

Grant Application

Print Form



The Natural Resources Agency

Project Title: Vegetation Management

Date: '8/31/16

Funds: Proposition 1

Amount: 750,000

Applicant Name: Mountains Recreation & Conservation Authority

Match amount: 0.00

Address: 570 West Avenue 26, Suite 100

Match source: n/a

State/Province: Los Angeles, CA

Total Project Cost: 750,000

Zip/Postal code: 90065

Phone: 323-221-9944

Brief Project Description: Fuel modification and vegetation management within MRCA owned and managed property

Fax: 323-221-9934

Santa Monica Mountains Conservancy

5750 Ramirez Canyon Road

Malibu, California 90265

Phone: 310-589-3200

Fax: 310-589-3207

www.smmc.ca.gov

Grantee's Authorized Representative: Amy Lethbridge, Deputy Executive Officer 323-221-9944, x188
amy.lethbridge@mrca.ca.gov

Name and Title Phone Number Email

Person with day-to-day responsibility: Cara Meyer, Asst. Deputy Executive Officer 323-221-9944, x117 cara.meyer@mrca.ca.gov

Name and Title Phone Number Email

Project Objective: The proposed grant would fund the reduction of hazardous fuels and drought stricken vegetation to reduce wildfire risk and protect watershed and promote watershed health.

*Attach additional pages as necessary

Project Address: Various Locations

Latitude: **Acreage:** **Trail Length:**

Longitude: **APN's:** **Stream Miles:**

Congressional District: **State Senate District:** **Assembly District:**

Tasks / Milestones: **Budget:** **Completion Date:**

See attached budget

Completion Date: December 2017

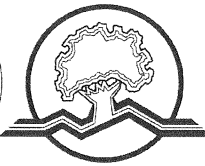
*Attach additional pages as necessary

I certify that the information contained in this Grant Application form, including required attachments, is accurate.

Signature of Authorized Representative

Date

Aug 30, 2016



MOUNTAINS RECREATION & CONSERVATION AUTHORITY
Los Angeles River Center and Gardens
570 West Avenue Twenty-six, Suite 100
Los Angeles, California 90065
Phone (323) 221-9944 Fax (323) 441-8691

August 31, 2016

Rorie Skei
Chief Deputy Executive Director
Santa Monica Mountains Conservancy
570 Ramirez Canyon Road
Malibu, California 90265

Proposition 1 Competitive Grant Application – Vegetation Management

Ms. Skei:

I am pleased to present the enclosed application for a Vegetation Management grant. The Mountains Recreation and Conservation Authority (MRCA) requests a grant in the sum of \$750,000 from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1).

The proposed grant would fund the reduction of hazardous fuels and drought stricken vegetation to reduce wildfire risk, protect watersheds, and promote watershed health. MRCA operates and manages dozens of park sites, hundreds of individual APN locations, and thousands of acres of open space located throughout Los Angeles and Ventura Counties. The systematic reduction of hazardous drought stricken vegetation at these sites directly reduces wildfire risks, protects watersheds, and promotes watershed health.

Please refer to the enclosed materials that describe the proposed grant and how it fits the Conservancy's Evaluation Criteria. If you have any questions regarding this, please contact me at (323) 221-9944, extension 188.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy Lethbridge".

Amy Lethbridge
Deputy Executive Officer

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The Mountains Recreation and Conservation Authority (MRCA) operates and manages dozens of park sites, hundreds of individual APN locations, and thousands of acres of open space located throughout Los Angeles and Ventura Counties. The systematic reduction of hazardous fuels and drought stricken vegetation at these sites directly reduces wildfire risks, protects watersheds, and promotes watershed health. The lands subject to vegetation management are mostly located in undeveloped mountain areas and are not in or adjacent to a disadvantaged community. Regardless of this, reducing wildfire risks benefits the entire Los Angeles metro area, including disadvantaged communities.

