and Recovery (Phase 1)</b> – Water supply project consisting of two injection/extraction wells (ASR-1 and ASR-2 wells), a backwash percolation basin, a chemical/electrical building, and conveyance pipelines. During high-flow periods in the Carmel River, river water is injected into Seaside Groundwater Basin, then extracted during dry periods or periods of high demand (MPWMD, 2005).	Construction completed in 2008
30	Seaside Middle School General Jim Moore Boulevard/ Coe Avenue	<b>Seaside Groundwater Basin Aquifer Storage and Recovery (Phase 2)</b> – This phase includes two additional injection/extraction wells (ASR-2 and ASR-3 wells) and a backwash percolation basin (Denise Duffy & Associates, 2012).	Construction completed in 2014
59	(With Monterey Regional Water Pollution Control Agency)  MRWPCA Regional Wastewater Treatment Plant	<b>Pure Water Monterey Groundwater Replenishment (GWR) Project</b> – The MRWPCA certified the Final EIR and approved the GWR project in October 2015. The project would provide purified recycled water for recharge of groundwater and recycled water to augment the existing Castroville Seawater Intrusion Project's (CSIP) irrigation supply. The GWR facilities would collect a variety of source waters from several locations in Monterey County and convey that water to the MRWPCA Regional Wastewater Treatment Plant for treatment. The GWR project would then purify 3,500 afy of water at a new Advanced Water Treatment Plant located at the existing wastewater treatment plant site, and convey and then inject the purified water into the Seaside Groundwater Basin. The GWR facilities also would provide an average of 4,750 afy of recycled water for agricultural irrigation in northern Monterey County through the CSIP.  The new source waters for the GWR project would supplement the existing incoming wastewater flows, and would include the following: 1) water from the City of Salinas agricultural wash water system, 2) stormwater flows from the southern part of Salinas and the Lake El Estero facility in Monterey, 3) surface water and agricultural tile drain water that is captured in the Reclamation Ditch and Tembladero Slough, and 4) surface water and agricultural tile drain water that flows in the Blanco Drain. The GWR project would include new pipelines and injection facilities. In September 2016, the CPUC approved a Water Purchase Agreement that allows CalAm to secure 3,500 afy of water from the GWR project to meet a portion of the project water supply needs.  The GWR Project is a cumulative project in the context of Alternatives 5a and 5b, which evaluate a reduced-size (6.4-mgd) desalination plant at the Project and an Alternate site. The GWR Project is not a cumulative project in the context of the proposed project or any alternative that includes a 9.6 mgd desalination plant built and operated by CalAm (i.e., Alternatives 1 and 2), because if the GWR is implemented, CalAm would not need to construct a 9.6 mgd desalination plant (the proposed project); instead, it would construct the 6.4-mgd desalination plant described in Alternatives 5a and 5b. The GWR project is also not a cumulative project with Alternative 4, the Peoples' Project, because the project objectives of that alternative are to provide the full amount of water required to meet the water supply needs of CalAm's Monterey District, and would rely on a water purchase agreement with CalAm to justify that alternative and to secure its funding. Thus, if the GWR project is built, it is not reasonably foreseeable that the Peoples' Project would	Construction anticipated complete in 2018

**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
Monterey Peninsula Water Management District (cont.)			
59 cont		proceed, so the Peoples' Project is considered as an alternative, but without the GWR project being implemented. The GWR project is a cumulative project with the DeepWater Desal project because that project is sufficiently large and designed to serve customers in myriad geographic locations such that it could proceed even if the GWR project is implemented. As an alternative to the proposed project, if the GWR project supplies water to CalAm, then the DeepWater Desal project could supply the remainder of the project water supply needs and would simply have more water available for other purchasers, than it would if the GWR project were not implemented.	
