



County of San Mateo

Inter-Departmental Correspondence

Department: PARKS

File #: 21-135

Board Meeting Date: 2/23/2021

Special Notice / Hearing: None
Vote Required: Majority

To: Honorable Board of Supervisors

From: Nicholas J. Calderon, Parks Director

Subject: San Mateo County Parks Department's Wildfire Fuel Management Program's 5-Year Priority Project List and Cost Estimates

RECOMMENDATION:

Accept the San Mateo County Parks Department's Wildfire Fuel Management Program's 5-Year Priority Project List and Cost Estimates.

BACKGROUND:

The San Mateo County Parks Department ("Department") manages 24 parks, recreation areas, and historic sites that collectively comprise over 16,000 acres of land. These parklands, which contain a diversity of vegetation communities with varying degrees of vegetation density, are mostly located within or in proximity to the wildland-urban interface. For this reason, they pose a significant risk for the spread of wildfire, as was seen when the August 2020 CZU Lightning Complex Fires burned through Pescadero Creek County Park.

As a result of last year's fire, the Department developed its Wildfire Fuel Management Program ("Program"). The Department designed the Program to assist its fuel management efforts in three innovative ways. First, it serves as a planning and budgeting tool. By scheduling the treatment and retreatment of high-threat areas over a 5-year period, the Department can ensure it is properly assigning staff and financial resources to the planning, permitting, treatment, and retreatment of wildfire mitigation projects. Second, the Program provides a basis by which the Department can best and most efficiently identify, evaluate, and prioritize critical projects that mitigate threats to life and property based on best available data and practices. Third, through the Program, the Department is able to better monitor the condition of treated areas and adapt maintenance strategies accordingly.

Because of prior land management practices, there is a significant amount of high-risk wildfire fuel within the County park system. Some of the largest threats include large groves of eucalyptus trees, acres of oaks impacted by Sudden Oak Death, invasive species like broom and jubata grass, and overly dense forests. The Department thus designed the Program to identify and prioritize the most urgent projects ("Priority Projects") with these threats in mind. Please note, the Priority Projects do not represent the entirety of wildfire fuel management projects required within the park system, and

instead represent the projects which the Department has identified as the most immediately critical.

To best evaluate and prioritize the Priority Projects, the Department identified the 14 ranking criteria ("Criteria") shown on Exhibit A (attached). Each of the Criteria is weighed on a sliding scale based on its level of significance. A project's proximity to residential homes and its ability to improve the ecological value of a park are weighed on a scale of 1 to 10; all other Criteria are weighed on a scale of 1 to 5. The maximum points a project can score is 80. The list of 32 Priority Projects identified by the Department, including each project's ranking, is shown on Exhibit B (attached).

DISCUSSION:

The 32 Priority Projects total approximately 1,830 acres of land, with treatment and retreatment costs over a five-year period estimated to be approximately \$18,750,000. This estimate assumes contractors will be responsible for all treatment and retreatment activities. Depending on staff capacity and operational obligations, the Department may be able to maintain several of the projects on its own. It should be noted that although this Program constitutes a 5-year plan, any fuel reduction project implemented will need to be maintained in perpetuity or else the vegetation will regrow and the wildfire threat will return.

Wildfire Fuel Reduction Projects

During 2021, the Department anticipates being able to commence work on Priority Projects 2, 9, 12, 20, and 21 as identified on Exhibit B. The Department has either secured grant funding to complete these projects or has committed to maintaining these areas as part of previously completed projects. Further, if the California Office of Emergency Services awards the Department Hazard Mitigation Grant Program funding for which the Department has applied for Priority Projects 6 and 7, the Department must commence work within 90 days of being awarded those funds. Depending on its capacity, the Department will also strive to complete work on Priority Projects 1, 3, 10, and 11.

Due to the amount of fuel reduction required throughout the park system, the Department has scoped the Priority Projects to consist primarily of constructing shaded fuel breaks along park boundaries, fire roads, and residential roads. Shaded fuel breaks span between 50 and 200 feet from the park boundary line or edge of a road or trail and consist of removing trees under 10 inches in diameter, ladder fuels, tall brush, and dead or dying vegetation. By removing this highly combustible material, fuel available to increase the intensity of a wildfire is limited and chances of a groundfire becoming a canopy fire is reduced. Some projects include fire road and access improvements, and high fire-risk invasive species treatments.

It is important to note that the complete removal of some vegetation communities is cost prohibitive at this time. To remove an entire acre of eucalyptus trees, for example, costs approximately \$135,000. Thus, for the Department to effectively and efficiently treat as much area as possible, it will primarily pursue shaded fuel breaks rather than the complete removal of vegetation.

Equipment and Training

If the Department is to be responsible for maintaining treated areas on its own, it will need to purchase additional equipment and conduct further training of field staff. To properly maintain significant acreage of shaded fuel breaks, the Department would need a compact excavator with a masticating head. Although current equipment allows the Department to masticate material in immediate proximity to roads and trails and in open fields, a compact excavator would allow the Department to retreat areas up to 30 feet off a road edge or trail edge. A compact excavator, a masticating head, and a towing trailer costs approximately \$400,000.

To ensure staff safety and improved efficiencies, the Department will also expand training opportunities for staff. This will include, but not be limited to, how to properly use a chainsaw and pole saw and how to work within proximity to a chipper, masticator, and other pieces of heavy equipment.

FISCAL IMPACT:

The Priority Projects scheduled to commence during FY 2020-21 are included in the FY 2020-21 Adopted Budget and are funded through a combination of Measure K and grant monies. Funding for additional Priority Projects shall be included in future budgets with the source of funds for such projects identified at such time.

Attachments:

- Exhibit A
- Exhibit B