Notice of Preparation of an Environmental Impact Report

Date: June 22, 2017

Project Title: Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention Project

Location: Cities of Santa Cruz and Capitola, and portions of unincorporated Santa Cruz County

APN: Potential treatment facility location in the City of Santa Cruz: 004-331-05 and 004-331-02; potential recharge well location in the City of Capitola:036-195-02; and potential treatment facilities and recharge well locations in the county of Santa Cruz: 029-013-54, 029-013-56 and 029-013-57; 030-241-20, 030-241-22 and 030-242-43; and 037-241-46 and 039-141-06. Pipelines and appurtenant conveyance facilities would be located in the Cities of Santa Cruz and Capitola, and County of Santa Cruz on multiple properties with numerous Assessor Parcel Numbers (APNs).

Project Sponsor: Soquel Creek Water District
P.O. Box 1550
Capitola, CA 95010

Lead Agency: Same as Project Sponsor

Staff Contact: Melanie Mow Schumacher, P.E.
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Soquel Creek Water District
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This revised Notice of Preparation (NOP) of an Environmental Impact Report (EIR) has been prepared by the Soquel Creek Water District (District) in connection with the Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention Project (Project). As described further herein, the Project has been slightly modified since publication of the November 2016 NOP. The purpose of the EIR is to provide information about potentially significant physical environmental effects of the proposed Project, to identify possible ways to minimize the Project’s significant adverse effects (if any), and to describe and analyze possible alternatives to the proposed Project. The District is issuing this NOP to inform the public and responsible and trustee agencies about the proposed Project and the intent to prepare an EIR. This NOP is also available online at: http://www.soquelcreekwater.org/purewatersoquel-EIR
Project Summary

The Soquel Creek Water District (District) proposes an advanced purified groundwater replenishment project – to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. The Project would help increase the sustainability of the District’s groundwater supply, upon which it currently relies for 100 percent of its water supply, reduce the degree of overdraft conditions in the District’s groundwater basin, protect against and aid in preventing further seawater intrusion of the groundwater basin, and promote beneficial reuse by reducing discharge of treated wastewater to the Monterey Bay National Marine Sanctuary. The Project would provide sufficient treatment capacity to offset the groundwater supply impacts attributable to District pumping. The proposed Project facilities include: water treatment facilities; pump stations and pipelines for the conveyance of source water, purified water, and brine concentrate; and recharge and monitoring wells. The Project also includes the potential use of the advanced purified water for landscape irrigation application and redistribution of groundwater pumping from District extraction wells.

The District originally published an NOP for the Project in November 2016. The District has since modified the Project, as described in this revised NOP. Key features of the Project that have been revised are summarized below:

- Removal of option to use raw wastewater from the Santa Cruz County Sanitation District collection system as source water and removal of associated pipelines and raw wastewater treatment facility, and focuses on the Project only using treated effluent from Santa Cruz Wastewater Treatment Facility (SC WWTF) as the source water to purify.
- Addition of a Chanticleer Avenue property location as an option for development of an Advanced Water Purification Facility (AWPF), and associated water pipeline extending from the Chanticleer Avenue Site to recharge well sites.
- Addition of the option for development of an AWPF facility at the Santa Cruz Wastewater Treatment Facility (SC WWTF), and associated purified water pipeline extending from SC WWTF to recharge well sites.
- Minor changes to the potential limits of disturbance associated with the development of an AWPF at the West Annex Site and the Cabrillo College Recharge Well Site.

The Project location and components, as revised, are described further in the Notice of Preparation and supporting Project Description subsections that follow.

