

**Draft  
Initial Study/Mitigated Negative Declaration  
for the  
Marina Coast Water District  
Watkins Gate Well and Pipeline Project**

**March 2011**

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**DRAFT INITIAL STUDY**  
**for the**  
**WATKINS GATE WELL AND PIPELINE PROJECT**

**Chapter 1. Introduction & Project Description**

**1.1 INTRODUCTION**

This Initial Study (IS) assesses potential environmental impacts associated with the proposed Watkins Gate Well and Pipeline Project (the project), located within Monterey County, California (**Figure 1**). This IS has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code 21000-21177) and CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387). The Marina Coast Water District (MCWD) is the Lead Agency for the proposed project.

The proposed Watkins Gate Well and Pipeline Project is comprised of a water supply well to provide water to the MCWD's existing water supply distribution system; building to enclose the well head, motor controls, and mechanical and electrical appurtenances; backup emergency power generator; and associated distribution pipeline. The building is anticipated to be 400 to 600 square feet. The location of the 16-inch, 400- or 900-foot deep well (approximate values) is proposed adjacent to the intersection of Watkins Gate Road and Reservation Road. The determination of the final well depth will depend upon the geological findings of a previously drilled test hole. The well would connect to an existing 24-inch water line connection with the installation of 2,500 feet of a new water conveyance pipeline to be located within the paved roadway of Watkins Gate Road in the East Garrison area of MCWD's Ord Community service area (**Figure 2**). A test well would be installed and monitored prior to construction of the well. If the test well is determined operational, the well will be made into a permanent monitoring well.

The proposed project would help satisfy a portion of MCWD's Master Plan needs and includes components of MCWD's Capital Improvement Program. The Watkins Gate Well would pump groundwater from the 400 or 900 foot deep aquifer, and then the water would be remotely treated at a reservoir site before being distributed to the water system but may be treated at the well location in the future.

The design of the proposed project incorporates mitigation features to minimize potential environmental impacts of project development and operation. In addition, although potentially significant impacts were identified in the following issue areas, implementation of the mitigation measures in this Draft IS/MND would reduce these impacts to a less-than-significant level.

- Air Quality,
- Biological Resources,
- Cultural Resources,
- Geology & Soils, and
- Traffic/Circulation.

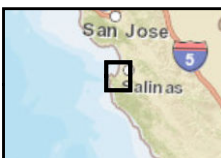
Based on the information in this IS, the project would not significantly affect the environment, which would have necessitated the preparation and distribution of an Environmental Impact Report for public review. On this basis, a Mitigated Negative Declaration (MND) is included in **Appendix A**.

0 1 2 4 Miles

# Project Location

Monterey Bay

Former Fort Ord



Title: **Project Vicinity**  
 File: **Project Vicinity.mxd**

Date: 3-14-2011  
 Scale: 1 inch = 2.37 miles  
 Project: 2911MCWD

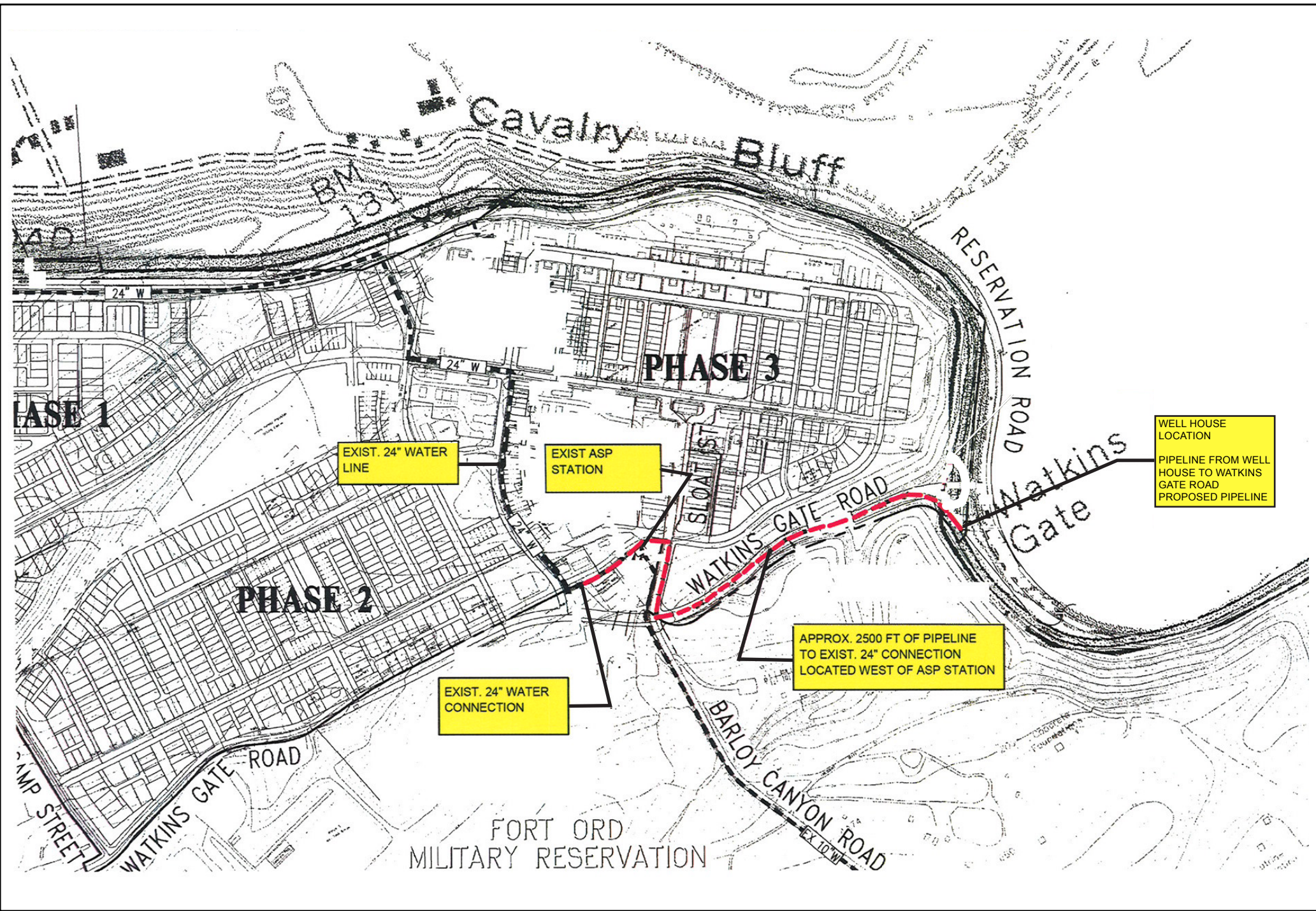


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Figure  
**1**

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Title: **Site Map**

File: **Site Map.pdf**

Date: **3-14-2011**

Scale: **N/A**

Project: **2011MCWD**



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Figure  
**2**

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## **1.2 PROJECT LOCATION**

The MCWD service area is located on the coast of Monterey Bay at the northwest end of the Salinas Valley in Monterey County, California. The proposed project is located on the former Fort Ord U.S. Army base that encompasses approximately 27,900 acres along the central California coastline (**Figure 1**).

The proposed project site is located in Monterey County's East Garrison Specific Plan (EGSP) Area (**Figure 2**). The areas of the EGSP are under the ownership of Union Community Partners and/or Monterey County. The East Garrison Development project, which was approved by the Monterey County Board of Supervisors in June 2005, includes the development of a new community with residential, commercial, public, cultural, and open space land uses. The community will consist of three residential neighborhoods surrounding a mixed use town center. The EGSP allows for the construction of up to 1,470 residential units, 75,000 square feet of commercial space, 11,000 square feet of institutional uses, and 100,000 square feet of artist studio space. In addition, the Plan contains approximately 50 acres of open space, parks, and natural areas.

The project site consists primarily of disturbed areas of ruderal vegetation and paved roadway. The location of the well site is located immediately adjacent to the intersection of Watkins Gate Road and Reservation Road. The alignment of the 2,500-foot water conveyance pipeline would be primarily within existing roadway or pavement, with the exception of a 200-foot portion that extends from the water line connection point to Barloy Canyon Road, which is proposed within ruderal/disturbed vegetation. Direct access to the project site for construction purposes would be provided through the East Garrison Development project site via Sloat Street and/or Watkins Gate Road and Reservation Road.

## **1.3 BACKGROUND**

Currently, the MCWD operates three deep aquifer wells within Central Marina (Wells 10, 11, and 12) and three shallow aquifer wells in the Ord Community (Wells 29, 30, and 31). A fourth Ord Community well (No. 32) did exist at the east end of the existing well-field pipeline, but now has been properly destroyed under permit with the County of Monterey. Minimization of reliance on the District's coastal wells leads to the need to replace Well No. 32 by installing a new well (Well No. 34). The Well No. 34 site is currently under construction. An extension of this effort is to install the well at the Watkins Gate site.

The MCWD's 2005 Urban Water Management Plan projected the annual demand for the MCWD's full service area in the year 2025 to be 15,403 acre-feet/year (AFY). This water demand may be accommodated through a combination of groundwater pumping, desalination, and recycled water. By agreement, groundwater pumping is limited to 6,600 AFY for the Ord Community. Installation and operation of the Watkins Gate Well, as proposed by the project, would not exceed this allowable level of groundwater pumping.

## **1.4 CONSTRUCTION SCHEDULE**

Construction of the test well for the Watkins Gate Well, the well house, and the associated distribution pipeline would begin in May 2011 and take approximately six months to complete.

