

COASTAL CONSERVANCY

Staff Recommendation  
September 22, 2022

**East Bay Regional Park District Biomass Facility Pilot Program**

Project No. 22-037-01  
Project Manager: Avra Heller/Vanessa Aczon

**RECOMMENDED ACTION:** Authorization to disburse up to \$1,000,000 to the East Bay Regional Park District to conduct fuel treatments on 80 acres and implement a biomass facility pilot program in Anthony Chabot Regional Park.

**LOCATION:** Anthony Chabot Regional Park, Alameda County

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EXHIBITS

- Exhibit 1: [Project Location Map](#)
  - Exhibit 2: [Project Photos](#)
  - Exhibit 3: [2019 Staff Recommendation](#)
  - Exhibit 4: [Project Letters](#)
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**RESOLUTION AND FINDINGS**

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed one million dollars (\$1,000,000) to the East Bay Regional Park District (“the grantee”) to conduct fuel treatments on 80 acres and implement a biomass facility pilot program in Anthony Chabot Regional Park.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
  2. Names and qualifications of any contractors to be retained in carrying out the project.
  3. A plan for acknowledgement of Conservancy funding.
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4. Evidence that all permits and approvals required to implement the project have been obtained.

Findings:

Based on the accompanying staff recommendation and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 3 of Division 21 of the Public Resources Code.
2. The proposed project is consistent with the Conservancy Project Selection Criteria.

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## **STAFF RECOMMENDATION**

### **PROJECT SUMMARY:**

Staff recommends that the Conservancy authorize a grant of an amount not to exceed one million dollars (\$1,000,000) to the East Bay Regional Park District (“the Park District”) to conduct fuel treatments on 80 acres and implement a biomass facility pilot program in Anthony Chabot Regional Park.

Due to recent extreme drought and ongoing climate change, the East Bay Regional Park District has experienced a sudden onset of tree mortality and die-back affecting eucalyptus, acacia, pine, and coyote brush. This has led to an increase in standing dead and dying trees of various species and sizes, and other hazardous conditions in the wildland-urban interface of the East Bay hills. The Park District has identified over 1,500 acres of tree mortality within its jurisdiction – nearly all within the State Responsibility Areas (SRA), locations that are acknowledged by the Board of Forestry and Fire Protection as areas where Cal Fire is the principal emergency response agency in charge of the prevention and suppression of wildfires. The wildfire risk presented by vegetation mortality is substantial – upright dead and dying trees can widely spread airborne embers, which can quickly jump out of park jurisdiction into adjacent residential areas. The Park District’s existing Wildfire Hazard Reduction and Resource Management Plan enables immediate action to remove the dead and dying trees.

Because of the magnitude of this undertaking, the Park District is considering several options for treating the resulting biomass using more carbon friendly biomass disposal and wood re-use strategies than those currently available to it. The Park District’s current methods of biomass disposal include chipping on site, open burning, and hauling logs or chips by truck from the parklands to landfill sites or cogeneration plants in Stockton or Woodland. While some of these traditional methods will still be necessary for portions of the total biomass treatment, additional, more carbon-friendly, biomass disposal strategies are also under consideration. These strategies include repurposing the higher-grade tree logs for fences, trail treads, or park benches, and the conversion of biomass to biochar by way of a carbonator. The Park District is interested in piloting this biomass to biochar process so that it may navigate various permitting challenges, establish best operations processes, and determine potential best use protocols for

the resulting biochar product, in an effort to assess the scale-ability of this fuels treatment methodology.

The significant greenhouse gas (GHG) emissions created by trucking biomass is antithetical to the Park District's environmental ethic and the Governor's climate goals. The Park District seeks to offset GHG emissions and manage for safe visitor experiences wherever feasible so as not to negatively impact park users, staff, and the public. The current estimate for using traditional trucking methods, factoring in distances to the nearest Cogen facilities (60 miles to Stockton and 85 miles to Woodland), would lead to biomass disposal generating an estimated 19 lbs of emissions per ton of biomass at a cost of approximately \$100 per ton of biomass. If the proposed pilot project of utilizing a carbonator to process the biomass on site is a success, and the Park District can adopt this methodology for the full 1,500 acres identified for treatment, the new methodology would result in an estimated 2.1 lbs of emissions generated per ton at a cost of approximately \$50 a ton of biomass. For the expected 107,000 tons of biomass needing to be removed to treat forest decline in this part of the Park District, this is a potential savings of 1,808,300 lbs of emissions.