Finding

The District has determined that the project may have a significant effect on the environment and an Environmental Impact Report (EIR) is required. This determination is based upon the criteria of the State California Environmental Quality Act (CEQA) Guidelines Sections 15064 (Determining Significant Effect) and 15065 (Mandatory Findings of Significance).
Public Scoping Process

The District will hold an additional Public Scoping Meeting to provide an opportunity for the public and regulatory agencies to learn about the Project and provide oral comments via court reporter and/or written comments. The meeting will be held on July 12, 2017, from 6:00 pm to 8:00 pm at: Twin Lakes Church, 2701 Cabrillo College Dr., Monschke Hall, Aptos, CA 95003. Meeting location access and restrooms are compliant with the Americans with Disabilities Act. To request a language interpreter or to accommodate persons with disabilities at the scoping meeting, please contact the staff contact listed above at least 72 hours in advance of the meeting. Written comments will also be accepted until 5:00 pm on July 22, 2017. Written comments should be sent to Melanie Mow Schumacher, Soquel Creek Water District, P.O. Box 1550, Capitola, CA 95010 or via email at: purewatersoquel@soquelcreekwater.org

If you work for a responsible or trustee State agency, we need to know the views of your agency regarding the scope and content of the environmental information that is germane to your agency’s statutory responsibilities in connection with the Project. Your agency may need to use the EIR when considering a permit or other approval for this Project. Please include the name of a contact person in your agency.

June 22, 2017

Date

Melanie Mow Schumacher, P.E.
Associate Manager – Special Projects
Soquel Creek Water District
P.O. Box 1550
Capitola, CA 95010
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PURE WATER SOQUEL
Notice of Preparation Project Description

The Pure Water Soquel: Groundwater Replenishment and Seawater Intrusion Prevention Project (Project) would help increase the sustainability of the District’s groundwater supply, reduce the degree of overdraft conditions in the local groundwater basin, protect against and prevent further seawater intrusion of the groundwater basin, and promote beneficial reuse by reducing discharge of treated wastewater to the Monterey Bay National Marine Sanctuary. This Project Description addresses the following key Project elements and is supported by several figures:

- Background
- Objectives
- Components
- Construction
- Operations & Maintenance
- Schedule
- Regulatory Requirements, Permits, and Approvals
- Potential Environmental Issues

The Project is being evaluated in accordance with the California Environmental Quality Act (CEQA) to identify the physical environmental impacts of the Project. The District is the CEQA Lead Agency. The District has determined that an Environmental Impact Report (EIR) must be prepared for the Project prior to any final decision regarding whether to approve the Project. The purpose of the EIR is to provide information about potential significant physical environmental effects of the Project, to identify possible ways to minimize the significant effects, and to describe and analyze possible alternatives to the Project. Preparation of a Notice of Preparation (NOP) or EIR does not indicate a decision by the District to approve or to disapprove the project. However, prior to making any such decision, the decision makers must review and consider the information contained in the EIR.

1. Background

The District is a County Water District formed under Section 30000 et. seq. of the California Water Code providing potable drinking water and groundwater resource management in a portion of mid-Santa Cruz County, California. The District’s service area includes portions of the City of Capitola and the unincorporated communities of Aptos, La Selva Beach, Rio Del Mar, Seascape, Seacliff Beach and Soquel. The District serves approximately 15,800 connections, of which 85 percent are residential, and a population of approximately 40,200. The District currently obtains 100 percent of its water supply from aquifers in the Santa Cruz Mid-County Groundwater Basin. These aquifers are located within two geologic formations that underlie the District’s service area, the Purisima Formation and the Aromas Red Sands aquifer. The Purisima Formation provides the majority of the District’s water needs.
The District’s groundwater supply is currently in a state of critical overdraft and the District has declared a groundwater emergency, meaning water has been extracted from the aquifers faster than their natural rate of recharge, resulting in depressed groundwater levels. In addition, and related to the overdraft conditions, the District has detected seawater intrusion in its groundwater supply aquifers at some coastal monitoring wells. Hydrologic analysis and evaluations estimate that a supplemental water supply would be required to restore groundwater levels basinwide, and aid in meeting the mandates of the Sustainable Groundwater Management Act that the basin be sustainable by 2040. Based on current hydrologic evaluations and its desired level of risk/uncertainty, the District needs to limit its average groundwater pumping to no more than 2,300 acre-feet per year (afy)\(^1\); thus, the District would need to secure approximately 1,500 afy of supplemental supply to offset the portion of the basin’s groundwater overdraft attributable to District pumping (WSC, 2015). An estimated 3,000 afy of supplemental supply would be required to address basinwide groundwater overdraft.