## **1.5 REQUIRED PERMITS AND APPROVALS**

The proposed project requires approval from MCWD for project construction and operation and review and approval by the following agencies and entities:

- California Department of Health Services (DOHS): Water Supply Permit Amendment
- County of Monterey: Right of Way Permits
- County of Monterey Department of Health, Division of Environmental Health (DEH): Well Permit
- Monterey Bay Unified Air Pollution Control District: Emergency Generator Permit
- Central Coast Regional Water Quality Control Board: NPDES Permit for Test Well Water Discharge

This Initial Study may also be used to comply with Proposition 50 grant requirements of the State Water Resources Control Board. Therefore, it will be forwarded to Monterey County Water Resources Agency, the local agency administering the grant.

## Chapter 2. Environmental Checklist

This Initial Study is based on CEQA's Environmental Checklist Form (Appendix G of the CEQA Guidelines). Each item on the checklist is answered as either "potentially significant impact," "less-than-significant with mitigation incorporated," "less than significant," or "no impact" depending on the anticipated level of impact. The checklist is followed by explanatory comments corresponding to each checklist item.

A "no impact" response indicates that it is clear that the project will not have any impact. In some cases, the explanation to this response may include reference to a previously prepared CEQA document or an adopted plan or map. A "less-than-significant impact" response indicates that there will be some impact but that the level of impact is insufficiently substantial to be deemed significant. The text explains the rationale for this conclusion. A "less-than-significant impact with mitigation incorporated" response indicates that there will be a potentially significant impact, but the Initial Study determines there is adequate mitigation, which is described, to reduce the level of impact to an insignificant level. Finally, a "potentially significant impact" response would indicate that the Initial Study cannot identify mitigation measures to adequately reduce the impact to a level that is less-than-significant.

The sources/references of information for this Checklist are listed at the end of the document. In particular, the environmental setting information was taken primarily from the Monterey County Geographic Information System (GIS) and several technical documents prepared for related projects located within the vicinity of the proposed project.

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### 1. AESTHETICS

<b>Would the project:</b>		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** Prominent visual resources in the project vicinity include the Monterey Peninsula, Monterey Bay, the ridgelines and canyons of the Santa Lucia Range, and agricultural fields of the Salinas Valley. Expansive views of the coastline adjacent to the former Fort Ord can be seen from Monterey Bay and the Monterey Peninsula. The undeveloped areas of the former Fort Ord area are predominantly hilly and covered by grassy and forested landscape.

The proposed project site is located on the northeastern portion of the former Fort Ord adjacent to Reservation Road. East of Reservation Road are active agricultural fields. The proposed project site consists of pavement, remnant Army buildings, and ruderal plant species. Coast live oak woodland borders the existing roads. Views from the proposed site include the agricultural fields, remnant

buildings, and oak woodland. Views of the Monterey Bay, Monterey Peninsula, Santa Lucia Range are not available from the project site.

**1(a),(b),(c).** The project site is not located within a scenic vista or along a scenic road or highway. The project site for the well and its well house is visible from Reservation Road, from which some expansive views of agricultural land are also visible. However, the new well house building would be located adjacent to an intersection of roadways and would not obstruct views. Therefore, the proposed project would have a negligible adverse impact on views. Therefore, there would be no significant impacts to aesthetic resources.

At the proposed well and pipeline site, construction activities would result in minor and temporary degradation of the existing visual character and quality of the project site. Trimming of coast live oak trees and other vegetation may be required. However, due to the short duration of activities and mitigation measures identified below (under Biological Resources) to reduce impacts associated with tree and vegetation removal, this impact is considered less-than-significant.

**1(d).** The project does not propose a use that would create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

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## 2. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** Construction and implementation of the proposed project would not convert prime, unique, or farmland of statewide importance to non-agricultural use or involve any other changes that would result in the conversion of farmland. The project site is not located within

parcels designated for agricultural use or under Williamson Act contract and would not disrupt any agricultural operations. Construction and implementation of the proposed project would not convert forest land or timberland or involve any other changes that would result in the conversion or loss of forest land.

### 3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in significant construction-related air quality impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The former Fort Ord is located in the North Central Coast Air Basin (NCCAB) of California. The NCCAB is contiguous with the Monterey Bay Unified Air Pollution Control District (MBUAPCD), which consists of Monterey, Santa Cruz, and San Benito Counties. The state and federal governments have established air quality standards for certain identified pollutants in order to protect public health and welfare.

The MBUAPCD shares responsibility with the Air Resources Board (ARB) for ensuring that state and national air quality standards are achieved and maintained with the NCCAB. State law assigns local air districts the primary responsibility for control of air pollution from stationary sources, but reserves oversight functions for the ARB. The MBUAPCD is responsible for developing regulations governing emissions of air pollution, permitting and inspecting stationary sources of air pollution, monitoring of ambient air quality, and air quality planning activities, including implementation of transportation control measures.

Sensitive receptors are more susceptible to the effects of air pollution than are the general population. Land uses considered sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. There are no sensitive receptors within the immediate vicinity of the project site.

**3(a),(b),(c),(d),(e).** Implementation of the project may result in temporary construction-related air quality impacts. However, the short-term air quality impacts of particulate matter emissions occurring during construction will be minimized with implementation of the following standard construction practices, which are proposed as part of the project:

- Apply water to all excavated or graded areas to prevent excessive dust.
- Cover or water all material transported offsite to prevent excessive dust release.
- Minimize the total construction area disturbed by grading, earth moving, or excavation.
- Limit onsite construction vehicle speeds to 15 miles per hour.
- Clean loose soil from construction vehicles before exiting the work site.
- Maintain all construction vehicles internal combustion engines according to manufacturer specifications.

Due to the temporal nature of anticipated construction activities associated with the proposed project with adherence to standard best practice management guidelines as noted above, and because there are no sensitive receptors located within the immediate vicinity of the proposed project, impacts to air quality would be less-than-significant.

The proposed Watkins Gate Well would require backup power generation for emergency purposes and a generator would be located at the well site. The operation of the generator and pumps would result in emissions of air pollutants and a potentially significant impact to air quality without appropriate pollution control devices. Therefore, the following mitigation is required in order to reduce impacts due to emissions from the generator and pumps to a less-than-significant level.

**Mitigation**

Implementation of the mitigation measures identified below will reduce potentially significant impacts to air quality to a less-than-significant level.

1. In order to limit potential air quality impacts, prior to installing a backup generator on the project site MCWD shall comply with MBUAPCD rules and regulations, including submitting an application to and receiving a permit from MBUAPCD, and installation of any required pollution control equipment on the generator and pumps such that emissions from the pump engines are demonstrated to remain below MBUAPCD thresholds during intermittent operation of the pumps.

**3(f).** The project is not anticipated to create objectionable odors.

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**4. BIOLOGICAL RESOURCES**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**4. BIOLOGICAL RESOURCES**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The information in this section is based on a biological survey conducted by DD&A biologist, Jami Davis, on March 4, 2011. The proposed well site and pipeline alignment (assuming a 20-foot wide impact area) were surveyed for biological resources by DD&A, based on site plans provided by MCWD. Focused botanical surveys for special-status plant species were not able to be conducted due to the time of year. Therefore, a reconnaissance-level survey was conducted on March 4, 2011, to determine the presence or potential presence of biological resources, including special-status plants and wildlife and sensitive habitats throughout the entire project site.

**Special-Status Species**

Special-status species are those plants and animals that have been formally listed or proposed for listing as Endangered or Threatened, or are Candidates for such listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA). Listed species are afforded protection under the ESA and CESA. State species of special concern are afforded protection against impacts and habitat loss by CEQA although they are not protected under the ESA or CESA. Plants listed as Rare under the California Native Plant Protection Act or on the California Native Plant Society (CNPS) List 1B (Plants Rare, Threatened, or Endangered in California) of the CNPS Inventory of Rare and Endangered Vascular Plants of California are also considered special-status species. All species in the above categories fall under state regulatory authority and may also fall under federal regulatory authority. In addition, species that meet the definition of Rare or Endangered under CEQA Section 15380 are considered special-status species. Impacts to these species may be considered significant under CEQA.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and state laws and regulations. The federal Migratory Bird Treaty Act of 1918 (CDFG Code Section 3513) prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Birds of prey are protected in California under CDFG Code Section 3503.5. Section 3503.5 states that it is “unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto.”

Current agency status information was obtained from the USFWS and CDFG (2011) for species that are listed, proposed for listing, or are candidates for listing as Threatened or Endangered under the ESA or CESA, and those considered CDFG California species of special concern. RareFind Reports (2011) from the California Natural Diversity Database (CNDDDB) were reviewed for special-status species occurrences in the quadrangle containing the project site (Salinas quadrangle) and the eight surrounding quadrangles (Chualar, Marina, Moss Landing, Natividad, Prunedale, San Juan Bautista, Seaside, and Spreckels).

Special-status plant and wildlife species known to occur or with the potential to occur in the project vicinity, along with their legal status and habitat requirements, are included in **Appendix B**. This list was based on the documented occurrences reported in the CNDDDB RareFind Reports and literature reviewed, as well as evaluating the geographic ranges and habitat requirements of species, habitat conditions on the property, and general maps showing the known distribution of special-status species on the former Fort Ord contained in the Flora and Fauna Baseline Study (U.S. Army Corps of Engineers, 1992) and Fort Ord Multi-Species Habitat Management Plan (HMP) (U.S. Army Corps of Engineers, 1997).

### **Sensitive Habitats**

Sensitive habitats are defined by local, state, or federal agencies as those habitats that support special-status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. Habitat types considered sensitive include those listed on the CNDDDB’s working list of high priority and rare natural communities (i.e., those habitats that are Rare or Endangered within the borders of California) (CDFG 2003) and those that are critical habitat in accordance with the ESA.

