TOWN OF DISCOVERY BAY

A COMMUNITY SERVICES DISTRICT

SDLF Platinum-Level of Governance

PLATINUM LEVEL

NOTICE OF THE SPECIAL MEETING
OF THE WATER AND WASTEWATER COMMITTEE
OF THE TOWN OF DISCOVERY BAY
Wednesday, DECEMBER 15, 2021
SPECIAL WATER AND WASTEWATER COMMITTEE MEETING 5:00 P.M.
Community Center
1601 Discovery Boulevard, Discovery Bay, California

NOTICE
Coronavirus COVID-19

The Town of Discovery Bay Community Services District Board Chambers will be open to the public as well as attendance by video conference and telephone for this meeting. Masks are required for in person attendance. On September 16, 2021, Governor Newsom signed into law AB 361, enabling public agencies to continue using teleconferencing with modified notice and physical access requirements for public meetings during a proclaimed State of Emergency.

In response to the current proclaimed State of Emergency, and recommended measures to promote social distancing imposed by State and local officials, the Town of Discovery Bay Community Services District Board of Directors will take all actions necessary to carry out the intent and purpose of AB 361, including, ensuring that the Directors and meeting attendees may continue to have the option to access and participate in this public meeting by teleconference to avoid imminent risks to the health or safety of the Directors and meeting attendees.

TO ATTEND IN PERSON: Masks are required to be worn inside the building.

TO ATTEND BY WEBINAR:
Please register for Regular Meeting of the Board of Directors at: (*copy and paste into your browser the registration URL)*

Registration URL: https://attendee.gotowebinar.com/register/7835966902959926800
Webinar ID# 651-242-611

After registering, you will receive a confirmation email containing information about joining the webinar by computer or by phone.

For listen-only mode dial: (415) 655-0060 **ID#** 530-887-943

Download Agenda Packet and Materials at www.todb.ca.gov/

Water and Wastewater Committee Board Members
Chair Kevin Graves
Vice-Chair Ashley Porter

A. ROLL CALL
1. Call business meeting to order 5:00 p.m.
2. Roll Call.

B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)
During Public Comments, the public may address the Committee on any issue within the District's jurisdiction which is not on the Agenda. The public may comment on any item on the Agenda at the time the item is before

the Committee for consideration. Any person wishing to speak will have 3 minutes to make their comment. There will be no dialog between the Committee and the commenter as the law strictly limits the ability of Committee members to discuss matters not on the agenda. We ask that you refrain from personal attacks during comment, and that you address all comments to the Committee only. Any clarifying questions from the Committee must go through the Chair. Comments from the public do not necessarily reflect the viewpoint of the Committee members.

C. DRAFT MINUTES TO BE APPROVED

None.

D. PRESENTATIONS

1. None

E. DISCUSSION ITEMS

1. Discussion Regarding the Town of Discovery Bay Water System Emergency Response Plan (ERP).
2. Discussion Regarding the Central Valley Regional Water Quality Control Board; Compliance Evaluation Inspection Report.
3. Discussion Regarding Luhdorff & Scalmanini Scope of Work to Provide Design and Construction Engineering Services for Well 8 Pump Station and Well, in the amount of $357,998 Plus 10% for Contingencies.
4. Discussion Regarding Authorization to Waive Annual $224 Vacant Lot Fee for Contra Costa Water District Los Vaqueros Pipeline Parcel Crossing Wastewater Plant #2 Property in Order to Complete Annexation of Plant #2 Property and Removal of Two Previously Detached Parcels from the Town Sphere of Influence.

F. FUTURE DISCUSSION/AGENDA ITEMS

G. CLOSED SESSION

1. CONFERENCE WITH REAL PROPERTY NEGOTIATORS FOR WELL 8 AS ALLOWED UNDER GOVERNMENT CODE SECTION 54956.8

Property: A portion of APN 011-220-010, Discovery Bay
Agency Negotiator: Dina Breitstein, General Manager
Negotiating Parties: C&D Discovery Bay LLC/Waterfront Lots LLC
Under Negotiation: Price and Terms of Payment

H. RETURN TO OPEN SESSION; REPORT ON CLOSED SESSION

(Government Code Section 54957.1)

I. ADJOURNMENT

1. Adjourn to the next Standing Water and Wastewater Committee meeting at the Community Center located at 1601 Discovery Bay Boulevard on February 2, 2022.

“This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the American with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code § 54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact the Town of Discovery Bay, at (925) 634-1131, during regular business hours, at least forty-eight hours prior to the time of the meeting.”

"Materials related to an item on the Agenda submitted to the Town of Discovery Bay after distribution of the agenda packet are available for public inspection in the District Office located at 1800 Willow Lake Road during normal business hours."

Town of Discovery Bay

"A Community Services District"

STAFF REPORT

Meeting Date

December 15, 2021

Prepared By: Dina Breitstein, General Manager
Submitted By: Dina Breitstein, General Manager

Agenda Title

Discussion Regarding the Town of Discovery Bay Water System Emergency Response Plan (ERP).

Recommended Action

Recommend that the Board of Directors adopt and certify the Town of Discovery Bay ERP and authorize the submittal of the ERP to the California State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW), and to America's Water Infrastructure Act (AWIA).

Executive Summary

Purpose:

In California, the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW), is the Drinking Water Primary Agency for all public water systems serving over 200 service connections. The Discovery Bay Public Water System's primary agency is the SWRCB DDW.

One of the operational requirements for a public water system is to "provide a reliable and adequate supply of pure, wholesome, healthful and potable water" (CA Health & Safety Code, Section 11655), and Emergency Response Planning for both terrorist and natural disasters is an essential part of ensuring customers receive a reliable and adequate supply of potable water.

On October 23, 2018, America's Water Infrastructure Act (AWIA) was signed into law. AWIA Section 2013 requires community (drinking) water systems serving more than 3,300 people to develop or update risk assessments and emergency response plans (ERPs). The law specifies the components that the risk assessments and ERPs must address and establishes deadlines by which water systems must certify to EPA completion of the risk assessment and ERP.

The Town of Discovery Bay ERP utilized the State of California's template and direction in preparing this ERP plan.

The next step in the process is to certify the submission of the ERP to the California State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW), and to America's Water Infrastructure Act (AWIA), by December 31, 2021.

Staff is looking for a recommendation from the Water and Wastewater Committee that the Board of Directors adopt and certify the Town of Discovery Bay ERP and authorize the submittal of the ERP to the California State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) and to America's Water Infrastructure Act (AWIA).

Fiscal Impact:

Amount Requested:
Sufficient Budgeted Funds Available?:
Prog/Fund # Category:

Previous Relevant Board Actions for This Item: AWIA Risk Assessment

Attachments: List the attachment:
The Town of Discovery Bay Emergency Response Plan

AGENDA ITEM: E-1

Town of Discovery Bay
Public Water System No. CA0710009
Emergency Response Plan

October 2021

Operated by Veolia North America, LLC

Town of Discovery Bay
1800 Willow Lake Drive
Discovery Bay, CA 94505
(925) 634-1131

Veolia North America
Site: 17501 Highway 4
Discovery Bay, CA 94505
(925) 634-8818

Veolia North America, LLC
53 State Street, 14th Floor
Boston, MA 02109
(617) 849-6600

Revised November 2021

Emergency Response Plan

Section 1 Introduction

1.1 Purpose

In California the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) is the Drinking Water Primacy Agency for all public water systems serving over 200 service connections. The Discovery Bay Public Water System's the primacy agency is the SWRCB DDW.

One of the operational requirements for a public water system is to "provide a reliable and adequate supply of pure, wholesome, healthful and potable water" (CA Health & Safety Code, Section 11655), and Emergency Response Planning for both terrorist and natural disasters is an essential part of ensuring customers receive a reliable and adequate supply of potable water.

1.2 Emergency Response Plan Requirements

There are several regulations associated with the legal requirements of preparing an Emergency Response Plan (ERP) in California, which are described below:

1. *California Government Code Section 8607.2 - Public Water System Plans*

> "Requires public water systems with 10,000 or more service connections (approximately 33,000 population) to review and revise their disaster preparedness plans in conjunction with related agencies, including fire departments."
>
> "Also requires water systems with 10,000 or more service connections to furnish the Legislature with an assessment of their emergency response."

2. *United States Public Law 107-188 Public Health Security and Bioterrorism Preparedness and Response Act of 2002*

> "All community water systems serving more than 3,000 population (1,000 service connections) shall prepare or revise an Emergency Response Plan that incorporates the results of vulnerability assessments (VA) that have been completed. The updated Emergency Response Plan shall be certified to EPA within 6 months of completing the vulnerability assessment."
>
> Directions on how to submit the VA and ERP Certification to EPA are provided on EPA's website at:

3. *California Health and Safety Code, Sections 116460, 116555 and 116750. Please refer to the current edition of the California Safe Drinking Water Act and Related Laws for the specific language.*

> Section 116460 - Emergency Notification Plan Requirement
> Section 116555 - Operational Requirements
> Section 116750 - Tampering with Public Water Systems

4. *California Waterworks Standards, Section 64560.*

> Documentation demonstrating that a well site control zone with a 50ft radius around the site can be established for protecting the source from vandalism, tampering, or other threats at the site by water system ownership, easement, zoning, lease, or an alternative approach approved by the Department based on its potential effectiveness in providing protection of the source from contamination.

1.3 Emergency Response Plan in Conjunction with Town of Discovery Bay

This Emergency Response Plan is to be used in conjunction with the Town of Discovery Bay's Emergency Operations Plan, as amended. This document is a detailed guide that serves as the basis for effective responses to emergencies and hazards that threaten the jurisdiction. This ERP is an expanded step-by-step procedure and must be followed in the correct order of events, **if it is safe to do so**. This will ensure that immediate needs are addressed first and facilitate an efficient response to an emergency or disaster. Refer to the separate document: ***Quick Guide Emergency Response Plan*** for immediate and concise steps.

A copy of this ERP is located in the Administration Office, and additional copies have been distributed to our key staff (Project Manager, Operations Supervisor, and Maintenance Supervisor).

1.4 Emergency Operations Center (EOC) for Town of Discovery Bay

The Emergency Operations Center (EOC) will be activated at Town of Discovery Bay District Offices at 1800 Willow Lake Road unless otherwise directed. The EOC shall only be activated in the event that it is safe and does not pose a threat to the safety and welfare of Disaster Services Workers. In the event that the EOC is not available for use, an alternate location will be identified by the Town of Discovery Bay's General Manager in pursuant to the best available and safe location.

The EOC serves as the central point for information gathering, processing, and dissemination; coordination of all Town emergency operations, and coordination with other agencies and the Operational Area EOC. The EOC is partially or fully activated by the Director of Emergency Services, according to the requirements of the event.

Section 2 Emergency Planning Process

2.1 General Information

The following public response agencies are for Town of Discovery Bay Public Water System CA0710009:

Public Response Agencies

Local Emergency Management Agency: (**916) 206-1470** CAL OES Costal Region II Mutual Aid

Local Fire Department: **(925) 757-1303** ECCFPD Bixler Station 59 Dispatch

Local Law Enforcement: **(925) 646-2441** CCC Sheriff's Department Delta Station

Local Health or Environmental Health Department: **(925) 692-8510** CCC Health Department

Public Works Department: **(925) 313-2000** CCC Public Works

Local Hazardous Materials Response Team: **(925) 335-3232** CCC HAZMAT Emergency 24hr Line

Private and Public Health Laboratories:
(209) 942-0181 FGL Fruit Growers Lab,
(925) 828-6226 Alpha Analytical Lab
(510) 412-2331 Region 9 Bay Delta Richmond Lab

SWRCB DDW (State Drinking Water Primacy Agency): **(510) 622-2300** California Water Boards San Francisco Region 2

Regional Water Quality Control Board: **(916) 341-5250** State Water Quality Control Board (SWQCB)

Emergency Relief: **(415) 427-8000** American Red Cross Northern California Coastal Region (San Francisco)

Additional Organizations: located in Discovery Bay utility's service area involved in preparing for or responding to emergencies and disasters:

(**925) 228-5000** - CCC Office of Emergency Service
(916) 845-8510 - California Governor's Office of Emergency Services CAL EMA
(**925) 313-9622** - Community Warning System
(800) 621-3362 - FEMA
(800) 913-9106 - AMR Ambulance Services
(925) 933-1313 - Paramedics/Emergency Medical Services
(800) 743-5000 - PG&E Emergency Line
(925) 308-8111 - John Muir Brentwood 2400 Balfour Road (10 miles) Emergency Room
(925) 813-3100 - Kaiser Antioch 4501 Sand Creek Road (15 miles) Emergency Room
(925) 370-5000 - CCC Medical Center
(925) 634-6911 - Brentwood Police Department 9100 Brentwood Boulevard (7 miles)
(925) 646-4980 - California Highway Patrol (CHP)
(925) 646-2800 - Contra Costa Psychiatric Emergency Martinez 2400 Alhambra Avenue (38 miles)

Sandbag Stations:
Byron Airport 500 Eagle Court, Byron CA (9 miles)
Knightsen Farm Bureau 3020 2nd Street, Knightsen CA (10 miles)

In California, public emergency response agencies are required to utilize the Standardized Emergency Management System (SEMS) to mitigate disasters or emergency incidents. A component of SEMS is the Incident Command System (ICS), which is implemented to manage resources in the field during an event.

Discussions with response agencies should include: the role of water utility staff, in the field, under the Incident Command structure; the relationship and communication methods between field activities and any activations or preventative measures taken by the water utility's Emergency Operations Center (EOC) or Water Utility Emergency Response Manager (WUERM). These items are detailed later in this ERP in **SECTION 4.**

2.2 Disaster Events or Scenarios

A water system may be vulnerable to many natural and manmade disasters or emergency events **See Appendix H.** An efficient basic emergency disaster plan should be the foundation of the response to all hazards that may be encountered.

Reference Quick Guide for immediate response steps. The needs of the incident should drive the level of response required to mitigate the problem. Analyzing the impacts of an earthquake, flood, or fire may be important because they have occurred recently in California and will likely reoccur in the near future. Consider the probability of an event and its likely effect on the water system. Then focus on the actions needed to reduce impacts and respond in a timely and effective manner.

Likelihood of Occurrence & Severity:

HAZARD	Occurrence: Infrequent, Sometimes, Frequent	Severity: Low, Moderate, High
Levee Failure	Infrequent	High
Earthquake less than 5 Mag.	Sometimes	Low
Earthquake more than 5 Mag.	Infrequent	Moderate to High
Wildfire	Infrequent	Low to Moderate
Severe Storms	Frequent	Low, Moderate or High
Localized Flooding	Sometimes	Low to Moderate
HAZMAT/Chemical Release	Infrequent	Low to Moderate
Civil Disturbance	Infrequent	Low
Aircraft Crash	Sometimes	Low, Moderate or High
Major Vehicle Accident	Frequent	Low to Moderate
Terrorism	Infrequent	Low, Moderate or High

2.2.1 Natural Disasters

Consideration of common natural disasters when developing this emergency response plan, include:

Wildfires:

During late spring through fall, wildfires pose a significant threat to large rural areas in California. These fires can cause damage to infrastructure as well as watershed areas within the stare. Consider possible low pressure problems or water outages due to fires within or surrounding the water system service area.

BACKGROUND:

Fire hazards present a considerable problem to vegetation and wildlife habitats throughout the County. Grassland fires are easily ignited, particularly in the dry seasons, with extensive drought. These fires are relatively easily controlled if they can be reached by fire equipment; the burned slopes, however, are highly subject to erosion and gullying. While brush lands are naturally adapted to frequent light fires, fire protection in recent decades has resulted in heavy fuel accumulation on the ground. Brush fires, particularly near the end of the dry season, tend to burn fast and very hot, threatening homes in the area and leading to serious destruction

of vegetative cover. While woodland fires are relatively cool under natural conditions, a brush fire which spreads to a woodland could generate a destructive hot crown fire. No suitable management technique of moderate cost has been devised to reduce the risk of brush fires.

Because the natural vegetation and dry-farmed grain areas of the County are extremely flammable during the late summer and fall, wildfire is a serious hazard in undeveloped areas and large lot home sites with extensive areas of un-irrigated vegetation. Several factors affect the relative degree of wildfire hazard, including atmospheric humidity, slope steepness, vegetation type, exposure to sun, wind speed and direction, accessibility to human activities and accessibility to firefighting equipment. Taking these factors into consideration, a fire hazard severity scale has been devised which characterizes areas throughout the County by the number of days of moderate, high and extreme fire hazard.

Peat fires represent a special hazard in that once ignited, they are extremely difficult to extinguish. In some instances, islands have been flooded in order to extinguish peat fires. Any area lying generally east of the mean high water line may be peaty due to the marshy origin of the soil, although local areas of mineral soil are present within the general area.

In conjunction with Town of Discovery Bay ERP:

In the event of a wildfire, building fire, or ground fire the following steps should be taken:

If a person is on fire: Stop, Drop & Roll.

1. Call the Fire Department immediately (dial 911). Do not assume that District personnel can control the fire. Fire Departments would rather respond to a fire that is extinguished than to get the call after a fire is out of control. Assign an employee to meet the Fire Department at the main entrance to direct them to the fire.

2. Evacuate all personnel from affected buildings/areas, working from involved area, outward.

3. If safe to do so, use facility fire extinguishers to extinguish or control the fire. The extinguishers on site are Class A.B.C. for wood/paper, liquids, and electrical fired. **DO NOT USE WATER** on electrical, solvent, or chemical fires. WATER CAN BE USED ON grass/ground fires.

4. If a fire is in a High Risk area such as a flammables storage areas, if it is safe to do so, shut all doors and windows upon exiting the building and call 911. If there is a grass/ground fire, an immediate danger is smoke inhalation. Re-entry onto the property will not be permitted until it is declared safe to do so by the local Fire/Law enforcement officials.

There are several areas throughout the facility and office that have an increased threat level of explosion. These are flammable storage areas, and diesel/gas storage tanks. In the event of any type of explosion use the following steps:

1. Call the Fire Department Immediately (**dial 911**).

2. Evacuate the immediate area.

3. Rendezvous at the main office or shop and perform the standard headcount procedure to determine if any personnel are missing. Begin search & rescue if safely possible.

4. When calling the Fire Department, give them as much information as possible. The following should be included:
    a. Fire Location.
    b. Fire and or explosion type:
        i. Building involved.
        ii. Chemical storage area.
        iii. Flammables storage area.
        iv. Any known toxic releases (ex: chlorine).

Per Water System ERP Procedures:

1. EOC staffing levels will vary with the complexity and needs of the Town's response to the fire. At a minimum, the Director of Emergency Services and the Operations Section will likely be needed.

2. Immediately establish a liaison with the Fire Department Commander (IC).

3. Working through the Incident Command Post (ICP), determine the size of the involved area, both actual and potential.

4. Working through the ICP, determine the apparent direction the fire is traveling and what lies in its path.

5. If appropriate, the Director of Emergency Service could make a local Emergency Declaration.

6. Obtain current and forecasted weather to project potential spread of the wildfire.

7. Determine the need to conduct evacuations and sheltering activities.

8. If evacuation is required, work with the General Manager and the County to distribute the information immediately. All evacuation activities should be coordinated throughout the Operations Section.

9. As a point of reference, evacuation is the assisted removal of people before the threat arrives, while recue is an issue that deals with the removal of persons once the threat is upon them.

10. Constantly be aware of the potential for toxic smoke or fumes.

11. Maintain ingress & egress routes for emergency vehicles.

12. Establish a perimeter control, keeping unauthorized vehicles and pedestrians out of the involved areas.

13. Notify all EOC Sections, the Director of Emergency Services, supporting agencies, adjacent jurisdictions, and or any agency liaisons of situational changes.

14. Determine the need for additional resources and request as necessary through the Logistics Section.

15. If required, work with other agencies to establish a Joint Information Center (JIC) or coordinate with JICs established by other jurisdictions.

16. Form emergency public information messages and media responses using "one message, many voices" concepts.

17. Ensure that reports of injuries, deaths, and major equipment damage are communicated and coordinated with the Director of Emergency Services and the County prior to public dissemination.

18. Activate and implement applicable mitigation plans, community recovery procedures, and Continuity of Operations Plan (if required) until normal daily operations can be completely restored.

***Earthquakes*:**

Emergency response plans should evaluate what facilities are at risk during an earthquake and what can be done to mitigate impacts. System should look at historical earthquake damage reports for an idea of the severity and probability in their service area. Consider structural damage to roads, bridges, water treatment facilities, distribution system, power outages, and telemetry system and communication problems.

BACKGROUND:

Seismic risk is assumed by every occupant and developer in Contra Costa County because the County is within an area of high seismicity; the San Francisco Bay Region has been impacted by more than 10 severe earthquakes during historic time. The major effects of earthquakes are ground shaking and ground failure. Severe earthquakes are characteristically accompanied by surface faulting and less commonly by tsunamis and seiches.

Flooding may also be triggered by dam or levee failure resulting from an earthquake, or by seismically-induced settlement or subsidence. All of these geologic effects are capable of causing property damage and risks to life and safety of persons.

Historically, ground failure in its various forms, including liquefaction, has been a problem in areas of continually wet, unconsolidated geologic units. In Contra Costa County, the areas which are most susceptible to ground failure include geologically young sediments of the San Francisco Bay estuary, including the Delta Lowlands.

Liquefaction presents the potential for the most serious consequences in the Delta. Several pre-development studies have confirmed that a high potential for liquefaction exists below levees and proposed developments. This potential presents the possibility that several failures can occur simultaneously on a single levee, possibly preventing access for repairs. Flooding of protected islands would then be unpreventable and would make emergency relief and later repair very difficult.

In conjunction with Town of Discovery Bay ERP:

The Town of Discovery Bay and adjacent communities have many earthquake faults throughout the area, such as the Concord Greenbelt Fault. This means that there is potential for an earthquake at any time. The degree of seriousness of any earthquake is unpredictable; therefore everyone should be aware of the correct response in order to reduce the risk of damage to persons and property. The following steps should be taken in the event of a **noticeable** earthquake (observed movement of building and or grounds):

1. During the shaking:
If you are already inside a building **DO NOT** go outside of the building unless the building itself poses a dangerous situation.

Drop, Cover & Hold.

2. After the shaking:
Rendezvous at your work station (or outside of facility) and follow the step procedures in the Disaster Response Plan.

NOTE: Aftershocks are common and can be as dangerous as the initial earthquake. **STAY OUT** of weakened structures, if the designated emergency station appears structurally damaged or unsound, the emergency coordinator should have an alternate building inspected and set up as the Emergency Operations Center (EOC).

Per Water System ERP Procedures:

Drop where you are, onto your hands and knees. This position protects you from being knocked down and also allows you low and crawl to shelter if nearby.

Cover your head and neck with one arm and hand.
If a sturdy table or desk is nearby, crawl underneath it for shelter, if no shelter is nearby, crawl next an interior wall (away from windows). Stay on your knees; bend over to protect vital organs.

Hold until shaking stops.
Under shelter: hold on to it with one hand, and be ready to move with your shelter if it shifts.
No shelter: hold onto your head and neck with both arms and hands.

1. Obtain a Shake Map from USGS website: earthquake.usgs.gov/earthquakes/eventpage/nc73640435/map to view the shaking intensity from the event.

2. Determine the locations of structural damage. Attention should be focused on locations with potentially trapped people.

3. Determine the status of transportation infrastructures such as CA Highway 4 East & Westbound and CA-4 Old River Bridge.

4. Determine the status of communications systems to include broadcast television and radio media. Hand crank radio is in Disaster Kit located in Women's Restroom in Main Admin Building.

5. Determine the locations of major firefighting efforts, both contained and uncontained.

6. Determine the locations and severity of HAZMAT releases and the impact on the general public.

7. Determine the operational capability and capacity of critical facilities:
Town Community Center at 1601 Discovery Bay Blvd,
Discovery Bay Elementary at 1700 Willow Lake Road,
Willow Water Treatment Plant at 1800 Willow Lake Road,
Newport Water Treatment Plant at 1800 Newport Drive,
Wastewater Treatment Plant 2 at 17501 Highway 4,
PG&E Electrical Substations: contact PG&E **(800) 743-5000**

8. If evacuation is required, contact the Director of Emergency Services and Operations Section immediately. All evacuation activities should be coordinated throughout the Operations Section.

9. Coordinate with the County EOC and the Red Cross, other public agencies and or non-profit agencies for shelter operations.

10. Determine Public Safety needs: security, traffic control, and law enforcement needs. Communicate these to the County EOC.

11. Work with the County to develop a system for building inspectors and structural engineers to inspect critical facilities.

12. Work with the County to being the process for inspection of bridges and roadways.

13. Remove critical equipment and supplies stored in damaged facilities to prevent further damage or deterioration due to aftershocks and or weather exposure.

14. Continue to monitor USGS information about the earthquake such as magnitude, epicenter, and date & time of occurrence.

15. Use Shake Map data to deploy to the areas with most serious damage. The emergency response focus should be on search & rescue, emergency medical response, sheltering for injured and displaced persons, and the prioritization of bridges, roadways, and other critical facilities.

16. Obtain a status report of critical facilities that may have been damaged, then direct emergency personnel to those areas as needed.
Major earthquakes may have the *most widespread impact* on the Town than any other emergency.

17. Obtain status report on nearby highways and roads. Develop a consistent plan for the flow of traffic. Ensure adequate ingress & egress for emergency vehicles.

18. Initiate a Critical Facilities log that indicates which of those facilities have been checked and their disposition. Refer to **APPENDIX E iii** for Forms.

19. Be prepared to inform PG&E of any known electrical or gas complications.

20. Be prepared to inform the County on water and wastewater system damage.

21. In the event of a significant aftershock, repeat the above steps.

Floods/Levee and or Dam Failures:

Floods can cause widespread contamination as turbid waters carry bacteria that can overflow sources, transmission lines, treatment facilities, and pumping facilities. Floods can also ruin electrical components and telemetry systems. Consider damage to roads and bridges where distribution or transmission lines are located.

BACKGROUND:
Substantial areas within Contra Costa County are subject to flooding. The majority of the County's creeks and shoreline areas lie within the flood plain. In the East County area, substantial acreage lies within the flood plain, including our surrounding areas of Bethel Island, the Veale Tract, Holland Tract, Franks Tract, Jersey Island, and the area of Byron vicinity. Portions of Pittsburg, Antioch and Brentwood areas, as well as a number of creeks in East County, are also subject to flooding.

The most serious flood hazard that exists in Contra Costa County relates to the system of levees that protect the islands and adjacent mainland in the San Joaquin-Sacramento River Delta area in Eastern Contra Costa. Levee failure occurs in some areas where levees rest on soft mud, silt or peat. Flooding problems in the Delta area have also been exacerbated by boat movement (primarily recreational) on the waterways which causes waves to accelerate the natural process of levee erosion.

The possibility that flooding will occur on the islands in the Delta is greatly increased by two ongoing natural processes, the rising sea level and ground subsidence, which compound the dangers that periodic high tides or strong winter storms may breach portions of the existing levee system.

In conjunction with Town of Discovery Bay ERP and Water System ERP Procedures:

1. Major Equipment Submersion
a. If flood levels increase that major equipment, especially motors and other electrical components may become submerged and become damaged, begin sandbagging and or use auxiliary pumps to prevent damage.

b. If any motors, electrical outlets, etc. are already submerged ASSUME THAT THE AFFECTED AREA IS HOT. Shut off all affected equipment at the MAIN BREAKERS and LOTO.

c. Check the flooded area for electrical hazards - after checking for any potential electrical hazards, enter the area wearing RUBBER BOOTS.

2. Chemical & Fuel Storage Areas
a. Most storage areas in the facilities would not be affected by flooded conditions as they are stored in above ground water tight tanks and or containers.

b. In the event that a facility becomes flooded and chemicals are on the floor wear protective gear (boots and rubber gloves) as many of the concentrated acids and caustics are clear liquids and could be mistaken for water.

3. Pumping Stations
To reduce unsafe conditions caused by raw sewage spills and overflows:

PUT ALL AVAILABLE PUMPS ON HAND / FULL SPEED. If possible bring in auxiliary pumps.

NOTIFY:

(925) 634-2351 Reclamation 800 Water District
(707) 576-2220 Raw Sewage Spills

Severe Weather & High Winds:

In conjunction with Town of Discovery Bay ERP:

In the event of high winds and or severe weather conditions, stay indoors and monitor weather reports.

In the event of power failure, backup generators will activate and operate critical facilities. It may be necessary to roll out portable generators to facilities requiring power such as lift stations and wells.

NOTE: If powerlines are down STAY AWAY. Call 911 and report immediately to PG&E. Assume no one has called.

During thunderstorm activity, the safest place to be is in a building away from windows and metal objects. Do not use land lines during this time as lightning may cause injury through wired phone lines.

If you are driving during heavy thunderstorm conditions, stay in your vehicle. Do not attempt to drive across roadways that appear to be flooded.

If directed to do so, assist First Responders as necessary.

Situations of heavy rain may burden the community's storm drain system. Contact the County Office of Emergency Services at **(925) 646-4461** or by dialing 911.

Per Water System ERP Procedures:

1. Coordinate with the National Weather Service for timely watches and warnings affecting the area.

2. Stay in contact with Contra Costa County EOC for updated flood information.

3. Ensure public is well informed regarding both storm and flooding watches and warnings.

4. Obtain status report on nearby highways and roads. Develop a consistent plan for the flow of traffic. Ensure adequate traffic control is in place to assist emergency vehicles with ingress & egress to incident scenes.

5. Determine the need to conduct evacuations and sheltering activities.

6. If evacuation is required, work with the General Manager and the County to distribute the information immediately. All evacuation activities should be coordinated throughout the Operations Section.

7. Coordinate with local broadcast media to ensure timely and accurate Emergency Alert System activation.

8. As a point of reference, evacuation is the assisted removal of people before a threat arrives, while rescue is an issue that deals with the removal of persons once the threat is upon them.

9. Ensure that field personnel are checking for downed powerlines and inform PG&E immediately to prevent electrocution hazards.

10. Coordinate with PG&E to share information concerning power outages.

11. Floodwaters may carry additional health and safety risks, such as bacteria, raw sewage or hazardous substances. Sandbags tend to act as sponges for these hidden dangers, so ensure precautions are taken when handling them or coming into contact with the water itself.

12. Ensure field personnel watch potable water treatment facility tanks, wastewater treatment plant storage facilities for inundation or overflow.

13. Coordinate with schools, daycare centers etc. about proper precautions and emergency actions related to the storm.

14. Determine the availability of shelters through the County and the American Red Cross.

15. Coordinate with the County, the Red Cross, other public agencies and or non-profit agencies for shelter operations.

Drought:

Droughts are an issue in California and can have devastating effects on water supplies. During normal years, peak summer demands can double and even triple water use. These same demands during low water system years can lead to water shortages which can cause low pressure problems, boil-water advisories and possible need for hauled water will be addressed when event occurs.

2.2.2 Events Caused by Human-Intervention

Human-caused events that can result in a water system emergency include chemical spills, vandalism, terrorism, cyber-attacks, fires, construction accidents, and basic neglect of water system infrastructure and maintenance.

