

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk

County of: _____

From: (Public Agency): _____

(Address)

Project Title: _____

Project Applicant: _____

Project Location - Specific:

Project Location - City: _____ Project Location - County: _____

Description of Nature, Purpose and Beneficiaries of Project:

Name of Public Agency Approving Project: _____

Name of Person or Agency Carrying Out Project: _____

Exempt Status: **(check one):**

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: _____
- Statutory Exemptions. State code number: _____

Reasons why project is exempt:

Lead Agency

Contact Person: _____ Area Code/Telephone/Extension: _____

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: *Falak Zaidi* Date: _____ Title: _____

Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

**UNIVERSITY OF CALIFORNIA
PRELIMINARY ENVIRONMENTAL ASSESSMENT
Sedgwick Reserve Weather Station**

DATE: November 2022

CAMPUS: Santa Barbara

PROJECT TITLE: Weather Station at Sedgwick Reserve

PROJECT LOCATION: University of California, Santa Barbara, Sedgwick Reserve (see Figures 1a and 1b)

PROJECT DESCRIPTION: The UC Santa Barbara, Natural Reserve System is proposing to install a weather station at the Sedgwick Reserve. The weather station would evaluate meteorological conditions in support of prescribed burns, fire modeling and ecological studies. The weather station is a research grade, fully automated weather station capable of measuring wind speed and direction, temperature and relative humidity, precipitation, barometric pressure, solar radiation, soil moisture and temperature, fuel moisture and temperature, and other environmental parameters within the Sedgwick Reserve, from a key research location within the Reserve.

Background: Climate-related environmental change in California is causing increased fire risk with significant impacts to our natural environment and the agricultural, commercial, and municipal uses of our landscapes. Given the vast acreage in the U.S. needing management to reduce the severity of wildfires (~100 million acres) and the slow rate at which those treatments are occurring (~3 million acres per year), an improved approach to landscape-level management is needed. Related research at Sedgwick addresses this problem with the rapid deployment of environmental sensing technology with associated data science, cutting edge atmospheric and ecological modeling, and experimental and practical prescribed burns to forecast climate conditions and inform risk assessments before the next big wildfire occurs. The information derived from these activities will enable characterization of fire behavior and prescribed burn techniques in regions like Napa, Santa Barbara, and Orange Counties, and other coastal environments that are currently experiencing catastrophic wildfire events. Data from local weather stations are essential to evaluate weather forecasting models used for decision-making of prescribed burns.

Purpose and Need: Installation of the weather station supports the project's mission towards improving resilience to wildfires. The weather station brings support to atmospheric and ecological modeling and experimental and practical prescribed burn developed at Sedgwick Reserve. These measurements will be used to evaluate local meteorological conditions in support of prescribed burns, fire modeling and ecological studies. The collected data will be useful to validate the performance of regional modeling forecasts of fire weather conditions that are routinely produced at UCSB and are publicly available. The project will support the National

Weather Service (Los Angeles/Oxnard office) operational fire weather predictions. Improved fire weather forecasts will be available to the public and emergency managers and published in scientific journals.

Setting and Program: The Sedgwick Reserve is located at latitude 34.6922°N and longitude -120.0404°E longitude, in Santa Barbara County, California (Figure 1a). The Reserve is located in the northern part of the Santa Ynez Valley, in the foothills of Figueroa Mountain. The terrain elevation ranges from 300 – 850 m, and is comprised of a mix of small valleys and ridges over sloping terrain. The Reserve's vegetation is characterized by a mixture of shrublands, grasslands and (woody) savannas.

The weather station will be installed in a relatively open area with non-native grassland at an elevation of 372 m (1220 ft) above mean-sea level in a location that demonstrated the importance of the site to observe meteorological parameters useful to evaluate wildfire mitigation strategies. The station is accessible by an unpaved road at approximately 0.5-mile distance from the Sedgwick Reserve Visitor Center (Figure 1b). The station is a research grade, fully automated weather station capable of measuring wind speed and direction, temperature and relative humidity, precipitation, barometric pressure, solar radiation, soil moisture and temperature, fuel moisture and temperature, and other environmental parameters. Potential environmental impacts and ground disturbance will be minimized to the area of the concrete pad. The surrounding natural vegetation and ground surface would be disturbed as little as possible.

The main tower frame is built from 2.5 cm (1 in) outside diameter corrosion-resistant aluminum tubing and is 30 ft tall. It includes a tipping tower to facilitate easy sensor installation (i.e., no climbing is needed). It includes anchor bolts, lightning rod and a ground rod (Figure 2). No guy wires are needed, minimizing soil disturbance in the tower surroundings. The weather station is anchored to the ground on 9 square-foot, 4-foot deep (3'x3'x4') concrete pad. All sensor equipment will be installed upon the free-standing aluminum tower. The instruments will be solar powered. The solar panel and battery box will be installed next to the tower on the ground. Communication will be sent over cellular network facilitating remote monitoring of tower equipment. Researchers will visit the station frequently (less than monthly) for sensor maintenance.