### **Fort Ord Habitat Management Plan**

The U.S. Army’s decision to close and dispose of the Fort Ord military base is considered a major federal action that could affect listed species under the ESA. The USFWS issued a Final Biological Opinion on the disposal and reuse of former Fort Ord requiring that a Habitat Management Plan (HMP) be developed and implemented to reduce the incidental take of listed species and loss of habitat that supports these species (October 19, 1993). This plan (U.S. Army Corps of Engineers, 1997) was prepared to assess impacts on vegetation and wildlife resources and provide mitigation for their loss associated with the disposal and reuse of former Fort Ord.

The HMP establishes guidelines for the conservation and management of species and habitats on former Fort Ord lands by identifying lands that are available for development, lands that have some restrictions with development, and habitat reserve areas. The intent of the plan is to establish large, contiguous habitat conservation areas and corridors to compensate for future development in other areas of the former base. The HMP identifies what type of activities can occur on each parcel at former Fort Ord and parcels are designated as “development with no restrictions,” “habitat reserves with management

guidelines,” or “habitat reserves with some development allowed.”<sup>1</sup> The HMP sets the standards to assure the long-term viability of former Fort Ord's biological resources in the context of base reuse so that no further mitigation should be necessary for impacts to species and habitats considered in the HMP. This plan has been approved by the USFWS; the HMP, deed restrictions, and Memoranda of Agreement between the Army and various land recipients provide the legal mechanism to assure HMP implementation. It is a legally binding document and all recipients of former Fort Ord lands are required to abide by its management requirements and procedures.

The HMP anticipates some losses to special-status species and sensitive habitats as a result of redevelopment of the former Fort Ord. With the designated reserves and corridors and habitat management requirements in place, the losses of individuals of species and sensitive habitats considered in the HMP are not expected to jeopardize the long-term viability of those species, their populations, or sensitive habitats on former Fort Ord. Recipients of disposed land with restrictions or management guidelines designated by the HMP will be obligated to implement those specific measures through the HMP and through deed covenants.

However, the HMP does not provide specific authorization for incidental take of federal or state listed species to future land recipients under the ESA or CESA. In compliance with the ESA and CESA, the Fort Ord Reuse Authority (FORA) is currently in the process of obtaining a Section 10 Incidental Take Permit from the USFWS and Section 2081 Incidental Take Permit from CDFG, which will provide base-wide coverage for take of federal and state listed wildlife and plant species to all non-federal entities receiving land on the former Fort Ord. This process involves the preparation of a Habitat Conservation Plan (HCP) and Implementing Agreement (IA). The HCP and IA are currently in draft form and being reviewed by the resource agencies.

Another Biological Opinion was issued by the USFWS on March 14, 2005 to address the effects of the reuse of former Fort Ord on the California tiger salamander (*Ambystoma californiense*) (CTS). Incidental take of CTS within the East Garrison Development Project site is covered under this Biological Opinion.

### **Local Ordinances**

Title 16, Chapter 16.60, Monterey County Code, provides for the preservation of oaks and other protected tree species within the unincorporated areas of the County. As defined in Section 16.60.030 D, no oak may be removed in any area of the County designated in the area plan as Resource Conservation, Residential, Commercial, or Industrial without a permit.

### **Habitat Types within the Project Site**

#### *Developed/Ruderal Habitat*

The proposed project site contains developed/ruderal habitat. The developed areas consist of the remnant military buildings and paved areas, including roadways. Ruderal areas are those areas which have been disturbed by human activities (e.g., creating roads or structures) and are vegetated by non-native annual grasses and other “weedy” species. Within the project site, areas of ruderal vegetation include portions of the proposed well site and the proposed 200-foot portion of the pipeline from the connection point to Barloy Canyon Road. All other areas within the project site are paved and construction will be limited to the paved areas.

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<sup>1</sup> The proposed project is located within parcels that are designated as “development with no restrictions” in the HMP.

Ruderal areas within the site are dominated by non-native plant species, including ripgut grass (*Bromus diandrus*), rattail fescue (*Vulpia myuros*), English plantain (*Plantago lanceolata*) coyote bush (*Baccharis pilularis*), small quaking grass (*Briza minor*), telegraphweed (*Heterotheca grandiflora*), and iceplant (*Carpobrotus chilensis* and *C. edulis*) due to intense or repeated disturbance. There are also some coast live oak (*Quercus agrifolia*) trees scattered within and adjacent to the area west of Barloy Canyon Road.

Common wildlife species that do well in urbanized and disturbed areas can utilize this habitat, such as the American crow (*Corvus brachyrhynchos*), raccoon (*Procyon lotor*), skunk (*Mephitis mephitis*), scrub jay (*Aphelocoma californica*), European starling (*Sturnus vulgaris*), western fence lizard (*Sceloporus occidentalis*), and rock dove (*Columba livia*).

This habitat type is considered to have low biological value, as it is generally dominated by non-native plant species and consists of relatively low quality habitat from a wildlife perspective. No special-status wildlife species were observed within this habitat type. However, scattered oaks occur within the project site and large, mature cypress trees occur adjacent to the project site. These trees may provide nesting habitat for raptors and other protected avian species. The disturbed, ruderal vegetation west of Barloy Canyon Road to the water line connection site may provide marginal upland aestivation habitat for the CTS; however, as described above, there is an existing Biological Opinion that authorizes the incidental take of CTS within the East Garrison Development project site and therefore, no additional analysis or mitigation is required.

Focused botanical surveys were not conducted at the appropriate time of year within the project site. Monterey spineflower is known to occupy disturbed areas and has a low potential to occur within the ruderal area associated with the proposed pipeline west of Barloy Canyon Road. No other special-status plant species are expected to occur due to lack of appropriate habitat (**Appendix B**).

## **Special-Status Species**

### *Special-Status Plant Species*

One special-status plant species has the potential to occur within the ruderal area associated with the proposed pipeline: Monterey spineflower. All other species are assumed absent from the site due to a lack of appropriate habitat or the results of focused surveys (see **Appendix B**).

### Monterey Spineflower

Monterey spineflower is a federally Threatened and CNPS List 1B species. This annual herb is found in sandy soils of maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland habitats at elevations of 10-147 feet (3-450 meters). The blooming period is April through June. However, this species is known to occur in disturbed areas and, therefore, Monterey spineflower has the potential to occur in the ruderal area associated with the proposed pipeline located west of Barloy Canyon Road extending to the connection point. This portion of pipeline contains the open, sandy areas required for this species; however, the soil composition and high number of non-native species may not support this species. Therefore, the potential for this species to occur is considered low. The ruderal area associated with the proposed well site does not contain the open, sandy area required for this species and is not expected to occur in that area. A focused survey for this species needs to be conducted at the appropriate time of year to determine the presence or absence of this species within the project site.

### Nesting Raptors

Raptors and their nests are protected under CDFG Code and the MBTA. Species that have the potential to nest in the coast live oak or cypress trees within or adjacent to the site include, but are not limited to: red-tailed hawk, northern harrier (*Circus cyaneus*), and American kestrel (*Falco sparverius*). While the life histories of these species vary, overlapping nesting and foraging similarities (approximately March to August) allow for their concurrent discussion.

Most raptors are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest habitats, as well as open grasslands, are used most frequently for nesting. Breeding occurs between March and August, with peak activity May through July. Prey for these species includes small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges.

Raptors and other protected avian species may utilize the coast live oak trees or other mature trees within or adjacent to the project site for nesting.

**4(a),(b),(c),(d),(e),(f).** The construction of the proposed project would potentially result in impacts to developed/ruderal habitat areas. Impacts to special-status wildlife and/or plant species that may occur within these habitats are addressed below.

### **Special-Status Plant Species**

Impacts to Monterey spineflower may occur as a result of the construction of the proposed project. This is considered a potentially significant impact which can be reduced to less-than-significant with implementation of the mitigation measure identified below.

### **Special-Status Wildlife Species**

Appropriate nesting habitat for raptors and other protected avian species is present within the trees within and adjacent to the project site. Construction activities associated with the project may result in the loss of habitat, direct mortality of individuals, or destruction of nests. Raptors and their nests are protected by both federal and state regulations (Migratory Bird Treaty Act of 1918 and CDFG Code Sections 30503 and 3503.5), which protect birds of prey and their eggs and nests. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by CDFG. Any loss of fertile raptor eggs or nesting raptors, or any activities resulting in raptor nest abandonment, would constitute a significant impact. Construction activities such as tree trimming or site grading that disturb a nesting raptor on-site or immediately adjacent to the construction site would constitute a significant impact. This is considered a potentially significant impact that can be reduced to a less-than-significant level with implementation of the mitigation measure identified below.

The proposed project will not interfere with the movement of any native wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites. The proposed project is also located within areas designated as development parcels in the Fort Ord HMP, and is consistent with the HMP.

### **Sensitive Habitats**

No sensitive habitats will be impacted by the project.

## **Trees**

Based on the information provided about the proposed construction activities, this analysis assumes that no trees will be removed or substantially impacted as a result of construction activities. If removal of oak trees are determined necessary, a permit will be required from the County of Monterey. Therefore, the proposed project would not be in conflict with any policies.

## **Mitigation**

Implementation of the mitigation measures identified below will reduce potentially significant impacts to biological resources to a less-than-significant level.