Proposition 1 and the California Water Action Plan (Water Action Plan) together outline priorities and strategies to help protect our developed and natural resources from severe dry periods and to establish a water conservation ethic. Our vegetation management project aims to conserve water and achieve greenhouse gas reduction targets. Additionally, wildfire prevention efforts help to protect plant and animal species and their habitat found in fragmented urban and open space areas of Southern California. As a result, this project will result in the restoration of important species and habitat throughout the region. Reduction of wildfire risks is a component of Santa Monica Mountains' management plans and policies by California State Parks, National Park Service, and Los Angeles County.

Fuel modification is conducted through the removal of highly flammable and dead vegetation or thinning of undesirable combustible vegetation. The objective is to reduce the amount of fuel and create a defensible space to keep developed structures and natural landscapes safe from fire. Tasks include annual removal of weeds, dry and dead materials, invasive species, and other undesirable flammable vegetation. MRCA utilizes pre-emergent herbicides that prevent the re-sprouting of invasive species as a technique to reduce ongoing costs related to fuel modification. Our certified handlers complete regular training and can make use of new products, if applicable.

Invasive species are particularly targeted by field crews due to their ability to increase fuel loads, to become naturalized in wild land areas, and to degrade wildlife habitat. The steep hillsides, common in Southern California, require protection from erosion: This makes it imperative to protect and preserve native plant communities that are better adapted to the geology of the area and provide important wildlife habitat as well as ground cover for slope stabilization. Reducing wildfire risk provides multiple direct and indirect benefits including reducing sediment, ash, and organic matter from entering streams that drain into our watersheds thereby limiting creek sedimentation and erosion, and encouraging ground water recharge.

The protection and restoration of both natural and developed resources support ongoing public safety efforts. Additionally, managing vegetation within trails and parks protects its continued use and enjoyment by the public. These management efforts avoid future emergency responses that would be much higher in cost than the proposed preventive measures.

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Effects of the current long-term drought are increasingly affecting vegetation management in multiple ways: Our open spaces have become extremely vulnerable which is compounded by an extreme beetle infestation during these drought conditions. Although the growth of weedy, grassy species can be reduced, staff have also noticed an increasing amount of infected trees which contributes to their death. In most cases these are very mature, large trees that have failed due to drought or insect infestations that are exacerbated by the dry conditions. The removal of these trees can be extremely costly but necessary due to the risk of infestation of other nearby trees, and the risk of injury to people and property and fire hazard caused by weakened roots.

California's efforts to meet goals mandated by the Global Warming Solutions Act ("AB 32") to reduce greenhouse gas emissions to 1990 levels by the year 2020 assumed no net emissions for wildland ecosystems by 2020, underestimating the potential of wildfires as a considerable greenhouse gas source. Current findings are showing that burned, or dead, vegetation releases carbon into the atmosphere further exacerbating climate change.¹ Projections of stronger, more damaging, fires compounded by current drought conditions underscore the need to annually perform preventive vegetation management.

This grant would help to serve the approximately 70,000 acres of MRCA managed property prone to wildfire risk. This in turn would effectively prevent an approximated 71,000 metric tons of CO₂ from being released into the atmosphere. Fuel modification by brushing holds the CO₂ emissions within the carbon sinks of plant material and prevents their release into the atmosphere. Refer to Appendix A for carbon emissions calculations.

The proposed \$750,000 grant would be used to manage vegetation and reduce hazardous fuels in order to decrease wildfire risk and protect watersheds, protect habitat, improve air quality, and promote watershed health. This work is also necessary to protect homes, businesses, and other public and private structures from wildfire. Protection and restoration activities covered under this grant application will be performed by MRCA staff as well as outside contractors. Equipment to be purchased will include, but is not limited to, chainsaws, handsaws, chemical spraying equipment, personal protection equipment, and safety gear. Monitoring and reporting on the progress and effectiveness of the project will occur via written project status reports and photographs. After the project's completion, photographs will be provided upon request.

¹ Gonzales, P. et.al. (2015) **Aboveground live carbon stock changes of California wildland ecosystems, 2001–2010** *Forest Ecology and Management, Volume 348,p68-77*

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BUDGET

See attached budget. No matching funds are available for this project.

