

4.7 ENERGY AND MINERAL RESOURCES

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4.7.1 Introduction

This section analyzes the Proposed Project's potential impacts on non-renewable energy and mineral resources, and the potential for the Proposed Project's construction and operation to adversely affect the availability of these resources. This section also describes the existing regional and local energy systems and the applicable regulations related to energy production and consumption.

Public and agency comments received during the public scoping period in response to the Notice of Preparation are summarized in **Appendix A, Scoping Report**. No comments were received with regard to energy or mineral resources impacts.

4.7.2 Environmental Setting

The Proposed Project would be located in Monterey County and would include components in the unincorporated area of Monterey County and in the cities of Monterey, Seaside, Marina, Salinas, Sand City, and Pacific Grove. For a detailed view of the geographic location of the Proposed Project components, see **Chapter 2.0, Project Description**, and **Figure 2-18, Proposed Project Facilities Overview**.

4.7.2.1 Electricity

The production of electricity requires the consumption or conversion of energy resources: water, wind, oil, gas, coal, solar, geothermal, and nuclear sources. Approximately 70% of the state's electricity supply comes from in-state sources; the remainder is imported from the Pacific Northwest and the Southwest (California Energy Commission, 2008). The electricity generated is distributed via a network of transmission and distribution lines commonly called the power grid.

Pacific Gas & Electric (PG&E), the local public utility and energy supplier, provides electricity from both renewable and non-renewable resources. The power mix PG&E provided to its customers in 2012 consisted of non-emitting nuclear generation (21%), large hydroelectric facilities (11%) and eligible renewable resources (19%), such as wind, geothermal, biomass, solar and small hydro. The remaining portion came from natural gas/other (27%) and unspecified power (21%). According to PG&E, unspecified power refers to electricity that is not traceable to specific generation sources by any auditable contract trail. In Monterey County, electricity is distributed via local infrastructure owned and operated by PG&E. The largest source of electricity in the county is supplied to the electrical grid by the Moss Landing Gas Fired Power Plant owned by Dynegy (California Energy Commission, 2009). The Moss Landing Plant generates over 1,500 megawatts.

Electricity consumption reported in the California Energy Commission's Statewide Energy Demand report for Monterey County was 2,568 million gigawatt hours (GWh) in 2012 (including nonresidential use of 722 GWh and residential use of 1,921 GWh) (California Energy Commission, 2014).

4.7.2.2 Natural Gas

After electricity, natural gas is the most widely used energy source in California. Depending on yearly conditions, 40 to 45% of the total consumed natural gas is burned for electricity generation. The primary source of natural gas in Monterey County is the natural gas transmission system owned and operated by PG&E. PG&E's gas is delivered via high-pressure pipelines to its load centers, with compressors used to maintain transmission pressure. The gas is then received at either an underground storage facility or redistributed through another series of pipelines. The most recent report for natural gas consumption shows that Monterey County consumed 112 million therms in 2012 (including nonresidential use of 53 million therms and residential use of 59 million therms) (California Energy Commission, 2014).

4.7.2.3 Oil, Gas, and Geothermal Wells

According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, three plugged oil or gas wells are located in the cities of Seaside, Sand City, and Del Rey Oaks; these wells are inactive and do not lie within the Proposed Project area (Division of Oil, Gas and Geothermal Resources, 2013).

4.7.2.4 Mineral Resources

The primary mineral commodities mined in Monterey County are sand, gravel, and petroleum. Sand and gravel are used to make concrete for buildings and asphalt to pave roads. Crude oil, natural gas, and coal are fuel minerals used for producing petroleum and petrochemicals. Of the non-metallic minerals, construction-grade aggregate (sand, gravel, and crushed stone) is the most abundant and commonly used mineral resource in the county.

In accordance with the Surface Mining and Reclamation Act of 1975 (SMARA), the California Department of Conservation, Division of Mines and Geology, currently known as the California Geological Survey (CGS), has mapped nonfuel mineral resources of the state to show where economically significant mineral deposits are either present or likely to occur based on the best available scientific data. These resources have been mapped using the California Mineral Land Classification System, which includes the following Mineral Resource Zones (MRZ).

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated.

- MRZ-4: Areas where available information is inadequate for assignment to any other zone.

According to the Guidelines for the Classification and Designation of Mineral Lands, there are two general categories used to exclude lands from an MRZ-2 designation, the first is an economic exclusion and the second a social exclusion (California Geological Survey, 1999). Social exclusions include cemeteries, public parks and recreation areas, schools, hospitals, prisons and military bases and reservations. Economic exclusions include the following:

- Residential areas and areas committed to residential development, such as approved tracts.
- Commercial areas with land improvements (buildings).
- Industrial areas (buildings and adjacent storage and parking facilities).
- Major public and private engineering projects, such as canals, freeways, bridges, airports, dams, and railroads.
- Small areas isolated by urbanization (generally less than 40 acres).

The classification process is based solely on the underlying geology without regard to existing land use or land ownership. The primary goal of the mineral land classification is to ensure that the mineral potential of the land is recognized by local government decision-makers and is considered before making land use decisions that could preclude mining. Historic mineral production in Monterey County included sand and gravel mining for construction materials, mining for industrial materials (diatomite, clay, quartz, and dimension stone¹) and metallic minerals (chromite, placer gold, manganese, mercury, platinum, and silver) (Monterey County General Plan, 2010).

Figure 4.7-1, Mineral Resources Map displays the location of the MRZs in Monterey County, as well as the existing mines and oil wells. Nearly all the areas classified as MRZ-1 are located in the urbanized areas around Salinas, Castroville, and the Pajaro region. These are areas where, based on available geologic studies and information, no significant mineral resources were identified. The area in Monterey County designated as MRZ-2, or as an area of identified mineral resource significance, is in the vicinity of Marina, Sand City and Seaside. Monterey and Pacific Grove are designated as MRZ-3, with undetermined mineral resource significance (Monterey County, 2010). A majority of the Proposed Project component sites in Marina, Seaside, and Sand City, are designated MRZ-2; the proposed sites of Treatment Facilities at the Regional Treatment Plant, Product Water Conveyance System, and the Injection Well Facilities are designated as MRZ-2 zones due to the presence of significant sand and gravel deposits. All designated MRZ-2 lands are encouraged to be protected, as feasible, from land uses that would eliminate their future availability for mining. The Salinas Pump Station component site is not within a designated MRZ (California Geological Survey, 2012).