2. A qualified biologist shall conduct a pre-construction survey, during the appropriate blooming period, for Monterey spineflower to determine presence of these species. The biologist shall prepare a report that provides the results of the survey, including a description of the baseline habitat conditions, and, if found, the number of individuals and location of the populations identified within the area of impact. If no individuals are found, no further mitigation is necessary. If individuals are found, the following measures shall be implemented:
  - a. Individuals shall be avoided to the maximum extent possible.
  - b. If avoidance is not feasible, the MCWD shall hire a qualified biologist to collect seed from Monterey spineflower plants and salvage topsoil within the occupied areas that will be disturbed. Seed should be collected during the appropriate time of year (generally April – June) by a qualified biologist. At this time, the qualified biologist shall also prepare a map that identifies specific distribution of the spineflower for topsoil preservation. The collected seed shall be used in to revegetate temporarily disturbed areas, where practicable.
3. A qualified biologist shall conduct an Employee Education Program for construction crew and MCWD staff prior to construction activities. A qualified biologist shall meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route in and out of the construction area and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which will ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction effort; 5) the general provisions and protections afforded by the USFWS and CDFG; and 6) the proper procedures if a special-status animal or any other animal is encountered within the project site.
4. Trees and vegetation not planned for removal or trimming shall be protected during construction to the maximum extent possible. This includes the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales, and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species.
5. A biological monitor shall remain on-site during the initial grading activities and vegetation removal. After these activities are completed, the biological monitor shall check at least once weekly until the project construction is complete that the protective fencing remains intact and that all construction work is maintained within the limits of construction.



6. Following construction, disturbed areas shall be restored to pre-project contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, per the recommendations of a qualified biologist.
7. Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation.
8. All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from the project site.
9. No firearms shall be allowed on the project site.
10. To prevent harassment or mortality of special-status wildlife species in the area, no pets shall be permitted on the project site.

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## 5. CULTURAL RESOURCES

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The former Fort Ord is located within the currently recognized ethnographic territory of the Costanoan (also known as the Ohlone) group. This Native American group followed a hunting/gathering subsistence pattern, with partial dependence on the natural acorn crop. Habitation is considered to have been semi-sedentary and occupation sites often occur at the confluence of streams and along streams or near springs. Resource gathering and processing areas with associated temporary campsites are frequently found on the coast and in other locations containing resources utilized by the group. Temporary camps or other activity areas can also be found along ridges or other travel corridors.

Several studies investigating the archaeological and historical resources of former Fort Ord have been completed, including A Cultural Resources Survey of 783 Hectares, Fort Ord (Waite, March 1995) and information in the Final Environmental Impact Report for the Ford Ord Reuse Plan (FORA, June 1997). Based on this data, the areas of greatest archaeological sensitivity at former Fort Ord include the terraces and benches adjacent to the Salinas River and El Toro Creek, the areas surrounding the wet cycle lakes, and areas adjacent to streams and coastal beaches.

The project site is located outside of all recorded archaeological areas. Historical structures are located within the project's vicinity in areas of the East Garrison Development project; however, the proposed project would have no impact upon historical structures. The areas of the proposed project within the East Garrison area were surveyed reviewed per CEQA requirements in the Final Environmental Impact Report for the East Garrison Specific Plan (certified by the Monterey County Board of Supervisors on October 4, 2005).

**5(a),(b),(d).** No known archaeological sites exist on the site of the proposed project; however, because there is always a possibility of encountering unidentified cultural resources (specifically, ones that qualify as significant resources under CEQA) during construction of the proposed project, there is the potential for a significant impact on those discovered resources. Therefore, standard mitigation will be implemented to mitigate in the event that unknown resources are uncovered during grading for project activities, thereby reducing potential impacts to a less-than-significant level.

**Mitigation**

Implementation of the mitigation measures identified below will reduce potentially significant impacts to cultural resources to a less-than-significant level.

- 11. If archaeological resources are accidentally uncovered during the course of development, all development activity in the vicinity of the site shall cease until a qualified archaeologist completes an investigation. The archaeologist shall determine the proper procedure for the preservation, recovery, and documentation of the resource. In addition, the archaeologist shall submit a report that includes a determination of the significance of the site and recommendations on its disposition.
- 12. If buried human remains are encountered during construction, work in that area shall be halted and an archaeologist and the coroner immediately notified. If the remains are determined to be Native American, then the NAHC must be notified within 24 hours as required by Public Resources Code 5097. The NAHC will notify designated most likely descendants who will provide recommendations for the treatment of the remains within 24 hours. The NAHC will mediate any disputes regarding treatment of remains.

**5(c).** Implementation of the proposed project would not destroy any known paleontological resources or unique geologic features.

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



**6. GEOLOGY AND SOILS**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** Geologic mapping indicates that the majority of the project area consists of Pleistocene age Eolian, Older Coastal Dunes, and Terrace deposits, as well as Holocene age Alluvial, Basin, and Flood Plain deposits. Plio-Pleistocene age Continental deposits are also noted in the project area. Near-surface soils in the project area consist of loose to medium dense, poorly graded sand with silt to silty sand. Deeper soils in the project area have been classified as loose to very dense, poorly graded sand to silty sand.

The project site is not located within a state-designated Alquist-Priolo Earthquake Fault Zone, and no known active faults transverse the site. The site is situated within a region traditionally characterized by numerous active faults and moderate to high seismic activity. The Monterey Bay area is considered to be one of the more seismically active regions in the United States. The project site is seismically dominated by the San Andreas Fault System. The project area is within the vicinity of the Rinconada and Las Palamas faults. Other known active faults considered to be significant seismic sources in the vicinity include the Monterey Bay-Tularcitos fault, Zayante-Vergeles fault, the San Andreas (Pajaro) fault, and the San Gregorio (Sur Region) fault.

Because no known active faults have been mapped crossing the proposed project site, the risk of ground rupture occurring at this site is judged to be low. Although ground rupture is not considered to be a concern at the site, the site will likely be subject to at least one major earthquake and associated seismic shaking during the proposed project’s lifetime, as well as periodic slight to moderate earthquakes. Some degree of structural damage due to stronger seismic shaking at the site should be expected, but the risk can be reduced through adherence to seismic design codes.

Soil liquefaction is a condition where saturated, granular soils undergo a substantial loss of strength and deformation due to pore pressure increase resulting from cyclic stress application induced by

earthquakes. In the process, soil acquires a mobility sufficient to permit both horizontal and vertical movements if the soil mass is not confined. Soils most susceptible to liquefaction are saturated, loose, clean, uniformly graded, fine sand deposits. Another type of seismically induced ground failure that can occur as a result of seismic shaking is dynamic compaction or seismic settlement. Such phenomena typically occur in unsaturated, loose granular material or uncompacted fill soils.

**6(a),(b),(c),(d).** Due to the minor amount of grading activities associated with the project, the project is not expected to result in significant increases in erosion, sedimentation, or landslide during construction or operational activities.

The project site would be subject to strong ground shaking in the event of a large magnitude earthquake on a regional fault. The proposed facilities at the project site would not involve development of any habitable structures or exposure of people to seismic hazards.

Well development and testing water will require disposal to land in order to percolate back to the groundwater. The project proposes to pre-treat the water to achieve an acceptable water quality and then dispose of this water in existing drainage basins adjacent to Reservation Road (see the Hydrology & Water Quality section for further discussion).

The soils on the site are not likely to have liquefaction potential; however, severe ground shaking from a major earthquake in the proposed project area could cause dynamic compaction or seismic settlement of native sand deposits. Seismically induced settlement of the ground surface from densification of native sands is likely to be somewhat random due to the nature of the sand deposits. These conditions may be considered a significant impact due to the potential for them to cause failure of one or more of the proposed project components.

**Mitigation**

Implementation of the mitigation measure identified below would reduce potentially significant geology and soil impacts to a less-than-significant level:

- 13. In order to minimize the potential effects from strong seismic ground shaking on project components, a project-specific geotechnical analysis shall be performed by a registered professional engineer with geotechnical expertise prior to the development of project-level plans. The recommendations of the geotechnical analysis shall be incorporated into project plans and implemented during construction.

**6(e).** The project does not propose any land use that would require a septic system.

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**7. GREENHOUSE GASES**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**7. GREENHOUSE GASES**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** Construction of the proposed project would result in temporary, negligible greenhouse gas emissions during construction activities and negligible emissions during the operational phase of the proposed project. Mitigation listed in the Air Quality section of this Initial Study would require air pollution controls be adhered to for operation of the proposed well’s backup emergency generator. The proposed project would not conflict with any plan, policies, or regulations adopted for the purpose of reducing greenhouse gas emissions.

**8. HAZARDS AND HAZARDOUS MATERIALS**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**8. HAZARDS AND HAZARDOUS MATERIALS**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The entire former Fort Ord installation was placed on the National Priorities List of Hazardous Waste Sites (i.e., Superfund List) in 1990. Since then, numerous contaminated properties have been remediated and approved for transfer by the EPA. Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Army is required to remediate chemical contamination of soil and groundwater.

Potentially hazardous sites have been characterized in the Basewide Remedial Investigation/Feasibility Study for Fort Ord, California (Harding Lawson Associates, 1994). After initial characterization by the study, the sites were categorized as remedial investigation (RI) sites, interim-action sites, or no-action sites. No-action sites have been determined not to warrant remedial action under CERCLA. Interim-action sites have limited volume and extent of contaminated soil and, as a result, are easily excavated and remediated without further investigation. The RI sites have sufficient contamination to warrant full remedial investigation, baseline human health risk assessments, ecological risk assessments, and feasibility studies. Due to its former uses, military munitions may still exist at locations throughout the former military base. However, the project site is located within areas that have been determined to be free of ordnance and explosives.

**8(a),(b).** Water sourced from the well would be preliminarily treated at MCWD’s Intermediate reservoir. Implementation of the proposed project must comply with federal, state, and local laws and regulations. Therefore, significant hazardous materials impacts due to the use of hazardous materials associated with the proposed project are not anticipated.

Hazardous materials used during construction and well drilling will be contained onsite as required by relevant hazardous materials handling regulations, including the Resources Conservation and Recovery Act (RCRA) of 1976 and the California Hazardous Waste Control Law and California Code of Regulations (CCR) Titles 22 and 26. In addition, the project includes:

- Construction of a containment area at the well site to enclose the drill rig, fluid truck, and other equipment used for storing and handling hazardous fluids.
- Maintenance on site of a supply of absorbent materials should a spill occur.