The proposed biomass to biochar facility will be installed on an unused former gun range in Anthony Chabot Regional Park (Exhibit 1). This site was selected because it has direct road access and large paved areas that could house the carbonators. The 80 acres proposed for fuel treatment is the land surrounding the former gun range. The only ingress and egress to this area of the park as well as to an adjacent residential community is a single two-lane, winding backroad. Common biomass disposal for the work required in this part of the Park District would require thousands of trucks trips on this road, creating significant greenhouse gas emissions, as well as creating potential roadblock hazards: should a fire break out, the trucks could impede the ability of fire engines to pass by and personnel working on site could be trapped.

The biomass to be removed from the 80 acres of the project area in Chabot Regional Park has been estimated to be around 10-25 tons/acre, with stem counts estimated at 200–2,000 stems/acre. Estimates for biomass to be disposed after prescribed treatment were generated using a stand-specific density table based on a 2006 field study of eucalyptus stands in Park District lands. These stands were measured for wet and dry tonnage of cut vegetation. Using those data there is an estimated 7,100 tons of biomass which needs to be processed and/or removed from the 80-acre site. The Park District will put out a bid and select a contractor with experience operating a biochar carbonator. The selected contractor will bring the carbonator to the project site and operate it there. The contractor will also be responsible for the fuels treatment of the 80-acre project area.

Using a biochar carbonator would reduce wood volume by 90% using a specially controlled and efficient burning process. Processing biomass onsite would enable the production of an estimated 500 tons of biochar for the project. The biochar can be used as a plant soil amendment at the project site and to assist in developing regional biochar markets. These benefits would be expanded if the same biochar process is used on the larger planned treatment areas in this portion of the Park District and beyond.

**Site Description:** The proposed location for the biomass facility is the former Chabot Gun Club located at Anthony Chabot Regional Park in Castro Valley, California (Exhibits 1 & 2). The location is ideal because it is centrally located near areas where tree die-off has occurred on a large scale, is open air, and easily accessible. The site provides several areas that can be used for tree debris sorting and storage, chipping and wood processing equipment, and more than one carbonator. Because of its history as a gun range, the site contains areas where lead has entered the soil and some of the surrounding trees. The use of a carbonator at the proposed site is ideal because a carbonator sits on top of the soil or concreted areas, minimizing the potential for disturbing the lead in the soil.

**Grant Applicant Qualifications:** The East Bay Regional Park District manages a system of parklands and trails in Alameda and Contra Costa counties to the east of San Francisco. The system comprises nearly 125,000 acres in 73 parks, including over 1,250 miles of trails and 55 miles of shoreline. The Park District is currently managing an existing regional forest and fire capacity program grant received from the Conservancy. The Park District’s Grants Department is currently administering over 150 grants valued at nearly \$150 million, including over \$6 million in FEMA fuels reduction grants. The Park District has also completed several CAL FIRE and Coastal Conservancy grants in the last 10 years. Current grants funding fuels management and wildfire risk mapping include:

<b>STATUS</b>	<b>AGENCY</b>	<b>PROGRAM</b>	<b>PROJECT</b>	<b>AMOUNT</b>
<b>ACTIVE</b>	CA Coastal Conservancy	Forest Health and Wildfire Resilience	North End Fuels Treatment	290,600.00
<b>ACTIVE</b>	CA Coastal Conservancy	Regional Fire and Forest Capacity	Hazardous Fuels Reduction in Wildland Urban Interface	750,000.00
<b>ACTIVE</b>	CA Dept of Forestry	Fire Prevention	Hazardous Fuels Reduction in Wildland Urban Interface	750,000.00
<b>ACTIVE</b>	CA Department of Fish & Wildfire	VegCAMP	Fine Scale Vegetation Sampling and Classification	307,000.00
<b>ACTIVE</b>	CA Dept of Forestry	Fire Prevention Grant	Wildfire Risk Mapping	773,929.00
<b>ACTIVE</b>	USGS	3D Elevation Program	Fine Scale Vegetation Mapping	20,028.64
<b>ACTIVE</b>	FEMA/CalOES	Hazard Mitigation	Brushland Management	4,047,453.00
<b>ACTIVE</b>	FEMA/CalOES	Pre-Disaster Mitigation	East Bay Hills Fuels Management Project	2,867,438.00
<b>AWARDED</b>	CalRecycle	2021 State Budget Act	Tree Die off in Anthony Chabot and Tilden	10,000,000.00
<b>AWARDED</b>	East Bay Municipal Utility District	Pass through funds	Fine Scale Vegetation Mapping	50,000.00
<b>TOTAL</b>				<b>19,856,448.64</b>