Construction: No trees will be removed. A 9 square-foot concrete pad would be installed with minimal ground disturbance. There will be no lights on the weather station and the station will be solar powered. Concrete will be used to construct the base and the concrete will be delivered using a cement mixer. The tower will be accessed using the nearby unpaved road (Figure 1b).

Schedule: The proposed project is expected to begin in early 2023 and will take approximately 1 week to complete.

Removal plan and timing: The tower will be removed in 10 years if enough measurements have been collected to provide useful information to evaluate regional changes in meteorological variables. If in 10 years it is decided more measurements are needed, the tower would remain and agreements would be amended.

Maintenance: The tower's immediate surroundings (defensible space) vegetation is characterized by non-native grasslands, and will be mowed on an annual basis by Sedgwick Reserve staff.

ENVIRONMENTAL ISSUES:

This project is considered Categorical Exempt under CEQA Section 15303, New Construction or Conversion of Small Structures and Section 15304, Minor Alternations to Land as supported by the discussion below. There are no unusual circumstances which would create an exception to the Exemption.

Aesthetics: The weather station is small in scale and would be located in open grassland area of the Reserve. The weather station would not obstruct views of the coast or mountains and would not significantly change the visual character of the project area.

Agricultural Resources: There is an agricultural conservation easement with the Santa Barbara County at the Reserve. The proposed weather station would not be constructed within this conservation easement and there would be no impact to agricultural resources.

Air Quality: Site preparation is minimal to install the concrete pad and weather station and would not result in an air quality impact. The weather station would not have emissions during operation.

Biological Resources: The project site is non-native grassland and there are no sensitive biological resources identified at the project site. No biological resources would be impacted from installation of the weather station. The site is accessed from an unpaved road and no biological resources on the Reserve would be impacted.

Cultural Resources: There are no cultural resources identified in the proposed project area. The proposed project does not involve significant ground disturbance and no cultural resources would be impacted.

Geology: The proposed project does not involve major grading or excavation and would not impact geological resources. The weather station would not be located within 50 feet of a known earthquake fault.

Hazards and Hazardous Materials: There are no hazardous materials associated with the installation or operation of the weather station.

Hydrology/Water Quality: There would be no impact to hydrology or water quality from the installation or operation of the weather station. Since the concrete pad is small in size (9 square feet), there would not be a substantial increase in impervious surface and impervious area and surface water runoff quantities would be relatively the same before and after the weather station installation.

Land Use: Sedgwick Reserve is not within the University's Long-Range Development Plan and does not have a designated land use within the LRDP. The weather station would be consistent with the Reserve's mission as its purpose is for research and instruction. There would be no change in the land use designation for this project.

Mineral Resources: There would be no impact to mineral resources as a result of the proposed project.

Noise: Site preparation would create minimal noise and there are no sensitive receptors in the project area. Operation of the weather station would not result in a noise impact.

Population and Housing: There would be no impact to population and housing from the proposed project.

Public Services: The proposed project would not increase the need for public services at the University. There would be no impact to public services as a result of the proposed project.

Recreation: There would be no impact to recreational resources as a result of the proposed project.

Traffic: There would not be an increase of traffic or the need for parking from the proposed project. The site would be accessed through the unpaved road for installation and occasional maintenance.

Utilities: The weather station is wholly operated utilizing solar power. All necessary utilities are available via a localized solar array.

DETERMINATION: Based on the above project assessment, the proposed project is classified as exempt from the provisions of CEQA under Section 15303 Class 3, New Construction or Conversion of Small Structures and Section 15304, Minor Alternations to Land. None of the exceptions cited in Section 15300.2 apply to this project.

Falak Zaidi

Falak Fatima Zaidi
Senior Planner

11/22/2022

Date

References:

Rodriguez Consulting

2004 *Sedgwick Reserve Infrastructure Plan Final Environmental Impact Report*. Prepared by Rodriguez Consulting, Inc. for the University of California, Santa Barbara, Office of Campus Planning and Design. SCH#2003041096.

Wittmann, Marion

2022 Personal Communication with Marion Wittmann, Executive Director, University of California, Santa Barbara Natural Reserve System.