The project is within the consultation area of U.S. Army’s Special Groundwater Protection Zone. According to the U.S. Army, construction and operation of the water supply wells would not result in lateral spreading of contaminants to groundwater aquifers and would have negligible risks due to exposure to chemicals by construction workers or the general public.

**8(c),(d),(e),(f),(g),(h).** The project site is not located within one-quarter mile from a school. As discussed above, the entire former Fort Ord was placed on the National Priorities List of Hazardous Waste Sites (i.e., Superfund List); however, the proposed project site is located in an area determined to be free of ordnance and explosives. The project is not located within two miles of any area airports and would not result in safety hazards or interfere with airport operations. Implementation of the proposed project would not interfere with emergency response plans. Wildland fires can occur on the former Fort Ord; however, implementation of the project would not result in the potential for a significant risk of loss or injury from potential wildland fires.

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**9. HYDROLOGY AND WATER QUALITY**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The project site does not contain any creeks, drainages, or other types of water bodies. The proposed improvements at the project site will minimally increase the amount of impervious surface area at the site; however, the increase in runoff will be controlled onsite through proposed drainage improvements that will connect to the East Garrison storm drain system. The project site is not located within a FEMA-designated floodplain or floodzone.

In 1972, the Federal Water Pollution Control Act was amended to state that the discharge of pollutants to waters of the U.S. from any point source is unlawful unless the discharge is in compliance with a National Pollution Discharge Elimination System (NPDES) Permit, administered through the State Water Resources Control Board (SWRCB). The Central Coast Regional Water Quality Control Board (RWQCB) oversees a statewide General Permit regarding management of stormwater runoff from construction sites over one acre in size. Provisions of the Statewide Permit indicate that discharges of material other than stormwater into waters of the U.S. are prohibited; that stormwater discharges shall not cause or threaten to cause pollution, contamination, or nuisance; and that stormwater discharges not contain hazardous substances. The Statewide Permit also requires implementation of "Best Management Practices" (BMPs) to achieve compliance with water quality standards. A BMP is defined as any program, technology, process, siting criteria, operating method, measure, or device which controls, prevents, removes, or reduces discharge of pollutants into bodies of water. Any project that will disturb over one acre is required to file a "Notice of Intent" with RWQCB and submit a StormWater Pollution Prevention Plan (SWPPP) prior to project construction.

In addition, if well production or testing water is discharged to an applicable surface water feature (i.e., with beneficial uses as defined in the Central Coast RWQCB Basin Plan; see <http://www.swrcb.ca.gov/rwqcb3/BasinPlan/Index.htm>), then a RWQCB discharge permit would be required. With the proposed project; however, the water is proposed to be discharged to land and not a surface water feature and percolated back to the groundwater basin.

**9(a),(b),(c),(d),(e),(f).** The proposed construction activities (grading, excavating, and leveling of the terrain) may result in temporary impacts to the drainage of the project site. The proposed improvements at the project site may result in a minimal increase of impervious surface area; however, proposed drainage improvements would control runoff onsite by connecting the site to the East Garrison stormwater system.

The proposed project could also result in minor erosion during construction activities; however, the contractor will be required to implement standard erosion control measures during construction to reduce minor temporary erosion impacts to a less-than-significant level. The proposed project would not result in ground disturbance of over one acre total, and, therefore, would not require a NPDES General Construction StormWater Permit.

The project proposes to dispose of well water produced during well development (approximately 2 MG) and testing (approximately 2,000 gpm for 36 hours) to existing drainage basins and percolation areas adjacent to Reservation Road in the direct vicinity of the proposed well location. The well water produced during well development is proposed to be pre-treated onsite (temporarily during well production only) to remove sedimentation (specifically, bentonite) before the water is discharged. Pretreatment may include filtration, flocculation, and/or settlement in a basin/tank. As a condition of the project, MCWD will be required to obtain a permit from the Central Coast Regional Water Quality Control Board approving the proposed discharge of test well water.

**9(g),(h),(i),(j).** The project site is not in a special flood hazard area (SFHA) as mapped by the Federal Emergency Management Agency (FEMA). The entire site is mapped in Zone C, defined as those areas subject to minimal or no flooding, according to the latest FEMA mapping taken from the currently effective Flood Insurance Rate Map panel 060195 0130 D for Unincorporated Areas of Monterey County (April 2, 2009). The project does not propose the placement of housing in a flood zone and would not be susceptible to inundation by seiche, tsunami, or mudflow.

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**10. LAND USE AND PLANNING**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The project site is located within the former Fort Ord, which was previously a U.S. Army base. Future development has been planned for the former Fort Ord base as part of the Fort Ord Reuse Plan, adopted in 1997 by the Fort Ord Reuse Authority (FORA). The plan designates land uses and development intensities within the former Fort Ord. The proposed project would occur within the area designated as the East Garrison Specific Plan development project. The East Garrison project has been approved and will construct 1,470 units in a mixed development planned community.

The proposed well site and associated water conveyance pipeline is located within an area designated for planned development as a mixed use district in the FORA Plan. Land uses surrounding the project site consist primarily of areas of the former Fort Ord and agricultural lands. Agricultural fields are located east of the proposed well site; former Fort Ord lands surround the remainder of the site consisting of either undeveloped areas or portions of the proposed East Garrison Development.

**10(a),(b),(c).** The proposed project is consistent with the existing land use and future adjacent land uses. The proposed action is consistent with the Fort Ord Reuse Plan, Habitat Management Plan (see Biological Resources section), and MCWD 2006 Water System Master Plan CIP. No new land uses will be created by the project. No land use impacts associated with incompatibility or conflicts with applicable plans would occur as a result of the proposed project. The project would not divide an established community.



## 11. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** Construction and implementation of the proposed project would not result in the loss of known mineral resources or result in the loss of an important mineral resource recovery site.

## 12. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** Noise is defined as an unwanted or objectionable sound. State and local regulations and ordinances define objectionable noise levels and identify land use compatibility standards. Sound is comprised of three variables: magnitude, frequency, and duration. The magnitude of variation of air pressure associated with sound waves results in the quality commonly referred to as “loudness.” Variations in loudness are measured on the “decibel” (dB) scale. On this scale, noise at zero decibel is barely audible, while noise at 120-140 decibels is painful and may cause hearing damage. The



human ear responds to sounds whose frequencies are in the range of 20 hertz (HZ) to 20,000 HZ. People generally find higher pitched sound to be more annoying than lower pitched sounds. Annoyance due to noise is often associated with how long noise persists. Sensitive noise receptors are identified as residential uses, transient lodging (hotels/motels), schools, libraries, churches, hospitals, and nursing homes.

Existing sources of noise affecting the project site are very limited due to the remote location of the site and because unauthorized vehicles are currently prohibited in the area. There are no sensitive receptors within the immediate vicinity of the project area. Completion of the East Garrison Development project will introduce sensitive receptors within vicinity of the project components; however, the principal noise impacts that would be caused by the proposed project, those related to construction activities, would be finished long before completion of the East Garrison development project. Additionally, any noise emanating from the operation of the Watkins Gate Well would be negligible as the facility would be located within a well house building, which would insulate noise.

**12(a),(b),(d).** The primary noise sources at the types of water facilities similar to the proposed project typically involve pumping and occasionally use of a backup, emergency generator. However, the proposed project involves the construction and operation of the well and its associated appurtenances to be located within a proposed well house building, which will minimize any noise impacts from the well's operation. Therefore, the project would not result in significant operational noise.

Construction activities would cause a temporary increase in ambient exterior noise levels in the project area. However, due to the remote location of the site and the absence of sensitive receptors within the immediate vicinity of the proposed project, this is considered a less-than-significant impact.

**12(c),(e),(f).** Implementation of the proposed project would not impact public airport operations and is not located in the vicinity of a private airstrip. Further, the project does not propose any land use activities that would increase the ambient noise levels substantially.

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### 13. POPULATION AND HOUSING

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The site of the proposed project is located in Monterey County's East Garrison Specific Plan (EGSP) Area of the former Fort Ord.

**13(a),(b),(c).** The project does not propose residential, commercial, or industrial development; the project does not propose the removal of existing residential structures. As such, the implementation of the project would not induce population growth, displace housing, or displace people. The proposed project would help satisfy a portion of MCWD's Master Plan needs and includes components of MCWD's Capital Improvement Program. Water supply from the proposed Watkins Gate Well would be used by the MCWD to serve customers in its existing service area.

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**14. PUBLIC SERVICES**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project result in:</b>				
Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** Construction and implementation of the proposed project is not anticipated to impact existing levels of service for fire, police, emergency medical, schools, parks, or other public facilities. Construction activities would be relatively short in duration and would be entirely located on former Fort Ord lands, which are not presently publically accessible.

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**15. RECREATION**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>Would the project:</b>				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The proposed project would not increase recreational needs in the area as the project is not creating any residential uses in or around the project site.

**16. TRANSPORTATION/TRAFFIC**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measure, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** Regional access to the project site is provided from Reservation Road. Direct access to the project site for construction purposes would be provided through the East Garrison Development via Sloat Street and/or Watkins Gate Road and via Reservation Road. Currently, no unauthorized vehicles are permitted in the undeveloped areas of the former Fort Ord, including the area planned for the East Garrison development. The proposed access route during construction activities consists of utilizing the existing roadway network. Although access during construction activities is expected to primarily occur on roadways within the East Garrison Development, access to the proposed well location may be partially provided via Reservation Road.

**16(a),(b).** Construction activities at the project site would result in a slight increase in traffic in the area. However, due to the remote location of the site and the existing vehicle restrictions, construction traffic would not significantly increase the existing traffic load of the project area. The operation and maintenance activities associated with the proposed improvements at the site would result in a negligible increase in traffic. The potential impact would, therefore, be less-than-significant.