Vandalism:

Vandalism is generally a spur-of-the-moment act using materials at hand rather than a preplanned or premeditated activities. Vandals often break into systems, damage facilities and paint graffiti. These acts are relatively easy to prevent by enhancing security, increasing lighting, installing locks on doors and hatches, and putting up security fencing. This is a listed recommendation in the Vulnerability Assessment Table 11 (2021) **Appendix I.**

Terrorism:

Acts of terrorism are defined by Code of Federal Regulations as **"….the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives."** There are many potential threats to drinking water systems, including physical destruction of infrastructure (explosions), chemical, biological or radiological contaminations as well as other physical types of damage to the infrastructure and SCADA systems. Threats of, or contamination using biological, radiological, or chemical agents are a major concern for a drinking water system.

BACKGROUND:

According to the FEMA publication *Principal Threats Facing Communities and Local Emergency Management Coordinators,* most terrorist activities are bombing attacks. Principal targets include military personnel and facilities, commercial establishments, and federal government buildings and property.However, based on events surrounding September 11, 2001, there is an increasing threat of Weapons of Mass Destruction (WMD) incidents, including Nuclear, Biological, and Chemical attacks against civilian targets. The degree of seriousness of any act of terrorism is unpredictable; therefore everyone should be aware of the correct response in order to reduce the risk of injuries.

In conjunction with the Town of Discovery Bay and Water System ERP:

1. If directed to do so, assist First Responders as necessary.

2. Contact the County Office of Emergency Services at 911 or by calling **(925) 646-4461.**

System Neglect:

System neglect, often referred to as deferred maintenance, is a major cause of emergencies. System components that are aging and need replacement go without attention causing an emergency situation. Drinking water systems need to continuously evaluate infrastructure and replace them before failure occurs. Following the preventative maintenance schedules in the program Job+, these situations can be averted, along with work order write ups for system components that have prospective need for repairs and or replacements.

Water System Contamination Situations:

BACKGROUND:

Organisms such as *Giardia* and *Cryptosporidium* can contaminate water supplies and causes waterborne diseases. The 1993 Milwaukee, Wisconsin *Cryptosporidium* outbreak killed more than 100 people and sickened more than 400,000. Additionally, another incident occurred in 2000 at Walkerton, Ontario where an *E. coli* outbreak killed 6 people and sickened over 2,300.

1. Cross Connections

A cross connection is an actual or potential physical connection between a public water system and any source of recycled water, non-potable liquid, solid or gas that could potentially contaminate water supply through a backflow process. Cross connections usually occur unknowingly when someone makes a connection in the system or when conducting maintenance on the system.

2. Backflow Conditions

Backflow is the reverse flow of water or other substances into the public water system. Under backflow conditions, unprotected cross-connections can provide a path for biological, chemical or physical contaminations to enter the water supply. These contaminations can lead to waterborne disease outbreaks and chemical poisonings Backflow usually occurs when there is a loss of pressure somewhere in the system causing water to reverse itself.

3. Construction Accidents

Construction accidents sometime fall into the category of a routine operating emergency. The system may lose pressure, resulting in serious backflow incidents that contaminate the water. The utility must be aware of construction in and around the system and be prepared to respond quickly to an accident if it happens.

In conjunction with Town of Discovery Bay ERP for Conditions Listed Above:

Along with immediately notifying proper agencies such as Law Enforcement, the County, and or HAZMAT and working through the EOC and the Incident Command Post (ICP):

1. Identify location and source of contamination and determine the size of the area, both actual and potential.

2. If contamination is from the water system source, isolate and treat source.

3. If contamination is an act of sabotage, vandalism, or an act of terrorism, immediately contact local Law Enforcement and regulatory agency SWRCB Division of Drinking Water. Actions should be taken in consultation with the regulatory agency and could include shutting off water until all contaminants are identified.

For contamination from Cross Connections and Backflow Incidents:

1. If preventative measures fail and a backflow contamination even occurs:

a. Respond by limiting the damage and remove the contaminant from the system if possible.

b. When contamination area is found, isolate that portion of the system to prevent spreading.

c. Take measures to shut off valves surrounding the contaminated area from the start point where contamination was reported and work outward until edge of contaminated area is found.

2. Begin procedures for notifying customers.

a. If a contamination event has occurred, and was unable to be isolated before reaching customers, all customers served by the Water System must be notified. The type of notification depends on the contaminant and the size of the area contaminated.

Corrective Measures to Restore Normal Operations of Water System:

1. System Flushing and Cleaning

a. Once a contamination event has occurred, been identified, and isolated, begin procedures for flushing the system as a first attempt to remove the contaminant.

b. Flush by opening hydrants and expelling water from the system using wide open valve approach until the contaminant can no longer be detected.

c. If a large area has been affected, several hydrants may need to be opened in succession to clean the system, generally moving from the source of contamination in the downstream direction.

d. If the source of contamination is not found and fixed, there is a possibility of a repeat incident.

2. Pipeline Replacement when Necessary

a. Certain types of contaminants may not be removed by physical cleaning.

b. Formulate plan to isolate, remove and replace affected pipelines.

NOTE: Radioactive materials are also difficult to remove physically as they can irradiate pipe materials. Other contaminants such as highly corrosive or explosive contaminants may cause damage to the system, along with some pesticides that can be absorbed into pipeline materials and release at a slow rate. In these cases, systems may choose to replace the contaminated piping and other appurtenances.

Chemical Spills (HAZMAT):

Many chemicals that are routinely transported can harm humans directly or indirectly by contaminating air or water. Spills can come from motor vehicles, trains, airplanes, boats, or fixed containers. They can occur at any time without warning, and many solvents are able to leach into PVC pipes.

BACKGROUND:

Contra Costa County began planning specifically for the management of hazardous materials and waste in 1983, with the establishment of the County Hazardous Waste Task Force. The County has completed the County Hazardous Waste Management Plan, a comprehensive analysis of all aspects of hazardous waste management from generation through disposal. The management of hazardous materials is the focus of the Contra Costa County Hazardous Materials Area Plan, which was adopted in January of 1988. This Plan outlines procedures that County regulatory and response agencies will use for managing, monitoring, containing, and removing hazardous materials from the site of an actual or threatened accidental release. The plan also identifies the agencies within the County responsible for the effective management of hazardous materials.

In conjunction with Town of Discovery Bay ERP:

In the event of a chemical spill, hazardous materials breach, or accident involving the release of a hazardous material, immediately call 911. East Contra Costa County Fire Protection and Contra Costa County HAZMAT will respond and provide immediate control of the incident.

The 24 hour hotline number for HAZMAT emergencies only is **(925) 665-3232**. Do not attempt to resolve the situation. Hazardous materials and chemicals are extremely dangerous, which cause life threatening conditions, and can be extremely flammable, threatening structures and facilities.

If you are in the immediate vicinity of a hazardous materials or chemical spill incident, immediately Shelter in Place, and wait for further direction from First Responders. **Immediately call 911.** DO NOT assume someone else has already contacted emergency first responders. Procedure per Town of Discovery Bay:

1. Immediately Shelter in Place and **Call 911.**

2. When calling 911, provide as much information as possible, the following should be included:
    a. Location of incident.
    b. Type of incident, if known (vehicle accident, storage tank or tote leak/spill, etc.).
    c. What location and where chemicals are stored.
    d. What location and where flammable cabinets are.
    e. Any known information about the chemical (NFPA data if known).

Per Water System ERP Procedures:

1. TODB EOC staffing levels vary with the complexity and needs of the Town's response to a HAZMAT incident. At minimum, the Director of Emergency Services and the Operations Section will likely be needed.

2. Immediately establish a liaison with the Fire District Incident Commander and or Law Enforcement IC.

3. Working through the ICP, determine the size of the involved area, both actual and potential.

4. Working through the ICP, determine the direction the plume (if one exists) is traveling and what lies in its path.

5. Consider the potential side effects of weather such as wind, rain and heat.

6. Be aware of sudden release of hazardous materials may allow little time for an organized response. Field personnel may take the action of locking down individuals or have them Shelter in Place.

7. The Operations Section may assist field personnel on coordinating the evacuation of the affected area by appropriate routes. The Section may also assist field personnel in the coordination of setting up a perimeter to prevent entry to the hazardous area.

8. Ensure that field personnel stay upwind, uphill and or upstream from the HAZMAT location and at a safe distance.

9. To ensure the Director of Emergency Services and the Operational Section are aware of the material and what the incident involves, staff should consult the SDS Binder for specific warnings, cautions, and handling guidelines.

10. If evacuation is required, work with the General Manager and the County to distribute the information immediately. All evacuation activities should be coordinated throughout the Operations Section.

11. Coordinate with the County, the Red Cross, other public agencies and or non-profit agencies for shelter operations.

12. As a point of reference, evacuation is the assisted removal of people before the threat arrives, while rescue is an issue that deals with removal of persons once the threat is upon them.

13. Be aware that in the event that helicopters are required for medical evacuations, consider potential spreading effect of the rotor downdraft. If required, work with the IC to choose a remote landing area.

14. The Operations Section Chief should remain aware of the HAZMAT cleanup status.

15. If required, the Logistics Section may assist field personnel with obtaining equipment and personnel to deal with emergency debris clearance.

16. If required, work with other agencies to establish a Joint Information Center (JIC) or coordinate with JICs established by other jurisdictions.

17. Form emergency public information messages and media responses using “one message, many voices” concept.

18. Ensure that reports of injuries, deaths, and major equipment damage due to a HAZMAT incident are communicated and coordinated with the Director of Emergency Services and the County prior to public dissemination.

Power Outages:

In recent years, the constant supply of electrical power for all facilities, in California and the Nation, has posed problems that should be considered in emergency planning. As noted, in the recent power failure on the east coast in August of 2003, many areas were without electricity for several days before it was restored. Alternate and backup power generation should be considered in emergency planning scenarios.

Per Water System ERP Procedures:

Newport and Willow Water Treatment Plants have stationary generators that have required PM schedules in order to maintain the system in the event of a power outage.

1. Obtain an outage map from PG&E website at pgealerts.alerts.pge.com and check affected area for Outage Status and Estimated Restoration ETA.

1. Make sure emergency generators are online to provide minimum water pressure to the system.

2. Mobilize and hook up portable generators critical equipment as directed.

2.3 The National Terrorism Advisory System

The National Terrorism Advisory System or NTAS, replaces the color-coded Homeland Security Advisory System. This new system will more effectively communicate information about terrorist threats by providing timely, detailed information to the public, government agencies, first responders, airports and other transmission hubs, and the private sector.

It recognizes the Americans all share responsibility for the nation’s security, and should always be aware of the heightened risk of terrorist attack in the United States and what they should do.

A description and details about the NTAS can be found on their webpage.

Section 3 Emergency Planning Process

3.1 Water System Information

In an emergency situation, both the water system and SWRCB DDW staff need to have basic information readily available. The information should be clear and concise. The basic information should include: system's ID number system address and location, population served, number of service connections, source type, and treatment provided, available storage and emergency contact numbers. These are listed below in **Table 3.1.**

3.2 General System Map/Service Area Map

The water system should have detailed drawings of the sources, water treatment plants, booster stations and distribution system. In the event of an emergency, it will be necessary to quickly locate sources and distribution system characteristics. Maps that include the distribution system, system valves and sources are provided in **Appendix C.**

3.3 Emergency Resources

In an event of a natural or man-made disaster, it may be necessary for the water system to use an emergency source of supply to maintain system pressure. The water system and SWRCB will work together to approve emergency sources and conduct minimum water quality sampling and appropriate public notification prior to using the source during an emergency as advised.

3.4 Estimated Emergency Supply of Water

The water system's estimated amount of storage available under worse case conditions is approximately 2,050,000 gallons between both Newport and Willow Water Treatment Plants.

Table 3.1 Water System Information

System Identification No.	**CA0710009**	
System Name and Address	**Town of Discovery Bay Public Water System 1800 Willow Lake Road Discovery Bay, CA 94505**	
Directions to System Office	**From Highway 4, turn onto Discovery Bay Blvd. Turn East on Willow Lakes Road. Turn North and continue past the Elementary School.**	
Number of Service Connections Connections/Population Served	**6,157 connections**	**16,790 population**
Type of Source	**6 Ground Water Wells**	**2 Ground Water Treatment Plants**
Type of Treatment Provided	**Iron and manganese removal &Sodium hypochlorite disinfection.**	
Number of Storage Tanks	**2 Backwash Tanks w/ recycle**	**4 Treated Water Tanks**
Average Water Demand	**2.0 MGD**	
Maximum and Peak Water Demand	**6,400 GPM Maximum**	**2.5 MGD Peak**
Emergency Contact Person(s)	**Project Manager COIC**	**Anthony Harper**
	Operations Supervisor	**Jeffrey Dobretz**
	Maintenance Supervisor	**Craig Shields**

Section 4 SEMS/ICS Integration or Organization

The Governor's Office of Emergency Services webpage contains a document "Emergency Planning Guidance for Public and Private Water Utilities" which describes most of the following information in more detail. The information in this section has been summarized and/or enhanced to assist water systems.

4.1 Standardized Emergency Management System (SEMS)

The standardized Emergency Management System is the system required by Government Code §8607 (a) for managing response to multi-agency and multi-jurisdiction emergencies in California. Local public agencies (cities, counties, special districts) must use SEMS to be eligible for State funding of certain response-related personnel costs resulting from a disaster. State agencies are required by the law to utilize SEMS during emergencies.

4.2 Five Levels of SEMS

There are five designated levels in the SEMS organization. When resources become depleted or are not available at the field or local level, requests for resources are moved up through these levels until they are filled. The type and severity of the incident determines the extent of activation for each level.

1. Field Response - The Field Response Level is where the Incident Command System is applied. At this level, emergency response personnel and resources are managed under ICS to carry out tactical decisions and activities in direct response to an incident or threat. The basic components of ICS are common terminology, modular organization, unified command structure, consolidated action plans, manageable span-of-control, predesignated incident facilities, comprehensive resource management, and integrated communications.

2. Local Government - Local Government includes cities, counties, school districts, or special districts (including most water utilities).

3. Operational Area - The Operational Area concept represents the intermediate level of the state's emergency organization, consisting of **county and all political subdivisions,** including water districts and other special districts, within the county area.

4. Regional - Because of its size and geography, the state of California has been divided into six mutual aid regions by the Governor's Office of Emergency Services. In SEMS, the regional level manages and coordinates information and resources among operational areas and the state level. **This water system's region is San Francisco Region 2.**

5. State - The state level manages and coordinates state resources in response to the emergency needs of the other levels. This level manages and coordinates mutual aid among the mutual air regions and between the regional and state levels. The state level also serves as the coordination and communication link between the state and federal disaster response system.

Water System Personnel may function in the ICS structure (Field Level) as an Agency Representative or Technical Specialist:

Agency Representative - is an individual assigned to an incident from an assisting or cooperating agency who has been delegated authority to make decisions on matters affection that agency's participation at the incident. "Agency Representatives" report to the Liaison Officer or Incident Commander in the absence of the Liaison Officer.

Technical Specialist - Certain incidents or events may require the use of "Technical Specialists" who have specialized knowledge and expertise. "Technical Specialists" may function within the Planning Section, or be assigned wherever their services are required.

4.3 Five Principle Functions of SEMS

There are **5 principle functions** within SEMS at each of the 5 organizational levels. They are **Management** ("Command" at Field Level), **Operations, Planning/Intelligence, Logistics,** and **Finance/Administration.** A general principle in the use of the 5 functions, is that no one person should directly supervise more than 5-7 staff. As they relate to the Water Systems Operations during an emergency, these functions are listed below:

1. Management - The Operations Section is responsible for the management of all operations directly applicable to primary mission established for the response. The Operations Section Chief activates and supervises organization elements in accordance with the Incident Action Plan and directs its execution.

Operations Section staff include field coordinators as necessary, linked to water personnel at other fixed facilities or assigned to incidents within the water utility. The field coordinator should receive and pass information up the chain of command, as well as, receive and coordinate requests for services and support.

2. Planning/Intelligence - Oversees the collection, evaluation, verification, and display of current information related to the emergency. This section is also responsible for preparing action plans and maintaining documentation related to the emergency. The information collected is needed to 1) understand current situation 2) predict probable course of the incident events 3) prepare alternative strategies and control operations for the incident.

3. Logistics - Provides facilities, services and material in support of the Incident. Oversees the acquisition, storing, and distribution of essential resources and support services needed to manage the emergency. It tracks the status of resources. Logistics provides services to all field units in terms of obtaining and meeting their personnel, materials and equipment needs including communications.

4. Finance/Administration - The Finance/Administration Section is responsible for all financial, administrative and cost analysis aspects of the incident. Finance/Administration prepares vendor contracts, maintains records of expenditures for personnel and equipment, and maintains records and processes claims. It also provides preliminary estimates of damage costs and losses.

5a. General Staff - Each function listed above should have a delegated Chief to manage the Section. Depending on the nature and scope of the emergency each Section can have several branches, divisions, groups, or units.

5b. Command Staff - These positions report directly to and are directly subordinate to the Incident Commander or EOC Director. They are the Public Information, Liaison and Safety Officers.

4.4 Water Utility Emergency Operations Center

The Emergency Operations Center (EOC) will be activated at the Town of Discovery Bay District Offices (unless otherwise directed) at:

1800 Willow Lake Road
Discovery Bay, CA 94505

The EOC shall only be activated in the event it is safe and does not pose a threat to the safety and welfare of Disaster Services Workers. In the event the EOC is not available for use, an alternate location shall be identified by the General Manager pursuant to the best available and safe location.

The EOC serves as the central point for information gathering, processing, and dissemination; coordination of all Town emergency operations, and coordination with other agencies and the Operational Area EOC. The EOC is partially or fully activated by the Director of Emergency Services, according to the requirements of the situation.

Section Leader Assignments		
Section	**Primary**	**Alternate**
Incident Manager	General Manager or WUERM	Chief Engineer
Operations	Water Quality/District Superintendent or WUERM	Field Maintenance Superintendent
Planning/Assessment	Head of Engineering Services	Principle Engineer
Logistics/Resources	Assistant Field Maintenance Superintendent	Field Supervisor
Administration	Admin Manager Accounting	Personnel Administrator or Human Resources

Command Staff	**Primary**	**Alternative**
Public Information	Public Education Coordinator	Customer Service Admin
Advisory Support	Safety Coordinator	Assistant Safety Coordinator

Water Utilities may be required to assign staff to the City or County (Operational Area) Emergency Operations Center (EOC) to coordinate with Pubic Health or any of the Sections that might need information or assistance. Typically, Water Utility Staff would report to the ROC as an **Agency Representative** and can move down, in the organization, to any of the sections as needed. Initially, the **Water Utility Agency Representative** would check in with the Liaison Officer, if one is not present then they would report to the EOC Director.

Section 6 Communication Procedures

Good communication is vital to effective emergency response. When an emergency occurs, panic, confusion and fear start to take over and poor communication can quickly make the situation worse. Normal communication with wireless communication and system operations via SCADA systems may be out of service during an emergency or terrorist activities. Backup or alternative communication procedures should be evaluated and exercised.

During water system emergencies there are several agencies that need to be notified and consulted. Some notifications are initially made while other notifications are not made until later or depending on the emergency, not at all. It is important for the water utility to have a clear understanding of who from their agency makes the appropriate contacts to County, State or Federal Agencies.

6.1 Water System Chain-of-Command

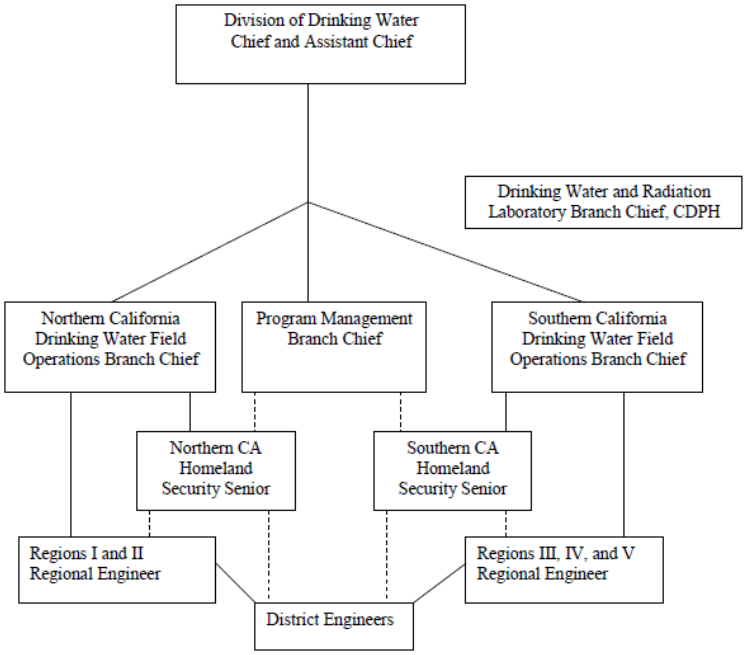
First of all, the water system must identify the lines of authority or the water system chain-of-command. A key element of the Incident Command System (ICS) is having a chain of command that identifies system personnel and their responsibilities in an emergency.

A lead person should be identified that will have the responsibility and authority for managing the utility's response to an emergency. Using the same terminology as the EPA, this lead person may be referred to as the Water Utility Emergency Response Manager or WUERM.

Below is the table identifies the Water System Chain of Command.

Since this list has many contact names and phone numbers, this information should be reviewed annually to ensure that current information is provided. **See Appendix A.**

Table 6.1 Water System Chain of Command Flow Chart



6.2 Drinking Water Field Operations Branch Chain-of-Command

The primary contact for the water system during any emergency is their District Engineer. Water systems should contact their District Engineer in the event of any emergency. From the district engineer, authority moves up the line to the Regional Engineer, Branch Chiefs, Assistant Division Chief, to finally the Chief of the Division.

6.3 External Notification Procedures

During an emergency it is important to contact and notify all the appropriate agencies and stakeholders that will be affected by the emergency. Some agencies will need to be notified immediately while some others may be needed later in the incident, depending on the event. The following is a list of agencies and stakeholders that a water system should have updated contact information. This information should be reviewed annually to ensure that current information is provided.

This initial notification response to any emergency should be to call 911 for the needed first responder and then the SWRCB DDW. The SWRCB DDW is the Drinking Water Primacy Agency in California and has regulatory jurisdiction over all public water systems in the state.

Contact to the SWRBC DDW should be their District Engineer. If the water system is unable to contact the District Engineer (or one of their staff), the water system should use the California Office of Emergency Services (OES) Warning Center Phone Number: 1-800-852-7550, which is a 24/7 phone number. A second phone number for the OES Warning Center is 916-845-8911. A duty officer will answer the CA OES Warning Center phone call, request for the SWRCB DDW duty officer. The SWRCB DDW duty officer will then call management staff in the Drinking Water Program to respond to the emergency.

6.3.1 Initial Notifications

All phone numbers are listed at the end of this section in Table 6.3.1.

1. First Responders 911

If the situation is an emergency that needs response from local fire, law enforcement, medical or hazardous materials (HAZMAT), calling 911 should be the first immediate call.

a. Local Police and Sheriffs

b. Fire and HAZMAT

2. State of California Agencies

a. Drinking Water Primacy Agency - The SWRCB DDW is California Water Boards San Francisco Region 2. If no one is available, do not leave a message, instead call the California State Warning Center at **800-852-7550.**

b. Depending on the magnitude of the event, the following state agencies may also need to be contacted (see table 6.3.1):

i. Office of Emergency Services (OES) Warning Control Center

ii. Department of Water Resources (DWR)

iii. Department of Fish & Wildlife

iv. Regional Water Quality Control Board

v. Department of Toxic Substances Control (DTSC)

vi. California Public Utilities Commission (CPUC)

3. Federal Agencies

a. Federal Bureau of Investigation (FBI) - *If the event is a known terrorist incident or a direct written or phone threat against a water system, the FBI is to be contacted as soon as possible.*
This water system's office is: **San Francisco - 415-553-7400**

b. USEPA - The US Environmental Protection Agency Drinking Water Program is not a direct response agency. USEPA through its Superfund Response Program has emergency response resources for incidents related to environmental chemical releases. These resources are not first response resources and should be requested through SEMS process.

4. Local County Health Department

County Health Department - The County Public Health Officer is responsible for all public health issues within their county. They should be notified of any event that could affect public health within their county. **In the event of an emergency that will require financial and technical assistance through CA Mutual Aide System, the County Public Health Officer will be one of the officials that can declare a State of Emergency and request assistance from the Regional and State OES.** The County Public Health Officer also will have access to disease surveillance data within the county. If you cannot reach the County Health Officer, contact your District Engineer.

4. Local Agencies & Facilities

a. County and State Offices of Emergency Services - The County and State Offices of Emergency Services (OES) provide support and coordination of resources during an emergency. If additional or specialized resources are needed during an emergency, OES will dispatch those resources to the emergency.

b. Hospital and Critical Care Facilities - An emergency or contamination event in the water system can affect the operations of facilities. **See Appendix D for this system's contact information.**

c. Customers - The Water Quality Emergency Notification Plan (WQENP), as required under Section 116460, California Health and Safety Code, is a significant part of a water system plan to communicate with their customers. The form that contains specific information for the SWRCB District Engineer and the County. Contact your District Engineer for current WQENP form.

Table 6.3.1

Organization	Contact	Contact Numbers
Police, Fire, HAZMAT		Call 911 925-646-2441 BPD - CCC Sheriff's Delta Station 925-757-1303 ECCFD - Dispatch 925-335-3232 HAZMAT 24hr Emergency
SWRCB District Engineer	If they cannot be reached, call the CA Warning Center's 24/7 number and ask for SWRCB Duty Officer. The manager will be contacted.	510-620-3454 Day 510-421-8382 Evening
FBI Regional Office	Regional FBI Office San Francisco	415-553-7400
County Public Health Officer	Contra Costa County	925-957-5403
County OES	LEPC Region 2 - CAL OES Liaison (Fairfield, CA)	831-444-1351
CA OES (State OES)	Warning Center Ask for SWRCB Duty Officer for Drinking Water Program	800-852-7550 707-862-2358 916-657-9494 Public Safety Communications 916-845-8911 California State Warning Center
Regional Water Quality Control Board	Region 2 - San Francisco Regional Water Quality Control Board	510-622-2300
CA Department of Fish and Wildlife	Region 3 - Bay Delta	707-428-2002
Water Quality Laboratory	US EPA Region 9 - (Richmond, CA)	510-412-2331

6.4 Public Notice Procedures

Standard public notifications for a water outage/low pressure problems, Boil Water Notice (BWN), Unsafe Water Alert (UWA), have been developed by SWRCB for use during an emergency. Water systems need to have copies of public notices in the appropriate languages used in their service areas. **See Appendix D.**

All public notifications (BWN, UWA, Do Not Drink or Do Not Use Notices) should be coordinated with the AWRCB District Engineer, County Environmental Health Department and the County Health Officer prior to issuing a public notice. However, any one of the three agencies should act immediately to issue a BWN or UWA, if delays will

jeopardize public health and safety. The SWRCB District Engineer OR the water system must notify the County Health Department and the County Health Officer prior to or immediately after issuing a public notice.

Notice must be given to a person, a message left on voicemail is NOT sufficient. The SWRCB DDW District Engineer will notify the two CDPH agencies of the BWN/UWA issued.

Consumer Alert during Water Outages or Periods of Low Pressure - If a water system is experiencing power outages, water outages, or low pressure problems, a consumer alert may be issued to the public. The notice provides consumers information on conserving water and how to treat the water with household bleach if the water quality is questionable. **See Appendix D.**

Boil Water Notice (BWN)

A BWN should be issued when minimum bacteriological water quality standards cannot be reasonably assured. To assure public health protection a BWN should be issued as soon as it is concluded by the designated personnel that the water supply is or may be biologically unsafe.

Unsafe Water Alert (UWA)/Do Not Drink

In the event a water quality emergency due to known or suspected chemical (non-bacteriological) contaminations to a water system a UWA or Do Not Drink should be issued. Water should not be used for drinking and cooking, but may be used for sanitation purposes.

In the event a known or suspected contamination event to a water system, where the contaminate may be chemical, biological or radiological a UWA or Do Not Use should be issued. Water should not be used for drinking, cooking, or sanitation purposes. Examples of these situations is: **Known or suspected widespread chemical or hazardous contamination in water supply distribution, including but not limited to terrorism contamination event.**

The water system Public Information Officer (PIO) will need to coordinate with all the other agencies PIOs. If more than one agency is involved in an emergency, a Joint Information Center (JIC) will be established.
If a BWN or UWA is issued, the water system should notify the PIOs in the EOC immediately.

Media Notification

Any dealing with the media during an emergency should come from one unified source: the EOC. Boil Water Notices, Unsafe Water Alerts, and other public notices can be distributed through the media. This is only effective if the information is coordinated through one source and one message is delivered to the public.

6.5 Cancellation of Public Notification

Once a BWN/UWA is issued, the only agency that can rescind the public notice is the drinking water primacy agency. SWRCB DDW will not lift the BWN until two rounds, collected a day apart, of coliform bacteria samples have been analyzed and the results are negative. The two sets of sample results should be faxed to the SWRCB DDW District Office for final approval before rescinding the BWN. **Special chemical sampling will be required to rescind an UWA, please contact the SWRCB DDW District Office to determine required sampling.**

6.6 Water Quality Sampling

Note: Laboratory protocols and procedures identified in section 6.6 are still under development by Federal and State agencies. This section will continue to evolve and updates will be provided as necessary.

During an emergency, there are several types of water quality sampling that may need to be analyzed depending on the actual event. If it is natural disaster, flood or power outage, sampling will probably only include bacteriological samples, turbidity, and chlorine residual samples. However, if the event is a terrorist act or contamination event, the sampling will include a full scan of Weapons of Mass Destruction (WMD) chemical, radiological and microbiological (unless the actual contaminant used is known).

Laboratory Resources

There are four different types or ownership of laboratory facilities in California that can analyze drinking water samples:

1. Commercial/private laboratories
2. County Public Health Laboratories
3. State Department of Public Health Laboratories
4. Research Facility/Specialty Laboratories

In general, laboratories are grouped into two broad categories: chemical or biological.
Chemical laboratories include: general environmental chemistry laboratories, radiological laboratories, and specialty laboratories that may be able to handle and analyze exotic contaminants, such as chemical weapons and radionuclides.

Biological laboratories include: environmental microbiology laboratories and Laboratory Response Network (LRN) that typically analyze clinical samples for pathogens and select biotoxins.

CDPH Laboratory

The CDPH Drinking Water and Radiation Laboratory (DWRL) is organized within the CDPH. DWRL is the State's primary drinking water quality testing laboratory and is the State laboratory capable of measuring environmental radiation. Its primary mission is to provide analytical services, reference measurements and technical support pertaining to the State's Drinking Water Radiological Health Programs.