Portions of Marina are underlain by the quaternary beach and dune sand formation. Most undeveloped lands supporting these sand deposits are classified as mineral resource areas for construction aggregate. Armstrong Ranch, which is an area north of the city of Marina and in the northern portion of the Proposed Project area, is identified as an area of potential mineral resources for construction aggregate.

¹ A natural stone that is selected and mined based on specific size, shape, texture, or pattern.

The Proposed Project components are all within the Monterey Bay Production-Consumption Region, a study area designated by the California Geologic Survey to establish and quantify aggregate supply and demand. According to the California Geologic Survey (California Geological Survey, 2006), the region has 347 million tons of permitted aggregate resources over the next 50 years, which is sufficient to supply approximately 91% of the anticipated demand.

4.7.3 Regulatory Framework

4.7.3.1 Federal

National Energy Policy Act of 2005

The National Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, including buying hybrid vehicles, building energy efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

4.7.3.2 State

California Department of Conservation

The California Department of Conservation (CDC) is the primary agency charged with mineral resource protection in California. Several divisions within the CDC (the California Geological Survey, the Office of Mine Reclamation, the Division of Land Resource Protection, and the Division of Oil, Gas, and Geothermal Resources) are responsible for managing the development, utilization, and conservation of mineral resources, and the reclamation of mined lands.

Surface Mining and Reclamation Act of 1975 (SMARA)

As discussed in **Section 4.7.1**, the State Mining and Reclamation Act (SMARA) (Public Resources Code Section 2710 et seq.) was enacted in response to land use conflicts between urban growth and essential mineral production. The Act requires the State Mining and Geology Board (SMGB) to adopt state policies for the reclamation of mined lands and the conservation of mineral resources. These policies are found in Title 24 of the California Code of Regulations, Division 2, Chapter 8, Subchapter 1.

In accordance with SMARA, the State of California established the Mineral Land Classification System to help identify and encourage protection of mineral resources in areas that are subject to urban expansion or other irreversible land uses that would preclude mineral extraction. Protected mineral resources include construction materials, industrial and chemical mineral materials, metallic and rare minerals, and non-fluid mineral fuels.

2005 California Energy Action Plans and 2008 Update

The Energy Action Plan II, and subsequent update in 2008, is the state's principal energy planning and policy document (California Public Utilities Commission, 2008). The plan continues the goals of the original Energy Action Plan, describes a coordinated

implementation plan for State energy policies, and identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. In accordance with this plan, the first-priority actions to address California's increasing energy demands are energy efficiency and demand response (i.e., reduction of customer energy usage during peak periods in order to address system reliability and support the best use of energy infrastructure). Additional priorities include the use of renewable sources of power and distributed generation; for example, the use of relatively small power plants near, or at, centers of high demand.

To the extent that these actions are unable to satisfy the increasing energy and capacity needs, clean and efficient fossil-fired generation is supported. At the beginning of 2008, the California Energy Commission (CEC) and California Public Utilities Commission (CPUC) determined it was not necessary or productive to create a new Energy Action Plan. The State's energy policies have been significantly influenced by the passage of Assembly Bill 32, the California Global Warming Solutions Act of 2006. Rather than produce a new Energy Action Plan, the CEC and CPUC prepared an "update" that examines the State's ongoing actions in the context of global climate change.

The Energy Action Plan II includes the following energy efficiency actions specific to water supply systems: identify opportunities and support programs to reduce electricity demand related to the water supply system during peak hours, as well as opportunities to reduce the energy needed to operate water conveyance and treatment systems. Because much of electricity demand growth is expected to be met by increases in natural-gas-fired generation, reducing consumption of electricity and diversifying electricity generation resources are significant elements of plans to reduce natural gas demand.

California Code of Regulations

The 2013 California Green Building Standards Code (CALGreen) is a code with mandatory and/or voluntary requirements for new residential and nonresidential buildings (including buildings for retail, office, public schools and hospitals) throughout California. As of July 1, 2012, some mandatory requirements were extended to certain nonresidential additions and alterations. The code is Part 11 of the California Building Standards Code in Title 24 of the California Code of Regulations and is also known as the CALGreen Code. In short, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. For more information see the *Guide to the 2013 California Green Building Standards Code (Nonresidential)* at <http://www.documents.dgs.ca.gov/bsc/CALGreen/CALGreen-Guide-2013-FINAL.pdf>.

In its Final Order Regulation For In-Use Off-Road Diesel-Fueled Fleets (California Code of Regulations in Title 13, article 4.8, chapter 9, section 2449, subsection (d), the state will be implementing requirements for construction and other off-road vehicles and equipment that use diesel to limit idling. Specifically, this section states "no vehicle or engines subject to this regulation may idle for more than 5 consecutive minutes" with some exceptions. The enforcement of this regulation would reduce energy use during construction.

In its Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, the state requires the driver of any vehicle subject to this section to comply with the following requirements, except as noted in subsection (d) below: (A) the driver shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location. (B) the driver shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air

conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5 minutes at any location when within 100 feet of a restricted area.

The enforcement of these regulations would reduce energy use during construction and operation of the Proposed Project.

Assembly Bill 32: Global Warming Solutions Act

The 2006 Act directs the California Air Resources Board to begin developing discrete actions to reduce greenhouse gases. For a discussion of the requirements of AB32, see **Section 4.3, Air Quality and Greenhouse Gases**.

4.7.3.3 Regional and Local

Plan and Policies Consistency Analysis

Table 4.7-1, Applicable State, Regional, and Local Land Use Plans, Policies, and Regulations – Energy and Minerals describes the state, regional, and local land use plans, policies, and regulations pertaining to energy and mineral resources that are relevant to the Proposed Project and that were adopted for the purpose of avoiding or mitigating an environmental effect. Also included in **Table 4.7-1** is an analysis of project consistency with these plans, policies, and regulations. In some cases, policies contain requirements that are included within enforceable regulations of the relevant jurisdiction. Where the analysis concludes the project would not conflict with the applicable plan, policy, or regulations, the finding and rationale are provided. Where the analysis concludes the project may conflict with the applicable plan, policy, or regulation, the reader is referred to **Section 4.7.4, Environmental Impacts and Mitigation Measures**, for additional discussion, including the relevant impact determination and mitigation measures.