In March 2016, the District completed a Regional Recycled Water Feasibility Study (Carollo, 2016) for recharging the local groundwater aquifers with advanced purified water. The goal of this work was to identify potentially feasible engineering solutions for securing supplemental water supply through the treatment and recharge of purified water into the local groundwater basin. Building upon the Study’s recommendations, additional discussions with stakeholders and the District’s consultant team, as well as from public input and new opportunities that have since arisen, the District has identified a number potential facility sites and conveyance pipeline alignments for the Project, which are discussed in the following sections.

In November 2016, the District initiated the EIR scoping process for the Project through the publication of an NOP. Since that time, the District has revised the Project description to include consideration for additional water treatment facility sites and to eliminate treatment of raw wastewater, among other minor refinements. This revised NOP describes the Project as currently proposed by the District.

2. **Proposed Project**

2.1 **Project Objectives**

- Replenish the local groundwater basin to prevent further seawater intrusion and develop a sustainable water supply in a timely manner that meets the District’s supply objectives and the State’s mandate under the Sustainable Groundwater Management Act.

- Develop an affordable, reliable, and drought-resistant supplemental water source, which contributes to the diversification of the District water supply portfolio and enhances resiliency.

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\(^1\) The District board set the desired level of risk and uncertainty at 70\(^{\circ}\) and based its pumping goal on maintaining proportion of consumptive use. This represented in estimates for groundwater flow offshore required to prevent seawater intrusion and recharge reduction due to climate change; both of which are based on 70\(^{th}\) percentile of their respective models’ simulations (HydroMetrics WRI, 2015).
• Continue to provide District customers with a high-quality and safe water supply.
• Provide additional environmental benefits, such as to surface and marine waters.

2.2 Project Location

The Project may include components in portions of the Cities of Santa Cruz and Capitola, and in the Live Oak, Soquel, and Aptos communities of unincorporated Santa Cruz County, California. As presented in Figure 1-1, potential Project components could extend as far as the Main Street-Soquel Drive intersection to the north, Cabrillo College to the east, Schwan Lake Park and the Santa Cruz Wastewater Treatment Facility (SC WWTF) to the south, and California Street near Santa Cruz High School to the west. Pipeline routes would generally follow road or railroad rights-of-way. Potential recharge well locations include sites at Cabrillo College, District property near Willowbrook Park, and/or District property near the Monterey Avenue-Kennedy Drive intersection. The Project treatment system could include components at the SC WWTF, District-owned property near the District’s offices at the Capitola Avenue-Soquel Drive intersection (West Annex Site), and/or property on the southwest corner of the Soquel Avenue-Chanticleer Avenue intersection (Chanticleer Site). The Project setting is predominantly urban, characterized by mostly residential and commercial development, interspersed with patches of more naturalistic undeveloped areas primarily along major drainages and riparian corridors.

2.3 Project Components

The Project would involve securing a new water supply source; pipelines to convey the source water, brine concentrate, and purified water; a treatment facility or facilities; and recharge and monitoring wells. The District is presently considering one or more options for each of these Project elements. A summary of the elements under consideration is provided below, organized by component type. Based upon information obtained through the CEQA scoping process, the environmental analysis, additional engineering feasibility considerations, and continued community engagement, the District will refine and combine Project elements under consideration into a single project option. The final Project will be comprised of elements similar in location, type and extent, and with a range of construction and operational effects within the range of those described and analyzed herein. Details of the key Project elements under consideration (source water, conveyance, treatment, and recharge wells) are presented in the following sections.