**CONSISTENCY WITH CONSERVANCY’S PROJECT SELECTION CRITERIA:**

The proposed project is consistent with the Conservancy’s Project Selection Criteria, last updated on September 23, 2021, in the following respects:

## Selection Criteria

### 1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the “Consistency with Conservancy’s Strategic Plan” section below.

### 2. Project is a good investment of state resources.

The proposed project is a good investment of state funding. The project is feasible and addresses a demonstrated need and regional problem. California is facing unprecedented fire risk due to climate change and a growing populace. The proposed project would pilot a methodology that could accelerate fire risk reduction projects while reducing their carbon impacts. The funding is needed to initiate this work as soon as possible. The project fulfills many statewide wildfire and forest resiliency goals and is consistent with several state plans, specifically the following:

- California’s Wildfire and Forest Resilience Action Plan (Governor’s Forest Management Task Force, January 2021), which calls for activities such as fuels reduction, forest thinning, vegetation management, prescribed fire, shaded fuel breaks, defensible space, and enhancement of fire-prone habitats to reduce fire risk.
- The California Forest Carbon Plan (CNRA, 2018), which calls for restoration of natural fire regime and forest composition through a multitude of approaches including thinning, prescribed burns, invasive vegetation management, and shaded fuel breaks.
- The Community Wildfire Prevention & Mitigation Report (Cal Fire, 2019), which urges state and local agencies to implement the goals of the Carbon Forest Plan and lays out recommendations to agencies to increase the scale and pace of management and mitigation actions to improve forest health and resiliency.
- The Forests and Rangelands Companion Plan, California State Wildlife Action Plan Update (CDFW 2015), which encourages projects that seek to create a healthier and more resilient forest ecosystem.
- The Environmental Goals and Policy Report: A Strategy for California @ 50 Million, Supporting California’s Climate Change Goals (OPR, 2015), Goal 6 of the Steward and Protect Natural and Working Landscapes section, which calls on the State to “Build resiliency into natural systems and prioritize natural and green infrastructure solutions.”

### 3. Project benefits will be sustainable or resilient over the project lifespan.

The Park District Fire Department has a dedicated Fuels Management Fire Captain and administrative support staff to support the proposed work. The Park District's Stewardship Department also has a Resource Analyst dedicated to managing the environmental resources and compliance aspects of fuels reduction work. If the pilot of biomass processing leads to predictably favorable results for the Park District, biomass processing will be used in future projects to continue reducing the environmental impacts of vegetation management on Park District lands. Additionally, many other local land management agencies are interested in both a demonstration of the biochar process and in the resulting data for processing forestry biomass onsite in the Bay Area region. If this project is successful, the methodology could be

expanded to Santa Clara County Parks, San Francisco Water Company (SFPUC), East Bay Municipal District, and CalFire Santa Clara Unit (SCU), among others.

**4. Project delivers multiple benefits and significant positive impact.**

By removing the impacted trees and hazardous fuels and adding more climate-friendly biomass disposal methods, the project will deliver multiple positive benefits including:

- Significantly reducing hazardous wildland fuels in parklands in the wildland-urban interface.
- Reducing potential future fire intensity, flame lengths, and potential for crown fires and ember dissemination.
- Creating shaded fuel breaks that allow and encourage native tree species to thrive and help to reduce future site maintenance costs.
- Reducing the impact of potential fires.
- Reducing the carbon footprint and negative environmental impacts of large-scale fuels treatment.