DWRL is located in Richmond, California and performs microbiological, inorganic and organic testing in various water matrices, carries out inorganic and organic analyses in water, and radiochemical testing in various environmental matrices in addition to water. The DWRL in conjunction with the CDPH Microbial Disease Laboratory (MDL) does microbiological analyses including biotoxins.

California Mutual Aid Laboratory Network (CAMAL Net)

The CDPH DWRL, in conjunction with water utilities, USEPA Region 9 laboratory in Richmond, Lawrence Livermore National Laboratory, and the California Department of Water Resources, have formed a laboratory network, CAMAL Net, to address laboratory capacity issues associated with possible drinking water related contamination events. CAMAL Net establishes a triage system to process samples when water systems or commercial laboratory methods are not available or the water system lacks capacity within their own lab.

The CAMAL Net system will not handle any samples where field screening indicates that the sample may contain a CDC listed WMD agent. Any requests for analysis through CAMAL Net system needs to be approved by the SWRCB DDW District Engineer prior to collection of water quality samples to be processed.

Chemical Analysis Classification - The SWRCB along with its stakeholders and federal partners developed an algorithm to assist California water systems, public health agencies, law enforcement, and first responders with the identification of possible chemical agents in drinking water contamination events.

Biological Analysis Classification - The LRN for Bioterrorism has ranked laboratories (Level A, B, C or D) based on the type of safety procedures they practice.

Level A Lab uses a Class II biosafety (BSL) cabinet. Level A Labs are used to rule out and forward organisms
Level B Lab is a BSL-2 + BSL-3 safety practices. Level B Labs are used for limited confirmation and transport
Level C Lab is a BSL-3 facility. Level C Labs are used for molecular assays and reference capacity
Level D Lab is a BSL-4 facility. Level D Labs are used for the highest level of characterization

In California there are **28** Level A Labs, **10** Level B Labs, and **2** Level C Labs.

The two Level C laboratories are the LA County Public Health Laboratory, Los Angeles, CA and the CDOH MDL in is located in Richmond, CA. Lawrence Livermore National Laboratory is also a Level C laboratory, but access to them is restricted.

The only Level D laboratories available in the LRN are the national laboratories, such as those at the Center of Disease Control and Prevention (CDC) and the Department of Defense. These laboratories test and characterize samples that pose challenges beyond the capabilities of the Level A, B and C reference labs, and provide support for other LRN members during a serious outbreak or terrorism event. The most dangerous or perplexing pathogens are handled only at the Bio-Safety Level 4 laboratories at CDC and USAMRIID: US Army Medical Research Institute of Infectious Diseases.

Natural Disaster

During a natural disaster, flood, earthquake, fire etc., sample collection and analysis will be available to the water system by their normal laboratory resources. Sampling will primarily consist of regulatory bacteriological samples and turbidity to show that the system has been flushed out. The water system may also be collecting chlorine residual samples throughout the system with field chlorine test kit.

Terrorist Event/Contamination Event

Once a threat warning has occurred and the utility has deemed the threat confirmed, it will be necessary to collect water quality samples. The decisions made from the time of the threat warning to the time the threat is confirmed is specific to each individual event. This “credibility stage “ may take a utility between 2 to 8 hours and should involve consultation with local first responders, SWRCB DDW (Drinking Water Primacy Agency), local Health Department and regional FBI office.

Assuming the threat is confirmed and credible enough to warrant water quality sampling, several state and federal agencies are involved to collect samples, transport the samples to appropriate laboratory and analyze the samples. **The water system’s first step in this process is to contact the SWRCB District Engineer so they can notify the CDPH DWRL of the incoming samples.** The following steps are described in more detail below:

1. Emergency Water Quality Sampling Kit

Contains sample bottles needed for chemical, radiological and microbiological analysis (that could be split into 3 complete sample sets). The CAMAL Net version of the sample kit has been finalized for deployment. This kit will continue to evolve as the USEPA develops sampling protocols for these new constituents in drinking water. A complete list of the CAMAL Net version of the EWQSK is provided **in Appendix F.** The EWQSK should remain sealed before the sample is collected.

SWRCB DDW purchased the supplies used to create enough EWQSK to supply 3 in each DDW District Office. The DDW will provide one of these kits in the event of an emergency. **Requests for these kits should be made to the District**

Engineer when the water system reports the incident. Travel time from the District Office to the water system should be incorporated in the water system's emergency response plan.

2. Sample Collection

Several types of samples may need to be collected depending on the event. The FBI will collect samples for the crime scene investigation. The water system needs to collect samples for public health to determine if the water is safe for consumption using the EWQSK for public health. The Department does not recommend that water system staff collect samples for the EWQSK due to liability issues. Several responding agencies are available for EWQSK sample collection: local HAZMAT, FBI, California National Guard Civilian Support Team (CST) or USEPA. Each agency has the proper personal protection material to minimize exposure to any possible agent. In addition, each agency has field screening kits that will provide a preliminary screen for several WMD agents that will help identify the required laboratory resources needed.

3. Laboratory

Depending on the results of the field screening and actual event, the required laboratories need to be notified and prepare to accept the samples. If an EWQSK (supplied by the water system or SWRCB DDW) is used, the CAMAL Net and the LRN need to be notified and involved in the process for laboratory selection. The first step in this process is for the District Engineer working with the water system to contact SRL.

4. Sample Transport

Depending on the responding agencies, field screening, the ICS will decide how the samples will be transported to the appropriate lab. Since the samples may be used for crime investigation, proper chain-of-custody must be maintained. The possible agencies and field screening, depending on the event are: HAZMAT, CHP, FBI, CST or USEPA.

5. Sample Analysis

Once the samples are delivered to the appropriate laboratory, they may be split for analysis to different laboratories. The transport and laboratory testing protocols will be handled by the CDPH DWRL laboratory. Sample results will be shared through the ICS. Please note that sample analysis may take days to weeks to complete depending on the complexity of analysis.

Section 7 Restoration and Recovery

7.1 Restoration and Recovery

The Restoration and Recovery Plan's key elements are the following:

1. Return to Service

a. Level of quality return
b. Criteria

2. Treatment Options

a. Technologies applicable
b. Change in existing treatment
c. Onsite treatment options
d. Monitoring
e. Staff safety
f. Human and environmental impacts

3. Disposal Options

a. Human and environmental impacts
b. Pretreatment requirements:
    i. Technologies
    ii. Equipment and supplies
    iii. Personnel
    iv. Power requirements
c. Approval/Permitting Requirements

4. Rehabilitation Options

a. Simple flushing
b. Cleaning
c. Disinfecting
d. Swabbing and pigging
e. Sandblasting
f. Relining
g. None-replacement
h. Disposal
i. Monitoring and analysis

5. Public Information

a. Information on progress to reduce panic
b. May be difficult if threat still exists

Initial Recovery Activities

1. Designate a disaster recovery coordinator (may or may not be EOC director) and notify all appropriate regulatory agencies.

2. Complete detailed evaluations of all affected water utility facilities and determine priorities for permanent repair, reconstruction, or replacement at existing or new locations.

3. Begin repair activities design and make bids for contractor services.

4. Make necessary repairs to system and un-tag repaired facilities and equipment.

5. Restore all telecommunications, data processing, and similar services to full operation.

6. Complete assessment of losses and costs for repair and replacement, determine approximate reimbursements from insurance and other resources of financial assistance, and determine how residual costs will be financed.

7. Define needs for additional staff, initiate recruitment process, and adopt temporary emergency employment policies as necessary.

8. Execute agreements with vendors to meet service and supply needs.

9. Reevaluate need for maintaining the emergency management organization; consider returning to normal organization structure, roles, and responsibilities when feasible.

10. Collect cost accounting information gathered during the emergency and prepare request for Emergency Disaster Funds (following FEMA and State EOS requirements).

11. Debrief staff to enhance response efforts in the future by identifying lessons learned, developing action plans and follow-up mechanisms, and providing employee assistance programs if needed.

21. Prepare After-Action Reports as required. Complete reports within six months of the event (90 days for public utilities which are part of a city or county government).

Identify recommendations.

Long Term Recovery Activities

1. Initiate permanent reconstruction of damaged water utility facilities and systems.

2. Restore water utility operations and services to full pre-event levels.

3. Continue to maintain liaison as needed with external agencies.

Assistance Programs

The State of California Office of Emergency Services administers several programs designed to assist victims of a disaster. They include Public Assistance, Individual Assistance, and Hazard Mitigation Public Assistance (PA) administers state disaster relief programs under various federal laws and regulations, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288 as amended), the Code of Federal Regulations (CFR), and the State Administrative Manual. These regulations designate the State of California as “grantee” for all federal public assistance funding available to agencies of the state government, local governments, and certain private non-profit organizations that provide essential services of a governmental nature to the general public, including water utilities. As grantee, the state is responsible for the processing of sub-grants to public assistance applicants in accordance with 44 CFR, part 13, 14 and 206, and its own policies procedures. PA works closely with the Federal Emergency Management Agency to process Damage Survey Reports. It dispatches inspection teams and conducts applicant briefings. This unit is led by OES, with support drawn from other state agencies. Under the Public Assistance Program, public and private non-profit water utilities may be eligible for public assistance to reimburse the work and associated costs of responding to and recovering from a disaster if the costs:

1. Are a direct result of the declared event and not pre-disaster condition result of some other event.

2. Are located within the area designated by FEMA as eligible for assistance.

3. Are the legal responsibility of the eligible applicant.

4. Are not eligible for assistance under another federal program (this applies to permanent restoration work only).

Individual Assistance

Individual Assistance (IA) performs a wide variety of functions and involves many state agencies to ensure individual, family, business, and farm recovery from disasters. Private, for profit water utilities may be eligible for disaster assistance in the form of low interest loans or grants to restore damaged structures, or replace inventories. Individual Assistance of this type is generally made available to private businesses when the ability to continue operations is terminated or impaired by a disaster. In addition, employees of a water utility may be eligible for disaster assistance in the form of funds for temporary housing, individual and family grants to meet disaster related expenses, and loans to individuals for repair or replacement of real and personal property.

Hazard Mitigation

Following a presidential disaster declaration, the Hazard Mitigation Grant Program is activated. The program's purpose is to fund projects which are cost-effective and which substantially reduce risk of future damage, hardship, loss or suffering from a major natural disaster. Virtually all types of hazard mitigation projects are eligible provided they benefit the declared disaster area and meet basic project eligibility requirements. Types of eligible projects will be identified from those mitigation measures identified in the State Hazard Mitigation Plan, hazard mitigation team reports, and issue unique to the disaster event. The priorities of funding will be established and the program administered by OES.

Expenditure Documentation

One of the critical aspects of any major emergency or disaster is collecting information on the costs related to response and recovery. The ability of the utility to recover costs or receive disaster assistance from the state and federal governments is predicated on its eligibility and ability to document its costs.

Section 8 Training

8.1 Water System Response Training

The water system conducts annual emergency response preparedness training. All policies and implementations are covered, as well as toolbox talks throughout the year. All contacts are updated annually, and all mock drills are tested. New hires are trained on emergency response preparedness after hire date.

Emergency equipment is tested, according to recommended Preventative Maintenance schedule, and mock drills are conducted in conjunction with Town of Discovery Bay personnel.

Section 9 Appendix

9.1 Definitions and Acronyms

The definitions below are specific to California Emergency Response Plan Guidelines, however the SWRCB DDW has tried to coordinate terminology with standards used nationally. Where possible, definitions were provided by the USEPA:

Agency Representative - is an individual assigned to an incident from an assisting or cooperating agency who has been delegated to make decisions on matters affecting that agency's participation at the incident. "Agency Representatives" report to the Liaison Officer or Incident Commander in the absence of a Liaison Officer.

Bioterrorism Act - Public Law 107-188 Public Health Security and Bioterrorism Preparedness and Response Act of 2002.

Civil Support Team (CST) - California National Guard Civilian Support Team, Two are located in California, 95th CST in Alameda, CA and the 9th CST in Los Alamitos, CA.

SWRCB DDW - State Water Resources Control Board Division of Drinking Water has regulatory jurisdiction of all public drinking water systems in California.

CAMAL Net - California Mutual Aid Laboratory Network.

Chain of Command - Lines of Authority for an agency.

District Engineer - Each public water system has a SWRCB DDW Senior Engineer assigned regulatory authority.

Drinking Water Primacy Agency - The Agency that has primary enforcement responsibility for national drinking water standards, namely the Safe Drinking Water Act as amended. In California, the SWRCB, DDW is the Drinking Water Primacy Agency for all public water systems serving over 200 service connections. For systems under 200 service connections, drinking water primacy may have been delegated by SWRCB to the representative County Health or County Environmental Health Department. However, some counties in California have chosen not to regulate public water systems and the SWRCB DDW is the Drinking Water Primacy Agency for all public water systems in those respective counties.

Emergency Operations Center (EOC) - Typically, a pre=designated facility established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency. However, the EOC may be located at any location based on the disaster event.

Emergency Response Plan (ERP) - A document developed by the water system that describes the actions that the water system would take in the event of a natural disaster, contamination event or terrorist activity.

Water Quality Emergency Notification Plan (WQENP) A two page document that lists the emergency contact phone numbers for the water system personnel and the SWRCB personnel. The WQENP also has a description of the public notification methods for the water system.

Emergency Water Quality Sampling Kit (EWQSK) - During a credible threat, a water quality sampling kit to be used that contains sample bottles for chemical, radiological and microbiological analysis.

Hazardous Materials Response Team (HAZMAT) - The acronym generally refers to a Hazardous Materials Response Team. A specially trained group of personnel that are equipped to deal with spills and releases of hazardous materials. A hazardous material is any substance or material that when release in an uncontrolled manner in sufficient quantities, poses a risk to public health, environment and/or property. In California, the minimum standards and types, for these teams, are discussed in the "Fire Service - Field Operations Guide (ICS-420-1)" manual.

Incident Command System (ICS) - A standardized on-scene emergency management concept specifically designed to allow its users to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.

Incident Commander - The individual responsible for the management of all incident operations.

Laboratory Response Network - A network of laboratories developed by the CDC, APHL, and FBU for the express purpose of dealing with bioterrorism threats, including pathogen and some biotoxins.

Public Information Officer (PIO) - The individual responsible for interfacing with the public and media or with other agencies requiring information directly form the incident. Under the ICS, there is only one Public Information Officer per incident.

Multi-jurisdiction Incident - An incident requiring action form multiple agencies that have a statutory responsibility for incident mitigation. In ICS, these incidents will be managed under Unified Command.

Office of Emergency Services (OES) - The Governor's Office of Emergency Services coordinates overall state agency response to major disasters in support of local government. The office is responsible for assuring the state's readiness to respond to and recover from natural, manmade, and war-caused emergencies, and for assisting local governments in their emergency preparedness, response and recovery efforts.

Security Breach - An unauthorized intrusion into a secured facility that may be discovered through direct observation, an alarm trigger, or signs of intrusion (e.g., cut locks, open doors, cut fences). A security breach is a type of threat warning.

Standardized Emergency Management System (SEMS) - The Standardized Emergency Management System (SEMS) is the system required by Government Code §8607(a) for managing response to multi-agency and multijurisdictional emergencies in California.

Technical Specialist - Certain incidents or events may require the use of "Technical Specialists" who have specialized knowledge and expertise. "Technical Specialists" may function within the Planning Section, or be assigned wherever their services are required.

Threat - An indication that a harmful incident, such as contamination of drinking water supply may have occurred. The threat may be direct, such as verbal or written threat, or circumstantial, such as a security breach or unusual water quality.

Threat Evaluation Part of the threat management process in which all available and relevant information about the threat is evaluated to determine if the threat is 'possible' or 'credible', or if a contamination incident has been confirmed. This is an iterative process in which the threat evaluation is revised as additional information becomes available. The conclusions from the threat evaluation are considered when making response decisions.

Unified Command - A unified team effort which allows all agencies with responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, responsibility, or accountability.

Vulnerability Assessment (VA) - A systematic process for evaluating the susceptibility of critical facilities to potential threats and identifying corrective actions that can reduce or mitigate the risk of serious consequences associated with these threats.

Water Utility Emergency Response Manager (WUERM) The individual(s) within the drinking water utility management structure that has the responsibility and authority for managing certain aspects of the utility's response to an emergency particularly during the initial stages of the response. The responsibilities and authority of the WUERM are defined by utility management and will likely vary based on the circumstances of a specific utility.

9.2 Appendix

9.2A - Chain of Command & Contact Information (section 6.1)

i. Town of Discovery Bay

	Employee Title	EOC Assignment	Phone Number
1	General Manager	Director of Emergency Services	925-519-1763
2	Assistant General Manager	Planning & Intelligence Chief	925-628-0796
3	Executive Assistant to GM	Planning & Intelligence	To be Assigned
4	Project Manager	Planning & Intelligence	925-775-5028
5	Parks & Landscape Manager	Logistics Chief	925-727-2167
6	Parks & Recreation Supervisor	Logistics	925-408-7915
7	Finance Manager	Finance & Administration Chief	925-783-1534
8	Accountant	Finance & Administration	To be Assigned
9	Office Assistant Cust. Serv. Rep B	Administration	925-978-6732
10	Office Assistant Cust. Serv. Rep B	Administration	To be Assigned
11	Admin Assistant & Board Secretary	Administration	To be Assigned
12	Water/Wastewater Manager	Operations Chief	925-775-5350
13	Water Service Technician II	Operations	925-206-2274
14	Water Service Technician I	Operations	925-204-4283
15	Parks/Landscape Maintenance Tech III	Operations	925-350-1795

16	Parks/Landscape Maintenance Tech II	Operations	925-481-1073
17	PG&E Emergency Liaison		925-459-8067

ii. Veolia North America Discovery Bay Site

	Employee Title	EOC Assignment	Phone Number
1	Project Manager	WUERM	925-634-8818
2	Operations Supervisor	Water System Operator	925-786-9131
3	O&M Tech II	Plant Operations	925-895-5265
4	O&M Tech II	Plant Operations	925-503-3055
5	O&M OIT	Plant Operations	209-401-4298
6	Maintenance Supervisor	Field & Maintenance Operations	209-278-8238
7	Maintenance Tech II	Field Operations	925-481-1373
8	Maintenance Tech II	Field Staff	925-308-3220
9	Maintenance Tech I	Field Staff	925-418-9428
10	Assistant to Project Manager	Administration	510-871-1068

iii. Structure per Water System ERP Guidelines

Name & Title	Responsibilities During an Emergency	Phone Number
Water System Manager WUERM	Overall Management and decision making for the water system. WUERM is lead of managing the emergency and contacting the regulatory agencies. WUERM contacts the public and news media. All communications to external parties are approved by the WUERM.	925-634-1131 Office Primary 925-634-8818 Office Secondary
Water System & WTP Operator	In charge of operating the water system. Performs inspections, maintenance, sampling of the system and relaying critical information to the WUERM. Assess facilities, and provides recommendations to WUERM. In charge of running water treatment plant. Performs inspections, maintenance, sampling of the WTP and relaying critical information to the WUERM. Assess WTP facilities and treatment provided and provides recommendations to the WUERM. In charge of collecting samples, having samples analyzed by certified labs, receiving the results. Determines the quality of water being served meets all drinking water and public health requirements.	925-634-8818 Office 925-786-9131 Cell
Office Administrator	Responsible for administrative functions in the office. Receives customer phone calls and maintains a log of complaint calls. In an emergency, could provide a standard carefully pre-scripted message for customers who call with general questions.	925-634-1131 Office Primary 925-634-8818 Office Secondary
Field Staff	Delivers water quality notices to door hangers. Provides backup to water system operator. Conducts site inspections of all facilities.	925-634-8818 Office 209-401-4298 Cell
Public Information Officer (PIO)	Coordinate with all the other agencies PIOs. Report and work with the joint information center (JIC) if more than one agency is involved.	925-634-1131 Office

9.2B - Additional Contacts

i. Local & Public Response Agencies

Agency	Services	Department Location	Phone Number
CAL OES Costal Region II Mutual Aid	Local Emergency Management		916-206-1470
East Contra Costa County Fire Department Station 59	Local Fire Department	Station 59 Bixler Road	925-757-1303
Brentwood Police Department	Local Law Enforcement	Dispatch	925-778-3911
Contra Costa County Health Department	Local Health & Environment	Contra Costa County	925-692-8510
Contra Costa County Public Works	Local Public Works Department	Contra Costa County	925-313-2000
Contra Costa County HAZMAT	Local HAZMAT Response Team	24 Hour Emergency	925-335-3232
Private & Public Health Labs	FGL Fruit Growers Lab	Stockton, CA	209-942-0181
	Alpha Analytical Lab	Livermore, CA	925-828-6226
	Cal Test Analytical Lab	Napa, CA	707-258-4000
	Babcock Lab	Riverside, CA	951-653-3351
	Region 9 Bay Delta	Richmond, CA	510-412-2331
State Water Resource Control Board Drinking Division Water Primacy Agency	California Water Boards San Francisco Region 2	California State San Francisco, CA	510-622-2300
State Water Resources Control Board Regional Water Quality Control Board	State Water Quality Control	California State Sacramento, CA	916-341-5250

ii. Additional Agencies

Agency	Note:	Phone Number
Contra Costa Office of Emergency Services		925-228-5000
California Governor's Office of Emergency Services (CAL EMA)		916-845-8510
Community Warning System		925-313-9622
FEMA		800-621-3362
AMR Ambulance Services		800-913-9106
Paramedics/EMS		925-933-1313
PG&E Emergency Line		800-743-5000
John Muir Hospital (Emergency Room)	2400 Balfour Road Brentwood, CA (10 miles)	925-308-8111
Kaiser Permanente (Emergency Room)	4501 Sand Creek Road Antioch, CA (15 miles)	925-813-3100
Contra Costa Medical Center	2500 Alhambra Avenue Martinez, CA (38 miles)	925-370-5000
Contra Costa Sheriff's Delta Station	9100 Brentwood Blvd Brentwood, CA (7 miles)	925-646-2441
California Highway Patrol (CHP)	5001 Blum Road Martinez, CA (37 miles)	925-646-4980
Contra Costa Psychiatric Emergency	2400 Alhambra Avenue Martinez, CA (38 miles)	925-646-2800
Sandbag Station	Byron Airport 500 Eagle Court Byron, CA (9 miles)	
Sandbag Station	Knightsen Farm Bureau 3020 Second Street Knightsen, CA (10 miles)	

iii. Critical Local Suppliers

Type of Service/Supply	Company/Vendor	Location Address	Phone Number
Bulk Chlorine	Univar		602-484-4560
Bulk Polymer	Polydyne		912-884-8719
Bulk Alum	Thatcher		801-834-4166
Diesel Fuel Delivery	Ramos Oil Company	3515 Navy Drive #A Stockton, CA	209-465-6255
Electrical & SCADA Services	CALCON Systems Inc.	12919 Alcosta Blvd #9 San Ramon, CA	925-277-0665
	Telstar	1717 Solano Way #34 Concord, CA	925-671-2888
	TESCO Controls Inc.	8440 Florin Road Sacramento, CA	916-395-8800
Electrical Supplies	Wille Electric	432 North Grant Street Stockton, CA	209-943-2441
Pump/Motor Purchases	Ace Electric Motor & Pump	529 North Orange Street Stockton, CA	209-464-6428
Pumping Services	Roto-Rooter Pumping & Water Cleanup	3500 Clayton Road #113 Concord, CA	925-889-4976
Rental Equipment Services	Ahern Rentals	3673 Mallard Drive Benicia, CA	707-748-1900
	All Star Rents	1204 Sunset Drive Antioch, CA	925-755-7368
	United Rentals	2911 East Fremont Street Stockton, CA	209-948-9500
	United Rentals Fluid Solutions	2700 California Avenue Pittsburg, CA	925-252-2400
General Supplies	ACE Hardware	8900 Brentwood Blvd #J Brentwood, CA	925-634-3201
	Home Depot	5631 Lone Tree Way Brentwood, CA	925-513-6060
Bottled Water Delivery	Alhambra/Primo		800-728-5634
Local Food Market & Water	Safeway	14841 Highway 4 Discovery Bay, CA	925-626-6000

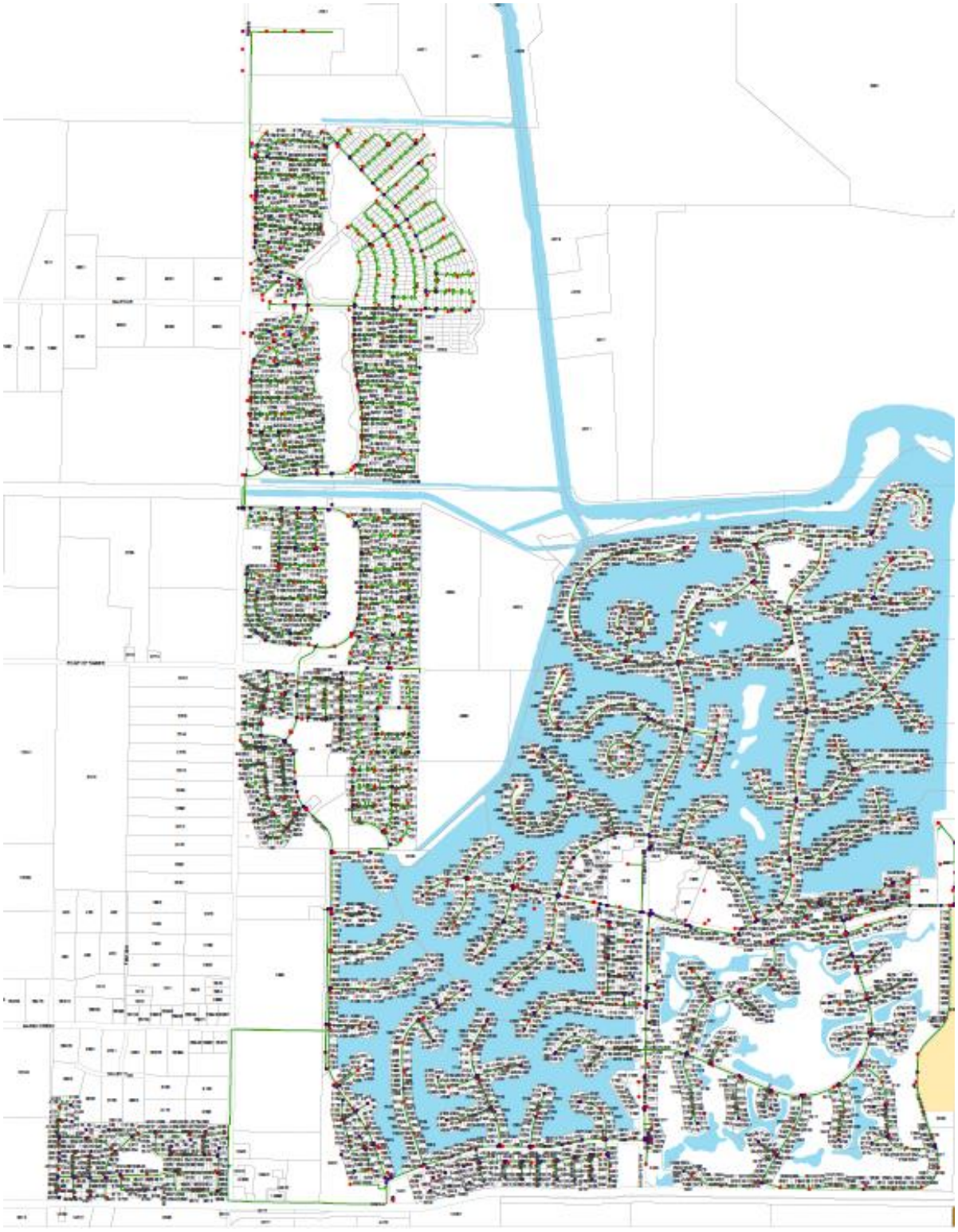
iv. County & State Agencies

Organization	Name	Contact Numbers
Police, Fire, HAZMAT	First Responders	Call 911 925-646-2441 BPD - CCC Sheriff's Delta Station 925-757-1303 ECCFD - Dispatch 925-335-3232 HAZMAT 24hr Emergency
SWRCB District Engineer	If they cannot be reached, call the CA Warning Center's 24/7 number and ask for SWRCB Duty Officer. The manager will be contacted.	510-620-3454 Day 510-421-8382 Evening
FBI Regional Office	Regional FBI Office San Francisco	415-553-7400
County Public Health Officer	Contra Costa County	925-957-5403
County OES	LEPC Region 2 - CAL OES Liaison (Fairfield, CA)	831-444-1351
CA OES (State OES)	Warning Center Ask for SWRCB Duty Officer for Drinking Water Program	800-852-7550 707-862-2358 916-657-9494 Public Safety Communications 916-845-8911 California State Warning Center
Regional Water Quality Control Board	Region 2 - San Francisco Regional Water Quality Control Board	510-622-2300
CA Department of Fish and Wildlife	Region 3 - Bay Delta	707-428-2002
Water Quality Laboratory	US EPA Region 9 - (Richmond, CA)	510-412-2331

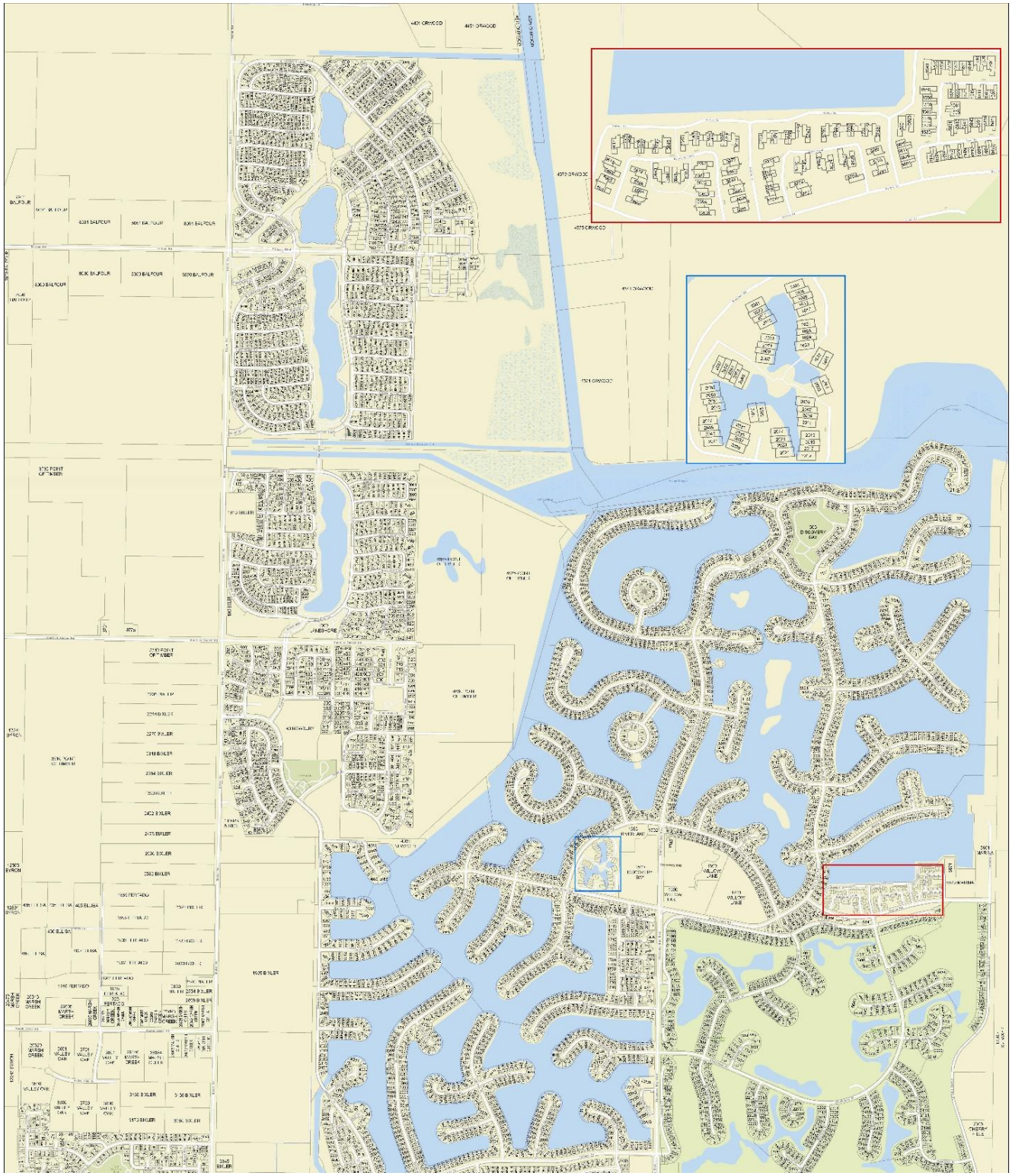
9.2C - Maps (section 3.2)