Other			
32	Carmel River near confluence with San Clemente Creek	<b>CalAm San Clemente Dam Removal Project</b> –This project removed the 106-foot-tall San Clemente Dam that used to be on the Carmel River, rerouted the Carmel River into San Clemente Creek, excavated and stabilized sediment that had accumulated in San Clemente Creek, and restored a half-mile reach of San Clemente Creek (San Clemente Dam Removal, 2016).	Construction completed in 2015
34	Moss Landing / Santa Cruz County	<p><b>Monterey Bay Regional Water Project (MBRWP or DeepWater Desal)</b> – This project includes a 23 mgd seawater desalination facility and co-located 1 million-square-foot data center on a 110-acre site in Moss Landing, on Dolan Road, approximately 1,500 feet east of the Moss Landing Power Plant. The project would serve up to 25,000 afy of potable water supply to participating communities in the Monterey Bay region, potentially including the Monterey Peninsula, Castroville, Salinas, and parts of Santa Cruz County (DeepWater Desal, 2015).</p> <p>As proposed by DeepWater Desal, the project would develop supplemental water supplies to serve the customers in CalAm's Monterey District service area. However, if the MPWSP is built, DeepWater Desal can provide water to other areas, as described above. Therefore, this EIR/EIS considers two reasonably foreseeable scenarios that include development of the DeepWater Desal Project:</p> <ol style="list-style-type: none"> <li>1) Development of the DeepWater Desal Project as an alternative to the MPWSP, as described in Chapter 5 (serving CalAm's Monterey District service area). This is Alternative 3 described and analyzed in Chapter 5.</li> <li>2) Development as a separate project in addition to the MPWSP or another alternative that would serve CalAm's Monterey District service area. In this case, the impacts of the DeepWater Desal Project are considered in the cumulative scenario as they relate to the provision of water to Santa Cruz County and the City of Salinas. The DeepWater Desal Project with provision of water to Santa Cruz County and the City of Salinas is a reasonably foreseeable project in the cumulative scenario relevant to the proposed project and Alternatives 1, 2, 4, and 5a and 5b.</li> </ol>	Beyond 2017
57	Moss Landing Green Commercial Park/ Santa Cruz County	<p><b>Peoples' Moss Landing Water Desal Project</b> – The project would provide 12,500 afy of desalinated water to customers in CalAm's Monterey District. The project would rehabilitate existing pipelines for an open-water intake and the discharge of effluent, a new pump house, desalination plant, and desalinated water conveyance and storage facilities (The Peoples' Project, 2015).</p> <p>As proposed by its applicant, the Peoples' Project would develop supplemental water supplies to serve customers in CalAm's Monterey District service area. Since the Peoples' Project and the MPWSP would not both be implemented to serve the same customers, this EIR/EIS assumes the Peoples' Moss Landing Project is an alternative to the MPWSP (see Chapter 5). Therefore, it is not a reasonably foreseeable project in the cumulative scenario relevant to the MPWSP. It would also not be a reasonably foreseeable project in the cumulative scenario for any of the alternatives aimed at meeting the objectives of the MPWSP. Therefore, although acknowledged here as a reasonably foreseeable alternative to the proposed project (as described in Chapter 5), this project's contributions to cumulative impacts are not considered as part of the cumulative scenario relevant to the proposed project or another alternative.</p>	Unknown