**16(d).** Construction vehicles may access the proposed well site at Watkins Gate Road from Reservation Road, which may increase road hazards. Slowing construction vehicles may interrupt or slow traffic. This is considered a potentially significant impact that can be reduced with the mitigation measure identified below.

**Mitigation**

Implementation of the mitigation measures identified below will reduce potentially significant impacts to traffic and circulation to a less-than-significant level.

- 14. In order to minimize construction traffic impacts, the contractor shall prepare a construction management plan for the approval of the MCWD prior to construction. The contractor shall adhere to measures included in the approved construction management plan.

**16(c),(e),(f),(g).** Construction and implementation of the project would not result in a change to air traffic patterns, nor would it result in inadequate emergency access. No road improvements are included as part of the proposed project. The project does not propose parking as part of the overall project and construction related parking would be limited to within the area of the East Garrison development; thus outside of public parking areas. The proposed project would not conflict with policies, plans, or programs concerning alternative transportation.

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**17. UTILITIES AND SERVICE SYSTEMS**

<b>Would the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion/Conclusion/Mitigation:** The MCWD, formed in 1960, is authorized by Division 12 of the California Water Code to provide potable water and wastewater treatment services to customers in its service area. The MCWD has historically served approximately 18,000 customers in the City of Marina. In 1996, the MCWD was selected by the Fort Ord Reuse Authority (FORA) to take over conveyance of the water and wastewater systems at the former Fort Ord military base. The former base consists of approximately 28,000 acres incorporating portions of the cities of Seaside, Monterey, Del Rey Oaks, Marina, and portions of unincorporated Monterey County. In November of 2001, water and wastewater systems were conveyed through a Public Benefit Conveyance to MCWD. The MCWD is now responsible for providing water and wastewater service throughout the former Fort Ord military base. The MCWD's current potable water supply is the Salinas Valley Groundwater Basin.

The U.S. Army, on behalf of the United States of America, entered into a Memorandum of Agreement for the Annexation of Fort Ord into Zones 2 and 2A of the MCWRA. The agreement established a maximum withdrawal of 6,600 AFY of groundwater from the Salinas Basin, provided no more than 5,200 AFY are withdrawn from the 180-foot and the 400-foot aquifers, with the remaining 1,400 AFY coming from the deep aquifer. Another interpretation of the agreement language is that unlimited withdrawals are allowed from the deep aquifer up to the remaining amount within the 6,600 AFY. As a part of the Fort Ord Reuse Plan, an allocation from the 6,600 AFY was provided for each of the jurisdictions.

MCWD well systems currently utilize Salinas Valley groundwater as its primary supply source in accordance with agreements with the Monterey County Water Resources Agency (MCWRA). Both MCWD and the agricultural and municipal users throughout the basin within the MCWRA water supply system rely on wells that extract water from the Salinas Valley Groundwater Basin (SV Basin). The SV Basin that is located generally within the alluvial portions of the Salinas Valley consists of the sand, gravel, and clay that have been deposited over millions of years. The entire SV Basin is one large hydrologic unit; however, the SV Basin also contains discrete areas that demonstrate unique characteristics differentiating them from the other areas of the basin.

Seawater intrusion in the SV Basin has been documented since the 1930's. Seawater intrusion occurs when the naturally occurring offshore flow of fresh groundwater in a coastal aquifer is reversed and seawater begins moving inland. The flow reversal occurs when onshore groundwater levels are consistently below sea level as a result of extractions (i.e., cumulative pumping from wells). Regionally, water levels can drop below sea level as a result of extractions that exceed the recharge to the aquifer. On a local scale, water levels can drop below sea level because of well operations and specific aquifer properties. In the Pressure Subarea, the flow reversal allowing seawater intrusion is the result of both processes, but predominantly by large scale pumping by entities other than MCWD in the areas east and south of MCWD boundaries.

MCWD's pumping represents a very small fraction of the total pumping from the Pressure Subarea. MCWD operates a monitoring well located between Monterey Bay and MCWD's production wells, which is intended to identify any future seawater intrusion that might subsequently affect the wells located further inland. Detection of seawater in the monitoring well would provide advance notice to MCWD to install or reinstate one or more back-up wells further inland, where Monterey County Water Resources Agency (MCWRA) data indicate ample recharge is available, to replace any potential future loss of production capacity (Feeney, 2004 and UWMP, 2005). There is no evidence of seawater intrusion in the deep aquifer, nor is there evidence that such intrusion will likely occur.

**17(a),(b),(d).** The proposed project would be comprised of new water supply distribution infrastructure, including the installation of a new well to deliver potable water to the MCWD’s customers. The proposed Watkins Gate Well would help satisfy requirements of the MCWD’s Master Plan. The well would deliver groundwater from the aquifer through a pipeline and be treated in a booster station at MCWD’s Intermediate reservoir before being distributed within MCWD’s service area.

The proposed project would not cause a substantial depletion or degradation of water resources resulting in a significant impact for the following reasons:

- Construction and operation of the project facilities would not exceed the MCWD’s allowable pumping limits from the Salinas Valley Groundwater Basin.
- The proposed well will only be producing up to the amount required or demanded by the MCWD’s customers which in the short-term will remain far less than the allowable limits.
- The MCWD’s allowable limits are a small fraction of the total pumping from the basin and the pressure subarea, more specifically, as described in the Groundwater Status and Inventory report (MCWD/ DD&A/Martin Feeney, March 2004).
- The proposed well is located further inland than any of the MCWD’s existing wells and therefore may be considered to have less of a direct, adverse impact on the seawater intrusion conditions.
- Through MCWD’s annexation into Zones 2/2A, the MCWD participates in groundwater management activities of the MCWRA including cooperating in the planned Salinas Valley Water Project (SVWP).
- The objectives of the SVWP are to stop, and eventually reverse, the seawater intrusion fronts even with continued MCWD pumping and this project would have no effect on implementation of that project.
- Some water would be used during construction to control dust and adjust the moisture content of the soil. However, the amount of water would not be significant due to the size, scale, and duration of the project construction.
- The proposed Watkins Gate Well would be a 400’ or 900’ deep aquifer well, which is not anticipated to create noticeable drawdown at other nearby local wells. Local wells in the vicinity are not anticipated to experience any adverse impacts due to the limited connectivity between the upper and deep aquifers.

**17(c),(e),(f),(g).** The proposed project would not result in an increase in wastewater, solid waste generation or require new stormwater drainage facilities.

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**18. MANDATORY FINDINGS OF SIGNIFICANCE**

<b>Does the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**18. MANDATORY FINDINGS OF SIGNIFICANCE**

<b>Does the project:</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion/Conclusion/Mitigation:** As identified in this IS, the project could result in potentially significant environmental impacts. These impacts are associated with air quality, biological resources, cultural resources, geology and soils, and traffic and circulation. The proposed project has incorporated features to minimize potential impacts. In addition, mitigation is provided herein as described in this Initial Study to reduce potentially significant impacts to a less-than-significant level. This Initial Study found that the proposed project would have less-than-significant or no impacts in any other topical areas. Therefore, the project would have a less-than-significant or no impact on the environment, the habitat of a fish or wildlife species or population, plant or animal communities, rare or endangered plant or animal or important examples of the major periods of California history or prehistory. The potential impacts of the project were found to be less-than-significant and would therefore, not be considered cumulatively considerable. This project would add negligible traffic to any cumulatively impacted intersections or roadways and the project would not create a significant impact at any intersection. The project was determined to have some significant adverse effects on human beings directly or indirectly, and for those significant impacts, mitigation measures are recommended herein. The previous sections document the reasons for this determination.

As defined by Section 15355 of the State CEQA Guidelines, a cumulative impact is an impact that is created as a result of the combination of the proposed project and related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. This analysis looks at two cumulative scenarios: short-term construction and long-term operational.

Construction-related impacts such as those identified for the proposed project are typically short-term and therefore have a relatively narrow window of time related to those past, present, and probable future projects that could contribute to a potentially significant cumulative impact. Infrastructure projects and development projects in the vicinity of the proposed project site that could contribute to cumulative effects have been considered by this Initial Study. This includes projects that could begin before but would be completed during construction of the proposed project, could be constructed simultaneously with the proposed project, or are scheduled to begin during but would be completed after construction of

the proposed project. Construction of the proposed project is planned to occur within the next year. The geographic area considered included the Cities of Marina, and Monterey County near the City of Marina, because these are areas that could be affected by or could contribute to construction-related impacts.

In reviewing all projects and related cumulative impacts, the proposed project would be a minor negligible contributor to these short-term construction impacts. The proposed project covered under this environmental document did not identify any operational impacts, with the exception of the potential for a backup generator to be used in cases of emergency, which would only result in temporary usage. Therefore, it would not contribute to a cumulative impact in any issue areas during operation.

Construction of the future wells would require compliance with state and local well drilling and construction standards, and compliance with Salinas Valley Groundwater Basin pumping limits in all applicable agreements with Monterey County Water Resources Agency. MCWD pumping shall not result in a significant adverse impact on other vicinity groundwater wells based upon the requirements in the above standards. Specifically, according to CEQA Guidelines and thresholds above, a project may not substantially deplete groundwater supplies such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted). As discussed previously in this Initial Study, MCWD is restricted to allowable pumping limits, their pumping represents a small portion of the cumulative pumping in the SVGB, and Monterey County Water Resources is planning the Salinas Valley Water Project, the objective of which is to halt, and eventually reverse, seawater intrusion. Therefore, even with construction and operation of new wells in the future, MCWD's cumulative contribution to the any potential significant cumulative groundwater impacts would be considered less-than-significant.