TIMELINE

The proposed project will be completed approximately 1 year after approval. This may vary depending on the amount of rainfall and subsequent vegetation growth.

RESPONSE TO EVALUATION CRITERIA

Project achieves the purposes of Proposition 1 per Water Code Section 79732(a).

The proposed Vegetation Management project will involve the protection and restoration of natural and developed resources by reducing hazardous fuels and drought stricken vegetation. The proposed grant achieves the following Prop 1 purposes:

1) Protect and increase the economic benefits arising from healthy watersheds, fishery resources, and instream flow. The project, through its management and preventive efforts, will avoid future fires and emergency responses that would cost much more than the proposed preventive measures.

2) Implement watershed adaptation projects in order to reduce the impacts of climate change on California's communities and ecosystems. The removal of exotic species and the restoration of native plant communities reduces wildfire risk, helping to mitigate the impacts of climate change. Additionally, as burned and dead vegetation releases carbon into the atmosphere further exacerbating climate change, this project would reduce carbon emissions and improve air quality.

8) Implement fuel treatment projects to reduce wildfire risks, protect watersheds tributary to water storage facilities, and promote watershed health. The proposed grant is a fuel treatment project and will thereby reduce wildfire risks and help to protect watersheds and promote watershed health.

9) Protect and restore rural and urban watershed health to improve watershed storage capacity, forest health, protection of life and property, stormwater resource management, and greenhouse gas reduction. The systematic reduction of hazardous fuels and drought stricken vegetation at various MRCA managed sites directly reduces wildfire risks, protects watersheds, protects habitats, improves air quality, and promotes overall urban watershed health. This work also protects homes, businesses, and other public and private structures.

11) Reduce pollution or contamination of rivers, lakes, streams, or coastal waters, prevent and remediate mercury contamination from legacy mines, and protect or restore natural system functions that contribute to water supply, water quality, or flood management. Actions under the proposed grant will reduce sediment, ash, and organic matter from loading and contaminating streams draining into our watersheds.

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This in turn limits erosion and creek sedimentation, and encourages ground water recharge.

12) Assist in the recovery of endangered, threatened, or migratory species by improving watershed health, instream flows, fish passage, coastal or inland wetland restoration, or other means, such as natural community conservation plan and habitat conservation plan implementation. Wildfire prevention through vegetation management efforts directly helps to protect plant and animal species and their habitats found in fragmented urban interface and open space areas.

The project will provide multiple benefits related to water quality, water supply and/or watershed protection and restoration.

Reducing wildfire risk through vegetation removal provides multiple direct and indirect benefits: Vegetation management reduces sediment, ash, and organic matter from entering streams which drain into our local watersheds; limits erosion and creek sedimentation; encourages ground water recharge; and reduces the amount of invasive species in our environment thereby protecting native habitats.

The project results in restoration or protection of important species and habitat pursuant to the California Water Action Plan.

As mentioned, wildfire prevention efforts, such as the proposed project, protect plant and animal species and their habitats found in fragmented urban and open space areas of Southern California. The removal of invasive, nonnative species will result in the restoration and protection of important species and habitat.

The project employs new or innovative technology or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation.

After exotic species are removed, MRCA utilizes pre-emergent herbicides that prevent the re-sprouting of invasive species as an innovative practice to reduce ongoing costs. Our certified handlers complete regular training and can make use of new products, if applicable.

Applicant has proven that implementation of the project is feasible.

MRCA crews understand that the removal of high fuel loads is a fundamental factor when it comes to keeping developed structures and natural landscapes fire safe. Tasks include annual removal of weeds, dead materials, and other undesirable flammable vegetation. The MRCA staff has many years of experience and expertise to undertake these tasks.

Applicant has financial capacity to perform project on a reimbursable basis.

MRCA has been implementing capital projects on a reimbursable basis for many years, and anticipates reimbursable payments in our budgets. MRCA also maintains a line of credit that can be drawn upon in the event of an extended delay. Therefore, the MRCA has the financial capacity to perform this project on a reimbursable basis.