**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
<b>Marina Coast Water District</b>			
31	Marina Coast Water District / Salinas Valley Reclamation Plant, Monterey County	<p><b>Regional Urban Water Augmentation Project (RUWAP) Desalination Element</b> – On March 1, 2016, in response to a request for information, MCWD stated that the RUWAP Desalination Plant would produce up to 2,700 acre-feet per year (AFY) of potable water supply; 2,400 AFY would be for the former Fort Ord, as identified in the Fort Ord Reuse Authority (FORA) Base Reuse Plan (BRP) and 300 AFY would be for the District's Central Marina service area, as a replacement for the existing pilot (non-operating) desalination plant (MCWD, 2016). However, MCWD reported that the water source for the proposed desalination project has not yet been determined; it may be seawater-intruded groundwater from the 180-Foot Aquifer, or it may be seawater from shallow wells located along the coast. The location of the wells and pipelines must also be addressed in a feasibility study. The desalination plant site last studied was located in North Marina on a parcel owned by MCWD, adjacent to the MRWPCA Regional Wastewater Treatment Plant. In any event, a feasibility study is needed to determine the actual component sizes and the timing of this project is dependent upon the redevelopment water demands within the former Fort Ord.</p> <p>Subsequent to that March 2016 response, the MCWD Board of Directors adopted by unanimous vote on May 2, 2016, Resolution 2016-26 approving a Memorandum of Understanding regarding Fort Ord water augmentation and a three party effort (MCWD, FORA and MRWPCA) to study alternatives. The resolution was prompted by the MCWD and MRWPCA entering into an agreement dated April 8, 2016 for the joint Pure Water Delivery and Supply Project, which will provide 1,427 AFY, leaving an unmet need for 973 AFY to support the FORA BRP.</p> <p>The three party planning (TPP) effort will explore the most cost effective and technically efficient mix of advanced treated water, conservation, desalination, groundwater recharge and recovery, and other water sources, options, and alternatives to provide the 973 AFY of augmented water, and whether more or less than 1,427 AFY of advanced treated water is necessary to serve the Ord Community. The FORA Board will utilize the TPP study in developing a preferred water augmentation mix and deciding which additional water augmentation project(s) should be developed by MCWD.</p> <p>Based on these current events and actions, it is speculative to assume that MCWD will implement a 2,700 AFY desalination facility, or what the size, timing or configuration of that facility will be. This EIR/EIS thus does not generally include the RUWAP Desalination Plant. Making conservative assumptions, however, Section 4.4, Groundwater Resources, does analyze as a cumulative project the development of a 1,000 AFY desalination plant on MCWD land in the event that such an option is chosen to make up the shortfall needed to provide a total of 2,400 AFY of water augmentation to support the FORA BRP.</p>	Unknown