Table 4.7-1
Applicable State, Regional, and Local Land Use Plans, Policies, and Regulations – Energy and Minerals

Project Planning Region	Applicable Plan	Plan Element/ Section	Project Component(s)	Specific Policy or Regulation	Project Consistency with Policies and Regulations
California	California Code of Regulations	California Green Building Standards Code Title 24, Part 11 (CALGreen)	All	CALGreen requires energy efficiency measures in all new nonresidential buildings. See Guide to the 2013 California Green Building Standards Code (Nonresidential) at http://www.documents.dgs.ca.gov/bsc/CALGreen/CALGreen-Guide-2013-FINAL.pdf for more information.	Consistent: The Proposed Project must comply with the mandatory requirements in this regulation.
California	California Code of Regulations	Title 13, article 4.8, chapter 9, section 2449, subsection (d)		Final Order For In-Use Off-Road Diesel-Fueled Fleets Idling – The idling limits in section 2449(d)(2) shall be effective and enforceable immediately upon this regulation being certified by the Secretary of State. Fleets must meet the following idling limits. (A) Idling Lim it – No vehicle or engines subject to this regulation may idle for more than 5 consecutive minutes. Idling of a vehicle that is owned by a rental company is the responsibility of the renter or lessee, and the rental agreement shall so indicate. The idling limit does not apply to: 1. idling when queuing, 2. idling to verify that the vehicle is in safe operating condition, 3. idling for testing, servicing, repairing or diagnostic purposes, 4. idling necessary to accomplish work for which the vehicle was designed (such as operating a crane), 5. idling required to bring the machine system to operating temperature, and 6. idling necessary to ensure safe operation of the vehicle. (B) Written Idling Policy – As of March 1, 2009, medium and large fleets must al so have a written idling policy that is made available to operators of the vehicles and informs them that idling is limited to 5 consecutive minutes or less. (C) Waiver – A fleet owner may apply to the Executive Officer for a waiver to allow additional idling in excess of 5 consecutive minutes. The Executive Officer shall grant such a request upon finding that the fleet owner has provided sufficient justification that such idling is necessary.	Consistent: The Proposed Project must comply with this regulation.
California	California Code of Regulations	Title 13, article 4.8, chapter 9, section 2485, subsection (1)		Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling - or after February 1, 2005, the driver of any vehicle subject to this section shall comply with the following requirements: (A) the driver shall not idle the vehicle's primary diesel engine for greater than 5.0 minutes at any location; (B) the driver shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area.	Consistent: The Proposed Project must comply with this regulation.
Monterey County	Monterey County General Plan	Public Services	Salinas Treatment Facility Storage and Recovery Reclamation Ditch Diversion site Tembladero Slough Diversion site Blanco Drain Diversion site Treatment Facilities at Regional Treatment Plant RUWAP Alignment Option Coastal Alignment Option	Policy PS-13.2: All new utility lines shall be placed underground, unless determined not to be feasible by the Director of the Resource Management Agency.	Consistent: The Proposed Project would not require any new utility lines in the unincorporated area of the County; furthermore, new utility lines in the area of the Injection Well facility would be undergrounded.
Monterey County	Monterey County General Plan	Conservation and Open Space		Policy OS-9.1: The use of solar, wind and other renewable resources for agriculture, residential, commercial, industrial, and public building applications shall be encouraged.	Consistent: This policy obligates the County to encourage the use of renewable resources, but does not obligate project sponsors to incorporate renewable resources into their projects. Solar energy currently is used to meet part of the electricity demand at the Regional Treatment Plant, and would continue to be used during operation of the Proposed Project.
Monterey County	Monterey County General Plan	Conservation and Open Space		Policy OS-2.1: Potentially significant mineral deposits and existing mining operations identified through the State Division of Mines and Geology, including idle and reserve properties, shall be protected from on-site and off-site land uses that would be incompatible with mineral extraction activities.	Consistent: Within unincorporated Monterey County, the Proposed Project component that would traverse known mining operations would be the conveyance pipeline component that traverses Armstrong Ranch. The pipeline would not prevent sand mining operations at this site. Other segments of the Product Conveyance Pipeline and the Treatment Facilities at the Regional Treatment Plant would be located on lands designated as mineral resource areas on the County's mineral resources map; however the project would not prevent access to and recovery of such mineral resources. See Impact EN-3, below.
City of Marina	City of Marina Local Coastal Program Land Use Plan	Article 6, Development	Coastal Alignment Option	Section 30253: Minimization of Adverse Impacts. New development shall do all of the following: d. Minimize energy consumption and vehicle miles traveled.	Consistent, with mitigation: Short-term construction activities in the City of Marina that would be associated with the Proposed Project could result in wasteful or inefficient use of energy, but implementation of Mitigation MeasuresEN-2 would minimize energy consumption during project construction. This issue is addressed under Impact EN-1. Operations would require long-term consumption of energy that would not be used in an inefficient or wasteful manner.
Former Fort Ord	FORA Base Reuse Plan	Conservation	RUWAP Alignment Option including Booster Pump Station Coastal Alignment Option including Booster Pump Station Injection Well Facilities site	Soils and Geology Policy B-2: The City shall protect designated mineral resource protection areas from incompatible land uses.	Consistent: The Proposed Project would not be constructed nor operated on mineral resource protection areas within the former Fort Ord.

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4.7.4 Impacts and Mitigation Measures

4.7.4.1 Significance Criteria

Based on Appendices F and G of the CEQA Guidelines, the project would have a significant effect on energy resources and minerals if it would:

- a. Use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner;
- b. Constrain local or regional energy supplies, require additional capacity, or substantially affect peak and base periods of electrical demand;
- c. Require or result in the construction of new electrical generation and/or transmission facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects;
- d. Conflict with existing energy standards, including standards for energy conservation;
- e. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;
- f. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

4.7.4.2 Impact Analysis Overview

Approach to Analysis

Energy

This analysis evaluates the use of energy resources (direct and indirect) associated with the construction and operation of the Proposed Project. The energy conservation analysis is based, in part, on estimates of the operational electricity requirements of the Proposed Project provided by MRWPCA as well as estimates of diesel and gasoline consumption that would occur during project construction; estimates of the electricity requirements for operations and the potential fuel required for operations are given in **Chapter 2, Project Description**. For construction and operations, the analysis considers whether the Proposed Project would use large amounts of fuels or electricity, and whether they would be used in an unnecessary, wasteful, or inefficient manner; estimates of energy demand and capacity of the existing PG&E grid also are provided. No new electrical generation or transmission facilities would be required for construction or operations. The new power supply facilities associated with the project (in this case small electricity distribution lines to connect to existing PG&E transmission facilities) are described in **Chapter 2, Project Description**, and the topical sections within this **Chapter 4, Environmental Setting, Impacts and Mitigation Measures**, address the environmental effects of constructing and operating those onsite facilities. Natural gas would not be required for Proposed Project construction or operation and is not discussed further in this section.