The proposed Project’s treatment facilities described below would be sized to produce 1,500 acre feet per year (afy), approximately 1.3 million gallons per day (mgd) of purified water (annual average) – the estimated volume required to offset the portion of the basin’s groundwater overdraft attributable to District pumping (discussed in Section 1.2, Background). However, to accommodate the potential for future expansion of the Project’s treatment system to produce approximately 2.7 mgd, or approximately 3,000 afy, of purified water – the estimated volume

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2 The Chanticleer Site is privately owned and would require District acquisition prior to Project implementation, if that site were selected.
required to address basinwide groundwater overdraft – the Project’s underground infrastructure would be sized to accommodate the latter full basinwide needs.

**Source Water**

The supply source for the Project would be treated effluent from the SC WWTF that has undergone a secondary-level of treatment.3

**Treatment Technology**

The District would utilize advance purification technology to treat the source water to advanced purified water, or Indirect Potable Reuse (IPR), standards suitable for groundwater replenishment via recharge wells. This treatment process requires multiple filtration and treatment steps. Brine concentrate (filter backwash and reverse osmosis concentrate) from the advanced water purification system would either be routed back to the SC WWTF for additional treatment, blended with the treated effluent and discharged via the outfall with no additional treatment, and/or discharged into the Santa Cruz County Sanitation District (SCCSD) collection system.

**Treatment System Configurations and Locations**

The District is considering three (3) locations for treatment system components. The selection of configuration and location will be influenced by engineering feasibility, economic drivers, environmental considerations, and public input. The District is considering the SC WWTF Site, West Annex Site, and the Chanticleer Site for the locations of treatment system components. Among those sites, the District is considering a number of treatment system options that include new facilities at the SC WWTF, West Annex, and Chanticleer sites:

- A new tertiary treatment system at the SC WWTF Site, coupled with an advanced water purification facility (AWPF) at either the West Annex Site or the Chanticleer Site for advanced purification of the tertiary effluent.

- A new AWPF at the SC WWTF, West Annex Site, or Chanticleer Site for advanced purification of secondary effluent.

Additional details of the treatment facility and siting considerations are presented below.

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3 Traditional wastewater treatment systems typically follow a three-phase treatment process (primary, secondary, and tertiary). The primary phase, or first stage of treatment, involves the separation of solids and a portion of the suspended sediments from the effluent. The secondary phase involves the use of chemical and biological measures to further remove dissolved organic matter, nutrients, and other contaminants such as suspended sediments. The tertiary stage involves the use of additional chemicals and can also include filtration technologies to further remove solids and microorganisms as well as disinfect the effluent.
The District is considering a number of potential pipeline routes, the final selection of which would be determined based upon treatment system configuration and alignment feasibility (e.g., sufficient space within rights-of-way, potential conflicts with existing utilities, environmental impacts).
**Develop Tertiary Treatment System or AWPF at Santa Cruz Waste Water Treatment Facility**

The District is considering two treatment options for the SC WWTF site which include 1) a tertiary membrane filtration system, or 2) an AWPF. Each option would require agreement with the City of Santa Cruz and is described below.

If a new tertiary treatment system were selected for the SC WWTF Site it would be designed to produce sufficient quantities of tertiary effluent to replace the amount produced by the SC WWTF’s existing on-site tertiary treatment system, plus that required to meet the District’s groundwater replenishment target. The approximate limits of potential disturbance at the SC WWTF for the tertiary treatment system upgrades are shown in Figure 1-2. As illustrated, the tertiary treatment system upgrades would occur within a developed area of the existing SC WWTF site and encompass an area of approximately 8,800 square feet (0.20 acre). Accommodating these improvements would require modifications to the layout of existing facilities, including partial or full demolition of the existing on-site tertiary treatment system which provides recycled water for in-plant use and City planned recycled water uses, such as potential use for La Barranca Park irrigation and at its truck fill station. If the SC WWTF were to be upgraded as described, the tertiary effluent would be conveyed to the West Annex Site or Chanticleer Site for advanced purification and would also be available to the City for the existing and planned uses described previously.