35	Marina Coast Water District / Salinas Valley Reclamation Plant, Monterey County	<p><b>Regional Urban Water Augmentation Project (RUWAP) Recycled Water Project</b> – The Recycled Water Project includes construction of a recycled water distribution system to provide up to 1,727 afy of recycled water to urban users in the MCWD service areas, including the former Fort Ord. The water would be recycled at the existing Salinas Valley Reclamation Plant. This project includes the following facilities: a new pipeline connection to the Salinas Valley Reclamation Plant; two pump stations; 40,000 linear feet of distribution pipelines; and a 1.5-million-gallon storage tank known as Blackhorse Reservoir. MCWD now proposes to combine conveyance facilities with the approved Pure Water Monterey Project for a shared pipeline (MCWD, 2016a).</p>	Some pipelines constructed; construction of balance unknown.
<b>Moss Landing</b>			
37	Moss Landing	<p><b>Moss Landing Community Plan</b> – Revised draft plan issued May 2015:</p> <ul style="list-style-type: none"> <li>• Revx-173 LLC – Demolition of an existing facility and construction of a 70,000-square-foot industrial warehouse on 189 acres.</li> <li>• Monterey Bay Aquarium Research Institute – Removal of a finger pier; construction of a 58,655-square-foot research facility; demolition of an existing building and construction of a 34,000-square-foot replacement facility; and construction of a 30-foot dock extension (Monterey County Planning Department, 2013). In addition, construction of a 66,500-square-foot building to support science and engineering research activities.</li> <li>• 30-Unit Hotel</li> </ul>	Unknown

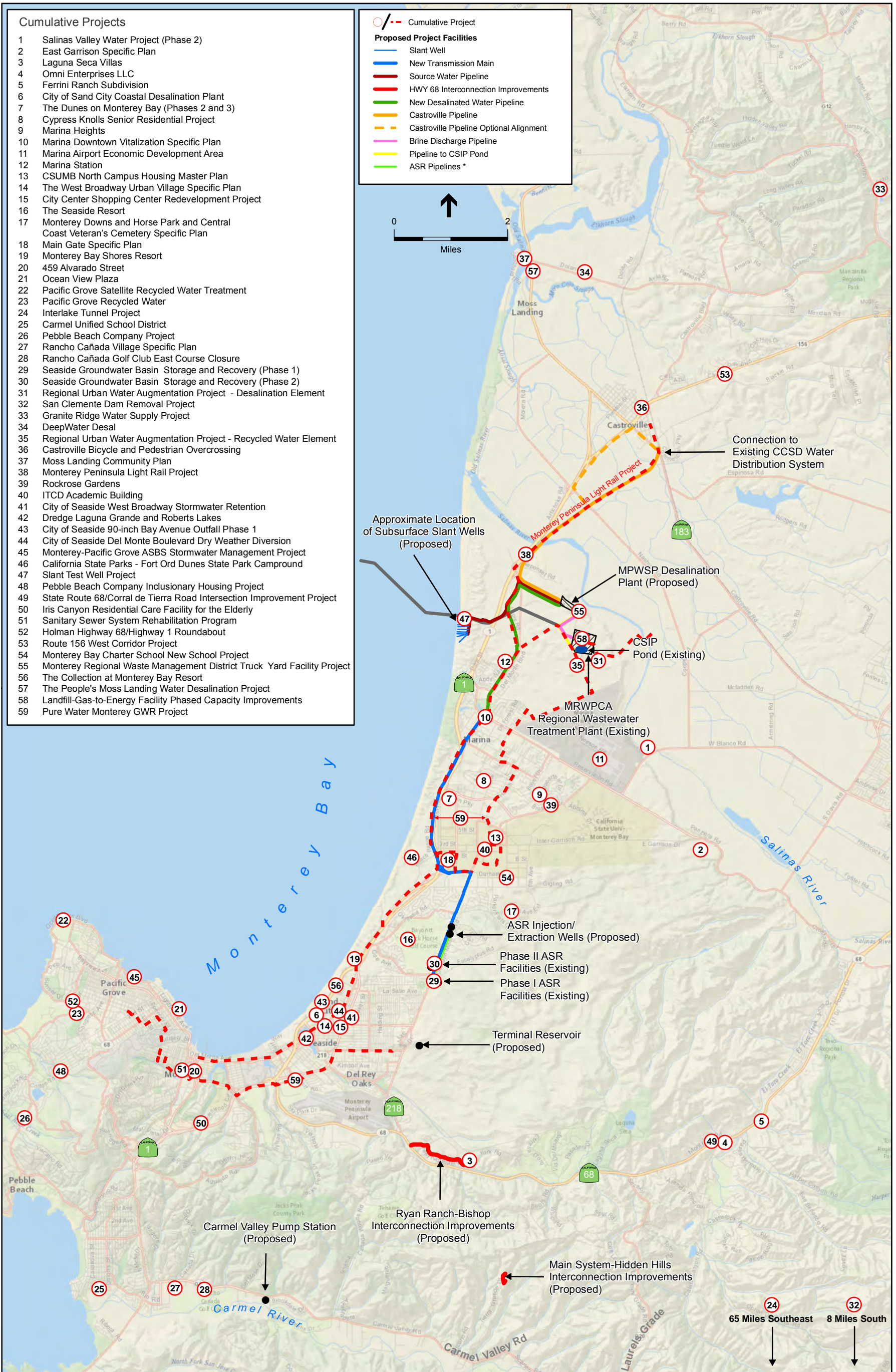
**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
<b>Moss Landing (cont.)</b>			
37 cont		<ul style="list-style-type: none"> <li>• Pisto Restaurant – Construction of a 6,000-square-foot restaurant</li> <li>• Moss Landing Marine Laboratories – Development of a 36,000-square-foot warehouse and 15,000-square-foot dock/wharf area at 7539 Sandholdt Road. At 7544 and 7722 Sandholdt Road, development of a 2,600-square-foot mixed-use facility, a 7,400-square-foot research building, 8,520-square-foot concrete slab for aquaculture, and a 300-foot pier.</li> <li>• Gregg Drilling – Development of an 8,000- to 9,000-square-foot building for high-tech operations (Monterey County Planning Department, 2015).</li> </ul>	
<b>Castroville</b>			
36	Transportation Agency for Monterey County Between Salinas Street and Castroville Boulevard	<b>Castroville Bicycle and Pedestrian Overcrossing</b> – The project would build a bicycle and pedestrian path connecting the Community of Castroville to Castroville Boulevard. The project starts on Salinas Street at McDougall and parallels Axtell Street with an overcrossing at the Union Pacific tracks and a Class 1 path to Castroville Boulevard. The overcrossing structure would be approximately 1,400 feet long (TAMC, 2016a)	Construction anticipated to start in 2016
53	Caltrans Highway 156 between Castroville Boulevard and U.S. 101	<b>Route 156 West Corridor Project</b> – The project would build a new four-lane highway parallel to the existing Highway 156 with new interchanges built at Castroville Boulevard and at U.S. 101. The current two-lane highway would be converted into a frontage road serving the local community. A supplemental Environmental Impact Report is in preparation (TAMC, 2016c).	Unknown
