



Safeguarding Communities while Protecting Natural Ecosystems

Balancing Fire Safety
with Environmental Stewardship

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Protecting Natural Ecosystems

1. Increasing frequency and severity of wildfires.
2. The dual need to protect human lives and preserve natural ecosystems.



Protecting Communities Preserving Resources



1. Protecting lives and property remains a top priority.
2. Impacts of wildfires on air quality, public health, and local economies.
3. Wildfire resiliency as a foundation for protecting park district resources.



The Role of Ecosystems in Fuels Management

Ecosystems as natural fire managers

1. Native vegetation's role in fire resiliency.
2. Diverse plant communities can limit the spread of fire by reducing the availability and continuity of flammable fuels.



Challenges in Balancing Fire Safety and Ecological Resources

1. Pressure for complete vegetation removal for safety measures that may harm our ecosystems.
2. Habitat destruction from fuel reduction activities.
3. Risk of invasive species disrupting native landscapes.





Strategies to Achieve Balance in Fuels Management

Fuels management best practices

1. Clearing underbrush to remove excess vegetation.
2. Forest thinning to reduce fuel densities and enhance forest health.



Prescribed Fire

1. Reduces excess vegetation, preventing catastrophic wildfires and allowing native plants to thrive.
2. Promotes nutrient cycling by returning essential minerals to the soil.
3. Stimulates the growth of fire-adapted species, maintaining ecological balance in fire-prone regions.



Mechanical Treatment

1. Reduces dense underbrush and overgrown vegetation, decreasing competition and allowing sunlight to reach the forest floor.
2. Enhances forest health by targeting invasive species, giving native plants the opportunity to reestablish.



Prescribed Grazing

1. Mimics natural grazing patterns, reducing invasive plants and promoting the growth of native grasses and flowers.
2. Enhances soil health through the natural fertilization and aeration provided by livestock movement.
3. Preserve open spaces that benefit species requiring grassland habitats, such as pollinators.
4. Over 85,000 acres currently grazed
 - 46 grazing tenants
 - Grazing occurs in 35 parks
 - 130 RTA's
 - 71 grazing licenses issued