If an AWPF system were selected for the SC WWTF Site, it would utilize secondary treated effluent from the SC WWTF as its source water. Major components of the AWPF would include a process building, chemical storage and feed systems, storage tanks, onsite conveyance infrastructure, and an operations building. The approximate limits of potential disturbance at the SC WWTF for a new AWPF are also shown in Figure 1-2. The AWPF would be built within the existing SC WWTF, could be constructed as a two-story facility, and would encompass an area of approximately 20,000 square feet (0.46 acre). Accommodating an AWPF would require modifications to the layout of existing facilities. If an AWPF were to be developed at the SC WWTF, then purified water would be pumped directly to the recharge well sites, and no additional water treatment facilities would be constructed at the West Annex or Chanticleer sites.

**Develop Advanced Water Purification Facility at West Annex Site or Chanticleer Site**

The District is also considering two other sites for the development of an AWPF. These include the West Annex and Chanticleer sites. Major components of the AWPF would be as described above for the SC WWTF. The footprint of the AWPF would be approximately 26,000 square feet (0.29 acres) at either the West Annex or Chanticleer sites. Additional area (for access roads, parking, site improvements, and relocation of existing buildings (as needed) would also be developed at the selected AWPF site. The approximate limits of potential disturbance are shown in Figure 1-3 for the West Annex Site and Figure 1-4 for the Chanticleer Site. Accommodating these facilities at the West Annex Site or Chanticleer Site would require demolition of the existing structures on the property. Construction of an AWPF at the West Annex Site could also involve rearranging some of the existing maintenance and facility buildings onsite.
Figure 1-2
Limits of Potential Pump Station, Tertiary Treatment Areas, and Advanced Water Purification Facilities at SC WWTF

SOURCE: SqCWD, 2016
Figure 1-3
Limits of Potential Advanced Water Purification Facilities at West Annex Site

SOURCE: SqCWD, 2017
Figure 1-4
Limits of Potential Advanced Water Purification Facilities at the Chanticleer Site

SOURCE: SqCWD, 2017
Conveyance System

The Project would require installation of new infrastructure for the conveyance of source water, brine concentrate, and purified water. The Project includes the following conveyance components: 1) a source water system to route the secondary or tertiary effluent from SC WWTF to the project treatment location; 2) a brine concentrate system that would return the brine concentrate from the treatment location to the SC WWTF; 3) a purified water system that would move the purified water the recharge well sites and turnouts or connection points for potential future irrigation customer connections. A description of the conveyance system components to be evaluated is provided in the following paragraphs and presented in Figure 1-1. The District is considering a number of pipeline routes, the final selection of which would be determined based upon treatment approach and alignment feasibility (e.g., sufficient space within rights-of-way, potential conflicts with existing utilities, environmental impacts). The routes under consideration generally follow disturbed or existing developed road and railroad rights-of-way.

Pump Station and Dedicated Source Water Pipeline from SC WWTF to the West Annex Site or Chanticleer Site

If the West Annex Site or Chanticleer Site were selected for AWPF construction, then the District would construct a new source water pump station, storage tank, and pipeline to convey secondary or tertiary effluent from the SC WWTF to the West Annex Site or Chanticleer Site for advanced purification. The diameter of the pipe would be approximately 16 inches. The source water pump station and storage tank would be located on a paved area within the existing SC WWTF property.

Pump Station and Dedicated Brine Concentrate Main to SC WWTF

If the West Annex Site or Chanticleer Site were selected for AWPF construction, then the District would also construct a new pump station and dedicated main to convey brine concentrate from the West Annex Site’s or Chanticleer Site’s AWPF to the SC WWTF. The brine concentrate conveyance pipeline diameter would be approximately 8 inches. The brine concentrate pump station would be located on the West Annex Site or Chanticleer Site, among the AWPF components.

