



MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: November 5, 2020

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

**SUBJECT: Information Related to SFPUC Construction Atop
Montara Mountain**

Montara Water and Sanitary District (MWSD or District) has sought information related to construction activities on Montara Mountain from the San Francisco Public Utilities Commission (SFPUC). This work is related to the SFPUC's Montara Mountain Rainfall Prediction and Radio Replacement Project (Project).

This Project consists of two components: (1) installation of an Advanced Quantitative Precipitation Information (AQPI) system and (2) replacement of components of an existing SFPUC radio system (the Radio Replacement Project), both on SFPUC-owned land on Montara Mountain.

The Montara AQPI system will be a component in the Regional AQPI Program, in collaboration with the National Oceanic and Atmospheric Administration's (NOAA) Earth Science Research Laboratory, U.S. Geological Survey, Colorado State University's Cooperative Institute for Research in the Atmosphere, and local water and flood control agencies. The Montara AQPI system will be one of at least five AQPI radar systems being installed throughout the San Francisco Bay Area by different local water and flood control agencies as part of this regional effort. The goal of the Regional AQPI Program is to improve early warning systems with better predictions of precipitation, streamflow, and storm surges through research and climatic monitoring by improving the regional weather radar network and incorporation of the data into weather models. This Program addresses the needs and technical capabilities of many users at SFPUC and other agencies in San Francisco and the region.

The Montara AQPI system consists of X-band radar data collection/monitoring equipment (collecting weather data at a more accurate 3000' elevation versus conventional 5000' elevation) and equipment to transmit the data to NOAA for processing and utilization. The Montara radar is being purchased with funds from a grant from the California Department of Water Resources; the grant is administered by Sonoma Water, and is part of the San Francisco Bay Area Integrated Regional Water Management efforts. SFPUC will pay the installation costs for the Montara system. The Radio Replacement Project replaces an outdated and inadequate SFPUC voice radio system with a modern digital communications system that would be portable and easy to use, improve



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coverage, enhance safety, and provide reliable communications during a disaster.

This combined Project includes the following elements:

- Site improvements including vegetation removal, construction of a 150' access road, and engineered foundations for the radar and radio tower
- Installation of a radar and support structure
- Installation of a 45-foot monopole tower with communications antennas and a small dish
- Connection to existing power lines
- Installation of a backup power system
- Installation of security fencing

Following community concerns, SFPUC staff met with local stakeholders late last year to discuss preserving access to the mountain top viewpoint for hikers. The SFPUC has committed to construct a community accessible viewpoint adjacent to the radar site as part of the Project. This viewpoint will resolve community access while preserving watershed and radar site security.

RECOMMENDATION:

This item is informational only.



AGENDA ITEM

Public Utilities Commission

City and County of San Francisco



DEPARTMENT Water Enterprise AGENDA NO. 9
 MEETING DATE August 13, 2019

Adopt the Final Mitigated Negative Declaration and Approve Project: Regular Calendar
Project Manager: Alexis Dufour

Approve Montara Mountain Rainfall Prediction and Radio Replacement Project

<p>Summary of Proposed Commission Action:</p>	<p>Adopt the Final Mitigated Negative Declaration (FMND), the Mitigation Monitoring and Reporting Program (MMRP), and the Findings as required by the California Environmental Quality Act (CEQA) for the Montara Mountain Rainfall Prediction and Radio Replacement Project; approve Water Enterprise-funded Montara Mountain Rainfall Prediction and Radio Replacement Project to install a weather radar and communications tower on Montara Mountain (the Project); adopt the required CEQA Findings, FMND and MMRP; and authorize the General Manager to implement the Project. This action constitutes the Approval Action for the project for the purposes of the California Environmental Quality Act (CEQA), pursuant to Section 31.04(h) of the San Francisco Administrative Code.</p>
<p>Background:</p>	<p>The Montara Mountain Rainfall Prediction and Radio Replacement Project (Project) consists of two components: (1) installation of an Advanced Quantitative Precipitation Information (AQPI) system and (2) replacement of components of an existing SFPUC radio system (the Radio Replacement Project), both on SFPUC-owned land on Montara Mountain.</p> <p>The Montara AQPI system will be a component in the Regional AQPI Program, in collaboration with the National Oceanic and Atmospheric Administration’s (NOAA) Earth Science Research Laboratory, U.S. Geological Survey, Colorado State University’s Cooperative Institute for Research in the Atmosphere, and local water and flood control agencies. The Montara AQPI system will be one of at least five AQPI radar systems being installed throughout the San Francisco Bay Area by different local water and flood control agencies as part of this regional effort. The goal of the Regional AQPI Program is to improve early warning systems with better predictions of precipitation, streamflow, and storm surges through research and climatic monitoring by improving the regional weather radar network and</p>