<b>Other Projects</b>			
45	Cities of Monterey and Pacific Grove (David Avenue Reservoir, Pine Avenue, Ocean View Boulevard, former wastewater treatment plant site)	<b>Monterey-Pacific Grove Area of Special Biological Significance (ASBS) Stormwater Management Project</b> – The project includes diverting both wet weather and dry weather flows from the Greenwood Park and Congress Storm Drain Watersheds to the David Avenue Reservoir site, and treating and delivering of recycled water to irrigation sites throughout the city (CPUC, 2012). The project also revises the existing storm drain system in Pacific Grove to retain or treat stormwater flows. These retention facilities will help to meter or treat flows into either treatment facility thereby allowing up to a 90 percent reduction in pollutant loading during storm events. Diverted flows would ultimately be directed to either the rebuilt Pacific Grove Water Treatment Plant or the Monterey Regional Water Pollution Control Agency Regional Water Treatment Plant in Marina (MPWMD, 2014).	2018-2020
38	Cities of Castroville, Marina, Monterey, Seaside, Sand City, and County of Monterey.	<b>TAMC Monterey Peninsula Light Rail Project</b> – Construction of commuter light rail service, mostly along the Transportation Agency for Monterey County's (TAMC's) existing Monterey Branch Line right-of-way, from House Plaza in the city of Monterey to Blackie Road in Castroville. This 15.2-mile-long project would involve improvements to existing rail, construction of new rail, and 12 new stops (one in Castroville, five in Marina, three in Seaside and Sand City, and three in the city of Monterey). Approximately 860 new parking spaces would be built at these stations. The project would also include a new maintenance facility; this facility would be located at one of three sites, all of which are near Highway 1 on lands formerly associated with the Fort Ord military base (TAMC, 2011). TAMC has placed this project on hold indefinitely until the agency can secure funding for environmental review, design, and construction.	Unknown
46	Fort Ord Dunes State Park (immediately west of the TAMC rail corridor and State Highway 1, west of the former Fort Ord Military Base)	<b>Fort Ord Dunes State Park Campground</b> – Construction and operation of a campground facility and associated infrastructure within Fort Ord Dunes State Park, including 45 RV sites and two host sites with electrical and water hookups, 10 hike/bike sites, and 43 tent sites; parking for 40 vehicles; restrooms with showers; a multi-purpose building; an outdoor campfire center; interpretation/ viewing areas; renovated bunkers; an entrance station near the 1st Street underpass; modular structures; storage yard and maintenance shop; improved beach access/trails; one plumbed restroom with outdoor shower for beach use; a 200-foot wildlife/habitat corridor; internal campground trail network, trail improvements, and roadway improvements; and offsite utilities (Denise Duffy & Associates, 2013).	Unknown

**TABLE 4.1-2 (Continued)  
CUMULATIVE PROJECTS**

No.	Planning Jurisdiction/ Location	Project Description	Estimated Construction Schedule
Other Projects (cont.)			