Pump Station and Dedicated Purified Water Pipelines

The District would construct a new pump station and dedicated pipeline to convey purified water from the selected AWPF site (i.e., SC WWTF, West Annex Site, or Chanticleer Site) to the recharge well sites. The pipelines would also include turnouts for potential future supply to irrigation customers. As described below, the District is considering three potential purified water recharge well locations, including those at Cabrillo College, District-owned property near Willowbrook Park, and District-owned property near the Monterey Avenue-Kennedy Drive intersection. The purified water pipeline would be approximately 14 inches in diameter. The purified water pump station would be located at the selected AWPF site, among the AWPF components.
Recharge and Monitoring Wells

Following treatment, advanced purified water would be conveyed from the selected AWPF site to new recharge wells into the Purisima Formation (aquifer replenishment). The wells would be constructed at up to three locations, which may include Cabrillo College, District-owned property near Willowbrook Park, and District-owned property near the Monterey Avenue-Kennedy Drive intersection. Figure 1-5 shows the potential limits of disturbance associated with well installation at the respective sites. Well facilities would be located on an approximately 10,000 square-foot (0.23 acre) concrete pad. The Project’s recharge wells would each be capable of replenishing approximately 1.3 mgd (1,500 afy) into the groundwater basin. Two monitoring wells would be located at/near each recharge well site.

2.4 Project Construction

An overview of the anticipated construction process is provided below. Included in this discussion are descriptions of site preparation and staging, construction approach and methodology, and schedule. Construction of the various Project components would proceed in parallel; that is, the Project implementation would not occur in phases.

Site Preparation and Construction Staging

Site Clearing and Preparation

Construction workers would clear and prepare the construction work areas in stages as construction progresses. Before construction were to start, the contractor would clear and grade portions of the Project area, removing vegetation and debris, as necessary, to provide a level surface for equipment access, materials staging, and construction activities. Upon completion of construction, the remaining undeveloped portions of these sites disturbed during construction would be returned to their approximate pre-construction condition, including topography and vegetation.

Staging and Laydown Areas

Construction equipment and materials would be stored within the construction work areas to the extent feasible, though an additional offsite laydown area would need to be obtained by the District if the SC WWTF Site were selected for the AWPF. If required, it is expected that the additional laydown area would be located near the SC WWTF. Construction staging and laydown for the source water pump station or purified water pump station would be within existing developed or disturbed areas of the SC WWTF site. Staging and laydown at the West Annex Site would mainly occur within the construction work area and the District’s existing paved storage and maintenance yard. Staging and laydown requirements for the Chanticleer Site would occur within the construction work area. Staging and laydown for each of the recharge well sites would occur onsite. However, additional offsite laydown area would need for well installation at the Monterey Site, and possibly at the Willowbrook site. If required, the additional staging/laydown areas would likely be located near the well sites. Staging and laydown for pipeline construction would occur primarily on paved areas near the pipeline route. Improvements to the staging areas (e.g., laying dirt or gravel) are not anticipated.
Figure 1-5
Potential Recharge Well Sites

SOURCE: SeqWd, 2017
Pumps, Wells, and Treatment Facilities Construction

In general, construction of the pump stations, advanced water purification facilities, and purified water recharge and monitoring wells would involve cutting, laying, and welding pipelines and pipe connections; connecting electrical power; pouring concrete footings for foundations, tanks, and other support equipment; building erection; assembling and installing major treatment process components; chemical storage and metering; installing piping, pumps, storage tanks, and electrical equipment; testing and commissioning facilities; drilling and construction of wells; and finish work such as erecting enclosures, painting, flooring, doors, windows, paving, landscaping, and fencing the perimeter of the site. Equipment required for construction of these Project elements would generally include skip loaders for site grading, back hoe or track hoe for excavation of foundations and pipe trenches, fork lifts for unloading and distributing construction materials, well-drilling machines, cranes for hoisting of construction material and setting of large permanent equipment such as pumps. In addition, concrete pumping equipment would be used for placement of concrete, scissor lifts for the install of above ground pipe and electrical inside of the buildings, and wire pulling machines for pulling electrical wire through electrical ductbanks.