Minerals

This impact analysis also evaluates the potential for the Proposed Project to result in the loss of availability of locally or regionally important mineral resources based on mineral resource maps prepared using the Mineral Land Classification System. Impacts related to the loss of mineral resources would be considered significant if the long term location of project components would

result in the loss of availability of a known resource of statewide or regional significance or if the Project component would result in the loss of an locally designated resource recovery site. All potential impacts related to mineral resources would be associated with long-term operations; no impacts to mineral resources would result from temporary Proposed Project construction.

Areas of No Impact

The Proposed Project would not result in impacts related to some of the significance criteria, as explained below. Impact analyses related to the other criteria are addressed below under **Subsections 4.7.4.4 (Construction Impacts), 4.7.4.5 (Operational Impacts), and 4.7.4.6 (Cumulative Impacts)**.

(c) Require or result in the construction of new electrical generation and/or transmission facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects. The Proposed Project would not necessitate construction of new electrical generation or transmission facilities or expansion of existing electrical generation or transmission facilities. The Proposed Project includes construction of some small power distribution lines to connect project electrical equipment to existing PG&E transmission lines. Those facilities would be within the Project boundaries and are evaluated as part of the Proposed Project throughout this EIR. The Proposed Project would not necessitate construction of other new transmission facilities beyond the Proposed Project boundaries and this impact is not evaluated further in this section (No impact related to construction beyond those identified elsewhere in this EIR; no impact related to operations.)

(f) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. As shown in **Figure 4.7-1, Mineral Resources Map**, there are nine non-metallic mineral recovery sites (mines) in the vicinity of the Proposed Project that are recognized in the Monterey County General Plan (Monterey County, 2010); it is unknown whether these facilities are actively mining aggregate resources at this time. Regardless, all delineated mines are over 0.25-miles from the closest Proposed Project component (the Coastal Alignment option of the Product Water Conveyance Pipeline and the Proposed CalAm Distribution Pipelines). Therefore, neither construction nor operations would result in the loss of availability of a resource recovery site (mine). (No impact related to construction or operations.)

Summary of Impacts

Table 4.7-2, Summary of Impacts – Energy and Mineral Resources provides a summary of potential impacts related to energy and mineral resources and significance determinations at each Proposed Project component site.

Table 4.7-2
Summary of Impacts – Energy and Mineral Resources

Impact Title	Source Water Diversion and Storage Sites						Treatment Facilities at Regional Treatment Plant	Product Water Conveyance		Injection Well Facilities	CalAm Distribution System		Project Overall
	Salinas Pump Station	Salinas Treatment Facility Storage and Recovery	Reclamation Ditch	Tembladero Slough	Blanco Drain (Pump Station and Pipeline)	Lake El Estero		RUWAP Alignment Option	Coastal Alignment Option		Transfer Pipeline	Monterey Pipeline	
EN-1: Construction Impacts due to Temporary Energy Use	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM
EN-2: Operational Impacts due to Energy Use	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
EN-3: Operational Impacts due to Availability of Mineral Resources	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
Cumulative Energy Impact	LS: The Proposed Project would not make a cumulatively considerable contribution to a significant cumulative energy impact.												
Cumulative Minerals Impact	NI: There would be no significant construction or cumulative impacts to mineral resources.												
NI – No Impact LS – Less than Significant LSM – Less than Significant with Mitigation SU – Significant Unavoidable BI – Beneficial Impact													

4.7.4.3 Construction Impacts and Mitigation Measures

Impact EN-1: Construction Impacts due to Temporary Energy Use. Proposed Project construction could result in wasteful or inefficient use of energy if construction equipment is not maintained or if haul trips are not planned efficiently. The Proposed Project would not conflict with existing energy standards. (Criteria a, b, and d) (Less than significant with mitigation)

Although energy consumed during the construction period would be a one-time use, it would represent irreversible consumption of non-renewable energy resources. During construction, the Proposed Project would consume energy in two general forms: 1) the fuel energy consumed by construction vehicles and equipment; 2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass. Fossil fuels used for construction vehicles and other energy-consuming equipment would

be used during site clearing, grading, trenching, and construction. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. The energy consumption for construction would not result in long-term depletion of non-renewable energy resources and would not permanently increase reliance on energy resources that are not renewable.

The Proposed Project construction vehicles and equipment, construction worker trips, and construction truck trips are provided in **Table 2-20, Construction Areas of Disturbance and Permanent Footprint**, in **Chapter 2, Project Description**, and **Table 2.17, Estimated Average-Year Diversion from the Blanco Drain**. Based on cost optimization and idling prohibitions required by Air Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (13 CCR Chapter 10, Section 2485) and Final Order Regulation For In-Use Off-Road Diesel-Fueled Fleets Idling (13 CCR, article 4.8, chapter 9, Section 2449), (i.e., the Idling Limitations), construction activity is not anticipated to use gasoline or diesel fuel unnecessarily, wastefully, nor inefficiently; however, other wasteful fuel or electricity use may occur if construction equipment is not well maintained, or if haul trips are not planned efficiently.

Construction activities would not reduce or interrupt existing electrical or natural gas services due to insufficient supply. Proposed Project construction would not interrupt existing local PG&E service, and project-related construction electricity demands would be too small to have a significant effect on PG&E's energy delivery systems or resources as evidenced by the letter received from PG&E (Kooyman, 2015). Construction activities would not significantly constrain local or regional energy supplies, require additional capacity, or substantially affect peak and base periods of electrical demand.

Energy efficiency and conservation would be accomplished by several approaches. The Proposed Project would be required to comply with existing codes and standards for efficiency and conservation, including Title 24. Title 24 building energy efficiency standards are updated every three years to constantly improve energy efficiency in residential and non-residential buildings. In addition, some incidental energy conservation would occur during construction through implementation of Mitigation Measure NV-1b identified in **Section 4.13, Noise and Vibration**, of this Draft EIR. In addition, the Idling Limitations in state regulations for diesel-fueled vehicles discussed above and discussed in **Section 4.3, Air Quality**, include a requirement that equipment not in use for more than five (5) minutes be turned off to save energy during construction.