Map i. - Aerial View of TODB Service Area (provided by Google Maps)

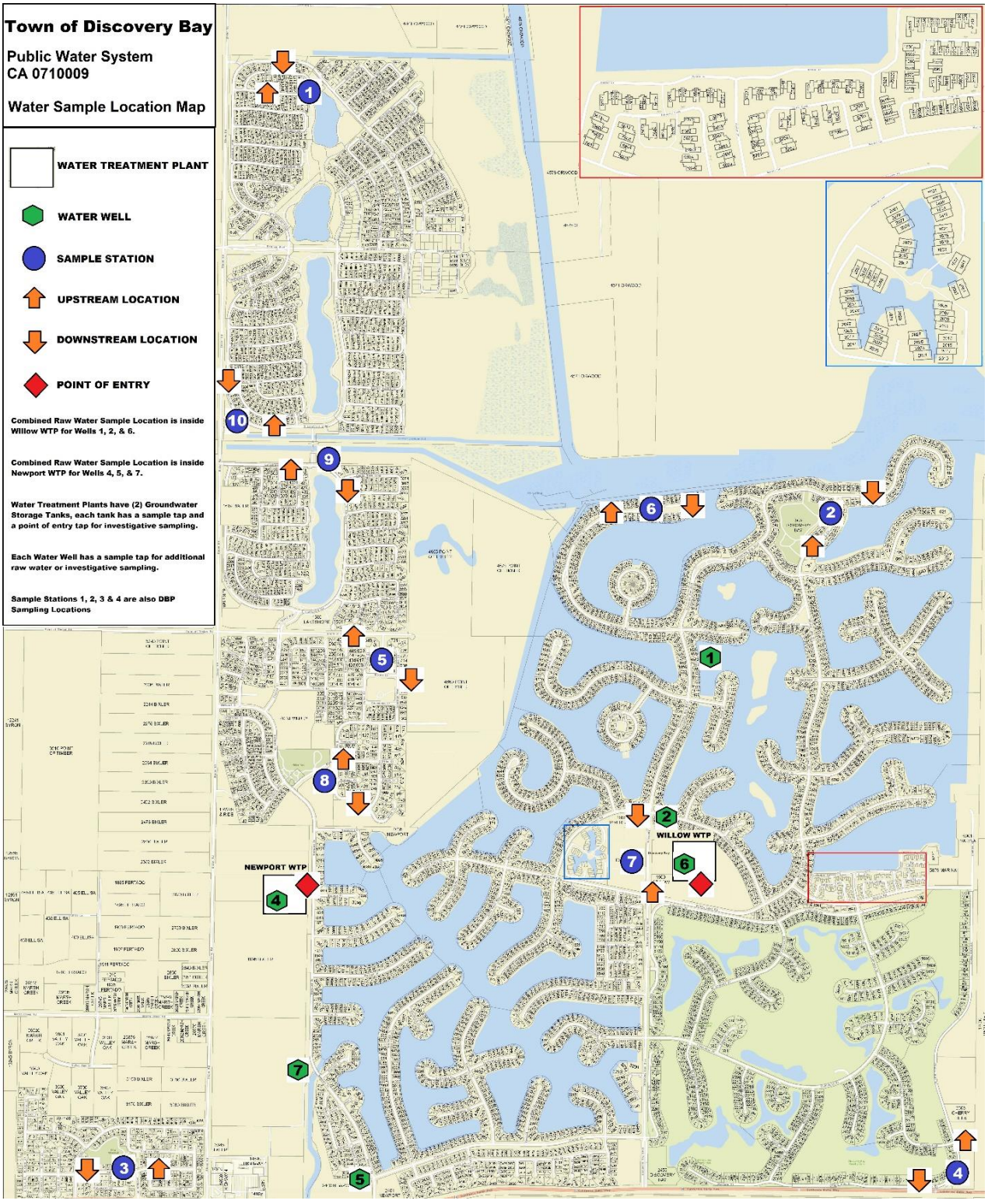
Map ii. - TODB Drinking Water & Sanitary Sewer System



Map iii. - TODB Customer Area Plots & Addresses



Map iv. - TODB Sampling Stations



Map v. - TODB Service Area & Pipelines

9.2D - Emergency Notifications and Cancellation Plans with Forms (section 6.4)

i. Water Quality Emergency Notification Plan

State Water Resources Control Board
Division of Drinking Water

WATER QUALITY EMERGENCY NOTIFICATION PLAN

Name of Utility: **Town of Discovery Bay – Public Water System 0710009**

Physical Location/Address: **1800 Willow Lake Road, Discovery Bay, CA 94505**

The following persons have been designated to implement the plan upon notification by the State Water Resources Control Board Division of Drinking Water that an imminent danger to the health of the water users exists:

	Water Utility: Contact Name & Title	Email Address	Telephone	
			Office	Emergency
1.	Anthony Harper – Veolia Project Manager	Anthony.harper@veolia.com	925-634-8818	812-217-8524
2.	Aaron Goldsworthy – ToDB Manager	agoldsworthy@todb.ca.gov	925-634-1131	925-775-5350
3.	Jeffrey Dobretz – Veolia Field Supervisor	Jeffrey.dobretz@veolia.com	925-634-8818	925-786-9131

The implementation of the plan will be carried out with the following SWRCB DDW and County Health Department personnel:

	SWRCB & County Health Agency: Contact Name & Title	Email Address	Telephone	
			Day	Evening
1	**SF District Office General Contact** SWRCB-DDW	DWPDIST04@waterboards.ca.gov	(510) 620-3474	(510) 620-3475
2	**Marco Pacheco**, District Engineer, SWRCB-DDW	Marco.Pacheco@waterboards.ca.gov	(510) 620-3454	(510) 421-8382
3	**Tim Ellsworth**, Contra Costa Environmental Health	Timothy.Ellsworth@hsd.cccounty.us	(925) 692-2500	(925) 692-2500

4. **If the above personnel cannot be reached, contact:**

Office of Emergency Services Warning Center (24 hrs) (800) 852-7550 or (916) 845-8911
When reporting a water quality emergency to the Warning Center, please ask for the State Water Resources Control Board – Division of Drinking Water Duty Officer.

NOTIFICATION PLAN

Standard Public Notification Method is used at Discovery Bay. Door to Door Hangers will be used. Certified Water Operators are on call within 1 hour response time. Additional personnel will respond as needed and additional notification methods may be used by the Town of Discovery Bay such as town website, bulletin board, and postings in public areas. Procedures are detailed in the Emergency Response Plan.

Report prepared by: Anthony Harper Title: Project Manager (Veolia)

Signature: Date: 10-5-2021

ii. First Responders Phone List - (Town of Discovery Bay)

ANIMAL CONTROL		LAW ENFORCEMENT & POLICE	
Animal Control	925-335-8300 925-779-6989	Sheriff Dispatch Delta Station - 9100 Brentwood Blvd	925-646-2441
		Brentwood Police Dispatch	925-778-3911
Vector Control	925-771-6696	Brentwood Non-Emergency	925-778-2441
		CHP - California Highway Patrol	925-646-4980
EMERGENCY SERVICES (911)			
CCC OES	925-228-5000	**PSYCHIATRIC EMERGENCY SERVICES**	
CAL OES Costal Region II	916-206-1470	Contra Costa Regional Health (38 miles) 2500 Alhambra Avenue, Martinez CA	925-646-2800
CAL EMA	916-845-8510	Contra Costa Crisis Center On Site Mobile Grief Response Team	800-837-1818
CCC Health Department	925-692-8510		
Community Warning System	925-313-9622	**SANDBAG STATIONS**	
American Red Cross	866-272-2237	Byron Airport (9 miles) 500 Eagle Court, Byron CA	
FEMA	800-621-3362	Knightsen Farm Bureau (10 miles) 3020 Second Street, Knightsen CA	
EMERGENCY MEDICAL SERVICES (911)		**TRANSPORTATION (511)**	
AMR Ambulance Services	800-913-9106	ARI Roadside Assistance	800-227-2273
Paramedics & Emergency Medical	925-933-1313	BART Information	510-464-6000
		Tri Delta Transit	925-754-4040
FIRE DEPARTMENT		Dial A Ride	925-754-3060
Fire and EMS Services	911 landline		
ECCFPD Bixler Station 59	925-933-1313	**WATER RELATED CONTACTS**	
Fire Department Dispatch	925-757-1303	Reclamation District 800	925-634-2351
		Discovery Bay Harbor Master	925-634-5928
GAS & ELECTRICAL EMERGENCY		US Coast Guard	707-643-2975
PG&E Emergency Line	800-743-5000	CCC Public Works Flood Zones	925-313-2351
PG&E 24 hour Liaison	925-768-2951	Flood Maintenance Division	925-313-7000
		Department of Boating & Waterways SAC	888-326-2822
HAZARDOUS MATERIALS		Raw Sewage Entering Body of Water	800-852-7550
HAZMAT Emergency Line	925-665-3232	SWQCB Raw Sewage Spills	707-576-2220
CCC HAZMAT Program	925-335-3200		
Delta Household HAZWASTE Facility	925-756-1990	**VEOLIA STAFF**	
Poison Control	800-222-1222	24 hour Emergency Line	925-634-8818
		Project Manager	925-634-8818
HOSPITALS WITH EMERGENCY ROOMS		Operations Supervisor	925-786-9131
John Muir Urgent Care (10 miles) 2400 Balfour Road, Brentwood CA	925-308-8111	Maintenance Supervisor	209-278-8238
		Administrative Assistant	510-871-1068
John Muir Medical Center (40 miles) 1601 Ygnacio Valley Road, Walnut Creek CA	925-939-3000		
Kaiser Antioch Medical Center (15 miles) 4501 Sand Creek Road, Antioch CA	925-813-3100		
CCC Medical Center (38 miles) 2500 Alhambra Avenue, Martinez CA	925-307-5000		

iii. Contra Costa Disaster Preparedness Services

June 2019
www.211cc.org

Contra Costa County Disaster Preparedness Services

CONTRA COSTA CRISIS CENTER
Crisis/Suicide Intervention: 2-1-1
Life Threatening Emergencies: 9-1-1

Crisis and Suicide Intervention

Contra Costa Crisis Center 2-1-1
Provides 24-hour crisis/warm line support, and information and referral for community services. **www.211cc.org**

National Suicide Hotlines 1-800-273-8255
ww.suicidepreventionlifeline.org

Disaster Preparedness/Response

American Red Cross.... 1-866-272-2237
Provides assistance to disaster victims of fires and natural disasters and to military personnel and their families. Services include food, clothing, shelter, and medical supplies based on verified need.
www.redcross.org/local/california/northern-california-coastal

Contra Costa County CAER (Community Awareness & Emergency Response ... 925-313-9296
Provides emergency preparedness and response training to the public.
www.cococaer.org

Contra Costa County Sheriff's Office of Disaster Management..... 925-646-4461
Provides coordination, planning and support related to emergency preparedness and disaster management.
www.cocosheriff.org/bureaus/support_services/emergency.htm

Community Emergency Response Team (CERT)
Trains members of neighborhoods, community organizations, or workplaces in basic response skills. Visit website to find the CERT point of contact nearest to you.
www.contracostacert.org

Federal Emergency Management Agency (FEMA)..... 1-800-621-3362
Works in partnership with the Cal OES to prepare for, respond to and recover from disasters. **www.fema.gov**

CA Office of Emergency Services (Cal OES)..... 707-862-2358
Helps the counties of the coast from Del Norte to Monterey and the counties surrounding San Francisco Bay to prepare for, respond to and recover from disasters.
www.caloes.ca.gov

Disaster Survivor Inquiries

Safe and Well – American Red Cross
Provides a database that allows disaster survivors who are alive following a disaster to post their name and medical condition for access by family members and friends, their current location and how to reach them. **www.safeandwell.org**

Emergency Notification Systems

National Weather Service
..... 831-656-1724
San Francisco Bay Area – Monterey, CA
www.weather.gov/sanfrancisco
NOAA NWS CCC Frequency
..... 162.425VHF

Bay Area Air Quality Management District 800-435-7247
Regulates sources of air pollution in the nine counties that surround San Francisco Bay **www.baaqmd.gov**

CA Office of Emergency Services Warning Center..... 916-845-8911
caloes.ca.gov/cal-oes-divisions/warning-center

Community Warning System (CWS).....925-313-9622
Issues alerts in Contra Costa County that pose an imminent threat to life or health.
www.cococws.us
www.twitter.com/CoCoCWS

Contra Costa County Website
Provides emergency information.
www.contracosta.ca.gov

Emergency Alert System (EAS)
CCTV Channels 24, 26, 27, 32 or 99
KTVU Channel 2, KQED 88.5 FM
KCBS 740AM, 106.9 FM

Hazardous Materials Emergency

Hazardous Materials Incident Response Team
Business hours 925-335-3200
24 hour hotline..... 925-335-3232
Responds to and monitors chemical spills and releases of hazardous materials into the air.

Health Emergencies

Contra Costa Health Services (CCHS)
Health Emergency Information Line
.....1-888-959-9911
Provides recorded information in both English and Spanish on health emergencies and issues.
www.cchealth.org
www.facebook.com/ContraCostaHealthServices
www.twitter.com/CoCoHealth

Centers for Disease Control and Prevention 1-800-232-4636
Provides information and resources to protect public health and safety. **www.cdc.gov**

Sandbag Locations

County Areas:

Central Contra Costa
2475 Waterbird Way, Martinez
2950 Walnut Boulevard, Walnut Creek

East Contra Costa
500 Eagle Court, Byron
3020 2nd Street, Knightsen
3105 Willow Pass Road, Bay Point

West Contra Costa
5555 Giant Highway, Richmond

City Areas:
All cities within Contra Costa County provide sandbags and sand. Clients should contact local cities for their sandbag program information or dial 211.

Terrorism Warnings

National Response Center Maritime Security 1-800-424-8802

Northern CA Regional Intelligence Center 1-866-367-8847
www.ncric.org

Sheriff's Office Homeland Security Unit.....925-313-9612
Develops and maintains partnerships with the community to help identify and prevent unnecessary risks for accidental as well as intentional acts, email: **hsu@so.cccounty.us**

The Contra Costa Crisis Center, provider of 211, partners with OES and CWS in case of a disaster to deliver official information to the public.

June 2019
www.211cc.org

Contra Costa County
Disaster Preparedness Services

CONTRA COSTA CRISIS CENTER
Crisis/Suicide Intervention: 2-1-1
Life Threatening Emergencies: 9-1-1

Utility Assistance

811 Know what's Below – Call before you dig 8-1-1
www.call811.com
Provides information about the location of gas and electric lines, water mains, telephone lines or other utility piping or cabling.

Pacific Gas and Electric (PG&E) 1-800-743-5000
www.pge.com
Provides information on power outages and possible compensation for extended outages for residential customers including equipment assistance for vulnerable populations.

Local Water Utilities

Central Contra Costa Sanitary District
.....925-228-9500

Contra Costa Water District
.....925-688-8044

Diablo Water District
.....925-625-3798

East Bay Municipal Utility District
.....866-403-2683

Golden State Water Company
.....800-999-4033

Some cities within Contra Costa County provide water service to residents. Clients should contact their local cities for their water department.

iv. Boil Water Notice, Cancellation, and Boil Advisory Guide (English)

SEE NEXT PAGES FOR COPIES

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este aviso contiene información muy importante sobre su agua potable. Para una copia en español, favor de llamar al sistema de agua (925) 634-8818

Town of Discovery Bay Public Water System **Date:** _____

BOIL WATER NOTICE

Boil Your Water Before Drinking or Food Preparation to Avoid Illness

Due to the recent event or emergency:

_____

which occurred on _____ the State Water Resources Control Board, Division of Drinking Water, the Contra Costa County Health Department, and the Town of Discovery Bay Water System are advising residents of Town of Discovery Bay to only use boiled tap water or bottled water for drinking and cooking purposes as a safety precaution to avoid stomach or intestinal illness. The affected area includes:

_____

We will inform you when tests show that water is safe to drink, and you no longer need to boil your water. We anticipate resolving the problem within

_____

If you have questions about other uses of tap water, such as bathing and dish washing, please call your water system or read this guidance: https://www.cdc.gov/healthywater/emergency/dwa-comm-toolbox/before/tools/What-to-Do-During-a-Boil-Water-Advisory.docx

Optional: Potable water is available at the following locations: _____

Please bring a clean water container (5 gallons maximum capacity).

Do not drink the water without boiling it first

- Boil all water for one (1) minute (rolling boil).
- Let water cool before drinking.
- Use boiled or bottled water for drinking, brushing teeth, and food preparation until further notice.
- Boiling water kills bacteria and other organisms in the water.

If you are unable to boil your water:

Household unscented liquid bleach

- For clear water, use 8 drops (1/8 tsp.) of bleach for 1 gallon of water. For cloudy water, filter through a clean cloth and use 16 drops (1/4 tsp.) of bleach for 1 gallon of water.
- Mix well. Allow to stand for 30 minutes before using.
- Water may taste or smell like chlorine. This means disinfection has occurred.

Water disinfection tablets

- Please follow the manufacturer's instructions.

For More Information

If you are concerned about your health or the health of a family member, contact your health care provider or Local Health Department at (925) 692-8510 or (925) 228-5000

Water Utility contact: Veolia (925) 634-8188 or TODB (925) 634-1131
State Water Resources Control Board: District 4 - (510) 620-3474 or (510) 620-3475
Local Environmental Health Jurisdiction: Contra Costa (925) 692-2500

Please share or post this information with others who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

CANCELLATION OF BOIL WATER NOTICE

Town of Discovery Bay Public Water System

Date: _____

On _____ you were notified of the need to boil/disinfect all tap water used for drinking and cooking purposes.

The Town of Discovery Bay Water System in conjunction with the State Water Resources Control Board and Contra Costa County has determined that, through abatement of the health hazard and comprehensive testing of the water, your water is safe to drink.

It is no longer necessary to boil your tap water or for you to consume bottled water.

For more information call:

Water Utility contact: Veolia (925) 634-8188 or TODB (925) 634-1131

State Water Resources Control Board: District 4 - (510) 620-3474 or (510) 620-3475

Local Environmental Health Jurisdiction: Contra Costa (925) 692-2500

Fact Sheet About What to Do During a Boil Water Advisory

Boiling water

To boil water

- Fill a pot with water.
- Heat the water until bubbles come from the bottom of the pot to the top.
- Once the water reaches a rolling boil, let it boil for 1 minute.
- Turn off the heat source and let the water cool.
- Pour the water into a clean container with a cover for storage.

Disinfecting water

If you are unable to boil your water, disinfect it instead.

If tap water is clear:

- Use unscented bleach (bleach that does not have an added scent).
- Add 1/8 teaspoon (8 drops or about 0.75 milliliters) of unscented household liquid bleach to 1 gallon (16 cups) of water.
- Mix well and wait 30 minutes or more before drinking.
- Store disinfected water in clean container with a cover.

If tap water is cloudy:

- Filter water using clean cloth.
- Use unscented bleach (bleach that does not have an added scent).
- Add 1/4 teaspoon (16 drops or 1.5 milliliters) of unscented household liquid bleach to 1 gallon (16 cups) of water.
- Mix well and wait 30 minutes or more before drinking.
- Store disinfected water in clean container with a cover.

Remember that containers may need to be sanitized before using them to store safe water.

To sanitize containers:

- Use unscented bleach (bleach that does not have an added scent).
- Make a sanitizing solution by mixing 1 teaspoon (5 milliliters) of unscented household liquid bleach in 1 quart (32 ounces, 4 cups, or about 1 liter) of water.
- Pour this sanitizing solution into a clean storage container and shake well, making sure that the solution coats the entire inside of the container.

- Let the clean storage container sit at least 30 seconds, and then pour the solution out of the container.
- Let empty container air dry OR rinse it with clean water that has already been made safe, if available. Never mix bleach with ammonia or other cleaners. Open windows and doors to get fresh air when you use bleach.

Water filters

Boil tap water even if it is filtered. Most kitchen and other household water filters typically ***do not*** remove bacteria or viruses.

Preparing and cooking food

- Wash all fruits and vegetables with boiled water that has cooled or bottled water.
- Bring water to a rolling boil for 1 minute before adding food to cook.
- Use boiled water when preparing drinks, such as coffee, tea, and lemonade
- Wash food preparation surfaces with boiled water.

Feeding babies and using formula

- Breastfeeding is best. Continue to breastfeed. If breastfeeding is not an option:
- Use ready-to-use baby formula, if possible.
- Prepare powdered or concentrated baby formula with bottled water. Use boiled water if you do not have bottled water. Disinfect water for baby formula if you cannot boil your water (see above for directions on how to use bleach to disinfect water).
- Wash and sterilize bottles and nipples before use.
- If you cannot sterilize bottles, try to use single-serve, ready-to-feed bottles.

Ice

- Do not use ice from ice trays, ice dispensers, or ice makers.
- Throw out all ice made with tap water.
- Make new ice with boiled or bottled water.

Bathing and showering

Be careful not to swallow any water when bathing or showering.
Use caution when bathing babies and young children. Consider giving them a sponge bath to reduce the chance of them swallowing water.

Brushing teeth

Brush teeth with boiled or bottled water. Do not use untreated tap water.

Washing dishes

Household dishwashers generally are safe to use if the water reaches a final rinse temperature of at least 150 degrees or if the dishwasher has a sanitizing cycle.

To wash dishes by hand:

- Wash and rinse the dishes as you normally would using hot water.
- In a separate basin, add 1 teaspoon of unscented household liquid bleach for each gallon of warm water.
- Soak the rinsed dishes in the water for at least one minute.
- Let the dishes air dry completely.

Laundry

It is safe to do laundry as usual.

Pets

Pets can get some of the same diseases as people. It is a good idea to give them boiled water that has been cooled.

For more information, see or contact:

- **Personal Preparation and Storage of Safe Water** (http://www.cdc.gov/healthywater/emergency/safe_water/personal.html) CDC provides guidance on the amount of water needed for good health, as well how to prepare and store safe water before and during an emergency.
- **Hygiene and Handwashing** (http://www.cdc.gov/healthywater/emergency/hygiene/index.html): CDC provides guidance on alternative hygienic practices when water is not available or is contaminated.
- **A Guide to Water Filters** (http://www.cdc.gov/parasites/crypto/gen_info/filters.html): CDC maintains a guide for filters that remove *Cryptosporidium* or *Giardia*.
- **EPA Safe Drinking Water Hotline**: 1-800-426-4791
- **Consumer Information** (http://water.epa.gov/drink/info/index.cfm): EPA provides information and guidance about drinking water quality, emergencies, contaminants, public health issues, and treatment and storage.

- **Water system**: Town of Discovery Bay (925) 634-1131 or Veolia (925) 634-8188
- **State public health department**: District 4 - (510) 620-3474 or (510) 620-3475
- **Local Environmental Health Jurisdiction:** Contra Costa (925) 692-2500

v. Boil Water Notice, Cancellation, and Boil Advisory Guide (Spanish)

SEE NEXT PAGES FOR COPIES

INFORMACION IMPORTANTE SOBRE SU AGUA POTABLE

Este aviso contiene información muy importante sobre su agua potable. Para una copia en español, favor de llamar al sistema de agua (925) 634-8818

Town of Discovery Bay Public Water System Date: _____

AVISO DE HERVIR EL AGUA

Para Evitar Enfermarse, Hierva Su Agua Antes de Beberla o Preparar Comida

Debido al reciente (Event)

_____

el cual ocurrió en (Date) _____
la Junta Estatal de Control de Recursos de Agua (División de Agua Potable), el Contra Costa County Health Department, y el Sistema de Agua Town of Discovery Bay, están advirtiéndoles a los residentes de Town of Discovery Bay que como precaución de seguridad, solo usen agua de la llave hervida o agua embotellada para beber y para cocinar. Esto es para evitar enfermedad intestinal o del estómago. El área afecta- da incluye: (Area)

_____

Le informaremos cuando las pruebas muestren que el agua es segura para beber y usted ya no tenga que hervir su agua. Esperamos resolver el problema dentro de (Time):

_____

Si tiene preguntas sobre el agua de la llave para otros usos, como para bañarse, y lavar los trastes, favor de llamar a su sistema de agua o lea esta guía:
https://www.cdc.gov/healthywater/emergency/dwa-comm-toolbox/before/tools/What-to-Do-During-a-Boil-Water-Advisory.docx

Opcional: En los siguientes lugares hay Agua Potable disponible: _____

Favor de llevar un contenedor limpio para el agua (de 5 galones máximos de capacidad).

No beba el agua sin antes hervirla

- Hierva toda el agua por un (1) minuto (a punto de ebullición).
- Deje enfriar el agua antes de beberla.
- Hasta nuevo aviso, use agua hervida o embotellada para beber, lavarse los dientes, y para preparar comida.
- Hervir el agua mata las bacterias y otros organismos en el agua.

Si no puede hervir su agua

Puede usar blanqueador sin olor de uso doméstico (household bleach)

- Para agua clara, agregue 8 gotas (1/8 de cucharadita) de blanqueador para 1 galón de agua. Para agua turbia, use una prenda de ropa limpia para filtrarla, y agregue 16 gotas (1/4 de cucharadita) de blanqueador para 1 galón de agua turbia.
- Mezcle bien. Deje reposar el agua por 30 minutos antes de usarla.
- Puede ser que el agua sepa o huela a blanqueador. Esto significa que el agua ha sido desinfectada.

Tabletas desinfectantes de agua

- Siga las instrucciones del fabricante.

Para más información

Si está preocupado por su salud o la salud de un miembro de la familia, contacte a su proveedor de salud o a Local Health Department at (925) 692-8510 or (925) 228-5000

Representante del Proveedor de Servicio de Agua: Veolia (925) 634-8188 or TODB (925) 634-1131
Oficina de Distrito de la Junta Estatal de Agua: (510) 620-3474 or (510) 620-3475
Jurisdicción de Salud Ambiental Local: (925) 692-2500

Por favor publique o comparta esta información con otras personas que beben esta agua, especialmente aquellos que no hayan recibido este aviso directamente (por ejemplo, las personas en apartamentos, asilos, escuelas, y negocios). Puede hacerlo poniendo este aviso en un lugar público o distribuyendo copias en persona o por correo.

CANCELACIÓN DEL AVISO DE HERVIR EL AGUA

Town of Discovery Bay Public Water System

Fecha: _____

El _____ le notificaron que tenía que hervir o desinfectar toda el agua de la llave que utilizara para beber y cocinar.

El Sistema de Agua de Town of Discovery Bay junto con la Junta Estatal de Control de Recursos de Agua, o la Jurisdicción Local de Salud Ambiental han determinado tras la supresión del riesgo de salud, seguido por un análisis completo del agua, que puede beber el agua de su llave sin peligro.

Ya no es necesario que hierva el agua de su llave ni que consuma agua de botella.

Para más información llame a:

Contacto en el Servicio de Agua: Veolia (925) 634-8188 or TODB (925) 634-1131

Junta Estatal de Control de Recursos de Agua: (510) 620-3474 or (510) 620-3475

Jurisdicción Local de Salud Ambiental: Contra Costa (925) 692-2500

Hoja informativa acerca de lo que hacerse durante una advertencia de uso de agua hervida

Durante una advertencia de uso de agua hervida, la mejor opción es usar agua embotellada hasta que las autoridades indiquen otra cosa. Si no tiene agua embotellada disponible, la segunda mejor opción es hervir el agua del grifo para que sea segura para beber. Si no es posible hervir el agua del grifo, puede desinfectarla para que sea segura para beber.

Cómo hervir el agua

Para hervir el agua

- Llene una olla con agua.
- Caliente el agua hasta que haya burbujas que suban rápidamente desde el fondo de la olla hasta la superficie.
- Continúe calentando el agua por un minuto más.
- Apague la fuente de calor y deje que se enfríe el agua.
- Vierta el agua en un envase limpio y tápelo para su almacenamiento.

Cómo desinfectar el agua

Si no puede hervir el agua, puede desinfectarla para que sea segura para beber.

Necesitará tener un recipiente limpio y desinfectado donde guardar el agua que desinfecte. Recomendamos lave y desinfecte su recipiente antes de desinfectar el agua, mediante los siguientes pasos:

1. Lave el recipiente con agua y jabón de lavar platos y enjuáguelo por completo.
2. Desinfecte el recipiente con una solución que se obtiene al disolver 1 cucharadita de cloro de uso doméstico no perfumado (cloro sin perfume agregado) en un cuarto de galón de agua (32 onzas, 4 tazas o aproximadamente 1 litro).
3. Cubra el recipiente y agítelo bien para que la solución desinfectante con cloro toque todas las superficies de dentro.
4. Espere al menos 30 segundos y vierta la solución desinfectante fuera del recipiente.
5. Deje que el recipiente vacío y desinfectado se seque al aire antes de usarlo O enjuáguelo con agua limpia y segura que tenga disponible de antemano.

Nota: Cuando prepare el agua segura, es mejor usar recipientes de agua de uso alimentario, como los que pueden encontrarse en las tiendas de artículos para camping o de excedentes militares. Si no puede usar un recipiente de

agua de uso alimentario, asegúrese de que el recipiente que elija:

- Tenga una tapa que pueda cerrarse completamente.
- Esté hecho de materiales durables que no se puedan romper (es decir, no de vidrio).