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## **Appendix A**

### **Determination – Mitigated Negative Declaration**

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**DETERMINATION**

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
\_\_\_\_\_  
Signature

GARY L. ROGERS  
\_\_\_\_\_  
Gary Rogers, Associate Engineer

3/23/11  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Marina Coast Water District

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**Appendix B**  
**Special-Status Species Table**

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## Special-Status Species Table for the Watkins Gate Well and Pipeline Project

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Site
<b>MAMMALS</b>			
<i>Antrozous pallidus</i> Pallid bat	-- / CSC / --	A wide variety of habitats are utilized including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. Also relatively common on bridges.	<b>Unlikely:</b> No suitable day roost or maternity colony habitat is present within or adjacent to the Project Site. Trees adjacent to the Project Site may be utilized as feeding roosts at night; however, the Project is unlikely to impact this species as feeding roosts are not typically protected habitat
<i>Lasiurus cinereus</i> Hoary bat	-- / CNDDDB / --	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or edge for feeding. Generally roost in dense foliage of trees.	<b>Unlikely:</b> No suitable day roost or maternity colony habitat is present within or adjacent to the Project Site. Trees adjacent to the Project Site may be utilized as feeding roosts at night; however, the Project is unlikely to impact this species as feeding roosts are not typically protected habitat.
<i>Neotoma macrotis luciana</i> Monterey dusky-footed woodrat	-- / SSC / --	Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.	<b>Unlikely:</b> No suitable habitat present within or immediately adjacent to the Project site.
<i>Reithrodontomys megalotis distichlis</i> Salinas harvest mouse	-- / CNDDDB / --	Known only to occur from the Monterey Bay region. Occurs in fresh and brackish water wetlands, and probably in the adjacent uplands around the mouth of the Salinas River.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Sorex ornatus salarius*</i> <b>Monterey ornate shrew</b>	-- / SSC / --	Mostly moist or riparian woodland habitats, and within chaparral, grassland, and emergent wetland habitats where there is a thick duff or downed logs.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Taxidea taxus</i> American badger	-- / SSC / --	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<b>BIRDS</b>			
<i>Accipiter cooperii</i> Cooper's hawk	-- / CNDDDB / --	Resident throughout most of the wooded portion of the state. Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. Seldom found in areas without dense tree stands, or patchy woodland habitats.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Agelaius tricolor</i> Tricolored blackbird	-- / SSC / --	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	<b>Unlikely:</b> No suitable habitat present within the Project Site.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Aquila chrysaetos</i> Golden eagle	-- / CFP / --	Use rolling foot-hills, mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, cliffs, and rocky outcrops. Nest in secluded cliffs with overhanging ledges as well as large trees.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Asio flammeus</i> Short-eared owl	-- / SSC / --	Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, meadows, dunes, irrigated lands, and saline and freshwater emergent marshes. Dense vegetation is required for roosting and nesting cover. This includes tall grasses, brush, ditches, and wetlands. Open, treeless areas containing elevated sites for perching, such as fence posts or small mounds, are also needed. Some individuals breed in northern California.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Athene cunicularia</i> Burrowing owl	-- / SSC / --	Year round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Buteo regalis</i> Ferruginous hawk	-- / CNDDDB / --	An uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges and a fairly common winter resident of grassland and agricultural areas in southwestern California. Frequent open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Does not breed in California.	<b>Unlikely:</b> No suitable habitat present within or immediately adjacent to the Project site. Additionally, this species does not breed in California and is therefore unlikely to be impacted by the Project.
<i>Charadrius alexandrinus nivosus</i> Western snowy plover	FT / SSC / --	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Elanus leucurus</i> White-tailed kite	-- / CFP / --	Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Eremophila alpestris actia</i> California horned lark	-- / CNDDDB / --	Variety of open habitats, usually where large trees and/or shrubs are absent. Found from grasslands along the coast to deserts at sea-level and alpine dwarf-shrub habitats at higher elevations. Builds open cup-like nests on the ground.	<b>Unlikely:</b> No suitable habitat present within the Project Site.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Falco mexicanus</i> Prairie falcon	-- / CNDDDB / --	Associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Uses open terrain for foraging; nests in open terrain with canyons, cliffs, escarpments, and rock outcrops.	<b>Low:</b> May forage within Project Site. No suitable nesting habitat present within the Project Site and is therefore unlikely to be impacted by the Project. The nearest CNDDDB occurrence is within the Spreckels Quad (exact occurrence location information not available).
<i>Rallus longirostris obsoletus</i> California clapper rail	FE / SE-CFP / --	Occur within a range of salt and brackish marshes.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Riparia riparia</i> Bank swallow	-- / ST / --	Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<b>REPTILES AND AMPHIBIANS</b>			
<i>Ambystoma californiense</i> <b>California tiger salamander</b>	FT / ST / --	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	<b>Low:</b> No breeding habitat is present within the Project Site. The nearest occurrence of CTS is approximately 0.1 mile from the Project site; however, this is not a breeding location. Several breeding locations are known within Fort Ord; the nearest of which is approximately 0.4 miles from the Project Site. Marginal upland aestivation habitat may be present within the ruderal habitat within the Project Site near the water line connection point west of Barloy Canyon Road.
<i>Ambystoma macrodactylum croceum</i> Santa Cruz long-toed salamander	FE / SE-CFP / --	Preferred habitats include ponderosa pine, montane hardwood-conifer, mixed conifer, montane riparian, red fir, and wet meadows. This is an isolated subspecies which occurs in a small number of localities in Santa Cruz and Monterey Counties. Adults spend the majority of the time in underground burrows and beneath objects. Larvae prefer shallow water with clumps of vegetation.	<b>Unlikely:</b> No breeding habitat is present on the Project site. The nearest CNDDDB occurrence is approximately 8.9 miles from the Project site, outside of the potential dispersal range for this species.
<i>Anniella pulchra</i> <b>California legless lizard</b>  (includes <i>A. p. nigra</i> and <i>A. p. pulchra</i> as recognized by the DFG)	-- / SSC / --	Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas.	<b>Unlikely:</b> No suitable habitat present within the Project Site.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Emys marmorata</i> Western pond turtle	-- / SSC / --	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Phrynosoma blainvillii</i> Coast horned lizard	-- / SSC / --	Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<b><i>Rana draytonii</i></b> <b>California red-legged frog</b>	FT / SSC / --	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	<b>Unlikely:</b> No suitable habitat present within or immediately adjacent to the Project site. The nearest CNDDDB occurrence is located approximately 4.2 miles from the Project site along the Salinas River; outside of the dispersal range for this species.
<i>Taricha torosa torosa</i> Coast Range newt  (Monterey County south only)	-- / CSC / --	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoir.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Thamnophis hammondi</i> Two-striped garter snake	-- / SSC / --	Associated with permanent or semi-permanent bodies of water bordered by dense vegetation in a variety of habitats from sea level to 2400m elevation.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<b>FISH</b>			
<i>Eucyclogobius newberryi</i> Tidewater goby	FE / SSC / --	Brackish water habitats, found in shallow lagoons and lower stream reaches.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Oncorhynchus mykiss irideus</i> South-central coast steelhead	FT / SSC / --	Coastal perennial and near perennial streams, with suitable spawning and rearing habitat and no major barriers.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<b>INVERTEBRATES</b>			
<i>Coelus globosus</i> Globose dune beetle	-- / CNDDDB / --	Coastal dunes. These beetles are primarily subterranean, tunneling through sand underneath dune vegetation.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Danaus plexippus</i> Monarch butterfly	-- / CNDDDB / --	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine, and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	<b>Unlikely:</b> No suitable habitat present within the Project Site.



Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Euphilotes enoptes smithi</i> <b>Smith's blue butterfly</b>	FE / -- / --	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are <i>Eriogonum latifolium</i> and <i>E. parvifolium</i> .	<b>Unlikely:</b> No suitable habitat present within or immediately adjacent to the Project site. The host plants for this species were not identified within the Project Site during the survey on March 4, 2011.
<i>Helminthoglypta sequoicola consors</i> Redwood shoulderband snail	-- / CNDDDB / --	Known only from the south slope of San Juan grade, near foot, 8 miles northwest of Salinas.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Linderiella occidentalis</i> <b>California linderiella</b>	-- / CNDDDB / --	Ephemeral ponds with no flow. Generally associated with hardpans.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Optioservus canus</i> Pinnacles optioservus riffle beetle	-- / CNDDDB / --	Species of this genus generally prefer gravelly or rocky streams and some often occur on moss covered rocks. Both adults and larvae crawl on rocks and gravel mostly in riffle areas.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<i>Tryonia imitator</i> California brackishwater snail	-- / CNDDDB / --	Inhabits coastal lagoons, estuaries and salt marshes. Found only in permanently submerged areas in a variety of sediment types. Tolerant of a wide range of salinities.	<b>Unlikely:</b> No suitable habitat present within the Project Site.
<b>PLANTS</b>			
<i>Allium hickmanii</i> Hickman's onion	-- / -- / 1B	Closed-cone coniferous forests, maritime chaparral, coastal prairie, coastal scrub, and valley and foothill grasslands at elevations of 5-200 meters. Bulbiferous herb in the Alliaceae family; blooms March-May.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i> <b>Hooker's manzanita</b>	-- / -- / 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June.	<b>Not Present:</b> Not identified during survey on March 4, 2011.
<i>Arctostaphylos montereyensis</i> <b>Toro manzanita</b>	-- / -- / 1B	Maritime chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 30-730 meters. Evergreen shrub in the Ericaceae family; blooms February-March.	<b>Not Present:</b> Not identified during survey on March 4, 2011.
<i>Arctostaphylos pajaroensis</i> Pajaro manzanita	-- / -- / 1B	Chaparral on sandy soils at elevations of 30-760 meters. Evergreen shrub in the Ericaceae family; blooms December-March.	<b>Not Present:</b> Not identified during survey on March 4, 2011.
<i>Arctostaphylos pumila</i> <b>Sandmat manzanita</b>	-- / -- / 1B	Closed-cone coniferous forests, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 3-205 meters. Evergreen shrub in the Ericaceae family; blooms February-May.	<b>Not Present:</b> Not identified during survey on March 4, 2011.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	-- / -- / 1B	Playas, valley and foothill grassland on adobe clay, and vernal pools on alkaline soils at elevations of 1-60 meters. Annual herb in the Fabaceae family; blooms March-June.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>California macrophylla</i> Round-leaved filaree	-- / -- / 1B	Cismontane woodland and valley and foothill grassland on clay soils at elevations of 15-1200 meters. Annual herb in the Geraniaceae family; blooms March-May.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Castilleja ambigua</i> ssp. <i>insalutata</i> Pink johnny-nip	-- / -- / 1B	Coastal prairie and coastal scrub at elevations of 0-100 meters. Annual herb in the Orobanchaceae family; blooms May-August.	<b>Unlikely:</b> No suitable habitat within Project site.
<b><i>Ceanothus cuneatus</i> ssp. <i>rigidus</i></b> <b>Monterey ceanothus</b>	-- / -- / List 4	Closed cone coniferous forest, chaparral, and coastal scrub on sandy soils at elevations of 3-200 meters. Evergreen shrub in the Rhamnaceae family, blooms February-April.	<b>Not Present:</b> Not identified during survey on March 4, 2011.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	-- / -- / 1B	Valley and foothill grassland on alkaline soils at elevations of 1-230 meters. Annual herb in the Asteraceae family; blooms June-November.	<b>Unlikely:</b> No suitable habitat within Project site.
<b><i>Chorizanthe pungens</i> var. <i>pungens</i></b> <b>Monterey spineflower</b>	FT / -- / 1B	Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-June.	<b>Low:</b> The ruderal habitat west of Barloy Canyon Road and east of the water line connection point contains marginal habitat for this species. This species was not identified in this area in previous surveys for the East Garrison Development project.
<i>Chorizanthe robusta</i> var. <i>robusta</i> Robust spineflower	FE / -- / 1B	Openings in cismontane woodland, coastal dunes, and coastal scrub on sandy or gravelly soils at elevations of 3-300 meters. Annual herb in the Polygonaceae family; blooms April-September.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Clarkia jolonensis</i> Jolon clarkia	-- / -- / 1B	Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June.	<b>Unlikely:</b> No suitable habitat within Project site.
<b><i>Cordylanthus rigidus</i> ssp. <i>littoralis</i></b> <b>Seaside bird's-beak</b>	-- / SE / 1B	Closed-cone coniferous forests, chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Hemiparasitic, annual herb in the Scrophulariaceae family; blooms April-October.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon California larkspur	-- / -- / 1B	Openings in chaparral and mesic areas of cismontane woodland at elevations of 230-1095 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	<b>Unlikely:</b> No suitable habitat within Project site.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Delphinium hutchinsoniae</i> Hutchinson's larkspur	-- / -- / 1B	Broadleaved upland forest, chaparral, coastal scrub, and coastal prairie at elevations of 0-427 meters. Perennial herb in the Ranunculaceae family; blooms March-June.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Ericameria fasciculata</i> Eastwood's goldenbush	-- / -- / 1B	Closed-cone coniferous forest, maritime chaparral, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 30-275 meters. Evergreen shrub in the Asteraceae family; blooms July-October.	<b>Not Present:</b> Not identified during survey on March 4, 2011.
<i>Eriogonum nortonii</i> Pinnacles buckwheat	-- / -- / 1B	Chaparral and valley and foothill grassland on sandy soils, often on recent burns, at elevations of 300-975 meters. Annual herb in the Polygonaceae family; blooms May-August.	<b>Not Present:</b> Not identified during survey on March 4, 2011.
<i>Erysimum ammophilum</i> Sand-loving (coast) wallflower	-- / -- / 1B	Maritime chaparral, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Erysimum menziesii</i> ssp. <i>yadonii</i> Yadon's wallflower	FE / SE / 1B	Coastal dunes at elevations of 0-10 meters. Perennial herb in the Brassicaceae family; blooms May-September.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Fritillaria liliacea</i> Fragrant fritillaria	-- / -- / 1B	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentinite, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i> Sand gilia	FE / ST / 1B	Maritime chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Holocarpha macradenia</i> Santa Cruz tarplant	FT / SE / 1B	Coastal prairies and valley foothill grasslands, often clay or sandy soils, at elevations of 10-220 meters. Annual herb in the Asteraceae family; blooms June-October.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Horkelia cuneata</i> ssp. <i>sericea</i> Kellogg's horkelia	-- / -- / 1B	Closed-cone coniferous forests, maritime chaparral, and openings in coastal scrub on sandy or gravelly soils at elevations of 10-200 meters. Perennial herb in the Rosaceae family; blooms April-September.	<b>Not Present:</b> Not identified during survey on March 4, 2011.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE / -- / 1B	Mesic areas of valley and foothill grassland, alkaline playas, cismontane woodland, and vernal pools at elevations of 0-470 meters. Annual herb in the Asteraceae family; blooms March-June.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Malacothamnus palmeri</i> var. <i>involutus</i> Carmel Valley bush-mallow	-- / -- / 1B	Chaparral, cismontane woodland, and coastal scrub at elevations of 30-1100 meters. Deciduous shrub in the Malvaceae family; blooms May-August.	<b>Not Present:</b> Not identified during survey on March 4, 2011. No suitable habitat within Project site.

Species	Status (USFWS/ CDFG/ CNPS)	General Habitat	Potential Occurrence within Project Site
<i>Malacothrix saxatilis</i> var. <i>arachnoidea</i> Carmel Valley malacothrix	-- / -- / 1B	Chaparral and coastal scrub on rocky soils at elevations of 25-1036 meters. Perennial rhizomatous herb in the Asteraceae family; blooms June-December (uncommon in March).	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Microseris paludosa</i> Marsh microseris	-- / -- / 1B	Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grasslands at elevations of 3-300 meters. Perennial herb in the Asteraceae family; blooms April-June (July).	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Pinus radiata</i> Monterey pine	-- / -- / 1B	Closed-cone coniferous forest at elevations of 25-185 meters. Evergreen tree in the Pinaceae family. Only three native stands in CA, at Ano Nuevo, Cambria, and the Monterey Peninsula; introduced in many areas.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Piperia yadonii</i> Yadon's rein orchid	FE / -- / 1B	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms May-August.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Rosa pinetorum</i> Pine rose	-- / -- / 1B	Closed-cone coniferous forest at elevations of 2-300 meters. Shrub in the Rosaceae family; blooms May-July. Possible hybrid of <i>R. spithamea</i> , <i>R. gymnocarpa</i> , or others; further study needed.	<b>Not Present:</b> No suitable habitat within Project site. Not identified during survey on March 4, 2011.
<i>Stebbinsoseris decipiens</i> Santa Cruz microseris	-- / -- / 1B	Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and openings in valley and foothill grassland, sometimes on serpentinite, at elevations of 10-500 meters. Annual herb in the Asteraceae family; blooms April-May.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Trifolium buckwestiorum</i> Santa Cruz clover	-- / -- / 1B	Broadleaved upland forest, cismontane woodland, and margins of coastal prairie on gravelly soils at elevations of 105-610 meters. Annual herb in the Fabaceae family; blooms April-October.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Trifolium hydrophilum</i> Saline clover	-- / -- / 1B	Marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools at elevations of 0-300 meters. Annual herb in the Fabaceae family; blooms April-June.	<b>Unlikely:</b> No suitable habitat within Project site.
<i>Trifolium polyodon</i> Pacific Grove clover	-- / SR / 1B	Closed-cone coniferous forest, coastal prairie, meadows and seeps, and mesic areas in valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-June.	<b>Unlikely:</b> No suitable habitat within Project site.

## **STATUS DEFINITIONS**

### **U.S. Fish and Wildlife Service (USFWS)**

- FE = listed as Endangered under the federal Endangered Species Act
- FT = listed as Threatened under the federal Endangered Species Act
- FC = federal Candidate under the federal Endangered Species Act
- = no listing

### **California Department of Fish and Game (CDFG)**

- SE = listed as Endangered under the California Endangered Species Act
- ST = listed as Threatened under the California Endangered Species Act
- SC = state Candidate under the California Endangered Species Act
- SR = listed as Rare under the California Endangered Species Act
- SSC = California Department of Fish and Game Species of Special Concern
- CFP = California Fully Protected Animal
- = no listing

CNDDDB = This designation is being assigned to animal species that are not assigned any of the other status designations defined in this table. These animal species are included in the DFG's CNDDDB "Special Animals" list (2010), which includes all taxa the CNDDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special-status species." The CDFG considers the taxa on this list to be those of greatest conservation need.

### **California Native Plant Society (CNPS)**

- 1B = List 1B species; Rare, Threatened or Endangered in California and elsewhere
- 2 = List 2 species; Rare, Threatened, or Endangered in California, but more common elsewhere
- 3 = List 3 species; plants about which more information is needed
- 4 = List 4 species; plants of limited distribution
- = no listing

## **POTENTIAL TO OCCUR**

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys.

High = known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of suitable habitat conditions.

Moderate = known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of marginal habitat conditions within the site.

Low = species known to occur in the vicinity from the CNDDDB or other documentation; lack of suitable habitat or poor quality.

Unlikely = species not known to occur in the vicinity from the CNDDDB or other documentation, no suitable habitat is present within the site.

Not Present = species not identified during focused surveys.

\* = **Bold** text indicates Fort Ord HMP species