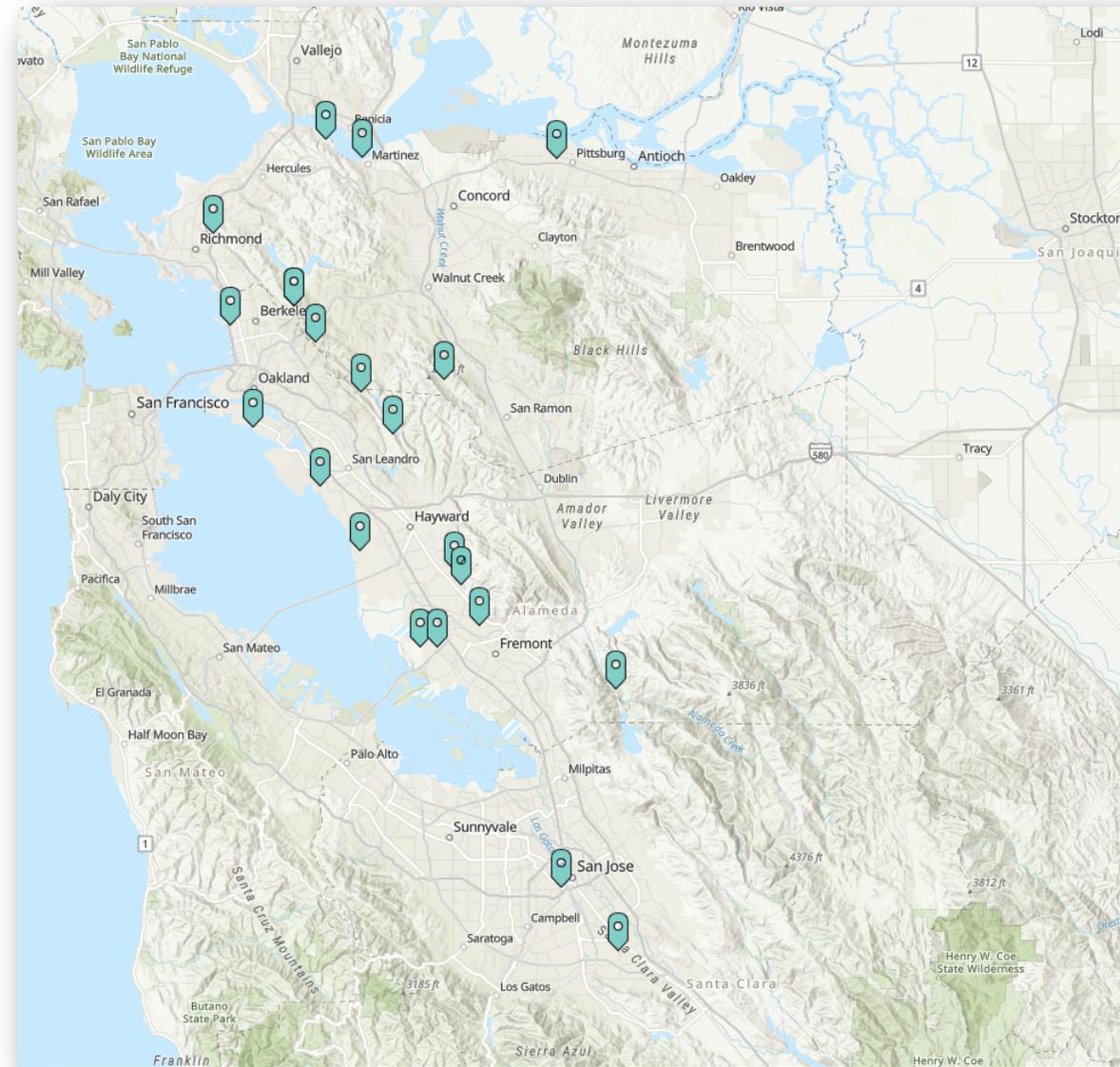
East Bay Regional Park District: Biochar Deployment Success

- **Applications Across the District:**
 - **Agricultural Enhancement:** At Ardenwood Farms & Dig Deep Farms, biochar boosts crop soil, leading to healthier plants and increased yields.
 - **Erosion Control:** Usage at Oyster Bay & Wildcat counters soil erosion, while at Sunol, biochar aids in water filtration and plant enrichment.
 - **Restoration and Revitalization:** Sibley at McCosker Ranch for improved soil and Shadow Cliffs & Quarry Lakes benefit from enhanced plant health through biochar application.
 - **Water Management:** Radke-Martinez Park employs biochar in bioswales for effective stormwater management and pollution filtration.



East Bay Regional Park District: Biochar Deployment

- Anthony Chabot Regional Park
- Ardenwood Historic Farm
- Carquinez Strait Regional Shoreline
- City of Berkeley Aquatic Park
- Coyote Hills Regional Park
- Crown Memorial State Beach
- Dr. Aurelia Reinhardt Redwood Regional Park
- Dry Creek Pioneer Regional Park
- EBRPD Fire Station 2 - Fuels Management
- Water Quality Department (EBRPD)
- Garin Regional Park
- Hayward Regional Shoreline
- John Muir Land Trust - Family Harvest Farm
- Las Trampas Wilderness Regional Preserve
- Martial Cottle Park
- Oyster Bay Regional Shoreline
- Quarry Lakes Regional Recreation Area
- Radke Martinez Regional Shoreline
- Sibley Volcanic Regional Preserve
- Sunol Regional Wilderness
- Tilden Regional Park
- Valley Verde
- Wildcat Canyon Regional Park



Collaborative Approaches

1. Partner with utilities, local governments, and conservation groups to align safety and environmental goals.
2. Improves soil stability by managing the spread of invasive plants that can degrade soil quality.
3. Restores natural water flow by clearing obstructive vegetation around streams and wetlands.

Before



After



THANK YOU