NO USE recipientes que se hayan usado previamente para almacenar sustancias químicas tóxicas líquidas o sólidas (cloro, pesticidas, etc.).

Cómo desinfectar el agua del grifo
Si el agua del grifo es clara:

- Use cloro no perfumado (cloro sin perfume agregado). La etiqueta debe decir que contiene 8.25% de hipoclorito de sodio.
- Agregue 6 gotas (medidas con un gotero de medicamentos) o 0.5 mililitros de cloro en 1 galón (16 tazas) de agua.
- Mezcle bien y espere 30 minutos o más antes de beber.
- Guarde el agua desinfectada en un recipiente limpio, desinfectado y con tapa.

Si el agua del grifo está turbia:

- Filtre el agua con un paño limpio.
- Use cloro no perfumado (cloro sin perfume agregado). La etiqueta debe decir que contiene 8.25% de hipoclorito de sodio.
- Agregue 12 gotas, 1 mililitro o 1/8 de cucharadita de cloro en 1 galón (16 tazas) de agua.
- Mezcle bien y espere 30 minutos o más antes de beber.
- Guarde el agua desinfectada en un recipiente limpio, desinfectado y con tapa.

Filtros de agua

Debe hervir el agua del grifo aunque esté filtrada. La mayoría de los filtros de agua de cocina o de los otros filtros de uso doméstico **no eliminan** las bacterias ni los virus.

Los filtros recolectan los microbios del agua, por lo tanto, todos los filtros de agua deben ser reemplazados después de que la advertencia haya terminado. Las personas que cambien los cartuchos deben usar guantes y lavarse las manos después. Deje correr agua por el filtro durante [X] minutos y luego reemplace la parte removible del filtro según corresponda.

Cómo preparar y cocinar alimentos

Use agua embotellada o agua hervida (que se haya enfriado) para lo siguiente:

- Lavar todas las frutas y verduras.
- Cocinar los alimentos.

- Preparar bebidas, como café, té y limonada.
- Lavar las superficies donde se preparan los alimentos.

Alimentación de bebés y uso de fórmula

La alimentación con leche materna es lo mejor. Continúe amamantando. Si amamantar no es una opción:

- Use fórmula para bebés lista para usar, si es posible.
- Use agua embotellada para preparar la fórmula para bebés en polvo o concentrada. Use agua hervida si no tiene agua embotellada disponible.
- Antes de usar los biberones y las tetinas lávelos y esterilícelos con agua embotellada o hervida (que se haya enfriado).
- Si no puede esterilizar los biberones, trate de usar biberones de un solo uso o listos para usar.

Hielo

- No use el hielo de las hieleras, los dispensadores de hielo ni las máquinas de hielo.
- Bote todo el hielo hecho con agua del grifo.
- Haga hielo nuevo con agua embotellada o hervida.

Lavado de manos

En muchas situaciones, puede usar el agua del grifo con jabón para lavarse las manos. Siga las pautas de las autoridades de salud pública locales o del personal de manejo de emergencias. Asegúrese de restregarse las manos con agua y jabón (fría o tibia) durante 20 segundos y de enjuagárselas bien bajo agua corriente. Es importante secarse las manos por completo con una toalla o al aire.

Baños y duchas

Tenga cuidado de no tragar agua cuando se bañe o se duche.
Sea precavido cuando bañe a bebés y niños pequeños. Considere darles baños de esponja para reducir la probabilidad de que traen agua.

Cepillarse los dientes

Cepíllese los dientes con agua embotellada o agua hervida (que se haya enfriado).

Lavado de platos

Use platos, tazas, vasos y utensilios desechables, si es posible. Si no tiene platos

desechables, siga las instrucciones a continuación. En general es seguro usar los lavaplatos de uso doméstico si el agua alcanza una temperatura final de enjuague de al menos 150 grados o si el lavaplatos tiene un ciclo de desinfección.

Para lavar los platos a mano:

- Lave y enjuague los platos como lo haría normalmente usando agua caliente.
- En un recipiente por separado, disuelva una cucharadita de cloro líquido de uso doméstico no perfumado por cada galón de agua tibia.
- Deje remojaren el agua los platos ya enjuagados por al menos un minuto.
- Deje que los platos se sequen por completo al aire antes de volverlos a usar.

Lavado de ropa

Es seguro lavar la ropa normalmente.

Mascotas

Las mascotas pueden enfermarse por los mismos microbios que las personas. Es una buena idea darles para beber agua embotellada o agua hervida (que se haya enfriado).

Para obtener más información

- **Cómo crear y almacenar una reserva de agua de emergencia** (http://www.cdc.gov/healthywater/emergency/drinking/creating-storing-emergency-water-supply.html): Los CDC proveen pautas sobre la cantidad de agua necesaria para la buena salud, así como también sobre la manera de preparar y almacenar agua que sea segura, antes y durante una emergencia.
- **Higiene, lavado de manos y cambio de pañales** (http://www.cdc.gov/healthywater/emergency/hygiene/index.html): Los CDC proveen pautas sobre las prácticas de higiene recomendadas cuando no haya agua disponible o cuando el agua esté contaminada.
- **Guía sobre los filtros de agua** (http://www.cdc.gov/parasites/crypto/gen_info/filters.html): Los CDC mantienen una guía para elegir filtros que eliminan agentes patógenos, sustancias químicas o toxinas.
- **Línea directa de la EPA de información sobre agua potable segura**: 1-800-426-4791.
- **Información para el consumidor** (http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/index.cfm): La Agencia de Protección Ambiental (EPA) proporciona información y pautas sobre la calidad del agua potable, emergencias, agentes contaminantes, problemas de salud

pública, y tratamiento y almacenamiento.

Contacto en el Servicio de Agua: Veolia (925) 634-8188 or TODB (925) 634-1131

Junta Estatal de Control de Recursos de Agua: (510) 620-3474 or (510) 620-3475

Jurisdicción Local de Salud Ambiental: Contra Costa (925) 692-2500

vi. Unsafe Water Alert (English)

SEE NEXT PAGES FOR COPIES

UNSAFE WATER ALERT

Town of Discovery Bay water is possibly contaminated with an unknown substance

DO NOT DRINK YOUR WATER

Failure to follow this advisory could result in illness.

An unknown substance has been added to the drinking water supplied by the Town of Discovery Bay due to a recent _____ at _____. The State Water Resources Control Board, Contra Costa County Health Department, and Town of Discovery Bay Water System are advising residents of Town of Discovery Bay to NOT USE THE TAP WATER FOR DRINKING AND COOKING UNTIL FURTHER NOTICE.

What should I do?

- **DO NOT DRINK YOUR TAP WATER---USE ONLY BOTTLED WATER.** Bottled water should be used for all drinking (including baby formula and juice), brushing teeth, washing dishes, making ice and food preparation **until further notice**.

- **DO NOT TRY AND TREAT THE WATER YOURSELF.** Boiling, freezing, filtering, adding chlorine or other disinfectants, or letting water stand will not make the water safe.

- Optional: Potable water is available at _____
  Please bring a clean water container (5 gallons maximum capacity).

We will inform you when tests show that the water is safe again. We expect to resolve the problem within _____

For more information call:

Water Utility contact: Veolia (925) 634-8188 or TODB (925) 634-1131
State Water Resources Control Board at: District 4 - (510) 620-3474 or (510) 620-3475
Local County Health Department: Contra Costa (925) 692-2500

This notice is being sent to you by Town of Discovery Bay.
California Public Water System ID # 0710009
Date Distributed: _____

Please share this information with all other people who receive this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand.

vii. Unsafe Water Alert (Spanish)

SEE NEXT PAGES FOR COPIES

ALERTA DE AGUA NO SEGURA

El agua de Town of Discovery Bay posiblemente está contaminada con an unknown substance

NO BEBA SU AGUA

Si descarta ésta advertencia puede enfermarse

Una sustancia desconocida fue agregada al agua potable suministrada por Town of Discovery Bay esto fue debido a una reciente _____ at _____. La Junta Estatal de Control de Recursos de Agua, el Contra Costa County Health Department, y el Sistema de Agua Town of Discovery Bay están advirtiéndoles a los residentes de Town of Discovery Bay que NO USEN EL AGUA DE LA LLAVE PARA BEBER Y COCINAR HASTA NUEVO AVISO.

¿Qué debo hacer?

- **NO BEBA AGUA DE LA LLAVE---SOLO USE AGUA EMBOTELLADA.** Se debería usar agua embotellada para todas las bebidas (incluyendo formula de bebés y jugo), para lavarse los dientes, lavar trastes, hacer hielo y preparar comida **hasta nuevo aviso**.

- **NO INTENTE TRATAR EL AGUA USTED MISMO.** Hervir, congelar, filtrar, agregar cloro (chlorine) u otros desinfectantes, o dejar que el agua repose, no hará que el agua sea segura.

- Optional: Hay agua potable disponible en los siguientes lugares: _____
  Por favor traiga un contenedor limpio para el agua (de 5 galones máximos de capacidad).

Le informaremos cuando las pruebas muestren que el agua es segura otra vez. Esperamos resolver el problema dentro de _____

Para más información llame a:

Contacto del Servicio de Agua: Veolia (925) 634-8188 or TODB (925) 634-1131
Junta Estatal de Control de Recursos de Agua: District 4 - (510) 620-3474 or (510) 620-3475
Departmento Local de Salud del Condado: Contra Costa (925) 692-2500

Este aviso es enviado a usted por Town of Discovery Bay.
Núm. de Identificación de California del Sistema de Agua Público 0710009
Fecha de distribución: _____

Por favor comparta esta información con todas las demás personas que reciben esta agua, especialmente aquellos que no hayan recibido éste aviso directamente (por ejemplo, las personas en apartamentos, asilos, escuelas, y negocios). Puede hacerlo poniendo este aviso en un lugar público o distribuyendo copias en persona.

9.2E - Critical Facilities & Asset Information

i. Wells

The Town of Discovery Bay has the following Wells:

Well No.	Address	Groundwater Basin	Aquifer Name	Perforation (ft)	Depth (ft)	Flowrate (GPM)
01B	1037 Discovery Bay Blvd Discovery Bay, CA 94505	East Contra Costa Sub Basin	Deep	271-289 308-340	350	1,600
02	1535 Discovery Bay Blvd Discovery Bay, CA 94505	East Contra Costa Sub Basin	Deep	245-335	348	850
04A	1800 Newport Drive Discovery Bay, CA 94505	East Contra Costa Sub Basin	Deep	307-347	357	1,800
05A	2400 Newport Drive Discovery Bay, CA 94505	East Contra Costa Sub Basin	Deep	251-281 307-347	357	1,500
06	1800 Willow Lakes Road Discovery Bay, CA 94505	East Contra Costa Sub Basin	Deep	270-295 305-350	360	2,200
07	2199 Newport Drive Discovery Bay, CA 94505	East Contra Costa Sub Basin	Deep	282-292	346	1,800

01 (INACTIVE)

03 (INACTIVE)

04 (INACTIVE)

05 (DESTROYED)

ii. Water Treatment Plants

Willow Water Treatment Plant: 1800 Willow Lakes Road Discovery Bay, CA 94505	
Well 06	On-site 1800 Willow Lakes Road uses on-site generator
Well 01B	Off-site 1037 Discovery Bay Blvd requires portable generator
Well 02	Off-site 1535 Discovery Bay Blvd requires portable generator
Maximum Production Rate	4,100 GPM
Maximum Filter Rate	2,400 GPM from 3 filters at 800 GPM each
Maximum Distribution Rate	6,200 GPM
Disinfection Method	Sodium Hypochlorite with 1,000 gallon capacity
Ground Storage Tank (North)	750,000 Gallons
Ground Storage Tank (South)	750,000 Gallons
Maximum Storage Capacity	1,500,000 Gallons
Backwash Tank Capacity	84,000 Gallons
Chlorine Residual Range	0.2 - 2.0 PPM
Distribution and Jockey Pumps	4 Distribution Pumps & 2 Jockey Pumps
Maximum Distribution Flow	Distribution Pumps: 5,200 GPM and Jockey Pumps 1,000 GPM
Special Instructions & Notes:	
Elementary school directly in front of facility, District Office inside of WTP & Community Center behind facility. Past business hours, gates locked, requires TODB **padlock key for entry.**	

Newport Water Treatment Plant: 1800 Newport Drive Discovery Bay, CA 94505	
Well 04	On-site 1800 Newport Drive uses on-site generator
Well 05	Off-site 2400 Newport Drive requires portable generator
Well 07	Off-site 2199 Newport Drive requires portable generator
Maximum Production Rate	5,400 GPM
Maximum Filter Rate	4,000 GPM from 2 filters at 2,000 GPM each
Maximum Distribution Rate	6,000 GPM
Disinfection Method	Sodium Hypochlorite with 1,000 gallon capacity
Ground Storage Tank (North)	275,000 Gallons
Ground Storage Tank (South)	275,000 Gallons
Maximum Storage Capacity	550,000 Gallons
Backwash Tank Capacity	100,000 Gallons
Chlorine Residual Range	0.2 - 2.0 PPM
Distribution and Jockey Pumps	4 Distribution Pumps & 2 Jockey Pumps
Maximum Distribution Flow	Distribution Pumps: 5,000 GPM and Jockey Pumps 1,000 GPM
Special Instructions & Notes:	
Residential homes across street from plant. Past business hours, gates locked, requires **TODB padlock key for entry**.	

Total Water System: Willow WTP and Newport WTP	
Maximum Production Rate	9,500 GPM
Maximum Filter Rate	6,400 GPM
Maximum Distribution Rate	12,200 GPM
Maximum Storage Capacity	2,050,000 Gallons
Max Cap with Backwash Tanks	2,234,000 Gallons

iii. Facilities Inspections List

Table of Contents:

Well 01B - 1037 Discovery Bay Blvd Inspection
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***back-up generator will need to be transported.**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUPIMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

Well 02 - 1535 Discovery Bay Blvd (adjacent) Inspection
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***back-up generator will need to be transported.**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUPIMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

Well 04A - 1800 Newport Drive Inspection
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***back-up generator is on-site in Newport WTP.**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUIPMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

Well 05A - 2400 Newport Drive Inspection
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***back-up generator is on-site at Willow WTP.**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUIPMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

Well 06 - 1800 Willow Lakes Road Inspection
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***back-up generator is on-site at Willow WTP.**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUIPMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

Well 07 - Newport Drive bridge (West side) Inspection
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***back-up generator will need to be transported.**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUIPMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

Willow Water Treatment Plant - 1800 Willow Lakes Road Inspection
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***back-up generator is fixed stationary on-site.**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUIPMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

Newport Water Treatment Plant - 1800 Newport Drive Inspection
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***back-up generator is fixed stationary on-site.**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUIPMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

Inspection:
TYPE OF EVENT AND DATE/TIME:

IF AT ANY TIME IT IS DETERMINED TO BE UNSAFE TO PERFORM ANY OF THE FOLLOWING TASKS:

DO NOT PROCEED.

□ A. Electrical Power Status

1. Is commercial electricity available or is there a need for portable generator:

***is portable backup generator needed?**

ACTION:

2. If backup generator is running/operating:
   - □ diesel fuel level
   - □ arrange fuel delivery as needed

3. After all other following safety checks are performed:
   - □ Call PG&E to check on status: 800-743-5000 or go to: www.pgealerts.alerts.pge.com/outages/map/

CURRENT OUTAGE STATUS:
ESTIMATED RESTORATION TIME:

□ B. Equipment & Machinery Damaged or Inoperable

1. Damaged equipment and LOTO
   - □ Inspect for damaged equipment (pump, pipes, lines etc.)
   - □ Report to supervisor immediately
   - □ Perform Lockout/Tagout procedures

EQUIPMENT LOCKED OUT & TAGGED OUT:

ASSIGNED TO:	DATE CHECKED:	TIME: (am/pm)	RECHECKED TIME: (am/pm)

9.2F - EWQSK Supplies List (section 6.6)

i. (EPA Response Protocol Toolbox: Planning for and Responding to Drinking Water Contamination Threats and Incidents)

3.2 Emergency Water Sample Collection Kit

Item	Quantity	Notes
Field Resources and Documentation		
Field guide	2	Resource for field personnel
Health and safety plan	2	If required for the site
Sample labels	48	Waterproof (filled out in advance, if possible)
Sample documentation forms	24	For recording sample information
Custody tape (or seals)	2 rolls	Used on sample or shipping containers
Chain of custody forms	24	For documenting sample custody
Lab marker	2	Waterproof, 1 red, 1 black
General Sampling Supplies		
Sample containers	Table 3-2	For collecting samples
Device for grab sampling	1	For sampling large water bodies
10 liter HDPE container	4	For collection of large volume water samples
Lab grade tape	3 rolls	For temporary labeling in the field
Miscellaneous glassware	N/A	Beakers, graduated cylinders, spatula, etc.
Collapsible cooler	1	For sample storage
Rigid shipping container	1	For shipping by overnight service if needed.
1 qt. zippered freezer bags	1 pack100	For double bagging ice and sample containers
Thermometer	2	For checking water temperature
Paper towels	2 rolls	Wiping wet containers and containing spills
Pathogen Sampling Supplies		
Tubing and clamp	1	For sample tap flushing, etc.
Stopwatch & graduated cylinder	1	For measuring flow rate
Ultrafiltration apparatus	1	For concentrating pathogen samples
Reagents (may need to be kept separate from the rest of the kit)		
Laboratory grade water	5 liters	For sample dilution in the field
Sodium thiosulfate crystals	100 grams	For water sample dechlorination
Ascorbic acid	100 grams	For water sample dechlorination
Sodium sulfite crystals	100 grams	For water sample dechlorination
Potassium dihydrogen citrate	100 grams	For carbamate preservation
6 Molar ACS grade hydrochloric acid (HCl)	25 mL	In dropper bottle for preservation of samples for organic analyses
6 Molar trace metal-grade nitric acid (HNO_3)	25 mL	In dropper bottle for preservation of samples for trace metals analysis
10 Normal Sodium hydroxide (NaOH)	25 mL	In dropper bottle for preservation of samples for cyanide analyses
pH paper in ranges from 0 - 4 and 10 - 14	50 strips	For checking the pH of samples preserved with acid or base (sensitive to 0.5 pH units)
Safety Supplies		
Splash resistant goggles	2	One per individual (minimum)
Disposable gloves	6 pairs	Nitrile or polyethylene, powder-free
Disposable shoe covers	2 pairs	One pair per individual (minimum)
Disposable laboratory coats	2	One per individual (minimum)
Clear, heavy duty plastic trash bags	4	For disposal of lab coat, gloves, etc.
Rinse water	20 liters	For general use and first aid
Antiseptic wipes	1 container	For cleaning hands, sample containers, etc.
Bleach solution (at least 5%)	1 gallon	For decontamination if necessary
Squirt bottle	2	For use with rinse water or lab grade water
First aid kit	1	For general first aid
Flashlight/headlamp	3	For working at night or in dark locations

9.2G - Emergency Supply Vendors

Type of Service/Supply	Company/Vendor	Location Address	Phone Number
Bulk Chlorine	Univar		602-484-4560
Bulk Polymer	Polydyne		912-884-8719
Bulk Alum	Thatcher		801-834-4166
Diesel Fuel Delivery	Ramos Oil Company	3515 Navy Drive #A Stockton, CA	209-465-6255
Electrical & SCADA Services	CALCON Systems Inc.	12919 Alcosta Blvd #9 San Ramon, CA	925-277-0665
	Telstar	1717 Solano Way #34 Concord, CA	925-671-2888
	TESCO Controls Inc.	8440 Florin Road Sacramento, CA	916-395-8800
Electrical Supplies	Wille Electric	432 North Grant Street Stockton, CA	209-943-2441
Pump/Motor Purchases	Ace Electric Motor & Pump	529 North Orange Street Stockton, CA	209-464-6428
Pumping Services	Roto-Rooter Pumping & Water Cleanup	3500 Clayton Road #113 Concord, CA	925-889-4976
Rental Equipment Services	Ahern Rentals	3673 Mallard Drive Benicia, CA	707-748-1900
	All Star Rents	1204 Sunset Drive Antioch, CA	925-755-7368
	United Rentals	2911 East Fremont Street Stockton, CA	209-948-9500
	United Rentals Fluid Solutions	2700 California Avenue Pittsburg, CA	925-252-2400
General Supplies	ACE Hardware	8900 Brentwood Blvd #J Brentwood, CA	925-634-3201
	Home Depot	5631 Lone Tree Way Brentwood, CA	925-513-6060
Bottled Water Delivery	Alhambra/Primo		800-728-5634
Local Food Market & Water	Safeway	14841 Highway 4 Discovery Bay, CA	925-626-6000

9.2H - Vulnerability Assessment Table 11. (section 2.1)

Table 11: Countermeasures (Optional)[25]

Countermeasures (optional) List countermeasures in the left column the CWS could potentially implement to reduce risk from the malevolent acts and natural hazards that were selected.	**Brief Description of Risk Reduction or Increased Resilience** For each countermeasure, in the right column, describe how the countermeasure could reduce risk or increase resilience for CWS assets from malevolent acts or natural hazards that were selected in the analysis. A countermeasure may reduce risk across multiple malevolent acts, natural hazards and asset categories.
1. Install a physical barrier between Willow WTP and the administration building, or relocate the administrative building.	By eliminating the current practice of allowing routine access to the Willow WTP by the public and administrative staff, this will reduce the risk a potential incident resulting from accidental or intentional malevolent acts and improve security of the facility.
2. Install surveillance monitoring systems (cameras) on all sites and intrusion alarms on all doorways.	This will increase resilience against accidental or intentional malevolent acts and improve security of the facility.
3. Conduct annual SCADA cybersecurity self-assessments in collaboration with District and Operator, using available tools online.	Promotes familiarity and awareness of cybersecurity practices amongst all District employees and contractors. This practice will help identify areas of improvement that can be tracked over time and make updates as new threats are identified.
4. Conduct third-party SCADA vulnerability assessment such as the U.S. Department of Homeland Security.	Provides transparent evaluation of threats and vulnerabilities of the District's SCADA system that is being administered by a contractor.
5. Install automatic gates to the water treatment plants and remote well sites.	Installing automatic gate openers will ensure that the gates are closed upon entry/exit. Automatic can also be used to document which person is entering using unique keycode entry.
6. Upgrade security fence at Willow WTP/Well 6	The security fence is shorter than standard and does not have barbed wire (due to the adjacent school). Hardening the security fence should be considered using a taller fence or a different material (steel pale, anti-climb, etc.)

[25] IMPORTANT NOTE: The assessment does not require a specific number of countermeasures. You may have fewer than five countermeasures or add more countermeasures on a separate sheet.

Countermeasures (optional) List countermeasures in the left column the CWS could potentially implement to reduce risk from the malevolent acts and natural hazards that were selected.	**Brief Description of Risk Reduction or Increased Resilience** For each countermeasure, in the right column, describe how the countermeasure could reduce risk or increase resilience for CWS assets from malevolent acts or natural hazards that were selected in the analysis. A countermeasure may reduce risk across multiple malevolent acts, natural hazards and asset categories.
7. Upgrade the Well 2 Electrical Panels	The current panels pose safety concerns as they are outdated and not to electrical code. Upgrading the panels will reduce risk of arc flash and harmful incidence from accidental failure.
8. Remove tree next to the Well 2 building	An old palm tree immediately next to the building accumulates debris and poses fire risk as well as structural risk if it were to all.
9. Explore alternatives for an emergency water supply sources (e.g., intertie with adjacent system, surface water from EBMUD, other).	While the existing groundwater aquifer is in sustainable conditions and the risk of large-scale water quality issues is low, by identifying the feasibility of alternative emergency water supply sources the District will improve its resilience to catastrophic events of the groundwater basis, from either natural hazards or malevolent acts.
10. Implement the use of Personnel Identification badges for authorized employees and visitors	A visible badge on authorized employees and visitors can reduce the risk of intruders.
11. Install a safety locked cage to protect Monitor Well 7	This will reduce the risk of tampering and contamination of the groundwater source by a malevolent act.

9.2I - Water System Details

CA Drinking Water Watch

Water System Details

Links

- PS Code Transition
- Water System Details
- Water System Facilities
- Monitoring Schedules
- Monitoring Results
- Monitoring Results By Analyte
- Lead And Copper Sampling
- Violations/Enforcement Actions
- Site Visits
- Consumer Confidence Reports
- Lead Service Line Documents

Return Links

- Water System Search
- County Map

Glossary

Contact Info

Water System No. :	CA0710009	**Federal Type :**	C
Water System Name :	TOWN OF DISCOVERY BAY	**State Type :**	C
Principal County Served :	CONTRA COSTA	**Primary Source :**	GW
Status :	A	**Activity Date :**	03-22-1979
Distribution System Classification :	D3	**Max Treatment Plant Classification :**	T2

Water System Contacts

Type	Address	Phone	Email - Web Address
Physical Location Contact	CA0710009-TOWN OF DISCOVERY BAY 1800 WILLOW LAKE ROAD DISCOVERY BAY,CA 94505-9376	There is no phone	There is no email address There is no web address
Administrative Contact	1800 Willow Lake Road DISCOVERY BAY,CA 94505	925-634-1131	mkibriya@todb.ca.gov

Division of Drinking Water District / County Health Dept. Info

Name	Phone	Email	Address
DISTRICT 04 - SAN FRANCISCO	510-620-3474	DWPDist04@waterboards.ca.gov	850 MARINA BAY PARKWAY BLDG. P, SECOND F RICHMOND CA 94804-6403

Annual Operating Periods & Population Served

Start Month	Start Day	End Month	End Day	Population Type	Population Served
1	1	12	31	R	16790

Service Connections

Type	Count	Meter Type	Meter Size Measure
AG	0	ME	0
AG	0	UM	0
CM	121	ME	0
CM	5	UM	0
IN	0	ME	0
IN	0	UM	0
RS	6031	ME	0
RS	0	UM	0

Sources of Water

Name	Type Code	Status
WELL 01B	WL	A
WELL 02	WL	A
WELL 04A	WL	A
WELL 05A	WL	A
WELL 06	WL	A
WELL 07	WL	A
WELL 01 - INACTIVE	WL	I
WELL 03 - INACTIVE	WL	I
WELL 04 - INACTIVE	WL	I
WELL 05 - DESTROYED	WL	I

Service Areas

Code	Name
R	RESIDENTIAL AREA

Water Purchases

Seller Water System No.	Water System Name	Seller Facility Type	Seller State Asgn ID No.	Buyer Facility Type	Buyer State Asgn ID No.

9.2J - Water Treatment Operations Plan

i. Overview

The Willow Lake Water Treatment (WLWTP) and Newport Drive Treatment Plant (NDWTP) in Discovery Bay, CA are Class 2 groundwater treatment plants that use manganese greensand filters to remove Secondary Contaminants iron and manganese. The process uses sodium hypochlorite in excess of what needed for disinfection dosage. Above-ground storage tanks at each plant equalize daily distribution requirements and hold an additional reserve for fire-fighting. The distribution system is a single pressure zone loop network simultaneously fed by the distribution pumps at each treatment plant.

Pre-filter and distribution system entry point free chlorine residuals and distribution system pressure and flow are monitored continuously. Post-filter total and free chlorine residuals and pre-filter free chlorine residuals are analyzed daily. Filter differential pressures, pump motor hours and storage tank levels are recorded daily. Individual well sites are checked daily. Bacteriologic sampling and other water quality monitoring is done according to State and Federal schedules.

The overall process control strategy is to first produce water that is safe to drink, second to produce the quantity demanded, and finally to produce water that meets secondary water quality standards.

ii. Raw Water Production

Design Data

Table 1: Groundwater Wells		ADWF GPM	Target GPM	AWWF GPM
Well 01B	150HP, 380ft 1995[1]	1,600	1,800	1,800
Well 02	100HP, 355ft. 1971/1978	800	850	900
Well 04A	150HP, 362ft, 1996	1,800	1,800	2,000
Well 05A	200HP, 360ft. 1991	1,800	2,000	2,000
Well 06	150HP, 360ft. 2009	1,700	1,700	1,900
Well 07[2]	200HP, 364ft. 2014	1,800	1,800	2,000

Note 1: Retrofitted 12/2013, increasing maximum flow by 200 GPM.
Note 2: In service 7/22/2015.

Table 1 shows all active groundwater wells, nameplate horsepower, depth of well, date first put into service, and design flow rates. Well 01B, 02, and 06 supply WLWTP. Wells 04A, 05A, and 07 supply NDWTP.

Because of high salinity/TDS levels, Well 05 is operated only during periods of high demand. If Well 05 is used, salinity levels must be monitored daily. All Wells must be run at least every 30 days or re-testing for bacteriological contamination must be done. Seasonal variations in the water table may cause fluctuations in raw water quality that may additionally impact production.

iii. Disinfection

Design Data

Table 2: Feed Design Data	WLWTP			NDWTP		
	Well 01B	Well 02A	Well 06	Well 04A	Well 05A	Well 07
Location	Pre-Filter					
Chemical Used	NaOCl (12.5% typical)					
Metering Rate (typical, GPD)[1]	72.0	55.2	144.0	66.0	156.0	114.0
Metering Rate (combined)[2]	144.0			180.0		
NaOCl Storage Capacity (gallons)	1,090			1,090		
Minimum Reorder Point (gallons)[3]	375			384		
Days On-Hand (full tank)	4.97			3.92		

Note 1: Maximum metering pump rate is 190.2 GPD per Well.
Note 2: Either Wells 01B and 02A together or Well 06 alone. Wells 05A and 07 cannot be used simultaneously.
Note 3: Reorder point is 30 inches, 12.8 gal/in at WLWTP and 12.5 gal/in at NDWTP.

Key Control Parameters

Table 3: Key Control Parameters, WLWTP	LCL	LWL	Target	UWL	UCL
Pre-filter Free Chlorine, mg/L[4]	1.0	1.2	1.4	3.0	5.0
Pre-filter Total Chlorine[4]	1.0	1.2	1.4	3.0	5.0
Post-filter A Free Chlorine[4]	0.20	0.50	0.70	2.00[5]	4.0
Post-filter B Free Chlorine[4]	0.20	0.50	0.70	2.00[5]	4.0
Post-filter C Free Chlorine[4]	0.20	0.50	0.70	2.00[5]	4.0
Above-ground Storage Free Chlorine[6]	0.20	0.50	0.70	1.50	2.00
DWS Entry Point Free Chlorine[7]	0.20	0.50	0.70	1.50	2.00
DWS Maximum Retention Time Free Chlorine[8]	0.02	0.10	0.20	1.50	2.00
Well 01B Metering Rate, GPD[9]			3.000	7.133	7.529
Well 02A Metering Rate[9]			2.300	7.133	7.529
Well 06 Metering Rate[9]			6.000	7.133	7.529
WLWTP NaCOI Used, Wells 01B &02A, GPD[10 11]			127.2	139.9	152.6
WLWTP NaCOI Used, Well 06[10 11]			144.0	158.4	172.8

Note 4: Daily grab sample.
Note 5: Recommended SMCL for free Cl_2 residual.
Note 6: Daily grab sample taken from North storage tank.
Note 7: Continuously monitored.
Note 8: Monthly grab sample.
Note 9: UWL is 90% of metering pump capacity, UCL is 95%.
Note 10: Well 01B and 02A are normally online. If Well 06 is online, Wells 01B and 2A are offline.
Note 11: UWL is 10% over target, UCL is 20%.