Pipeline Installation

The majority of the pipelines would be installed in existing roadways using conventional cut and cover construction techniques and installing the pipe in open trenches. Under typical circumstances, the width of the disturbance corridor for pipeline construction would vary from 25 to 50 feet, depending on the size of the pipe being installed. It is anticipated that excavation would range from 2-5 feet wide and would typically be no more than 6-feet deep. All creeks, drainages, and highways would be crossed using trenchless construction techniques or pipelines would be attached to existing bridge crossings. Typical construction equipment for pipeline installation would include flatbed trucks, backhoes, excavators, pipe cutting and welding equipment, haul trucks for spoils transport, trucks for materials delivery, compaction equipment, Baker tanks, pickup trucks, arc welding machines, generators, air compressors, cranes, drill rigs, and skip loaders.

2.5 Construction Schedule

The Project facilities would be built over approximately 36 months, with an expected construction period of early 2020 through late 2022. Approximate duration of construction activities would vary by Project component as follows: source water pump station – 18 months; treatment facility – 36 months; pipelines – 24 months; recharge wells – 12 months (approximately 3-4 months at each site). Construction work would typically occur during normal working hours; weekdays between the hours of 8 a.m. and 5 p.m., and possibly on Saturdays between the hours of 9 a.m. and 5 p.m. (if necessary). For recharge well locations, well drilling, construction, and development would require approximately 2-3 weeks of continuous, 24-hours-per-day construction activity for each location.
3. Operations and Maintenance

Operation and maintenance of the Project would include:

- Operation of the advanced water purification facility, conveyance facilities, and recharge and monitoring facilities,
- Monitoring of treatment processes, conveyance, and recharge and monitoring facilities, and
- Inspecting and maintaining treatment, conveyance, and recharge and monitoring facilities.

In addition, operations would involve potential redistribution of pumping among District groundwater extraction wells in order to more effectively address basin-wide conditions. Advanced water purification, conveyance, and recharge and monitoring facilities would operate continuously to replenish the groundwater aquifer. Operations would be carried out by licensed operators and computerized systems that would monitor the advanced water purification, conveyance, and recharge facilities around the clock.

4. Regulatory Requirements, Permits, and Approvals

The District could be required to obtain the permits and approvals described below for Project construction and operation.

4.1 Federal

- U.S. Army Corps of Engineers Nationwide Permit
  - U.S. Fish and Wildlife Service (Endangered Species Act Section 7 Consultation)
  - National Marine Fisheries Service (Endangered Species Act Section 7 Consultation)
  - California Office of Historic Preservation (National Historic Preservation Act Consultation)

4.2 State

- State Water Resources Control Board (SWRCB) Stormwater General Construction Permit and Stormwater Pollution Prevention Plan, if more than 1 acre of land is disturbed
- SWRCB consideration for Clean Water State Revolving Fund loan and review of environmental review requirements that must be completed to apply for a loan
- Title 22 compliant Water Recycling Requirements issued by the Central Coast Regional Water Quality Control Board following approval of an Engineering Report by the Division of Drinking Water
- Regional Water Quality Control Board (RQWCB) Section 401 Water Quality Certification and/or a Report of Waste Discharge
- California Department of Fish and Wildlife Section 1600 Streambed Alteration Agreement
- California Coastal Commission Coastal Development Permit
4.3 Local