Impact Conclusion

Construction activities could result in wasteful or inefficient use of energy if construction equipment is not well maintained or if haul trips are not planned efficiently. The potential for project construction to use large amounts of fuel or energy in a wasteful or inefficient manner is considered a significant impact. However, with implementation of Mitigation Measures EN-1 (Construction Equipment Efficiency Plan), which would ensure construction activities are conducted in a fuel-efficient manner, the impact would be reduced to a less-than-significant level.

Mitigation Measure

Mitigation Measure EN-1: Construction Equipment Efficiency Plan. (Applies to all Proposed Project components)

MRWPCA (for all components except the CalAm Distribution System) or CalAm (for the Cal Am Distribution System) shall contract a qualified professional (i.e., construction planner/energy efficiency expert) to prepare a Construction Equipment Efficiency Plan

that identifies the specific measures that MRWPCA or CalAm (and its construction contractors) will implement as part of project construction to increase the efficient use of construction equipment. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; consistent compliance with idling restrictions of the state; and identification of procedures (including the use of routing plans for haul trips) that will be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner.

4.7.4.4 Operation Impacts and Mitigation Measures

Impact EN-2: Operational Impacts due to Energy Use. Proposed Project operations would not result in the consumption of energy such that existing supplies would be substantially constrained nor would the Project result in the unnecessary, wasteful, or inefficient use of energy resources. (Criteria a and b) (Less than significant)

The operation and maintenance of the Proposed Project would result in the ongoing consumption of energy including the use of electricity for pumps, treatment processes, miscellaneous lighting, automated controls, and maintenance equipment. The Proposed Project also would generate up to 22 new employee trips per day and up to six new heavy duty truck deliveries per week and up to four maximum per weekday (eight trips), resulting in ongoing use of diesel and gasoline fuel. These vehicle trips would consume fossil fuels and would contribute to the operational energy demand of the Proposed Project. The amount of fossil fuel required to fuel these vehicle trips would be approximately 8,473 gallons per year, assuming an average fuel economy of 15 miles per gallon for employee vehicles and 5 miles per gallon for delivery trucks.

The components of the Proposed Project that would result in new operational electricity demand include the following:

- The source water diversion and storage facilities would have a net electricity demand of 911 megawatt-hours per year (MW-hr/yr) for operation of the pumps and miscellaneous controls.
- The Proposed Project's additions and changes at the Regional Treatment Plant (including the new AWT Facility and the SVRP modifications) would have the potential new demand for about 11,980 MW-hr/yr of electricity, which would be partially offset by a savings of 1,900 MW-hr/yr reduction in electricity demand from use of CSIP supplemental wells and by use of 2,726 MW-hr/yr produced by the cogeneration plant. New electricity would be required for pumping, pre-treatment, advanced water treatment, stabilization, and concentrate disposal facilities. Cogeneration at the Regional Treatment Plant would continue to provide all of the electricity required for the primary and secondary treatment processes. In addition, MRWPCA recently began using solar power generated on-site to meet approximately half of the electricity demand of the Salinas Valley Reclamation Plant. The net new electricity for the Salinas Valley Reclamation Plant would still be lower than the PG&E system demand prior to completion of the solar array (Bob Holden, personal communication, November 2014). The onsite electrical system components would include an electricity conveyance line, transformers, and switchgear. The major electrical loads would be from the influent pumping, oxygen generator, ozone generator, biologically active filtration backwash pumps, membrane filtration and reverse osmosis feedwater pumping,

ultraviolet light reactors, and product water pumping. The AWT Facility would not require back-up power; therefore, no new back-up generators are proposed and no increase in the use of existing generators is anticipated.

- A new Booster Pump Station would receive flow from the first “leg” of the Product Water Conveyance Pipeline. For either pipeline alignment, the Booster Pump Station building would include electrical and control equipment, maintenance access, electrical supply transformer and a surge tank for the pumps. The energy demand would be 1,912 MW-hr/yr for either booster station option (RUWAP and Coastal alignments).
- The proposed Injection Well Facilities would require a permanent power supply (approximately 147 MW-hr/yr) to the site, primarily for back-flushing the deep injection wells. The facilities would require a new connection to the existing PG&E power grid. The onsite electrical system, housed in four separate points of service would be designed to have an electrical building and outdoor switchgear for each well. The injection wells and associated electrical and mechanical systems would operate 24 hour per day, 7 days per week throughout the year, although all eight wells would never be actively injecting at the same time. The Proposed Project would also use a small amount of fuel for worker trips to perform routine operations and maintenance checks at each well facility site. Each well station would be visited daily when wells are operating. At other times, the wells would be visited on a weekly basis or less. Monitoring well water sample collection would occur during regularly scheduled visits.

The Proposed Project would require a total of approximately 11,000 MW-hr/yr of net new electricity representing only 0.1% of the Monterey County electrical usage. This amount would not substantially affect delivery of electricity on either a peak period or annual basis. The energy demands of the Proposed Project, described above, would be met by the existing PG&E grid and the following specifications:

- The source water diversion facilities (a portion of the Salinas Pump Station, Salinas Treatment Facility, Reclamation Ditch Plant Diversion, Tembladero Slough Diversion, Blanco Drain and Lake El Estero Source Water Diversion pumps) would be served by local PG&E electricity and distribution systems. The Salinas Pump Station will also receive a large portion of its power from solar that the City of Salinas will be purchasing. The AWT Facility power would be supplied through a new PG&E utility connection.
- The Booster Pump Station would receive the necessary electricity through a new PG&E utility connection.
- The proposed Injection Well Facilities will require a new PG&E connection. PG&E has two circuits in the vicinity of the Injection Well Facilities components. The circuits are called Del Monte 1101 and Del Monte 2012: circuit capacity at Del Monte 1101 is 8.73 MW and the projected maximum load is 5.28 MW; Del Monte 2012 circuit capacity is 16.48 MW and the projected maximum load is 9.82 MW. Either circuit has the capacity for the proposed 400 hp well load. The power would be brought to the site from offsite overhead power poles and run to the Injection Well Facilities by underground cables.

At a minimum, the proposed structures at the Injection Well Facilities would be designed to meet California's energy efficiency standards outlined in Title 24 of the California Code of Regulations. In addition, the Proposed Project pumps at the AWT Facility, Booster Pump

Station, and Injection Well Facilities, would utilize new, well-maintained, high efficient pump motors that would operate with automatic or manual variable speed controls. This type of pump motor minimizes wasted energy at the well pumps, because the motor would not start at the maximum speed, but instead would gradually ramp up when turned on and ramp down when turned off to prevent wasteful energy use.