APPROVAL: _____
 COMMISSION SECRETARY Donna Hood

	<p>incorporation of the data into weather models. This Program addresses the needs and technical capabilities of many users at SFPUC and other agencies in San Francisco and the region. The Montara AQPI system would consist of X-band radar data collection/monitoring equipment and equipment to transmit the data to NOAA for processing and utilization. The Montara radar is being purchased with funds from a grant from the California Department of Water Resources; the grant is administered by Sonoma Water. SFPUC will pay the installation costs for the Montara system.</p> <p>The Radio Replacement Project originated from a study and recommendation by AECOM completed in 2015, which called for the replacement of the outdated and inadequate SFPUC Water Enterprise voice radio system with a modern digital communications system that would be portable and easy to use, improve coverage, enhance safety, and provide reliable communications during a disaster. The proposed radio system replacement would increase coverage in the watershed and would provide coverage from Pacifica to Half Moon Bay. The Radio Replacement Project would replace the existing SFPUC Water Enterprise low band land mobile radio (LMR) system with a modern Project 25 (standard) Motorola high band digital LMR system.</p> <p>This combined Project includes the following elements:</p> <ul style="list-style-type: none"> • Site improvements including vegetation removal, construction of a 150’ access road, and engineered foundations for the radar and radio tower • Installation of a radar and support structure • Installation of a 45-foot monopole tower with communications antennas and a small dish • Connection to existing power lines • Installation of a backup power system • Installation of security fencing <p>Implementation of the Project will be mostly performed by SFPUC staff, including the Engineering Management Bureau (design), Water Supply and Treatment Division (access, site, and security improvements), Natural Resource and Lands Management Division (site improvements and regulatory compliance), and Information Technology Services (communications, power, and electrical). There will be limited use of purchase orders. Radar set-up and testing will be performed by Regional AQPI Program collaborators.</p>
<p>Result of Inaction:</p>	<p>A delay in approving this project will delay installation of the radar and radio equipment until summer of 2020, preventing potential improvements to water system operations, communications, and implementation of safety measures in the case of heavy rains or disaster in the winter of 2019-2020.</p>
<p>Description of</p>	<p>To implement the Project, this Commission must approve the Project</p>

Project Action:	and adopt the Final Mitigated Negative Declaration (FMND) and the Mitigation Monitoring and Reporting Program (MMRP). The MMRP and FMND are attached to this agenda (Attachments A and B).
Schedule:	Access and Site Improvements: August – November 2019 Installation of AQPI system: October 2019 – January 2020 Installation of WRRP system: 2020-2021 Installation of backup power system: 2020
Budget and Funding:	Purchase of the radar equipment is funded by a grant from the California Department of Water Resources under Proposition 84 that is being administered by Sonoma Water. All other costs related to the project will be funded by the Water Enterprise Programmatic Budget Project No. 10034527 Montara Mountain Rainfall Prediction and Radio Replacement Project.
Environmental Review:	
Recommendation:	SFPUC staff recommends that this Commission adopt the attached resolution.
Attachments:	<ol style="list-style-type: none"> 1. Final Mitigated Negative Declaration for the Montara Mountain Rainfall Prediction and Radio Replacement Project 2. Mitigation Monitoring and Reporting Program

PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. _____

WHEREAS, San Francisco Public Utilities Commission (SFPUC) staff have developed a project description for the installation of an Advanced Quantitative Precipitation Information (AQPI) system and replacement of components of an existing SFPUC radio system on SFPUC-owned land on Montara Mountain otherwise known as Project No. 10034527, Montara Mountain Rainfall Prediction and Radio Replacement Project; and

WHEREAS, The objectives of the Project are to 1) deploy monitoring equipment on Montara Mountain to collect atmospheric data in real time, and to use the data to generate rainfall forecasts with improved spatial, temporal, and volumetric accuracy, 2) use the improved forecasts in conjunction with the SFPUC Water Enterprise hydraulic model to better manage SFPUC infrastructure, and 3) to maintain and protect the City of San Francisco's critical infrastructure, by providing communications to ensure that operations and maintenance could proceed uninterrupted during emergencies; and

WHEREAS, Purchase of the radar equipment is funded by a grant from the California Department of Water Resources under Proposition 84 that is being administered by Sonoma Water, and funds for all other costs related to the project are available from Water Enterprise Programmatic Budget Project No. 10034527, Montara Mountain Rainfall Prediction and Radio Replacement Project; and

WHEREAS, The Planning Department reviewed and considered the Final Mitigated Negative Declaration (FMND) for the Project, and found that the contents of said report and the procedures through which the FMND was prepared, publicized and reviewed complied with the provisions of the California Environmental Quality Act (California Public Resources Code Sections 21000 et seq.)(CEQA), 14 California Code of Regulations Sections 15000 et seq. (the CEQA Guidelines), and Chapter 31 of the San Francisco Administrative Code ("Chapter 31"); and

WHEREAS, On June 19, 2019, The Environmental Review Officer found the FMND was adequate, accurate and objective, reflected the independent analysis and judgement of the Planning Department (and the summary of comments and responses contained no significant revisions to the Preliminary Mitigated Negative Declaration), and certified approved the FMND for the Project in compliance with CEQA, the CEQA Guidelines and Chapter 31; and

WHEREAS, The Planning Department is the custodian of records, located at 1650 Mission Street, Fourth Floor, San Francisco, California; and

WHEREAS, The San Francisco Public Utilities Commission (SFPUC) staff prepared a Mitigation and Monitoring Reporting Program (MMRP), which material was made available to the public and this Commission's review, consideration and action: now therefore, be it

RESOLVED, That this Commission has reviewed and considered the FMND and the record as a whole, and finds that the FMND is adequate for its use as the decision making body for the Project, that there is no substantial evidence that the Project could have a significant effect on the environment with the adoption of the mitigation measures contained in the MMRP to avoid potentially significant environmental effects associated with the Project, and that the FMND reflects the City's independent judgment and analysis, and hereby adopts the FMND and the MMRP; and be it

FURTHER RESOLVED, That this Commission hereby approves Water Enterprise Programmatic Budget-funded Project No. 10034527, Montara Mountain Rainfall Prediction and Radio Replacement Project and authorizes the General Manager to direct staff to implement the Project.

I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of August 13, 2019.

Secretary, Public Utilities Commission