54	California State University Trustees Colonel Durham Street and 6th Avenue	<b>Monterey Bay Charter School New School Project</b> – Phase I includes the construction of 19 K-8 classrooms; work rooms for administrators, teachers and custodians; resource and remedial instruction rooms; and storage. Phase II includes additional support facilities. Phase I is projected to accommodate approximately 430 students; full enrollment of 508 students is expected to be reached by Phase II (Denise Duffy & Associates, 2016).	Phase I construction anticipated 2018. Phase II construction anticipated 2020
55	Monterey Regional Waste Management District 14201 Del Monte Boulevard, Marina	<b>Monterey Regional Waste Management District Truck Yard Facility Project</b> – The project would include a 7,200-square-foot office/ administration building, a 11,300-square-foot maintenance building, a 5,000-square-foot truck wash and repair building, as well as collection truck parking and steel bin storage areas, Compressed Natural Gas equipment, and associated employee parking (Denise Duffy & Associates, 2014).	Construction underway
58	Monterey Regional Waste Management District 14201 Del Monte Boulevard, Marina	<b>Landfill-Gas-to-Energy Facility Phased Capacity Improvements</b> – Although it is not evaluated in this EIR/EIS, CalAm is actively pursuing a renewable energy source option with Monterey Regional Waste Management District (MRWMD) that would allow CalAm to meet a portion of the MPWSP Desalination Plant operational energy requirements with methane gas from the existing MRWMD landfill-gas-to-energy (LFGTE) facility located adjacent to the MPWSP Desalination Plant site. The MRWMD LFGTE facility produces 5.07 megawatts (MW) of continuous electricity that is sold to PG&E. MRWMD wishes to increase the electric generation capacity of the LFGTE facility by 3.2 MW in two stages, with the first phase of improvements increasing the capacity by 1.6 MW, followed by an additional 1.6 MW increase in 6 to 8 years. Once such an expansion were complete, the total generation capacity of the LFGTE facility would be 8.27 MW (ESI, 2014).  If this renewable energy source option were implemented, about half of the MPWSP Desalination Plant operational energy requirements could be met with methane gas from the LFGTE facility; the remainder would come from the local PG&E grid. Overhead powerlines, electrical transformers, metering devices, and switchgear would be needed to connect the MRWMD LFGTE facility with the MPWSP Desalination Plant. Implementation of this option and the construction of the associated interconnection improvements would require separate environmental review. These possible LFGTE improvements have not been proposed and are not actively under environmental review and consideration; for these reasons, they are not evaluated in the cumulative analyses in this EIR/EIS.	Phase 1: Unknown Phase 2: 6 to 8 years after Phase 1
60		<b>Monterey Pipeline and Pump Station</b> – The new 5.4-mile-long, 36-inch-diameter Monterey Pipeline would allow for bi-directional flows and would convey potable water supplies from the GWR project's (No. 59) new Transfer Pipeline to the Monterey Peninsula. The Monterey Pipeline would utilize the pressure (called "hydraulic head") provided by CalAm extraction operations to convey water to the Monterey Peninsula cities. The Monterey Pipeline would connect two pressure zones in the CalAm system (one in the area of the City of Pacific Grove and one in the area of the City of Seaside). Water stored in Forest Lake Tanks could flow via gravity to the lower Carmel Valley or be pumped to the upper Carmel Valley.  In September 2016, the CPUC approved the Monterey Pipeline and Pump Station along with the Water Purchase Agreement described for the GWR Project (No. 59).	Under construction





NOTE:  
 \*The ASR Pipelines are the ASR Conveyance Pipeline, the ASR Pump-to-Waste Pipeline, and the ASR Recirculation Pipeline. See Figure 3-9a for the individual pipeline alignments.

205335.01 Monterey Peninsula Water Supply Project  
**Figure 4-1**  
 Cumulative Projects

SOURCE: ESA, 2013

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