The energy impact of the Proposed Project would be less-than-significant, for the following reasons:

- The electrical power would be provided directly from the PG&E grid that has adequate capacity to supply the Proposed Project demands (i.e., the necessary power can be produced by existing electricity generating facilities and delivered by existing electricity transmission lines) (Kooyman, 2015);
- Existing Treatment Facilities at the Regional Treatment Plant are partially powered by solar energy and cogeneration of biogas (including methane generated during the treatment processes) thus minimizing the need for new electricity generation using fossil fuels;
- The Proposed Project is designed to be energy efficient and not waste energy because the new pumps and electrical facilities would be energy efficient, including the use of variable speed controls and LED lighting at a minimum; and
- The energy resources that would be consumed by the Proposed Project would be for the public benefit and would not be wasteful. The Proposed Project would serve to increase water supply diversity and reliability using water recycling, a method that is encouraged by State and federal agencies and non-profit entities due to its energy efficiency.

Impact Conclusion

Proposed Project operations would not result in the consumption of energy such that existing supplies would be substantially constrained nor would it result in the unnecessary, wasteful, or inefficient use of energy resources. Proposed Project operations would result in a less-significant energy impacts.

Impact EN-3: Operational Impacts on Mineral Resources. The Proposed Project would not result in a significant impact due to the loss of availability of known mineral resources of value to the region or to the state or to any locally-important mineral recovery site. (Criterion e) (Less than significant)

A large portion of the Proposed Project area is mapped as MRZ-2 (see **Figure 4.7-1, Mineral Resources Map**) and is within an area of identified mineral resource significance (see **Section 4.7.1.4**). Siting of the Proposed Project could indirectly affect the availability of the mineral resource if the location or maintenance of the facilities would preclude access to such mineral resources. The following discussion evaluates the potential for impacts to mineral resource impacts at each Proposed Project site:

- Salinas Pump Station, Blanco Drain, Salinas Treatment Facility Diversion and Storage sites do not lie within a designated MRZ and thus they have no known locally-important mineral resources. Siting facilities at these locations would not impact mineral resources.
- Reclamation Ditch Plant Diversion, Tembladero Slough Diversion, and Lake El Estero Diversion sites are designated as MRZ-1, a location where adequate

information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. Siting facilities at these locations would not impact access to potential mineral resources or designated mineral resource recovery sites at these diversion sites.

- The Treatment Facilities at the Regional Treatment Plant are on lands designated as MRZ-2. The Treatment Plant property is used as a wastewater treatment plant and is adjacent to the Monterey County Regional landfill and transfer station. For this reason, access to mineral resources already is substantially impeded at this site, and it is unlikely that mineral resources would be accessed from this location in the future. Therefore, siting the Advanced Water Treatment Facility and Salinas Valley Reclamation Plant improvements at the Regional Treatment Plant would not cause a significant impact on access to mineral resources or locally important mineral resource recovery sites.
- The RUWAP and Coastal Alignment Options of the Product Water Conveyance Pipeline would be located mostly within existing road rights-of-way, but the northernmost portion of both pipelines would cross undeveloped portions of the MRZ-2 area between the City of Marina and the Regional Treatment Plant. The Coastal alignment through this area is within the MRWPCA's wastewater interceptor easement and the RUWAP alignment is within the Marina Coast Water District's property. The Proposed Project would result in the construction of a new pipeline that would not preclude mineral extraction except on a narrow swath of land (approximately 10 feet wide) on top of and adjacent to the pipeline. The proposed pipeline through this area would have a limited footprint (less than 10 foot wide trench cross-section) such that mineral resources on either side of the pipeline easement could still be accessed from this vicinity under guidance of a geotechnical engineer to ensure pipeline stability. Neither pipeline option would result in a significant reduction in the availability of mineral resources (primarily dune sands). Therefore, the construction of the proposed conveyance facilities at these sites would have a less-than-significant impact on mineral resources.
- The Injection Well Facilities (including wells, back-flush, and control housing) would be sited in an area that is not within a designated mineral resource zone; this is an area that is not known to have any mineral resources. Therefore, the construction of the proposed Injection Well Facilities would have a less-than-significant impact on availability of mineral resources.
- The CalAm Distribution System pipeline would be sited entirely within existing road rights-of-way, which are designated MRZ-2 and MRZ-3 from Lake El Estero west to the end of the pipeline. These pipelines would be located within road rights-of-way and would have limited footprints, meaning the potential impact on mineral resources would be less-than-significant.

The siting of the Proposed Project components would not result in a loss in the availability of the known mineral resources in the MRZ-2 zoned area either directly (because the work would not consume large amounts of aggregate resources) or indirectly (precluding access to such resources). No aggregate extraction currently is occurring on the Proposed Project component sites, and future extraction would not be precluded, significantly obstructed, or otherwise affected by the Proposed Project. The Proposed Project would not result in the loss of availability of known mineral resources; therefore, the project would have a less-than-significant impact on mineral resources.

4.7.4.5 Cumulative Impacts and Mitigation Measures

The geographic area for the analysis of mineral and energy impacts consists of Monterey County and PG&E's service area. All of the cumulative projects identified in **Section 4.1.3.2, Table 4.1-2, Project Considered for Cumulative Analysis** could result in additional consumption of electricity, natural gas, gasoline and diesel in the region.

The discussion of cumulative impacts is organized to address the combined impacts of the Proposed Project plus the Monterey Peninsula Water Supply Project (MPWSP), with the 6.4 mgd desalination plant, and then to address the overall combined impacts of the Proposed Project and all relevant projects identified on **Table 4.1-2** for the cumulative analysis:

- *Combined Impacts of Proposed Project Plus MPWSP (with 6.4 mgd Desalination Plant)* (referred to as the MPWSP Variant):² The CalAm Monterey Peninsula Water Supply Project includes: a seawater intake system; a source water pipeline; a desalination plant and appurtenant facilities; desalinated water conveyance facilities, including pipelines, pump stations, a terminal reservoir; and an expanded ASR system, including two additional injection/extraction wells (ASR-5 and ASR-6 Wells), a new ASR Pump Station, and conveyance pipelines between the wells. The CalAm Distribution Pipelines (Transfer and Monterey) would be constructed for either the MPWSP or GWR project. The overall estimated construction schedule would be from June 2016 through March 2019 for the combined projects and could overlap for approximately 18 months (mid-summer 2016 through December 2017). The cumulative impact analysis in this EIR anticipates that the Proposed Project could be combined with a version of the MPSWP that includes a 6.4 mgd desalination plant. Similarly, the MPSWP EIR is evaluating a "Variant" project that includes the proposed CalAm Facilities (with the 6.4 mgd desalination plant) and the Proposed Project. The impacts of the Variant are considered to be cumulative impacts in this EIR. The CalAm and GWR Facilities that comprise the MPSWP Variant are shown in **Appendix Y**.
- *Overall Cumulative Projects*: This impact analysis is based on the list of cumulative projects provided on **Table 4.1-2** (see **Section 4.1, Introduction**).
- The overall cumulative impacts analysis considers the degree to which all relevant past, present and probable future projects (including the MPSWP with the 6.4 mgd desalination plant) could result in impacts that combine with the impacts of the Proposed Project.