Table 4: Key Control Parameters, NDWTP	LCL	LWL	Target	UWL	UCL
Pre-filter Free Chlorine, mg/L[5]	1.0	1.2	1.4	3.0	5.0
Pre-filter Total Chlorine[4]	1.0	1.2	1.4	3.0	5.0
Post-filter A Free Chlorine[4]	0.20	0.50	0.70	2.00[5]	4.0
Post-filter B Free Chlorine[4]	0.20	0.50	0.70	2.00[5]	4.0
Above-ground Storage Free Chlorine[12]	0.20	0.50	0.70	1.50	2.00
DWS Entry Point Free Chlorine[7]	0.20	0.50	0.70	1.50	2.00
DWS Maximum Retention Time Free Chlorine[8]	0.02	0.10	0.20	1.50	2.00
Well 04A Metering Rate, GPD[8]			2.750	7.133	7.529
Well 05A Metering Rate[8]			6.500	7.133	7.529
Well 07 Metering Rate[8]			4.750	7.133	7.529
NDWTP NaCOI Used, GPD[10]			240.0	264.0	288.0

Note 12: Daily Grab sample taken from South storage tank.

The post-filter and distribution free chlorine residual and pH is monitored continuously via HACH in-line analyzers. The results are displayed on site and also via SCADA.

Daily grab samples are taken during plant rounds using an EPA certified hand-held colorimeter and recorded on the plant round checklist, typically between 07:00 and 09:00 on weekdays and 0:900 to 11:00 on weekends and holidays. Chlorine metering rates are adjusted on site for both water treatment plants on an as needed basis. The on-call operator has remote monitoring capability, but must adjust metering rates locally.

Weekly sampling for total and fecal coliforms and chlorine residual and quarterly sampling for disinfection byproducts determine regulatory compliance.

iv. Process Troubleshooting Guide

A. Low Chlorine Residual:

1. Check metering pump rate.

    a. Increase pump rate to meet change in demand.
    b. May also run second pump in hand or in parallel.

2. Check for sufficient NaOCI solution in bulk storage tank.

    a. Verify most recent delivery request.
    b. Put other WTP in lead to reduce demand.

3. Check filter differential pressures.
    a. Back wash filters if any differential pressure is ≥ 8 psi.
        i. WLWTP requires backwash tank ≤ 4.5’ and water storage tank ≥ 19’.
        ii. NDWTP requires backwash tank ≤ 7.1’ and water storage tank ≥ 17.2’.

4. Check for power/run signal to metering pump.
    a. Run extension cord to manually power metering pump.

5. Check for loss prime.

6. Check metering pump differential pressure.
    a. High differential indicates blockage.
    b. Low differential indicates leak.

7. Check for broken suction or discharge line.

8. Check for blocked injector.

9. Check backwash storage tank sediment level.
    a. Wait at least 8 hours from last backwash.
    b. Flush spigot at level transducer.
        i. If water doesn't clear in one minute, go to next step.
    c. Crack tank drain valve.
        i. If water doesn't clear in one minute, go to next step.
    d. Submit work order for early tank cleaning.

v. Filtration, Backwash and Recycle

Groundwater filtration is accomplished via the Loprest Iron and Manganese Removal System, which relies on catalytic oxidation and multimedia filtration to remove secondary contaminants. A disinfection residual is a byproduct of the reaction. The recommended dose is 1ppm Cl_2 per ppm iron and 2ppm Cl_2 per ppm manganese plus the desired residual.

Normal operation requires periodic backwashing. The backwash cycle is manually initiated once the filter differential pressure is 8-10 psi. The backwash cycle has 4x 4-minute stages; Surface Wash, Surface Wash & Backwash, Backwash, and Rinse. NDWTP backwashes each of two 164 ft^2 filters in sequence. WLWTP also backwashes the three 120 ft^2 filters in sequence, but the rinse stage is performed simultaneously. The backwash is normally conducted one to three times a week, based on filter differential pressure. A filter out of service for more than two weeks must have the media reconditioned. The filter media is inspected annually.

The backwash water is held in above ground storage to settle. After a programmed 500-999 minutes (8.3-16.7 hours), the supernatant is pumped back to the filter during filtration where it is combined with raw water and re-filtered.

Design Data and Key Control Parameters

Table 5 shows the key control parameters for WLWTP. Table 6 shows the key control parameters for NDWTP.

Table 5: WLWTP Greensand Filters	LCL	LWL	Target	UWL	UCL
Filtration - total GPM	720	1,440	2,550	2,880	2,880
Differential Pressure PSI				11	15
Control Air Pressure PSI	29	80	90	130	145
Per Filter GPM					
Filtration	240	480	850	960	960
Surface Wash		120	240	360	
Backwash	1,440		1,620		1,800
Rinse (filtration rate)	240	480	850	960	960

Table 6: NDWTP Greensand Filters	LCL	LWL	Target	UWL	UCL
Filtration - total GPM	1,056	2,112	4,000	4,224	4,224
Differential Pressure PSI				11	15
Control Air Pressure PSI	40	80	90	125	140
Per Filter GPM					
Filtration	528	1,056	2,000	2,112	2,112
Surface Wash		264	528	792	
Backwash	3,168		3,564		3,960
Rinse (filtration rate)	528	1,056	2,000	2,112	2,112

The operating flow rates are dependent on filter size. The differential at WLWTP is dependent on the pneumatic solenoid requirements. The differential pressure at NDWTP is dependent on the valve actuator requirements.

The capacity and control parameters of the backwash storage tanks are shown in Table 7.

Table 7: NDWTP Greensand Filters	Capacity gallons	LCL feet	LWL feet	Target Range feet	UWL feet	UCL feet
WLWTP	84,000	2.0	3.0	3.5 - 12.4	12.6	12.8
Backwash Tank 1	84,000	2.0	3.0	3.5 - 12.4	12.6	12.8
Backwash Tank 2[1]	50,000					
NDWTP	100,000	2.1	3.1	3.6 - 16.3	16.8	17.0
Backwash Tank	100,000	2.1	3.1	3.6 - 16.3	16.8	17.0

Note 1: planned.

The design data for the recycle pumps is shown in Table 8.

Table 8: Recycle Pumps	Quantity	HP	Flow GPM
WLWTP			
Recycle Pump	2	5	190
Recycle Pump[1]	1		340
Total			380
NDWTP			
Recycle Pump	2	7.5	200
Total			400

Note 1: planned.

vi. Process Troubleshooting Guide

A. Backwash Storage Tank H or HH Alarm

1. Flush pressure transducer for at least one minute.

2. Crack tank drain to manually drain tank.
    a. Make sure the backwash water does not overflow the sewer drain.

B. Filtration Backwash Failure

1. Check filtration train assignment.
    a. If trains are reversed, reassign and restart backwash.

2. Check control air pressure. If it is below operational levels:
    a. Verify the supply pressure is in the proper range.
    b. Verify the compressor is operating normally.
    c. Verify the pressure regulator is operating normally.
    d. Check for air leaks in the supply lines and at the pneumatic solenoids.

3. Check for faulted valves.
    a. If a valve failed to open or shut:
        i. Bleed pressure from the pneumatic valve solenoid manifold.
        ii. Manually exercise the valve at the solenoid. Return solenoid to AUTO position.

vii. Storage and Distribution

Design Data and Key Control Parameters

Table 9: WLWTP Drinking Water	Capacity gallons	LCL feet	LWL feet	Target Range feet	UWL feet	UCL feet
North Tank	750,000	12.5	13.3	18.0 - 22.5	23.8	24.0
South Tank	750,000	12.5	13.3	18.0 - 22.5	23.8	24.0
Total	1,500,000					

Table 10: NDWTP Drinking Water	Capacity gallons	LCL feet	LWL feet	Target Range feet	UWL feet	UCL feet
North Tank	275,000	10.6	12.5	16.0 - 18.5	18.8	19.0
South Tank	275,000	10.6	12.5	16.0 - 18.5	18.8	19.0
East Tank[1]	275,000					
Total	550,000					

Note 1: planned.

As seen in Table 9 and Table 10 respectively, WLWTP has a storage capacity of 1.5 MG and NDWTP has 0.55 MG, for a combined storage capacity of 2.05 MG.

According to the system's peak demand capacity, 0.6 MG must be on-hand at any time to meet Title 22 requirements for drinking water distribution. An additional 0.54 MG is required by the Contra Costa Fire Department. The 1.14 MG is equal to 55.6% of total storage capacity. This is 10.6' at NDWTP and 13.3' at WLWTP or 12.5'across all storage tanks. Emergency storage of one Maximum Day Demand of 8.2 MG is ensured via a 750kW standby generator at each plant.

The 8.2 MG MDD requirements is met with a combination of above ground storage and active filtration.

Table 11: Distribution Pumps	Quantity	HP	Flow GPM	Min GPM	Max GPM
WLWTP				4,900	6,200
Jockey Pump	2	25	500		
Booster Pump	4	75	1,300		
NDWTP				4,750	6,000
Jockey Pump	2	25	150		
Booster Pump	4	75	1,250		

Variable speed distribution pumps at each plant respond to demand based on distribution system pressure. The firm capacity for each plant to meet demand is shown in Table 11 as “Min”.

Jockey pumps and booster pumps automatically rotate lead and lag. When the lead pump is called it starts at 60% and immediately starts adjusting to match the pressure set-point. If it reaches 100% for 30 seconds, the second pump is called, and so on, until the distributions system’s maximum capacity is met. In reverse, once a lag pump is operating 30% for 60 seconds it shuts off, letting the remaining pumps control pressure according to demand. A distribution pressure of 30 psi for 30 seconds causes low pressure alarm. These and other alarm set-points are shown in Table 12.

Table 12: Distribution System Alarm Set-points	LCL	LWL	UWL	UCL
NDWTP	20	30	85	90
WLWTP	20	30	85	90

The existing 46.4 mile distribution system is supplied simultaneously from both plants. Plant production capacity is balanced against demand by setting the distribution pressure 2 psi higher at one plant than the other. The key distribution system control parameters are shown in Table 13.

Table 13: Lead/Lag Set-points	Start PSI	Target PSI	Stop PSI
NDWTP in Lead			
ND Distribution Pump Set-points	59	62	65
WL Distribution Pump Set-points	57	59	61
WLWTP in Lead			
ND Distribution Pump Set-points	58	61	64
WL Distribution Pump Set-points	61	63	65

viii. Process Troubleshooting Guide

A. Low Drinking Water Storage Tank Level

1. Check for faulted well pumps (fail to start, etc.).
    a. Reset well (may require cycling main power if local reset doesn’t work).
    b. Reset alarm at WTP PLC.

2. Check distribution system demand.
    a. Lower booster pump start/stop set-points by 10 psi each (automatic pressure control).
        i. If other plant has sufficient storage make no more adjustments.
        ii. If other plant is also low, reduce other plant’s set-points by the same amount.
        iii. If demand continues, lower set-points for both plants an additional 10 psi.
        iv. Do not lower set-points below an average 30 psi (ND) and 32 psi (WL).
    b. Turn off one or more booster pumps (“manual” system pressure control).
        i. Monitor for sufficient distribution system pressure.

B. Low CL_2 Residual

1. Check metering pumps for operation while wells are running.
    a. Is metering rate adequate?
    b. Are any alarms active?

i. High discharge pressure indicates clogged injector or restricted line.
ii. Low discharge pressure indicates a leak in the line.

2. Check analyzer operation and reagent levels.
    a. Replace reagent kit if levels are under ½ inch.
    b. Record and look up any error codes.

3. Check filter differential pressures.
    a. Initiate a backwash if the differential pressure is ≥ 8 psi.

4. Check backwash tank sediment level.

C. Low Distribution System Pressure / Excessive Demand

1. Check distribution system pressure set-points (plant lead/lag set-points).

2. Check for faulted jockey or booster pumps/
    a. Rest pump(s) - may require cycling MCC power if local reset doesn't work.
    b. Reset alarm at WTP PLC.

3. Check distribution system demand.
    a. Excessive/uncharacteristic demand may indicate leak in distribution system.
        i. Coordinate with client to confirm distribution system leak.
        ii. Contact client for distribution system repair service.

4. If in contact with the customer ask:
    a. Is there good pressure at the hose bib outside the house?
    b. Is water softener installed at the location?
        i. Good pressure outside and low pressure inside indicates the water softener needs service.
    c. Do neighbors have good water pressure?
        i. Inform the client if only one house or other locations are affected.

5. Check distribution system valves
    a. One end of the distribution system loop may be closed.
        i. Coordinate with client to check appropriate valves.

D. Brown Water Complaint:

1. Have them run water at the farthest tap for at least one minute.

2. Check backwash filter settling timer.
    a. Increase to 999 minutes.
3. Check post-filter water color.
4. Check backwash tank sediment level.
5. Flush distribution system upstream of complaint location.

9.2K - Locations of PPE, Disaster Kit & Vehicles/Equipment

i. PPE

Item	Primary Location	Secondary Locations
Disaster Kit	Admin - Women's Restroom	
4 & 14mil disposable gloves	Admin - Women's Restroom	
Dust masks	Admin - Women's Restroom	
Safety glasses	Admin - Women's Restroom	On persons
Tyvek suits	Admin - Women's Restroom	
Full/Front brim hardhats	Admin - Women's Restroom	On persons
First Aid Kits	Admin Offices/Control Room	Vehicles & Buildings
Eyewash, showers	At chemical areas	WTPs
Fire extinguishers	At exit/entrances all buildings	Vehicles
AED	Admin - Main Hallway	
Spill kits	Maintenance Garages	

ii. Veolia Vehicles

ID #	Year	Make Model/Type	Location	Fuel Type
	2006	Chevy Colorado Light Duty LPN 8G74713	WWTP 2	Gas
	2011	Ford Ranger Light Duty LPN 38881D1	WWTP 2	Gas
	2012	Ford F-250 Light Duty LPN 34454H1	WWTP 2	Gas
	2014	Ford Escape SUV LPN 7EPG764	WWTP 2	Gas
	2017	Ford Transit Connect Van LPN 14656H2	WWTP 2	Gas
	2018	Ford Transit Connect Van LPN 62145N2	WWTP 2	Gas

iii. TODB Vehicles

ID #	Year	Make Model/Type	Location	Fuel Type
105	2008	Ford F-250 LPN 1309388	WWTP 1	Gas
106	2008	Chevy Colorado LPN 1319608	WWTP 1	Gas
108	2010	Ford F-150 Long Bed LPN 1358843	WWTP 1	Gas
109	2011	Ford F-150 LPN 1380458	WWTP 1	Gas
110	2012	Ford Escape SUV LPN 1396057	District Office	Gas
113	2015	Ford F-150 Work Truck LPN 1452687	WWTP 1	Gas
115	2015	Ford F-250 Work Truck LPN 1452501	WWTP 1	Gas
116	2017	Ford F-250 Work Truck LPN 1528601	WWTP 1	Gas
117	2017	Ford F-250 Work Truck LPN 1528602	WWTP 1	Gas
118	2020	Ford F-150 Work Truck LPN 1591043	WWTP 1	Gas
119	2020	Ford F-150 Work Truck LPN 1606873	Water Office	Gas

iv. Portable Generators

ID #	Year	Make Model/Type	Location	Fuel / HP
202	1999	Energy Generator 350kW	Well 05A	Diesel
204	2000	Mighty Mover Generator 60kW	WWTP 2	Diesel
205	2001	Whiteman Generator 60kW	WWTP 2	Diesel
211	2005	Cummings Generator 150kW	Newport Lift Station	Diesel
216	2008	Whisper Watt Ultra Silent Generator	WWTP 2	Diesel
313	2015	Emergency Stand-by Generator	Well 07	Diesel

v. Heavy Equipment / Other

ID #	Year	Make Model/Type	Location	Fuel / HP
101	1995	International F82 Truck w/ Conveyor	WWTP 2	Diesel
104	2006	Chevy Jomac Boom Truck LPN 1217613	WWTP 2	Diesel
107	2008	Aquatech Vac Truck LPN 1310628	WWTP 2	Diesel
111	2012	Gator Utility XUV	WWTP 1	Gas
114	2003	GEM 4 Passenger Cart	WWTP 1	Electric
206	2004	PJ Trailer Dump Hauler LPN 954074	WWTP 1	
208	2005	Texas Bragg Utility Trailer LPN 4GP7317	WWTP 1	
210	2005	Trash Pump Trailer	WWTP 2	Gas
212	2006	Hull Fuel Cell w/ Trailer LPN 1306774	WWTP 1	Electric
213	2006	Texas Bragg HD Yellow Transport Trailer	WWTP 2	
219	2012	Portable Message Board LPN 1437085	WWTP 1	
220	2015	Carry-on Trailer/Mower LPN 1481944	WWTP 1	Gas
221	2017	Changzhou Pressure Washer Trailer	WWTP 1	
222	2005	Forest River Utility Trailer LPN 1167686	WWTP 2	
223	2006	Texas Bragg Mower Trailer LPN 1358832	Willow Lake Road	
301	1999	CAT GP30 Forklift	WWTP 2	Propane
302	2003	GEHL CTL60 Track Loader	WWTP 1	Diesel
305	2001	CAT 3412 Stationary Generator	WWTP 2	Diesel
306	2001	CAT 3412 Stationary Generator	Willow Lake Road	Diesel
307	2001	CAT 3412 Stationary Generator	Newport Drive	Diesel
309	2012	Genie Trailer Boom Lift	WWTP 1	Electric
310	2011	CASE 570MXT Skip Loader	WWTP 1	Diesel
311	2015	Multiquip Light Tower w/ Trailer	WWTP 1	Diesel
312	2015	John Deere Mower	WWTP 1	Gas
314		X-Mark Laser Mower	WWTP 1	Gas
315	2018	John Deere Utility Tractor	WWTP 1	Gas

Record of Changes and Reviews

Title Veolia	Name	Signature	Date
Project Manager			
Title TODB	**Name**	**Signature**	**Date**
General Manager			

Document Version History

Name	Title	Signature	Date

CALIFORNIA Water Boards

GAVIN NEWSOM GOVERNOR

JARED BLUMENFELD SECRETARY FOR ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

30 November 2021

Michael R. Davies
General Manager
Town of Discovery Bay CSD
18000 Willow Lake Road
Discovery Bay, CA 94505

Via email only:
mdavies@todb.ca.gov

COMPLIANCE EVALUATION INSPECTION REPORT, TOWN OF DISCOVERY BAY COMMUNITY SERVICES DISTRICT, WASTEWATER TREATMENT PLANT, CONTRA COSTA COUNTY

The Town of Discovery Bay Community Services District (Discharger) discharges treated wastewater from its Wastewater Treatment Plant (Facility), which is regulated by Waste Discharge Requirements (WDRs) Order R5-2019-0082 (NPDES CA00078590). Central Valley Regional Water Quality Control Board (Board) staff conducted an inspection of the Facility on 26 October 2021 to determine compliance with the WDRs.

Enclosed is a copy of the inspection report for the Facility. Please review the inspection report carefully. The report includes a summary of the inspector's findings and an evaluation of the effectiveness in complying with the permit requirements. The report lists all ten areas evaluated with nine area were found to be satisfactory and one area to be marginal. Board staff identified the following area of concern for the inspection.

Area of Concern

> WDRs Provision VI.C.4.c.III (b) requires the Discharger to manage its ponds to prevent any excessive vegetation growth. During the inspection, it was observed that storage pond was covered with vegetation as shown in Figure 9. Currently the aerobic digester is out of service for maintenance and the discharger uses the storage pond more frequently. Excessive vegetation reduces the capacity of the storage pond and promotes breeding of mosquitoes. Therefore, the Discharger must develop a Best Management Practices to eliminate or reduce vegetation and debris accumulation in the pond.

By **20 December 2021**, please submit a report indicating the actions that have been implemented, or will be implemented, to address area of concern.

If you have any questions, please contact Mohammad Farhad at (916) 464-1181 or at mfarhad@waterboards.ca.gov.

XUAN LUO, Ph.D., P.E.
Senior Water Resource Control Engineer
NPDES Compliance and Enforcement Unit

Enclosures (2): Compliance Evaluation Inspection Report
Compliance Evaluation Inspection Photo Log

cc: Eric Magnan, USEPA, Region 9, San Francisco
Anthony Harper, Project Manager, Discovery Bay

CALIFORNIA Water Boards

GAVIN NEWSOM GOVERNOR

JARED BLUMENFELD SECRETARY FOR ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

NPDES COMPLIANCE EVALUATION INSPECTION (CEI) REPORT

Name and Location of Facility Inspected	Entry Date	Permit	Effective /Termination Date
Discovery Bay Community Services District Discovery Bay Wastewater Treatment Plant. 17501 Highway 4 Discovery Bay, CA	10/26/21	R5-2019-0082	1 Feb 2020/30 Jan 2024
	Entry Time 9:10 AM	Notified of Inspection? Yes ☒ No ☐	
Correct Mailing Address? Yes ☒ No ☐		If no, state rationale:	

NPDES Permit Number:	CA0078590
Order Number:	R5-2019-0082
Type of Facility:	POTW
Receiving Water Name:	Old River
County:	Contra Costa County
Current Classification:	III

Name of the individual who provided consent to inspect and to take photographs:
Name: Anthony Harper
Title: Chief Plant Operator/ Project Manager
Phone: 925-786-9131
Email: anthony.harper@veolia.com

Names and Titles of On-Site Representatives:

Name	Title	Phone	Email
Anthony Harper	Chief Plant Operator	925-786-9131	anthony.harper@veolia.com

Does grade level comply with plant classification? Yes ☐ No ☐

Name and Title of Responsible Official:

Name	Title	Phone	Email
Michael Davies	General Manager		mdavies@todb.ca.gov

Inspector Information

Name	Title	Phone	Email
Mohammad Farhad	Water Resource Control Engineer	916-464-1181	Mohammad.Farhad@waterboards.ca.gov

Weather and site conditions at the time of inspection:

Overview of Areas Evaluated During Inspection

S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated

Permit:	**S**	Flow Measurement:	**S**	Biosolids:	**S**
Records & Reports:	**S**	Self-Monitoring Program:	**S**	Compliance Schedules:	**S**
Facility Site Review:	**S**	Laboratory:	**S**	Pretreatment (POTWs only):	**NA**
Effluent:	**See Note 1**	Receiving Waters:	**NA**	Operations & Maintenance:	**M**
Stormwater:	**NA**	Good Housekeeping:	**S**		

Notes

1. Effluent was not viewed during the inspection because the road to access discharge location was not suitable to drive due to the recent storm.

Due to COVID-19 pandemic, all documentation review was conducted virtually prior to the inspection

PRE-INSPECTION*

Date of Last Inspection: 12/11/2019

Effluent Limit and Receiving Water Violations since last inspection

Constituent	Number of Violations	Corrective Action Yes	Corrective Action No	Notes
Total Coliform (Jun 2020)	5	☒	☐	Potential Lab error.
Annual Avg. EC		☒	☐	The Discharger is aware of the high salinity in discharge and the district has prohibited installation and use of new water softeners.

Monitoring and Reporting Violations

None

Issues listed during the last inspection:

None

Have any spills/bypasses been reported to the Regional Board Since the last inspection?

If yes, list dates and times

None

Describe any Facility upgrades/changes or any Operation Changes since the last inspection:

1. Currently, aerobic digester is out of service for rehabilitation. The Discharger expect to bring it back online by early next year.
2. The Discharger is constructing a third oxidation ditch at the Facility's Plant 2 which is expected to be completed by mid-2022. The Discharger expects to finish all the testing and bring the unit online by early 2023.

*The information provided in this sheet is for discussion purposes during the inspection only and is not intended to solidify or confirm any enforcement actions the Regional Board may take in the future.

Site Walk Inspection

Treatment Processes in use at the Facility		Described by Permit		Present on Site		Observed Operating		Well Maintained	
		Yes	No	Yes	No	Yes	No	Yes	No
Headworks[1]									
Hycore Screen	No. 1	☒	☐	☒	☐	☒	☐	☒	☐
Mechanical Grit Removal		☒	☐	☒	☐	☒	☐	☒	☐
Influent flow measurement									
Parshall Flume		☒	☐	☒	☐	☒	☐	☒	☐
Magnetic Flow Meter		☒	☐	☒	☐	☒	☐	☒	☐
Composite sampler internal temperature:		3.0°C							
Secondary Treatment									
Oxidation Ditch	Number: 3[2]	☒	☐	☒	☐	☒	☐	☒	☐
Secondary clarifier	Number: 3	☒	☐	☒	☐	☒	☐	☒	☐
Freeboard:									
Additional Pond/Stabilization Basin/Storage									
Storage Ponds	Number: 1	☒	☐	☒	☐	☒	☐	☒	☐
Irrigation Pond/Emergency	Number: 1	☒	☐	☒	☐	☒	☐	☒	☐
Freeboard:									

Notes:

1. The Facility has two plants that are bisected by State Road 4 with Plant 1 to the north and Plant 2 to the south. All flow enters the Plant 1 pump station, and then it is directed to Plant 2. The Discharger stopped utilizing Plant 1 and will only use as an emergency and backup.
2. According to the Discharger, once the third oxidation ditch is completed at Plant 2, the Discharger expect to dismantle Plant 1, which is currently not used for treatment purposes. The Discharger only uses oxidation ditch at Plant 1 for emergency storage purposes.

Site Walk Inspection (continued)

Treatment Processes in use at the Facility	Described by Permit		Present on Site		Observed Operating		Well Maintained	
	Yes	No	Yes	No	Yes	No	Yes	No
Filtration								
Sand filters Number: 2	☒	☐	☒	☐	☒	☐	☒	☐
Disinfection								
Ultraviolet (UV) disinfection	☒	☐	☒	☐	☒	☐	☒	☐
Effluent flow measurement								
Magnetic flow meter	☒	☐	☒	☐	☒	☐	☒	☐
Composite sampler internal temperature: 4.5°C								
Biosolids								
Digestion Yes ☒ No ☐								
Aerobic digesters (out of service for maintenance) No:	☒	☐	☒	☐	☐	☒	☐	☐
Dewatering Yes ☒ No ☐								
Belt filter press **Numbers:**	☒	☐	☒	☐	☐	☒	☒	☐
Drying Beds Yes ☒ No ☐								
Solar Drying Beds **Number:**	☒	☐	☒	☐	☒	☐	☒	☐
Other Yes ☐ No ☒								
Land Application (See note 1) Yes ☐ No ☒								

No. Channels 2 No. Banks 4 No. Lamp per Bank 61

Cleaning Frequency 1/month and deep clean: 1/ quarter

Groundwater monitoring program Yes ☒ No ☐

Notes:

1. The Discharger no longer uses the disposal area to spread dried biosolids. Instead, all dried biosolids are hauled off site to Synagro Ranch.

SITE WALK INSPECTION (continued)

Chemicals on site		MS/DS Yes	MS/DS No	Secondary Containment Yes	Secondary Containment No
1.	Polymer	☒	☐	☒	☐
2.	Aluminum Sulfate	☒	☐	☒	☐
3.		☐	☐	☐	☐
4.		☐	☐	☐	☐
5.		☐	☐	☐	☐
6.		☐	☐	☐	☐
7.		☐	☐	☐	☐
8.		☐	☐	☐	☐

Operations and Maintenance	Yes	No
Maintenance program appears to be in place and being followed	☒	☐
Does Facilities staff is also responsible to maintain the collection system	☒	☐
Emergency Operations		
Is auxiliary power available?	☒	☐
Are there alarm systems for power and equipment failure?	☒	☐
Are treatment control procedures established for emergencies?	☒	☐
Miscellaneous		
Does the facility appear well operated and maintained?	☒	☐
Do biosolids drying beds include leachate and runoff control?	☒	☐
Is public access restricted to the facility?	☒	☐

Notes:

FINAL EFFLUENT AND RECEIVING WATER

Appearance of Final Effluent	**Yes**	**No**
The effluent was viewed during the inspection (**See Note 1)**	☐	☒
Cloudy	☐	☐
Contained color	☐	☐
Clear	☐	☐
Sheens present	☐	☐
Scum present	☐	☐
Foam present	☐	☐
Other:		
Effluent Characterization		
Flow measurement location is representative of the actual discharge	☒	☐
Flow measurement devices designed to comply with permit requirements	☒	☐
Appearance of the Receiving Water		
The receiving water was viewed during the inspection	☐	☒
Compare upstream and downstream conditions. Check only those that differ:		
Foam or sheens present	☐	☐
Distinctly visible plume	☐	☐
Erosion at the discharge location	☐	☐
Presence of bottom deposits	☐	☐
Filamentous algae growths	☐	☐
Microbial layers on aquatic plants	☐	☐
Presence of snails	☐	☐
Other:	☐	☐

Notes:

1. Both effluent and receiving water were not viewed during the inspection. because the road to access the discharge location was not suitable to drive due to the recent storm.

RECORDS AND REPORTS

	Yes	No	N/A
NPDES permit available on site	☒	☐	☐
Permit modifications/amendments	☒	☐	☐
Influent flow meter calibration available on site	☒	☐	☐
Date of last calibration: 6/2/2021			
Calibration performed by: Telstar Instruments Inc.			
Effluent flow meter calibration available on site	☒	☐	☐
Date of last calibration: 6/2/2021			
Calibration performed by: Telstar Instruments Inc.			
Operation and Maintenance			
O & M Manual:	☒	☐	☐
Standard operating procedures (SOPs):	☒	☐	☐
Staffing guidelines	☒	☐	☐
Operation log books	☒	☐	☐
How are records maintained? Pen☒ Pencil ☐Electronic ☐			
Biosolids			
Biosolids disposal plan:	☒	☐	☐
Biosolids disposal log:	☒	☐	☐
Auxiliary Power check log records	☒	☐	☐
Power check records:	☒	☐	☐
Air Board permit number: 13197 Expiration date: 8/1/2022			
Miscellaneous			
Plant spill and bypass records:	☒	☐	☐
All records and reports required by the permit are organized and available	☒	☐	☐

Notes:

RECORDS AND REPORTS (continued)

Onsite Laboratory

Is there a laboratory on site? Yes ☐ No ☒

Is the laboratory ELAP certified? Yes ☐ No ☒

Certification number: NA Expiration date: NA

Does the laboratory have written sampling procedures and/or QA/QC? Yes ☐ No ☐ NA ☒

Does the laboratory have written analysis procedures and/or QA/QC? Yes ☐ No ☐ NA ☒

Are QA/QC procedures approved by management? Yes ☐ No ☐ NA ☒

Constituents analyzed on site

1. NA
2.
3.
4.
5.
6.
7.
8.

Temperature of refrigerators used for sample storage: 3°C

Reported data consistent with analytical results? Yes ☒ No ☐

Hand-held Meters

1. pH	Calibration records: Yes ☒ No ☐	Last calibrated:	9/15/2021
2. DO	Calibration records: Yes ☒ No ☐	Last calibrated:	9/15/2021
3. Temperature	Calibration records: Yes ☒ No ☐	Last calibrated:	9/15/2021

Influent sampler thermometer calibration records**:** Yes ☒ No ☐ Calibration Due: 3/9/21

Effluent sampler thermometer calibration records**:** Yes ☒ No ☐ Calibration Due: 3/9/21

Notes:

Figure 1: All influent flow is sent to Plant 2. Plant 1 is currently not in operation. he Magnetic influent flow meter measures flow coming from Plant 1. The flow meter is used for internal process control and as a backup in case the Parshall Flume goes off-line.