**5. Project planned with meaningful community engagement and broad community support.**

The Park District is an active member of the Hills Emergency Forum, an interagency coordinating group for fuels management and fire prevention in the East Bay. The Park District provides updates to the Hills Emergency Forum at these regular meetings to communicate and coordinate planned and current projects. Additionally, the Park District’s Fire Department provides an annual update to the Park District’s Board Executive Committee on activities related to fuels management, including accomplishments from the past year and the upcoming year’s work plan. These annual meetings are open to the public.

The project is supported by Diablo Firesafe Council, seven Assemblymembers (Alex Lee, Bill Quirk, Buffy Wicks, Lori D. Wilson, Mia Bonta, Rebecca Bauer-Kahan, and Timothy S. Grayson), and three State Senators (Nancy Skinner, Bob Wieckowski, and Steven M. Glazer) (Exhibit 4).

**PROJECT FINANCING**

<b>Coastal Conservancy</b>	<b>\$1,000,000</b>
<b>East Bay Regional Park District</b>	<b>\$1,000,000</b>
<b>Project Total</b>	<b>\$2,000,000</b>

The proposed funding for this project will come from a grant to the Coastal Conservancy from the Department of Conservation’s (DOC) Regional Forest and Fire Capacity Program (RFFCP). The Conservancy is one of the subregional recipients of RFFCP block grants. The goal of the RFFCP is to increase regional capacity to prioritize, develop, and implement projects that improve forest health and fire resiliency, facilitate greenhouse gas emissions reductions, and increase carbon sequestration in forests throughout California.

The Coastal Conservancy does not typically require matching funds, nor does it require documentation of expenditures from other funders. Typical grant conditions require grantees to provide any funds needed to complete the project. The Park District has invested a

significant amount of its resources in developing its Wildfire Hazard Reduction and Resource Management Plan, and invests over \$2,000,000 annually (on average) to implement the plan. They are committing an equal match of \$1,000,000 towards this project.

**CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:**

The recommended project would be undertaken pursuant to Section 31113 of Chapter 3 of Division 21 of the Public Resources Code, which authorizes the Conservancy to address the impacts and potential impacts of climate change on resources within the Conservancy's jurisdiction (Section 31113(a)).

Pursuant to Section 31113(b) and (c), the Conservancy is authorized to award grants to nonprofit organizations and public agencies to undertake projects that include reducing greenhouse gas emissions and addressing extreme weather events, sea level rise, flooding, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources.

Pursuant to Section 31113(c), the Conservancy must prioritize grants for projects that maximize public benefits and have one of several specified purposes, including reducing greenhouse gas emissions.

Consistent with these sections, the proposed project maximizes public benefits and facilitates the reduction of greenhouse gas emissions from increased wildfires due to climate change. In addition to reducing greenhouse gas emissions, the public benefits include improvement of forest health and protection of life, property, public health, water quality, and natural resources.

The proposed project addresses resources within the Conservancy's jurisdiction because it will occur in Alameda County, one of the nine counties of the San Francisco Bay Area (Chapter 4.5 of Division 21 of the Public Resources Code).

**CONSISTENCY WITH CONSERVANCY'S [2018-2022 STRATEGIC PLAN](#) GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 8, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will restore the health and resilience of California forests, grasslands, and natural lands in a manner that reduces fire risk to communities. The project will help make California's natural lands more resilient to catastrophic wildfires.

**CEQA COMPLIANCE:**

On October 17, 2019, the Conservancy independently reviewed and considered the "East Bay Regional Parks District Wildfire Hazard Reduction and Resource Management Plan Environmental Impact Report," ("EIR") and adopted findings that the Wildfire Hazard Reduction and Resource Management Plan ("Plan"), as mitigated, avoids or reduces to less than significant all potentially significant environmental effects, except for one temporary significant and unavoidable impact to Visual Resources. The Conservancy found that the public safety, air quality, natural resource, and community benefits of the Park District's project outweighed the

unavoidable impact to Visual Resources and adopted a statement of overriding considerations. (Exhibit 3).

All activities to be carried out under this project are within the scope of the EIR and will be conducted in accordance with the mitigation measures identified in the EIR and in the Mitigation, Monitoring and Reporting Program. There have not been any project changes, new information, or changed circumstances that trigger the need for additional documentation under CEQA. Therefore, this authorization remains consistent with the October 17, 2019 findings and statement of overriding considerations.