Energy Resources

Combined Impacts of Proposed Project Plus MPSWP (with 6.4 mgd Desalination Plant). The proposed 6.4 mgd CalAm desalination plant would require substantial amounts of new electricity.

New structures, including the Proposed Project Booster Pump Stations and Advanced Water Treatment Facility and the proposed CalAm desalination plant, would be required to be constructed in accordance with specifications contained in Title 24 of the California Code of Regulations. Recently adopted changes in state building and energy efficiency requirements to

² The October 2012 Notice of Preparation of an EIR for the MPWSP describes an alternative to the MPWSP that would include a smaller desalination plant combined with the Proposed GWR Project (CPUC, 2012). Based on ongoing coordination with the CPUC's EIR consultants, this alternative is referenced as the "Variant" and includes a 6.4 mgd desalination plant that was proposed by CalAm in amended application materials, submitted in 2013 to the CPUC (CPUC, 2013).

help reduce GHG emissions will also minimize increases in energy consumption. Such measures have been factored into California energy forecasts, which predict an overall reduction in per capita use of electricity due to energy efficiency standards and conservation.

PG&E has stated that it has adequate supplies to provide electricity to the Proposed Project and to the larger, 9.6 mgd CalAm Water Supply Project. (PG&E, 2014b, and Kooyman, 2015). Therefore, the MPSWP (with the 6.4 mgd desalination plant) and the Proposed Project would not result in a significant cumulative impact related to energy.

Overall Cumulative Impacts. Cumulative projects are shown on **Table 4.1-2** (see **Section 4.1**), and cumulative project locations are shown on **Figure 4.1.1**. The cumulative projects are cross-referenced (in parentheses) to the project number on Table 4.1-2. All cumulative projects would result in a cumulative demand for energy. As indicated above, the California Energy Commission, PG&E's system-wide electricity consumption is expected to increase from approximately 113,000 gigawatts in 2015 to a range of between 119,831 to 131,731 gigawatt in the year 2022 (California Energy Commission, 2012). Cumulative demand is taken into account in these projections. Cumulative projects are unlikely to use energy wastefully, inefficiently, or unnecessarily given the regulatory requirements related to fuel efficiency/energy conservation and cost-effectiveness considerations, and climate change regulations (such as AB32) that mandate reductions in petroleum-based electricity generation, and reductions in use of petroleum-based fuels.

While new cumulative development in the region would be required to comply with applicable energy standards, it is unknown whether such development would necessitate new or expanded energy or natural gas supplies or distribution facilities. If such facilities are required for a particular project, the environmental effects of such facilities would be evaluated during the environmental review process for the particular project.

The Proposed Project energy demand would constitute less than 0.1% of PG&E's projected increase of electricity demand between 2015 and 2022 (approximately 6,800 to 18,700 gigawatts). The Proposed Project construction and operation would not make a considerable contribution to a significant cumulative energy impact due to: consumption or use of energy unnecessarily, wastefully, or inefficiently; the need for new offsite power generation; nor construction of new transmission facilities. As described in Impact EN-2, the Proposed Project would not necessitate construction of new or expanded electricity generation or transmission facilities; therefore it would not contribute to cumulative impacts from construction of such facilities.

Mineral Resources

The Proposed Project would have no impact on the availability of mineral resources during construction, and would have a less-than-significant impact on availability of mineral resources due to Proposed Project operations.

Combined Impacts of Proposed Project Plus MPSWP (with 6.4 mgd Desalination Plant) (referred to as the MPWSP Variant in the EIR currently being prepared). While some components of each project would be sited on lands with known mineral resources, the siting and operation of the facilities would not result in a loss of availability of known mineral resources or interfere with mining operations. No aggregate extraction currently is occurring on the GWR component sites, and future extraction would not be precluded, significantly obstructed, or otherwise affected by the Proposed Project. MPWSP components within the CEMEX site would be buried, clustered with existing development, and/or set back from active mining areas, and would not preclude continued mining activities. Therefore, the combined effect of both projects would not result in a significant cumulative impact on mineral resources.

Overall Cumulative Impacts. Cumulative projects are shown on **Table 4.1-2** (see **Section 4.1**), and cumulative project locations are shown on **Figure 4.1.1, Cumulative Projects Location Map**. Except for the MPWSP (#1) as discussed above, no other cumulative development projects listed in **Table 4.1-2** would affect access to mineral resources in the same locations as the Proposed Project.

Cumulative Impact Conclusion

The Proposed Project would not make a considerable contribution to a significant cumulative energy impact. There would be no significant construction or operational cumulative impacts to mineral resources.