- Monterey Bay Unified Air Pollution Control District – Permit to Operate (back-up generators)
- Soquel Creek Water District – certification of the Final EIR and Project approval
- City of Santa Cruz Planning Department – Coastal Development Permit
- City of Santa Cruz Department of Public Works – Encroachment Permit
- Santa Cruz County Planning Department – Coastal Development Permit
- Santa Cruz County Department of Public Works – Encroachment Permit
- Santa Cruz County Department of Environmental Health – Well Drilling Permit
- City of Capitola Planning Department – Coastal Development Permit
- City of Capitola Department of Public Works – Encroachment Permit
- Santa Cruz County Sanitation District – Sewer Connection and Discharge Permit

5. Summary of Potential Environmental Issues

The EIR will describe the existing environmental conditions on the Project sites and will identify any potentially significant environmental impacts anticipated to result from development and operation of the Project components. Where potentially significant environmental impacts are identified, the EIR will also discuss mitigation measures that may avoid or reduce significant impacts, as feasible. All CEQA environmental topics will be addressed in the EIR. The following paragraphs describe key environmental issues to be addressed.

5.1 Aesthetics

The EIR will discuss the visual and aesthetic resources of the Project area and its surroundings, particularly from publicly accessible locations on or near the Project sites, and evaluate potential impacts on scenic vistas, scenic resources, and the lighting environment that could occur as a result of the Project.

5.2 Air Quality

The EIR will describe the federal, state, and local air quality policies, regulations, and standards as they pertain to the Project. The EIR will also describe local air quality based on air quality data from nearby monitoring stations and will identify locations of sensitive land uses in the Project area. The EIR will then evaluate the Project’s potential air quality impacts.
5.3 Hydrology and Water Quality

The EIR will analyze the Project in light of applicable requirements under the Clean Water Act, state objectives to protect beneficial uses of water bodies, and policies concerning stormwater reuse and water quality. The EIR will evaluate the Project’s potential effects from erosion and sedimentation during construction and impacts on flooding and surface water quality. In addition, groundwater studies are underway to assess changes in water levels and quality associated with groundwater recharge, including the potential for mobilization of existing contaminant plumes or minerals in the aquifer geology, changes in saline water intrusion patterns, and other groundwater effects. The EIR will also address these issues.

5.4 Noise and Vibration

The EIR will describe relevant noise policies, regulations and standards and discuss noise and vibration levels likely to be generated by Project construction and operation. The EIR will evaluate the potential for Project construction and operation to adversely affect adjacent land uses or violate applicable noise control ordinances. The analysis will also evaluate continuous vibrations produced by Project construction (e.g., tunneling and well drilling) based on the potential to impact sensitive receptors.

5.5 Alternatives to the Project

The EIR will consider a range of alternatives that will feasibly attain most of the basic Project objectives, but would avoid or substantially lessen significant Project impacts. Pursuant to CEQA Guidelines Section 15126.6(e), the EIR will also evaluate a No Project alternative to provide decision-makers the information necessary to compare the relative impacts of approving and not approving the Project. For each alternative, the EIR will assess the degree to which it might reduce one or more Project impacts, whether it could result in other or increased impacts, its feasibility, and the degree to which it is consistent with the Project objectives. The EIR will also identify the Environmentally Preferable Alternative.

5.6 Cumulative Impacts

The EIR will include a discussion of the potentially significant cumulative impacts of the Project when considered with other past, present, and reasonably foreseeable future Projects in the area. This section will cover all relevant subject areas discussed in the EIR (e.g., traffic, air quality, and noise) and will specify which of the areas are anticipated to experience cumulatively considerable impacts.

5.7 Other Required Sections

The EIR will also include other information typically required for an EIR. These other sections include the following: 1) Growth Inducing Impacts; 2) Significant and Unavoidable Impacts; 3) Significant Irreversible Environmental Changes; 4) Irreversible and Irretrievable Commitment of Resources; 5) References; and 6) EIR Authors. Relevant technical reports will be provided as technical appendices.
6. References