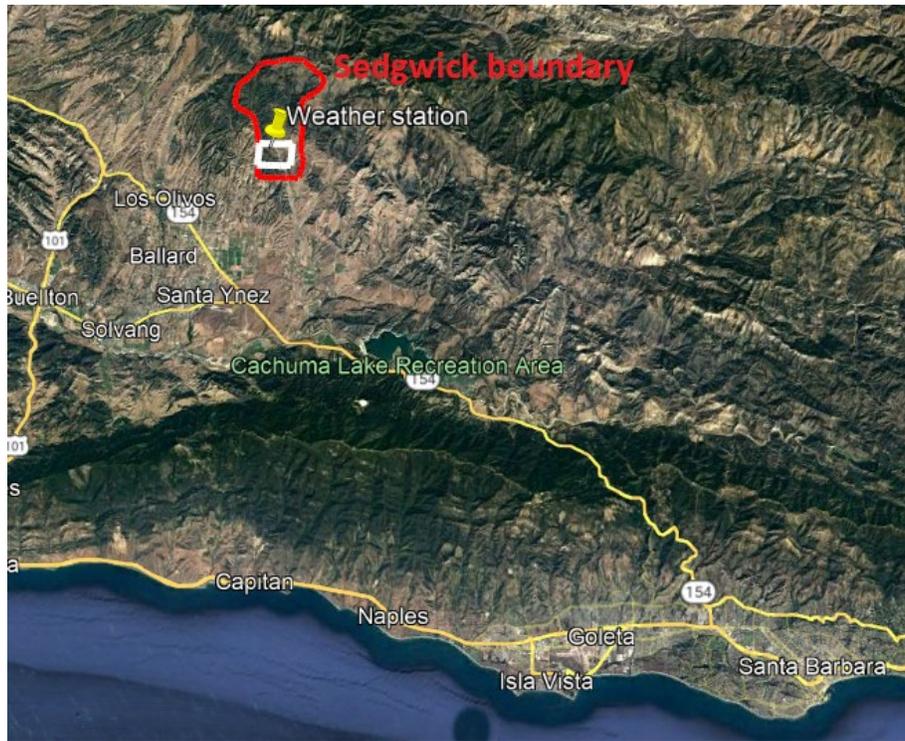


Figure 1a- Sedgwick boundaries in red within Santa Barbara County.

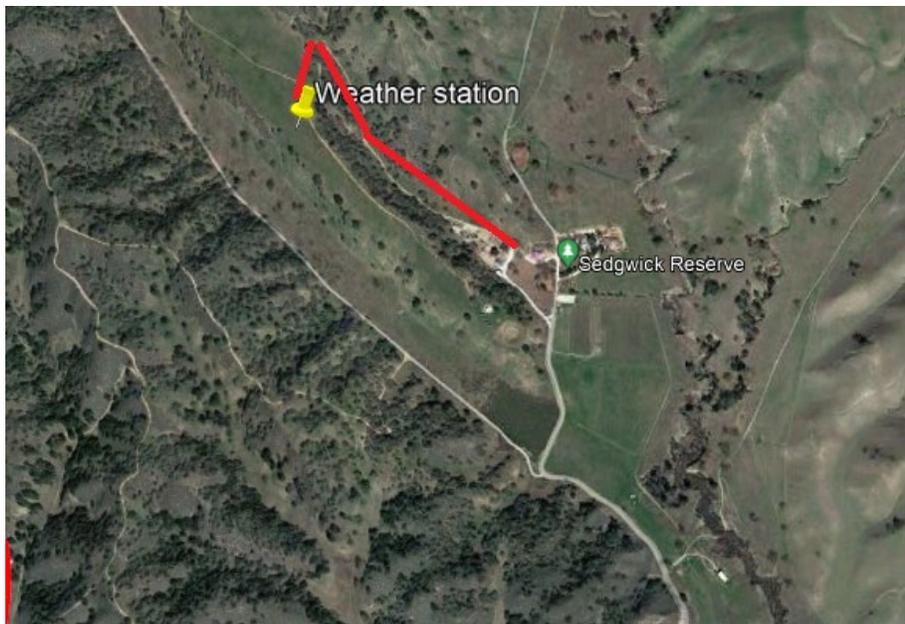


Figure 1b- Zoom of white square in top figure, with the weather station location and the unpaved road (red line) from the visitor center (Tipton Meeting House).

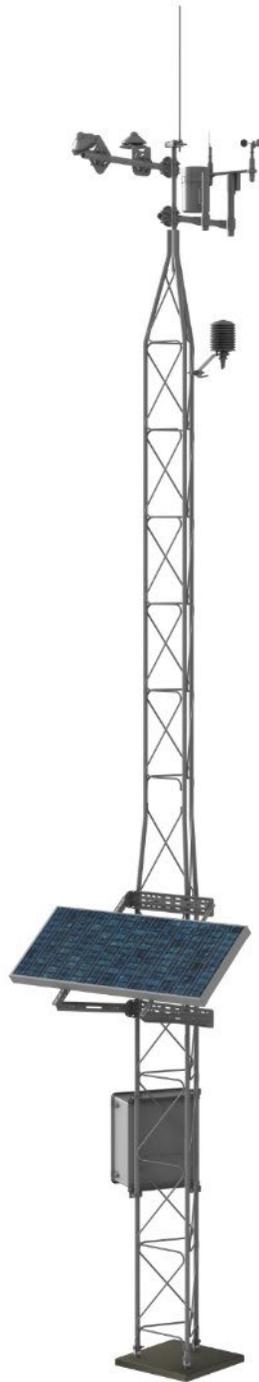


Figure 2- Image of the 30ft (10 m) tower that supports the weather station in Sedgwick Reserve. The tower is secured to the ground using bolts attached to a concrete pad.