Figure 2: Mechanical grit removal located at the headworks of Plant 2 appeared in good working condition.

Figure 3: One of the two Oxidation ditches located in Plant 2 appeared in good working condition during the inspection.

Figure 4: Currently, the Discharger is constructing third oxidation ditch at Plant 2. The Discharger expect to complete the construction activities and bring the oxidation ditch online by early 2023.

Figure 5: One of the three secondary clarifiers, located at Plant 2, appeared to be in good working condition.

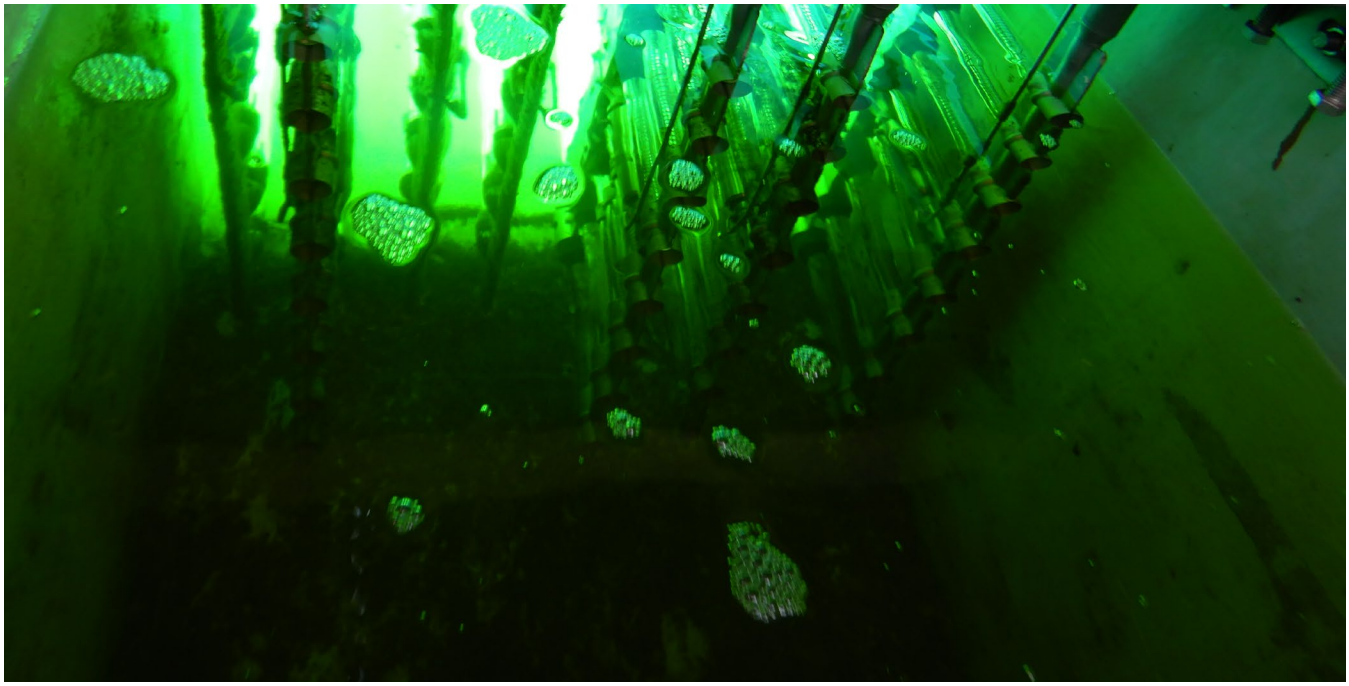


Figure 6: The Facility has two UV disinfection channels.

Figure 7: Aerobic digester is out of service for maintenance. Currently, all waste activated sludge (WAS) is discharged to the storage pond.

Figure 8: One of the four active solar dryers.

Figure 9: During the inspection, it was observed that storage pond had excessive vegetation.

Figure 10: The influent composite sampler had an internal temperature of 3.0°C.

Town of Discovery Bay

"A Community Services District"

STAFF REPORT

Meeting Date

December 15, 2021

Prepared By: Mike Yeraka, Projects Manager
Submitted By: Dina Breitstein, General Manager

Agenda Title

Discussion Regarding Luhdorff & Scalmanini Scope of Work to Provide Design and Construction Engineering Services for Well 8 Pump Station and Well, in the amount of $357,998 Plus 10% for Contingencies.

Recommended Action

a. Discuss proposed scope of work and provide input to Staff for approval by the Board of Directors at the January 19, 2022, Board Meeting.

Executive Summary

The test well that the Town installed on future Pantages Lot 121 has been completed with favorable results and has received preliminary approval from the Division of Drinking Water as the future Well 8 site.

Attached is a Scope of Work from Luhdorff & Scalmanini in the amount of $357,998 to provide permitting, design, bidding and construction oversight services for the new Well 8. The Town has budgeted $4.8 million for the total project and the LSCE costs are included in that budget as noted on the attached cost estimate.

The Scope of Work contains 4 Tasks:

1.	Project Coordination and Administration	$21,280
2.	Regulatory and Permitting Activities	$15,420
3.	Production Well Design and Construction	$75,470
4.	Well Pump Station Design and Construction	$245,828

Specific Committee Action:

a. Discuss proposed scope of work and provide input to Staff for approval by the Board of Directors at the January 19, 2022, Board Meeting.

Previous Relevant Board Actions for This Item

The Board approved a total of $4.8 million in project funds through FY 22/23 for Well 8 during approval of the FY 19/20 Budget at the June 19, 2019, Board Meeting.

The Board also authorized construction of a test well for the project at the May 6, 2020, Board Meeting.

The Board authorized Harris & Associates to prepare the CEQA environmental review for the project at the November 17, 2021, Board Meeting.

Fiscal Impact: Included in the $4.8 million project budget.
Amount Requested: $357,998 plus $35,800 for contingencies
Sufficient Budgeted Funds Available?: Yes
Prog/Fund # Category: TBD

Attachment

1. Overall Project Cost Estimate.
2. LSCE proposed Scope of Work.

AGENDA ITEM: E-3

Luhdorff & Scalmanini
Consulting Engineers

December 6, 2021
File No. 21-3-125

Ms. Dina Breitstein
General Manager
Town of Discovery Bay CSD
1800 Willow Lake Road
Discovery Bay, CA 94514

SUBJECT: SCOPE AND BUDGET FOR NEW WATER PRODUCTION WELL AND PUMP STATION DESIGN AND CONSTRUCTION ENGINEERING SUPPORT SERVICES FOR TOWN OF DISCOVERY BAY COMMUNITY SERVICES DISTRICT WELL NO. 8

Dear Ms. Breitstein:

INTRODUCTION

Luhdorff and Scalmanini, Consulting Engineers (LSCE) has prepared this detailed workplan scope and budget to provide the Town of Discovery Bay Community Services District (CSD) with permitting, design, bidding and construction oversight services for a new municipal well and pump station. The proposed well pump station site is located within the future Pantages subdivision about 1,500 feet northeast of the Newport Water Treatment Plant and adjacent to Kellogg Creek. The new well and pump station will provide the CSD with increased water supply reliability to meet the increasing water demands due to the new subdivision and ongoing water quality issues associated with Well No. 5A.

PROJECT UNDERSTANDING AND APPROACH

Rather than serving as a raw water source to supply one of the CSD's existing centralized water treatment plants, Well No. 8 will be equipped with an onsite water treatment system for removal of manganese and iron, disinfected with sodium hypochlorite, and water will be pumped directly into the distribution system. This configuration for Well No. 8 (as a standalone water treatment plant) will satisfy other treatment capacity and storage needs in addition to providing overall water supply reliability to the water system. The work included in this proposal includes permitting and regulatory assistance activities associated with the design and construction of Well No. 8 and the well pump station, as well as the engineering design and construction management/oversight of the project from start to finish.

As part of a separate contract with CSD, LSCE has developed a production well design from the completed hydrogeologic investigation. This completed scope included a geophysical log and nested monitoring well to gather crucial information to develop the production well design. Water quality samples were collected from the nested monitoring well to evaluate the possible treatment needs. LSCE also developed a conceptual site plan showing the station layout with major well pump station features, site access, regulatory well siting setback requirements, and utility connections to the planned Pantages utilities currently in design by the developer. LSCE has submitted the conceptual layout and other supporting

information needed to obtain regulatory concurrence from the State Water Resources Control Board – Division of Drinking Water (DDW). The DDW has since reviewed the well siting location, preliminary well design documents and other required permitting documents and granted approval of the location and design of the production well.

Given concurrence on site and preliminary well design and station layout, LSCE proposes to move forward with the Well No. 8 construction phase activities. At the same time, we will initiate engineering design work for the well pump station. Besides the preliminary well design and conceptual station plan, the design phase will consist of 75- and 100-percent levels of completion. Separate plans and specifications for the well pump station construction contract will be finalized after testing of the new well. LSCE understands that the Town of Discovery Bay is currently in negotiations with the Pantages developer to acquire the property for the well pump station and also finalize a water services agreement, therefore LSCE will move forward with the work outlined herein only after approval/direction from the Town/CSD.

Following design phase activities, LSCE will provide assistance with obtaining competitive bids on the well and well pump station contracts, to be issued separately, and technical assistance during construction phases. For the latter, we will provide milestone inspection services to ensure that construction satisfies the design requirements. We will also review and recommend acceptance of submittals, provide regular progress updates, and provide the CSD with as-built documents for the new well and pump station facilities.

The scope of work outlined below includes the tasks and subtasks required to design, oversee construction, participate in startup testing and commission of the new municipal well pump station. Work tasks include: a design basis report, draft and final submittals of the design, well design and drilling oversight, construction oversight and other tasks described in further detail below. The proposed work plan was developed based on our understanding of the CSD's needs and our experience with projects of similar size and scope. The tasks and subtasks are arranged generally in the order they will be completed.

WORK PLAN

The scope of work is outlined in the following tasks:

Task 1 – Project Coordination and Administration

Task 1.1 - Kickoff and Information Request
Task 1.2 - Meetings and Project Coordination
Task 1.3 - Project Administration

Task 2 – Regulatory and Permitting Activities

Task 2.1 – DDW Permit and CEQA Assistance

Task 3 – Production Well Design and Construction

Task 3.1 – Final Well Construction Design and Specifications
Task 3.2 – Well Construction Bidding Assistance
Task 3.3 – Well Construction and Testing Oversight Services

Task 4 – Well Pump Station Design and Construction

Task 4.1 – Pump Station Design, Plans and Technical Specifications
Task 4.2 – Pump Station Bidding Assistance
Task 4.3 – Pump Station Construction and Commissioning

Task 1 – Project Coordination and Administration

Task 1.1 – Kickoff and Information Request

LSCE's work on the project will begin with a kickoff meeting with CSD staff and key LSCE team members to discuss the various aspects of the project. Items such as contact information, chain of command, the CSD's project expectations, respective roles and responsibilities, schedule, design preferences and parameters, site constraints, and anticipated or possible issues that could impact project design and schedule shall be discussed at the kickoff meeting. Following the meeting, LSCE will provide the CSD with a list of any other requested information needed to facilitate design of the well pump station and construction of the production well.

Task 1.2 - Meetings and Project Coordination

Key LSCE team members will attend regular design meetings with the CSD to discuss various aspects of the project. For each meeting, LSCE will prepare and distribute meeting agendas, minutes, and action item summaries. LSCE assumes a meeting each month will be needed for the duration of the project (16 months total). The agendas and meeting minutes prepared by LSCE will generally include a summary of work completed, an updated schedule including deliverables and project milestones, items to be completed by the CSD and LSCE, discussion of items impacting the project and measures to address them, and other pertinent project issues to be addressed. LSCE will also provide frequent updates via email or telephone throughout the project as needed.

Task 1.3 - Project Administration

This task provides for project management and administrative activities throughout the assumed 16 month project duration such as:

- Contractual Arrangements
- Ongoing Examination Regarding Adherence to The Scope, Budget, and Schedule
- Coordination of Staff Resources
- Internal Review of Work Products
- Management of Subcontractors
- Billing Review
- Scoping and Budgeting

Task 2 – Regulatory and Permitting Activities

Task 2.1 – DDW Permit and CEQA Assistance

Under a separate contract with CSD (File No. 20-2-043), LSCE prepared the initial check list of documents and submitted to the State Water Resources Control Board, Division of Drinking Water (DDW) for permitting the new production well and pump station. Under Task 2, LSCE will finalize the submittal documents to amend CSD's existing water supply permit upon construction completion of the production well and well pump station. The list of documents to finalize for the submittal are listed below. LSCE will contact DDW to ensure that concurrence is obtained, and all questions or comments are addressed. The DDW checklist items are as follows:

Permit Amendment Application - Submittal will indicate that the actual amendment application will be sent after well station is constructed and tested.

Well Drilling Specifications - Submittal will include final "as-built" well profile. Final construction specifications will be sent with permit application.

Well Plot Plan - Submittal will include well plot plan for the constructed well location.

DWR Well Completion - To be submitted after test well is constructed.

Final DWSAP– A preliminary DWSAP was developed under an existing contract between CSD and LSCE. The DWSAP will be finalized and submitted upon commissioning of the well pump station (Task 4.4).

State Well No. and Lat./Long. - Submittal will include coordinates of the constructed well location.

Water Quality Reports – Water samples will be collected from the constructed production well for Title 22 constituents.

Task 2.1 also includes interaction with other regulatory agencies beyond DDW, including the Contra Costa County Department of Environmental Health related to permitting for drilling, construction, and testing of the new well. Permits and plans that are typically required for a well installation project include drilling, discharge, water supply, encroachment permits, storm water pollution and prevention plan (SWPPP), and traffic control plans. The contractor selected to drill the production well will be responsible for procurement and administration of the drilling permit. LSCE will submit plans and applications, and administer other permits as needed.Following acceptance of the project, LSCE will assist the CSD with preparation of the final DDW amended water supply permit, building upon the preliminary permit submittal. This will involve permitting for the new well, equipment and finalization of the DWSAPP for the facilities. LSCE has completed numerous water supply permits and fully understands the DDW process and required submittals.

LSCE understands that the CSD will be working to secure the services of a qualified environmental consultant to ensure all project work complies with California Environmental Quality Act (CEQA) requirements. CEQA compliance is required under the DDW permit amendment process for adding a new source of supply to an existing water supply permit. It has been our experience that compliance with the CEQA can require a varying level of assistance from the design engineers, depending upon the specific project, the location, and the extent of potential impacts. However, for purposes of this proposal LSCE is assuming that the subject project will have minimal potential environmental impact and can likely be addressed through a negative or mitigated-negative declaration. LSCE is prepared to assist the CSD's CEQA consultant with project descriptions and technical support as needed to facilitate development of the CEQA document.

Task 3 – Production Well Design and Construction

Task 3.1 - Final Well Construction Design and Specifications

In preparing construction plans and specifications, LSCE relies on its extensive field experience to anticipate potential problems due to unique site conditions, fluid discharge restrictions (typically one of the most difficult construction and testing issues), and site-specific restrictions and addresses them in a comprehensive set of project specifications. Anticipating and addressing potential issues in the specifications eliminates project delays and cost overruns and results in more efficient project execution, but more importantly ensures that the objectives of maximizing well yield and with satisfactory water quality are met.

LSCE will prepare project specifications for bidding purposes that include detailed construction requirements that must be followed by the well drilling contractor during every phase of the project, including the minimum acceptable methods for drilling fluid control, conditioning of the borehole for casing and gravel envelope installation, well development and testing, and performance standards. Other site-specific items will include requirements for containment and disposal of drill cuttings and handling of discharge water during development and test pumping in accordance with applicable local, state and federal regulations.

LSCE will prepare a complete set of specifications (Special Provisions and Technical Specifications), drawings in AutoCAD, and a bid sheet suitable for the solicitation of competitive bids. LSCE will provide a draft copy of the specifications and plans to the CSD for review. Upon acceptance by the CSD, LSCE will provide the CSD with the final specifications for incorporation with the CSD's front-end contract documents and forms for solicitation of bids. LSCE assumes that the CSD will contract directly with the selected contractor for the construction and testing of the wells.

Task 3.2 – Well Construction Bidding Assistance

LSCE will conduct a mandatory pre-bid conference for prospective contractors with CSD and LSCE project managers present. LSCE will issue the bidding documents to local plan houses and bid boards for competitive bid proposals on behalf of the Town in conformance with the Town's bidding requirements.

LSCE will also act on the Town's behalf to respond to any requests for information from prospective contractors and prepare and issue any bid addendums as needed throughout the bidding phase.

LSCE will review and tabulate all formal bids to ensure responsiveness with the contract requirements. A thorough background check on qualifications and references will be conducted on the lowest responsible bidder and the findings of that review will be discussed with the CSD. LSCE will prepare a formal bid summary and make a recommendation for award to the lowest responsible bidder.

Task 3.2 –Well Construction and Testing Oversight Services

As part of our inspection and oversight duties, LSCE will verify that all aspects of the project are carried out as set forth in the project specifications and according to accepted well drilling practices. LSCE will notify the contractor regarding lack of compliance with the project specifications or accepted water well drilling practices and, as the CSD's agent, will identify corrective measures to be implemented. LSCE will immediately stop work on the project if there are any safety, property damage, or permit violation concerns. LSCE will document all aspects of the project, including inspection items, calculations, and communications with the contractor and other involved parties. LSCE will provide frequent updates to the CSD via email, phone, and in person, if requested in addition to regular weekly updates.

LSCE has developed a systematic approach for well installation technical support and will assist the CSD with the following key elements to ensure that the well meets the performance requirements of the construction contract and that work is performed in the timeliest, most cost effective, and safe manner.

Pre-construction Conference – Prior to mobilization, LSCE will conduct a pre-construction conference with the successful bidder to ensure that they are familiar with the project specifications and answer any technical or logistical questions concerning the project.

Well Location – LSCE will verify the location of the planned well before drilling commences.

Mobilization/Site Preparation – LSCE will verify that all required site protection measures, sound walls, and other site preparation items required in the specifications are in place and that all equipment necessary to complete the project as specified is one site before work commences. LSCE will also verify that all project materials are on site or in the possession of the Contractor before work commences.

Conductor/Surface Casing – LSCE will witness conductor/surface casing installation and grouting operations.

Borehole Construction – LSCE will monitor drilling operations and drilling fluid control to ensure minimal formation damage.

Materials Inspection – LSCE will inspect and verify that all materials are as specified and in good condition.

Casing Installation – LSCE will witness borehole conditioning and casing assembly installation.

Gravel and Annular Seal Placement – LSCE will inspect gravel and seal(s) installation and estimate final quantities to be installed.

Well Development and Discharge Monitoring – LSCE will witness initial well development techniques with the drilling rig, final development of the well by pumping, and compliance with all discharge requirements.

Well Testing – LSCE will witness acceptance tests for minimum sand production and maximum well efficiency, monitor well pump tests, and evaluate well performance in order to develop pump design criteria.

Video Inspection, Plumbness and Alignment Testing, Well Disinfection – LSCE will witness video, plumbness and alignment testing, and final well disinfection.

Cleanup – LSCE will witness contractor's compliance with site cleanup and well security requirements.

Payment and Acceptance – LSCE will review all invoices for accuracy and make recommendations for payment and for final acceptance. LSCE will review all change order requests and make recommendations to the City regarding acceptance or denial.

Well Construction Summary Report - LSCE will prepare two bound copies of a Well Construction and Testing Summary Report, including a written summary of entire project, all testing results, and as-built diagrams. A PDF version of the report will also be provided on compact disk. Items to be included in the summary report are:

- Written Summary of Project
- Lithologic Log
- Geophysical Logs
- Caliper Log
- As-Built Diagrams
- State of California Well Driller's Completion Report
- Material Delivery Receipts
- Development Records
- Pump Test Results
- Pump Test Hydrographs
- Video Survey
- Plumbness and Alignment Survey Results
- Water Quality Summary
- Contractor's Daily Tour Reports
- Project Photographs
- Copy of Well Design Report
- Any Other Relevant Materials

Task 4 – Pump Station Design and Construction

Task 4.1 – Pump Station Design, Plans and Technical Specifications

LSCE will develop the pump station plans and specifications for the pump station facility. The scope of work covered by the engineering plans and technical specifications will consist of a submersible pump, motor, motor control center, discharge piping, liquid chlorine, iron and manganese treatment system, standby diesel generator, instrumentation, electrical control panels, SCADA communication, and CMU

block building to house chemicals. The design will also address site modifications and improvements including grading, drainage, paving, fencing, and painting. The electrical control logic will be designed to conform to existing CSD control logic and SCADA system which will permit effective communication between the new facility and the CSD's existing central system. Other specific design elements to be addressed in the plans and specifications are:

Best Management Practices (BMPs) - SWPPP and CEQA mitigation measures will be incorporated for control of storm water, construction water, and any other required mitigations the contractor shall follow such as for noise, light, work hours, etc.

Site Improvements - Drainage, paving, above-ground and below-ground piping for the connection to the distribution system (including detailed fittings and valves), frontage improvements, landscaping and site fencing and/or access improvements.

General Plansheets - Title page includes general project information (location, contacts, etc.). Additional general sheets include the sheet index, well profile, standard symbols, notes and abbreviations.

Civil Plansheets - Site improvements will include onsite paving within the property, grading, demolition, and utility design (i.e. sewer, storm, water) pipelines to serve the site.

Cathodic Protection Plansheets - Corrosion protection details and technical specifications will be provided by JDH.

Structural Plansheets - A CMU building to house the chemical components. Structural plans will also include the design of the equipment pads, building structure, and CMU perimeter wall.

Electrical Plansheets - Electrical service (PGE), electrical metering and disconnect, standby emergency generator and transfer switch (if needed), single line and process and instrumentation diagrams, VFD control system, pump-to-waste overboard circuitry, SCADA and radio communication, instrumentation, electrical conduits and conductors.

Mechanical Plansheets - Well pump, station piping, and mechanical conduits, chlorine system, filter vessels and reclaim tank.

Standard Construction Details - Plans will include pipe, pump and other applicable standard details.

Startup and Commissioning - Performance testing of all components and commissioning of the facilities and equipment for approval by the CSD and LSCE.

LSCE assumes a topographic basemap will be provided by either the Pantages developer or the CSD which will be suitable for depicting the engineering design features in an overall engineering plan set. LSCE has been provided a copy of the geotechnical report prepared by ENGEO for the overall Pantages development, dated February 13, 2020. Based on review of the geotechnical report by LSCE's structural engineering subconsultant (Finn Design Group), an addendum letter will need to be developed which addresses pump station site structural design features including recommendations pertaining to

allowance and suitability of conventional and/or shallow foundations for the building, tank, wall, equipment pads, etc. subgrade preparation including over-excavation recommendations, depth of footings, allowable bearing pressure, etc. Finn Design Group assumes shallow/conventional foundation design will be acceptable to ENGEO and post-tensioned slabs are not required for the project structural design foundations.

LSCE proposes to complete the design at the 75%, and 100% stages that will build upon the conceptual site plan that was previously prepared by LSCE. LSCE will also develop an Engineer's Estimate at each stage of the design. LSCE will prepare a complete set of engineering plans for the 75% stage including civil, electrical, mechanical, and structural disciplines as well as technical specifications. Both the engineering planset and technical specifications will provide sufficient detail to outline the fundamental components and scope of the project for the CSD's review.

After review of the 75% by the CSD, LSCE will incorporate any comments received from the CSD and prepare a 100% set of plans and specifications. LSCE will modify the plans and specifications as needed, to incorporate the data collected during the drilling of the production well. The 100% plans will also include additional civil, electrical, mechanical, structural plan details and technical specifications as needed. If any review comments are not incorporated into the 100% planset, an explanation will be provided. The 100% planset and technical specifications will be submitted to the CSD and the DDW for review comments and concurrence.

After receipt of the CSD's and DDW's 100% review comments, a final signed/stamped set of plans and specifications will be prepared for bidding purposes. LSCE assumes all design phase plans and specifications will be transmitted electronically to the CSD and physical copies are not needed. It is also assumed that only very minor changes will be needed prior to bidding. The final set of plans and specifications will have incorporated all applicable comments and will be issued to each permitting agency for signature (DDW will not sign plans – approval will be in letter form).

Task 4.2 – Pump Station Bidding Assistance

LSCE is knowledgeable of many general contractors and specialty contractors situated throughout northern, central, and southern California that specialize in construction of municipal well pump stations. LSCE will provide a list of a minimum of four (4) general and specialty contractors who may be interested in bidding on this project, for the CSD's review and approval. LSCE assumes the Town will post the bidding documents to various local plan houses to satisfy the Town's bidding requirements.

LSCE will conduct a mandatory pre-bid conference with the project manager, project engineer and electrical engineer in attendance. Based upon questions from bidders, LSCE will assist the CSD with preparing any required written clarifications and/or addendums to clarify the scope for bidding purposes. Upon publicly opening the bids, LSCE will assist the CSD with review of all formal bids to ensure responsiveness with the contract requirements. LSCE will assist the CSD with preparation of a bid tabulation summary table and identify the lowest responsible bidder.

Task 4.3 – Technical Assistance During Construction and Commissioning

LSCE's approach to providing construction support services involves a close coordination with the construction management personnel, schedule, progress and administrative processes so as to not delay progress. LSCE will act on behalf of the CSD and work in close coordination with the CSD's assigned project manager. LSCE assumes the scope of construction period services includes the following:

Pre-Construction Meeting - LSCE will hold a pre-construction conference to discuss the baseline schedule and the procedure for construction progress, RFIs, status of submittals, and any miscellaneous items throughout construction. Additional construction meetings will be held at the job site or the CSD's office (as needed) and they will be conducted as a means to address project issues or significant items which require in-person resolution. A formal agenda and meeting minutes documenting the status of the construction meetings will be prepared.

Construction Staking - LSCE assumes construction staking of the well site and major well station features will be provided by the CSD as needed to facilitate construction.

Submittal Review - LSCE will complete the review and transmittal of technical submittals provided by the general contractor. A submittal spreadsheet log will be maintained for use in tracking and documenting submittal review. LSCE assumes no more than 50 submittals will need to be reviewed/approved.

Requests for Information - During the construction period, the general contractor will ask questions on details of the contract, substitutions, and alternative approaches that are best answered by the designer. LSCE will review questions and provide written clarifications. LSCE assumes no more than 25 RFIs will need to be reviewed.

Change Order Assistance - LSCE will prepare any necessary field instructions and change orders. Anticipated assignments may include: preparing requests to the general contractor for proposals for extra or changed work; review of contractor requests for change order to determine if work proposed is considered extra work; opinion of probable construction cost; and, review and negotiation of cost estimates. LSCE will also prepare drawings, sketches or specifications for extra or changed work items. LSCE assumes no more than 5 change orders will need to be reviewed/approved.

Monthly Pay Requests - Every month, or as required under CSD general contracting procedure, the general contractor will submit a pay application for work completed to-date. LSCE will review the completed pay application and provide a recommendation for approval based upon actual work completed, material delivered and retention release. LSCE assumes the CSD will review/enforce labor compliance requirements and certified payroll record requirements. LSCE assumes no more than 12 payment applications will need to be reviewed/approved.

On-site Inspections - LSCE will provide scheduled on-site milestone inspections including special inspections for electrical, structural and mechanical components. LSCE will prepare an inspection report for each site-visit indicating the date and times, people on-site, material delivered, work completed, and corrections noted. LSCE assumes the following milestone inspections will be required which include:

Civil Engineer Support
Furnish an engineer for field observation of station layout/grading; well pump installation; station piping/valving installations; transducer installation; utility service lines/conduits and ventilation system construction; and chemical feed equipment installations. LSCE assumes an estimated four site visits are needed to perform this work.

Structural Engineer Support
Furnish an engineer for field observation of construction of CMU building components including the rebar, concrete slab, and CMU wall. LSCE assumes an estimated two site visits from a civil engineer will be needed to cover this inspection.

Geotechnical Engineering Services
LSCE assumes geotechnical services will be provided by others.

Electrical Engineering Support
Inspection of conduit routing, equipment anchorage, control and distribution panel configuration and electrical switchgear will be performed. Also included in this task will be to inspect the electrical for "green tagging" for power company electrical service connection. Four site visits by the electrical engineer are estimated to be needed for this scope of work.

Startup and Commissioning - LSCE will oversee and be responsible for the approval of the contractor's startup and commissioning activities for a fully functioning and operable facility, including all equipment acceptance testing, communications and programming, and close-out permitting requirements. This process will involve coordinating the general contractor, sub-contractors, systems integrator, equipment manufacturers, CSD staff and regulatory agencies.

A preliminary and final inspection will be conducted during startup/testing & commissioning of the pump station, in which LSCE and our sub-consultants prepare list of incomplete construction items for the general contractor prior to final acceptance of the project by the CSD and perform a follow-up visit to certify completion of the Contractor punchlist. Performance acceptance testing will also be conducted to ensure the completed down hole pump assembly operates as warranted by the equipment manufacturer to ensure the plant is operating at the flow rates, pressures and efficiencies for which the entire facility was designed.

As-Built Drawings - At the end of the construction phase of the project, LSCE will modify the project drawings into a set of project Record Drawings based on field changes and red-line markups from the general contractor and LSCE construction management staff. Digital copies of the Record Drawings will be provided to the CSD after they have been reviewed and approved by LSCE and the CSD.

DDW Permitting - Following acceptance of the project, LSCE will assist with the final DDW amended water supply permit, building upon the preliminary permit submittal in the Task 3. This will involve permitting for the new wells, equipment and preparation of the DWSAPP for the facilities. LSCE has completed numerous water supply permits and fully understands the DDW process and required submittals. Refer to Task 2 for full scope of work anticipated.

COST ESTIMATE AND CONTRACT ADMINISTRATION

The estimated budget to complete the Scope of Work described above is based on our current understanding of the project. The cost estimate is based on the effort that would be reasonably expected for a project of this size and scope. The table below summarizes the estimated costs per Task:

Task	Description	Outside Services	LSCE Services	Total
1	Project Coordination and Administration	$0	$21,280	$21,280
2	Regulatory Submittal	$0	$15,420	$15,420
3	Production Well Design and Construction	$4,000	$71,470	$75,470
4	Well Pump Station Design and Construction	$121,038	$124,790	$245,828
	Totals	**$125,038**	**$232,960**	**$357,998**

The attached cost estimate worksheet details the number of hours each job classification is anticipated apply to each task as outlined in the above Work Plan. Prevailing wages will be paid to LSCE employees and any subcontractors as applicable. Hours and cost for each task are tabulated to show number of total hours per job classification and total cost for each task. Estimated costs for subcontractors are included in their relevant task. LSCE's direct costs (mileage, misc. supplies) are estimated for each relevant task.