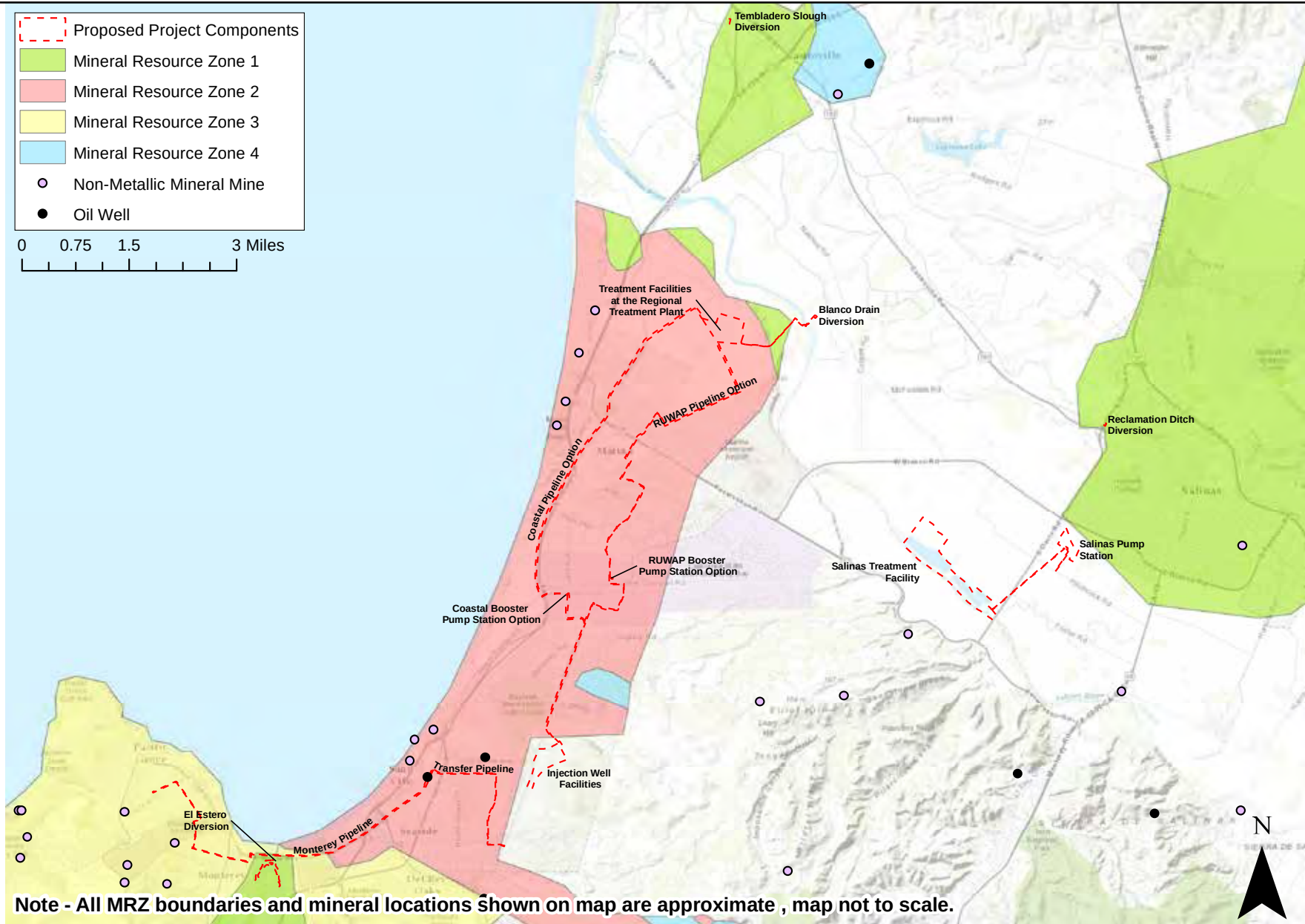
4.7.5 References

- A. Wesner, SPI, Ron Cole, City of Salinas, Bob Holden, MRWPCA, and T.G. Cole. Separate Personal Communications. November 2014.
- Bob Holden, personal communication, November 2014
- California Department of Conservation, 2013. *SMARA Mineral Land Classification Project*. Available Online at: <http://www.conservation.ca.gov/cgs/minerals/Pages/Index.aspx>. Date Accessed: February 20, 2014.
- California Energy Commission (CEC), 2014. *Tracking Progress: Statewide Energy Demand*. Available Online at: http://www.energy.ca.gov/renewables/tracking_progress/documents/statewide_energy_demand.pdf. Last Updated 5/7/2014. Date Accessed: October 13, 2014
- California Energy Commission, 2008. "Gas Consumption by County." Available Online at <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>. Date Accessed: November 9, 2014
- California Energy Commission, 2009. *2009 Integrated Energy Policy Report*. December 16, 2009.
- California Energy Commission, 2012. *Revised California Energy Demand Forecast 2012-2022*
- California Energy Commission, 2013a. *Overview of Natural Gas in California*. Available Online at: <http://energyalmanac.ca.gov/naturalgas/overview.html>. Date Accessed: February 20, 2014
- California Energy Commission, 2013b. *California Uses for Natural Gas*.
- California Public Utilities Commission. 2008. *Energy Action Plan (I, II and Update)*. Available online at: <http://www.cpuc.ca.gov/PUC/energy/resources/Energy+Action+Plan/>; Accessed: March 30, 2015.
- California Geological Survey, 1999. *Guidelines for the Classification and Designation of Mineral Lands*.
- California Geological Survey, 2006.
- California Geological Survey, 2012. *Aggregate Sustainability in California*, Map Sheet 52, 2012.
- City of Salinas, 2002. *City of Salinas General Plan*. September 17, 2002.
- City of Seaside, 2003. *Seaside General Plan, August 5, 2003*.
- Division of Oil, Gas, and Geothermal Resources (DOGGR), 2013. *DOGGR Online Mapping System*. Available Online at:

- <http://www.conservation.ca.gov/dog/Pages/WellFinder.aspx>. Date Accessed: March 21, 2014.
- Hannon et al., 1978. "Energy and Labor in the Construction Sector". Article in *Science Magazine*. November 24, 1978.
- ICF Jones & Stokes, 2007. *Mineral Resources Map MCGP*.
- Kooyman,, 2015. Letter from PG&E to Alison Imamura, Subject: MRWPCA Pure Water Monterey Groundwater Replenishment Project, February 19, 2015.
- Monterey County, 2010. *2010 Monterey County General Plan*, October 26, 2010.
- Monterey County Planning and Building Inspection Department, 2008. *DEIR Monterey County General Plan Section 4.5 Mineral Resources, Monterey County, California*, September 2008.
- Monterey County, 2010. *Monterey County General Plan Update and Final EIR*.
- Pacific Gas & Electric (PG&E), 2014a. "Clean Energy Solutions." Available Online at: <http://www.pge.com/en/about/environment/pge/cleanenergy/index.page>. Date Accessed: January 2014.
- PG&E, 2014b. Email from Daniel Waters of PG&E to Kristina Tierney of ESA; Subject: Capacity for 9.6 MGD Desalination plant. April 3, 2014.
- United States Geological Survey, 2011. *Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California*.
- Kelly White, ESA, personal communication, 2014

- Proposed Project Components
- Mineral Resource Zone 1
- Mineral Resource Zone 2
- Mineral Resource Zone 3
- Mineral Resource Zone 4
- Non-Metallic Mineral Mine
- Oil Well

0 0.75 1.5 3 Miles



Note - All MRZ boundaries and mineral locations shown on map are approximate , map not to scale.

Source: Monterey County, 2014



Mineral Resources Map

April 2015

Pure Water Monterey GWR Project
Draft EIR

Figure
4.7-1

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