In the event that the CSD directs LSCE to deviate from the proposed scope of work, or as dictated by unforeseen conditions, LSCE will provide notification of any potential changes in the estimated cost to complete the work. LSCE will not proceed with any work that deviates from the approved scope and budget until approval to proceed is granted by the CSD.

Typical items that may affect the cost of a task include:

- Significant changes in materials cost
- Unforeseen site conditions
- Delays in obtaining required permits
- Items or conditions that could not reasonably be anticipated at the time of proposal preparation
- Delays during construction that extend LSCE's construction administrative roles
- Longer than anticipated review of plans, specifications, and permits by others

LSCE will bill monthly for labor and materials, only as incurred, in accordance with the following rate schedule:

- LSCE Schedule of Fees - Engineering and Field Services 2021-2022

LSCE proposes to perform the work described in this proposal for a sum of $357,998. The proposed project budget includes LSCE's labor under each task as delineated in this proposal. LSCE will bill monthly for labor and materials, only as incurred, in accordance with LSCE's Schedule of Fees (attached). In the event that LSCE is directed to deviate from the proposed scope, or as dictated by unforeseen field conditions, LSCE will provide notification of any potential changes in the estimated cost and time to complete the work. LSCE will not proceed with any work that deviates from the approved scope and budget until approval to proceed is granted.

We appreciate the opportunity to provide you with this scope and budget and look forward to working with the CSD.

Sincerely,

LUHDORFF AND SCALMANINI
CONSULTING ENGINEERS

Jason M. Coleman, P.E.
Supervising Engineer

Attachments: Project Estimate Worksheet
2021-2022 Schedule of Fees for Engineering and Field Services

Client Town of Discovery Bay
Project 21-3-125
Est. By JMC,OS
Date December 6, 2021

Cost Estimate for
Design, Engineering, and Field Services for
Town of Discovery Bay Well No.8 and Well Pump Station

Luhdorff & Scalmanini Consulting Engineers		Principal Professional	Supervising Professional	Senior Professional	Project Professional	Staff Professional	Staff Professional Prevailing Wage	AutoCAD	Clerical	EPS (Electrical)	Finn Design Group (Structural)	JDH (Corrosion Protection)	Water Quality	Direct Expenses	Summary
Task	**Description**	$230	$220	$200	$175	$155	$170	$140	$90	Lump*	Lump*	Lump*	Incurred	Incurred	
Task 1 – Project Coordination and Administration															
Task 1.1 – Kickoff and Information Request	Task Hours	0	6	16	0	16	0		0						38
	Task Cost	$0	$1,320	$3,200	$0	$2,480	$0	$0	$0						$7,000
	Direct Expenses														$0
	Sub Consultant														$0
	SubTotal	$0	$1,320	$3,200	$0	$2,480	$0	$0	$0						**$7,000**
Task 1.2 – Meetings and Project Coordination	Task Hours	0	8	24		16	0	0	6						54
	Task Cost	$0	$1,760	$4,800	$0	$2,480	$0	$0	$540						$9,580
	Direct Expenses														$0
	Sub Consultant														$0
	SubTotal	$0	$1,760	$4,800	$0	$2,480	$0	$0	$540						**$9,580**
Task 1.3 – Project Administration	Task Hours	2	16	0	0	0	0	0	8						26
	Task Cost	$460	$3,520	$0	$0	$0	$0	$0	$720						$4,700
	Direct Expenses														$0
	Sub Consultant														$0
	SubTotal	$460	$3,520	$0	$0	$0	$0	$0	$720						**$4,700**
														Total Task Cost Estimate	**$21,280**
Task 2 – Regulatory and Permitting Activities															
Task 2.1 - DDW Permit and CEQA Assistance	Task Hours	2	8	14	24	40	0	0	0						88
	Task Cost	$460	$1,760	$2,800	$4,200	$6,200	$0	$0	$0						$15,420
	Direct Expenses														$0
	Sub Consultant														$0
	SubTotal	$460	$1,760	$2,800	$4,200	$6,200	$0	$0	$0						**$15,420**
														Total Task Cost Estimate	**$15,420**
Task 3 – Production Well Design and Construction															
Task 3.1 - Final Well Construction Design and Specifications	Task Hours	16	0	0	28			4	4						52
	Task Cost	$3,680	$0	$0	$4,900	$0	$0	$560	$360						$9,500
	Direct Expenses													$200	$200
	Sub Consultant														$0
	SubTotal	$3,680	$0	$0	$4,900	$0	$0	$560	$360						**$9,700**
Task 3.2 - Well Construction Bidding Assistance	Task Hours	12	0	0	12	0	0	0	2						26
	Task Cost	$2,760	$0	$0	$2,100	$0	$0	$0	$180						$5,040
	Direct Expenses													$200	$200
	Sub Consultant														$0
	SubTotal	$2,760	$0	$0	$2,100	$0	$0	$0	$180						**$5,240**
Task 3.3 - Well Construction and Testing Oversight Services	Task Hours	45	0	0	120	24	110	0	0						299
	Task Cost	$10,350	$0	$0	$21,000	$3,720	$18,700	$0	$0						$53,770
	Direct Expenses													$2,760	$2,760
	Sub Consultant												$4,000		$4,000
	SubTotal	$10,350	$0	$0	$21,000	$3,720	$18,700	$0	$0						**$60,530**
														Total Task Cost Estimate	**$75,470**
Task 4 – Pump Station Design and Construction															
Task 4.1 - Pump Station Design, Plans and Technical Specifications	Task Hours	4	24	30	50	100	0	140	0						348
	Task Cost	$920	$5,280	$6,000	$8,750	$15,500	$0	$19,600	$0						$56,050
	Direct Expenses														$0
	Sub Consultant									$27,600	$27,600	$22,713			$77,913
	SubTotal	$920	$5,280	$6,000	$8,750	$15,500	$0	$19,600	$0						**$133,963**
Task 4.2 - Pump Station Bidding Assistance	Task Hours	0	8	20	20	36	0	4	0						88
	Task Cost	$0	$1,760	$4,000	$3,500	$5,580	$0	$560	$0						$15,400
	Direct Expenses														$0
	Sub Consultant														$0
	SubTotal	$0	$1,760	$4,000	$3,500	$5,580	$0	$560	$0						**$15,400**
Task 4.3 - Technical Assistance During Construction and Commissioning	Task Hours	0	24	40	80	140	0	24	0						308
	Task Cost	$0	$5,280	$8,000	$14,000	$21,700	$0	$3,360	$0						$52,340
	Direct Expenses													$1,000	$1,000
	Sub Consultant									$19,263	$11,500	$12,363			$43,125
	SubTotal	$0	$5,280	$8,000	$14,000	$21,700	$0	$3,360	$0						**$96,465**
														Total Task Cost Estimate	**$245,828**
SUMMARY	Total LSCE Hours	81	94	144	334	372	110	172	20						1183
	Total LSCE Cost	$18,630	$20,680	$28,800	$58,450	$57,660	$18,700	$24,080	$1,800						$228,800
	Total Sub-consultant Cost									$46,863	$39,100	$35,075	$4,000		$125,038
	Direct Expenses													$4,160	$4,160
														Total Cost Estimate	**$357,998**

Luhdorff & Scalmanini
Consulting Engineers
500 FIRST STREET • WOODLAND, CA 95695

2021-2022 SCHEDULE OF FEES

ENGINEERING AND RELATED FIELD SERVICES

Professional*

Senior Principal	$235/hr.
Principal Professional	$230/hr.
Supervising Professional	$220/hr.
Senior Professional	$175 to 200/hr.
Project Professional	$155 to 175/hr.
Staff Professional	$140 to 155/hr.

Technical

Engineering Inspector	$140/hr.
ACAD Drafting/GIS	$140/hr.
Engineering Assistant	$115 to 140/hr.
Scientist	$115 to 140/hr.
Technician	$115 to 140/hr.

Clerical Support

Word Processing, Clerical	$90/hr.
Digital Communications Specialist	$90/hr.
Project Admin/Accounting Assistant	$90/hr.

Vehicle Use	$0.58/mi.
Subsistence	Cost Plus 15%
Groundwater Sampling Equipment (Includes Operator)	$170.00/hr
Copies	$0.20 ea.

Professional or Technical Testimony	200% of Regular Rates
Technical Overtime (if required)	150% of Regular Rates
Outside Services/Rentals	Cost Plus 15%
Services by Associate Firms	Cost Plus 15%

** Engineer, Geologist, Hydrogeologist, and Hydrologist*

Town of Discovery Bay CSD						
					Luhdorff and Scalmanini	
Well 8 Standalone WTP					Consulting Engineers	
Planning Level Cost Estimate (Preliminary)					Woodland, California	
Date:		6-Dec-2021				
File No.:		20-2-043				
					Unit	
Item		**Description**	**Quantity**	**Unit**	**Cost**	**TOTAL**
1	**Site Property Acquisition Budget *(budgetary only)***					**$165,000**
	a	Purchase Price (basis: est. bare ag land in Contra Costa)	0.44	Acre	$342,166	$150,000
	b	Fees (assumed to be 10%)	1	LS	$15,000	$15,000
2	**Well Construction**					**$525,384**
	a	Mobilization, Records, Site Construction (e.g. sound walls)	1	LS	$100,000	$100,000
	b	Conductor Bore, Sanitary Seal and Conductor/Surface Casings	1	LS	$78,410	$78,410
	c	Production Bore, Casing/Screen (stainless steel) and Gravel	1	LS	$237,374	$237,374
	d	Test Pumping, Development, Alignment Testing, Disinfection	1	LS	$109,600	$109,600
3	**General Site Construction**					**$1,400,983**
	a	Mobilization	1	LS	$100,000	$100,000
	b	Mass Grading, Fill and Compact (0.44 -acre site)	0.44	Acre	$320,000	$140,283
	c	Concrete (tank r/w, filter pad, chem pad, pedestals, misc.)	85	CY	$1,200	$102,000
	d	Station Piping (12" fab steel flanged FBE)	1	LS	$125,000	$125,000
	e	Distribution Piping (16" C905 PVC) - **Upsized Transmission Pipe**	120	LF	$250	$30,000
	f	Storm Drain Piping and Manholes (12" RCP)	75	LF	$300	$22,500
	g	Sewer Piping and Connection (6" PVC)	120	LF	$200	$24,000
	h	Valves and Instrumentation	1	LS	$200,000	$200,000
	i	Asphalt Paving	19,000	SF	$7	$133,000
	j	Steel Pale Security Fencing & Gate (wrought iron)	250	LF	$400	$100,000
	k	CMU Walls	360	LF	$220	$79,200
	l	Cathodic Protection	1	LS	$100,000	$100,000
	m	Chemical Building	1	LS	$70,000	$70,000
	n	Site Electrical Materials and Installation	1	LS	$175,000	$175,000
4	**Equipment Procurement and Installation**					**$1,365,000**
	a	Well Pump Assembly (250 HP, 1800 gpm Submersible)	1	LS	$300,000	$300,000
	b	Filter System (1800 gpm, 3-cell, greensand, 150 psi ASME)	1	LS	$450,000	$450,000
	c	Backwash Tank & Decanter (80,000-gal, bolted steel with sump)	1	LS	$80,000	$80,000
	d	Reclaim Pump (180 gpm)	1	LS	$40,000	$40,000
	e	Sewer Drain Pump (400 gpm)	1	LS	$30,000	$30,000
	f	Chemical Feed Equipment (100 GPD pump, 500 gal tank)	1	LS	$40,000	$40,000
	g	Standby Diesel Generator System (300 kW)	1	LS	$175,000	$175,000
	h	Motor Control Centers, PLCs and misc. Panels	1	LS	$250,000	$250,000
9	**Investigation, Design, Permitting, and Inspection Services**					**$721,773**
	a	Land Survey Topographic Basemap				$0
	b	Geotechnical Study and Inspection - *site dev., tanks, etc.*				$10,000
	d	Monitoring Well Construction				$80,000
	c	Engineering - Investigation, Design, Regulatory Approvals				$343,438
	e	Construction Inspection				$187,335
	f	Environmental (CEQA) - *Initial Study/MND for new well and site*				$41,000
	g	Misc. County/local Permitting Fees				$10,000
	h	PG&E New Service Design and Construction Fees				$50,000
		Total Estimated Cost				**$4,178,140**
					w/ 10% Contingency	**$4,595,954**

Town of Discovery Bay

"A Community Services District"

STAFF REPORT

Meeting Date

December 15, 2021

Prepared By: Mike Yeraka, Projects Manager
Submitted By: Dina Breitstein, General Manager

Agenda Title

Discussion Regarding Authorization to Waive Annual $224 Vacant Lot Fee for Contra Costa Water District Los Vaqueros Pipeline Parcel Crossing Wastewater Plant #2 Property in Order to Complete Annexation of Plant #2 Property and Removal of Two Previously Detached Parcels from the Town Sphere of Influence.

Recommended Action

a. Discuss and provide direction on the proposal to waive the annual $224 vacant lot fee for the Contra Costa Water District parcel crossing the Plant #2 property.
b. Discuss and provide direction on the LAFCO proposal to Remove APNs 011-190-044 and -045 from the Town's Sphere of Influence to clean up the detachment of the same parcels from the Town's service area that occurred in 2016.

Executive Summary

The District's application to LAFCO to annex the Town's Plant #2 property has been reviewed by the LAFCO Executive officer and Staff has been told that LAFCO may need to also include the Contra Costa Water District (CCWD) parcel that crosses the Plant #2 property in order for the Town to have a contiguous boundary. The area in blue on the attached exhibit is the CCWD parcel that crosses the Plant #2 parcels. It is this area that the LAFCO Executive officer is considering including in the annexation. CCWD has said they will not object to the inclusion of their property so long as they are not charged any annual fees. The annual Vacant Lot Fee is $224 but since the CCWD parcel can't have any structures built on it and since it could prevent our annexation from being approved if CCWD were to object to their parcel being included in the annexation, Staff feels that it is in the Town's best interest for the Board to take action to waive the fee.

Also, as noted in the attached December 7, 2021, email from the LAFCO Executive Officer, the detachment of the two parcels shown on the attached Exhibit 'B' in 2016 never included removal from the Town's Sphere of Influence. The LAFCO Executive Officer would like to use our application to clean up this issue and detach the two parcels from our SOI.

Specific Committee Action:

a. Discuss and provide direction on the proposal to waive the annual $224 vacant lot fee for the Contra Costa Water District parcel crossing the Plant #2 property.
b. Discuss provide direction on the LAFCO proposal to Remove APNs 011-190-044 and -045 from the Town's Sphere of Influence to clean up the detachment of the same parcels from the Town's service area that occurred in 2016.

Previous Relevant Board Actions for This Item

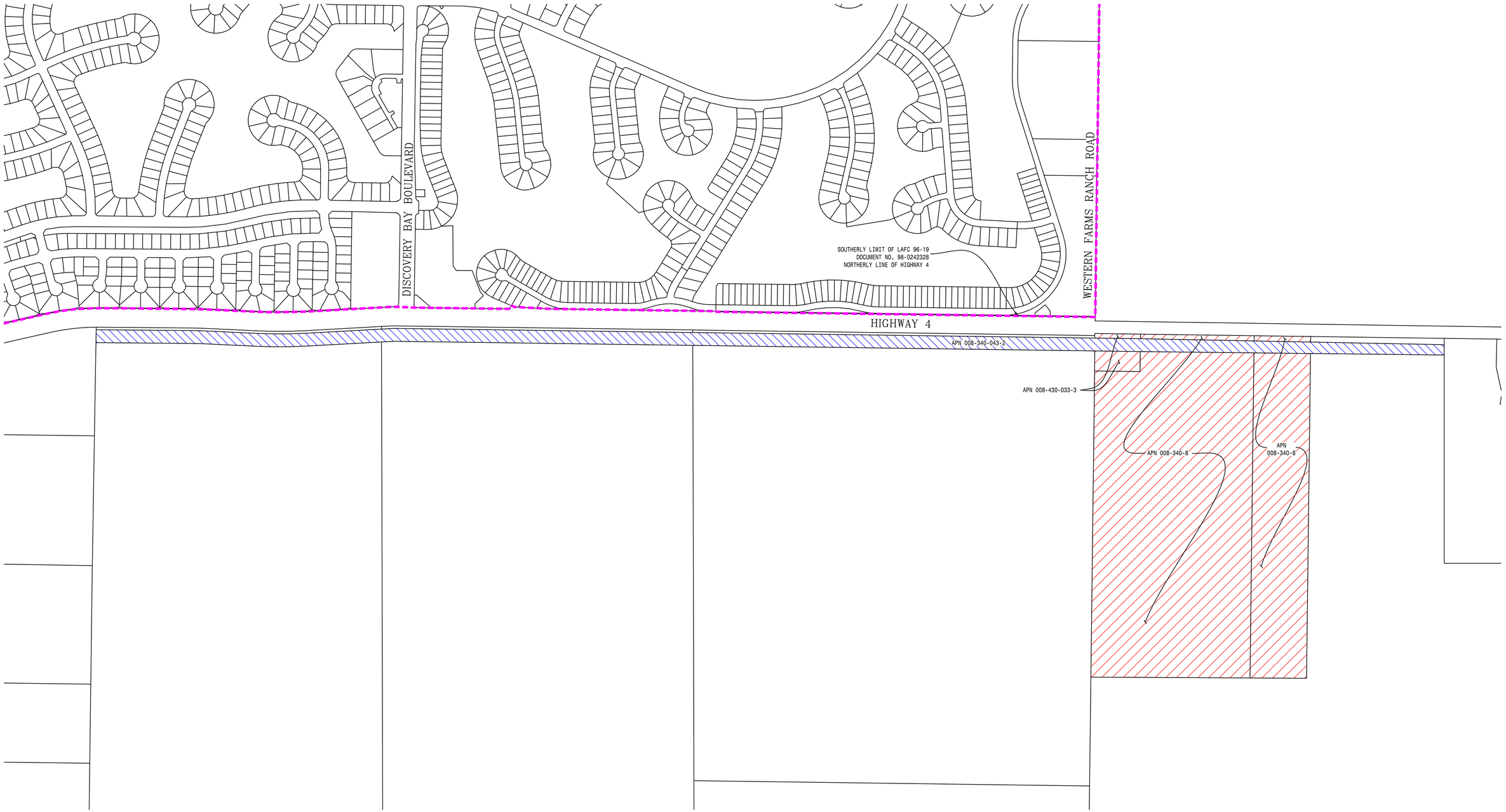
The Board had previously approved moving forward with the annexation application to LAFCO.

Fiscal Impact: N/A
Amount Requested: $0
Sufficient Budgeted Funds Available?: Yes
Prog/Fund # Category: TBD

Attachment

1. Property Exhibit
2. LAFCO email
3. Exhibit 'B' showing 2 parcels

AGENDA ITEM: E-4



LEGEND

SOUTHERLY LIMIT OF LAFC 96-19 DOCUMENT NO. 98-0242328 NORTHERLY LINE OF HIGHWAY 4

CONTRA COSTA COUNTY WATER DISTRICT DOCUMENT NO. 95-150272, EXCEPTION TO DOCUMENT NO. 2009-0151183

TOWN OF DISCOVERY BAY DOCUMENT NO. 2009-0151183 PORTION TO BE ANNEXED TO TOWN OF DISCOVERY BAY COMMUNITY SERVICES DISTRICT SPHERE OF INFLUENCE EXPANSION AND ANNEXATION

0 300 600

SCALE: 1"=300'

PROPERTY EXHIBIT
PANTAGES AND TOWN OF DISCOVERY BAY COMMUNITY SERVICES DISTRICT SPHERE OF INFLUENCE EXPANSION AND ANNEXATION

CONTRA COSTA COUNTY CALIFORNIA

DATE: 10-12-2021
DRAWN BY: IBM
CHK'D BY: IBM

MacKAY & SOMPS
ENGINEERS PLANNERS SURVEYORS
5142B FRANKLIN DR, PLEASANTON, CA 94588 (925)225-0690

19977.000.P

SHEET 1 OF 1

10-13-2021 11:29am Ian MacDonald P:\19977\SRV\EXH-S\EXH-TODB_ANNEXATION_WASTWATER_PLANT_2.DWG

Mike Yeraka

From: Lou Ann Texeira <LouAnn.Texeira@lafco.cccounty.us>
Sent: Tuesday, December 7, 2021 2:03 PM
To: Mike Yeraka
Subject: LAFCO 16-02

Hi Mike,

As noted in the LAFCO and reflected in the 8/10/16 LAFCO meeting minutes: Commissioners continued the public hearing from the July 13 meeting in order for the BBID proposed revisions to the original proposal to be publicly noticed. The revised proposal would exclude APNs 011-190-044 and -045 from the detachment of territory from BBID, and it would detach the same parcels from TODBCSD."

The intent was to remove these two parcels from DBCSD. And while the parcels were detached from DBCSD's service boundary, looks like they were never removed from the DBCSD's SOI.

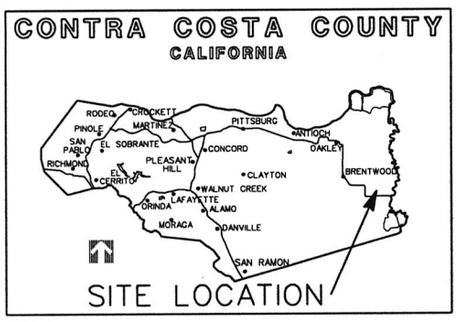
Let me know your preference – 1) does the district want to detachment these two parcels from DBCSD's SOI (yes/no), and if yes, 2) would the district prefer to add this to the current application, or have LAFCO staff add it to the LAFCO staff report?

Please advise.

Lou Ann Texeira, Executive Officer
Contra Costa LAFCO
40 Muir Road, 1st Floor
Martinez, CA 94553
925-313-7133

LouAnn.Texeira@lafco.cccounty.us

EXHIBIT 'B'



=PROPOSED TODBCSD DETACHMENT AREA

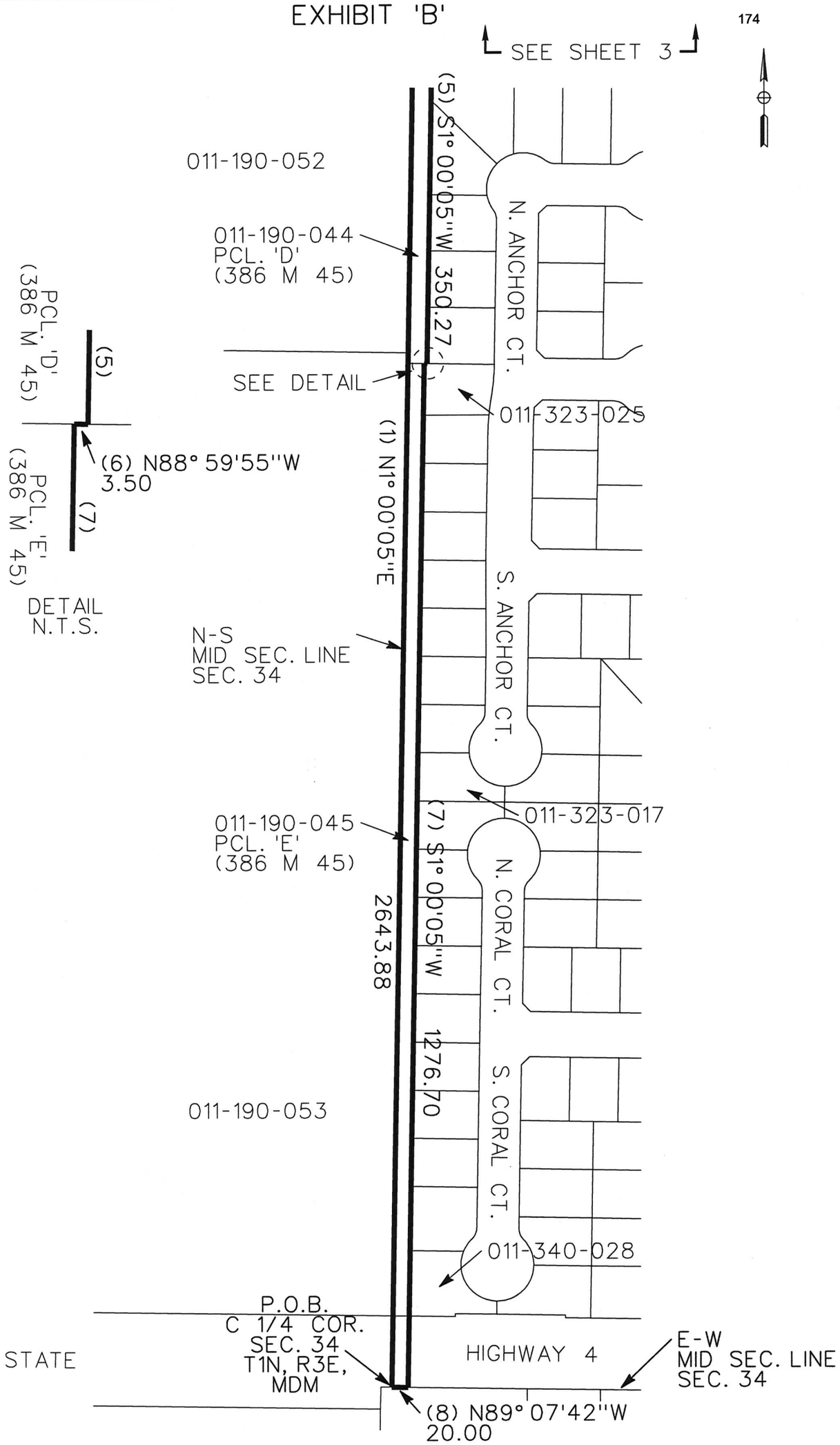
- - - - =SECTION LINE

Town of Discovery Bay Community Services District Detachment
Vicinity Map

SHEET 1 OF 3

CONTRA COSTA COUNTY PUBLIC WORKS DEPARTMENT 255 GLACIER DRIVE MARTINEZ, CALIFORNIA 94553	Scale: 1" = 500'	File No.
	Drawn By: TL	Plot Date: 9/28/2016
	Checked By: JS	Drawing: TODBCSD Detach.dgn

EXHIBIT 'B'

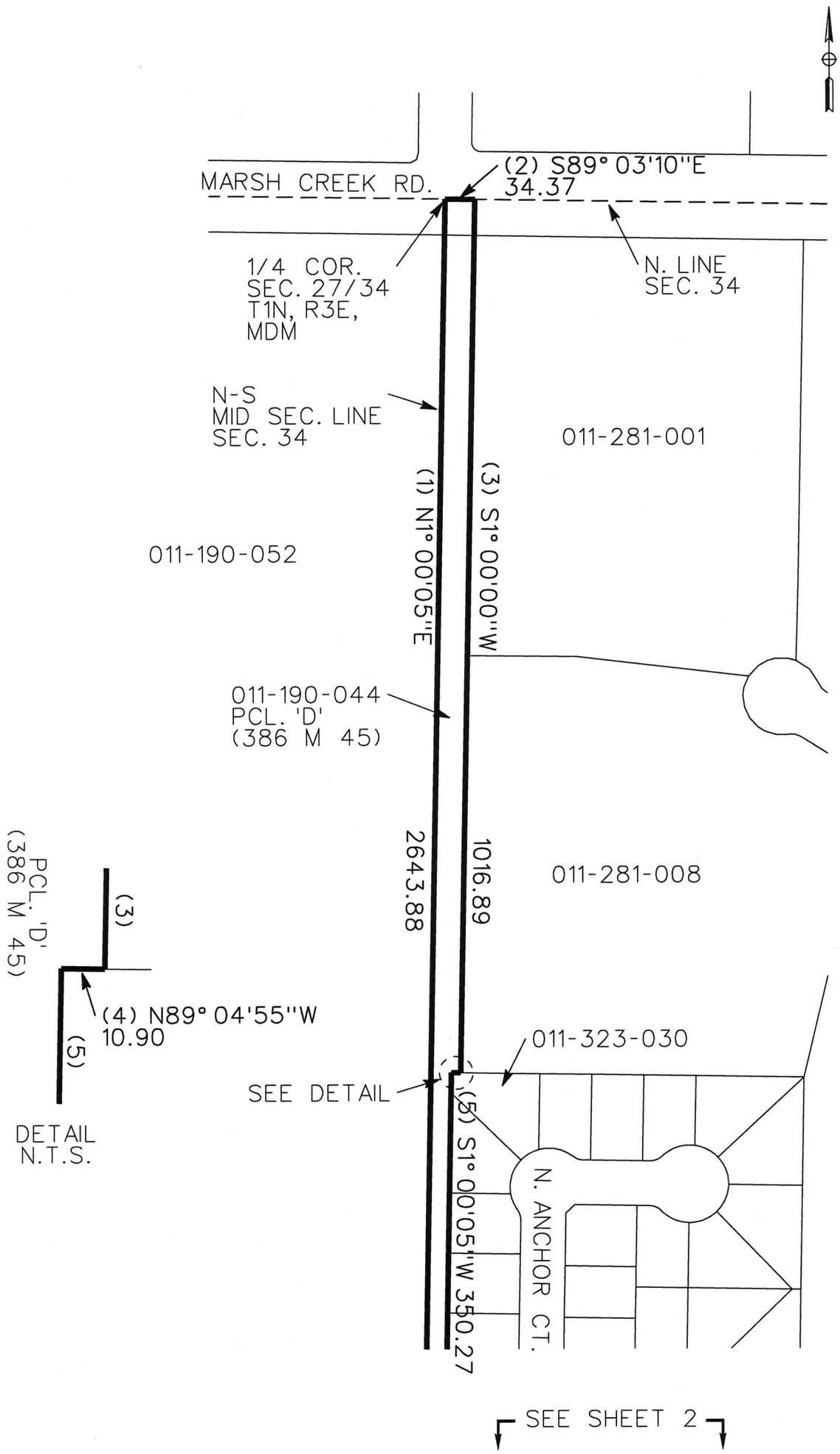


Town of Discovery Bay Community Services District Detachment

SHEET 2 OF 3

CONTRA COSTA COUNTY PUBLIC WORKS DEPARTMENT 255 GLACIER DRIVE MARTINEZ, CALIFORNIA 94553	Scale: 1" = 150'	File No.
	Drawn By: TL	Plot Date: 9/28/2016
	Checked By: JS	Drawing: TODBCSD Detach.dgn

EXHIBIT 'B'



Town of Discovery Bay Community Services District Detachment

SHEET 3 OF 3

CONTRA COSTA COUNTY PUBLIC WORKS DEPARTMENT 255 GLACIER DRIVE MARTINEZ, CALIFORNIA 94553	Scale: 1" = 150'	File No.
	Drawn By: TL	Plot Date: 9/28/2016
	Checked By: JS	Drawing: TODBCSD Detach.dgn