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Applicant, or active project partner, has successfully completed multiple projects of similar size and scope.

The MRCA has an in-house Fire Division that has years of experience performing fuel modification throughout the region. The team of full-time staff and seasonal employees have been eliminating hazardous fuels and invasive nonnatives on MRCA managed properties since the agency was founded in 1985. Staff also makes use of outside contractors to increase efficiency during busy growing seasons.

The project is a partnership between two or more organizations and each organization has committed to contributing toward project implementation.

MRCA is a local public agency exercising joint powers of the Santa Monica Mountains Conservancy, the Conejo Recreation & Park District, and the Rancho Simi Recreation & Park District pursuant to Section 6500 *et seq.* of the Government Code. These three entities each have a voting member on MRCA's Governing Board, which approved the proposed grant application on August 3, 2016.

Completion of the project would assist a government agency in fulfilling a water resources protection, watershed ecosystem restoration, or multi-benefit river parkway plan.

The MRCA is a local government agency with the responsibility to protect and manage both the lands it owns and those owned by the Santa Monica Mountains Conservancy. The management of vegetation within these owned and/or managed lands fulfills the goals of watershed ecosystem **restoration** (the action or returning something to a former condition) by the systematic removal of invasive species and reintroduction of native plant species.

Applicant, or project partner, has 1+ years experience maintaining and operating projects of similar size and scope.

The MRCA has been managing land in the region since 1985 and our mission is to protect land and public access to natural lands in southern California. MRCA staff has been performing fuel hazard reduction and vegetation management of these lands on an ongoing basis since its inception.

Applicant has identified maintenance funding for at least 2 years after completion.

MRCA will provide maintenance from our general fund.

The project substantially restores a site by reestablishment of native species to reduce wildfire risk and promote watershed health.

Vegetation management through fuel hazard reduction and removal of nonnative species promotes the re-establishment of native species. Removing competition created by exotic invasive plants helps native plants thrive, ensuring healthier watersheds.

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The project upgrades an existing regional trail or river parkway to protect its continued use and enjoyment by the public.

Many regional trails traverse lands that will be affected by the proposed vegetation management grant. Wildfire prevention protects the continued use and enjoyment of these regional trails, and prevents damage to public resources. The reduction of fuel loads also makes trails more easily accessible and enjoyable for public.

The project includes improvements that would significantly reduce the amount of untreated runoff entering urban rivers, waterways, or costal watersheds.

Erosion and watershed protection are also accomplished by restoration of native plant communities and the prevention of wildfires through the reduction of fuel loads. These actions also serve to reduce the potential of sediment, ash, and organic matter loading of the streams draining watersheds of the Los Angeles River and Santa Monica Bay.

The project includes improvements that would improve or support regeneration of important native vegetative cover on slopes near a stream or river, which if substantially disturbed may contribute to flood, erosion, creek sedimentation, or reduced groundwater recharge.

A portion of the work proposed will occur on slopes near streams, on soil that would be prone to erosion without proper vegetative cover. The removal of invasive exotic species will help native vegetation thrive. By preventing wildfire, the proposed grant will also prevent the erosion of sediment, ash, and organic matter into streams.

The project implements public safety practices by reducing wildfire risk.

The primary goal of the proposed grant is to reduce wildfire risk. The protection and restoration of both natural and developed resources supports ongoing public safety efforts. Managing vegetation within trails and parks protects their continued use and enjoyment by the public. The crews that will implement the project have regular safety trainings and briefings.

The project implements fuel treatment projects to reduce wildfire risks, protect watersheds tributary to water storage facilities, and promote watershed health.

The proposed grant is a fuel treatment project that will accomplish the stated goals. Benefits will accrue to the watersheds in general, and to all downstream water storage facilities that exist.

The project substantially restores a site by removal of exotic species to reduce wildfire risk and promote watershed health.

The primary activity proposed is the removal of exotic species to restore native vegetation and protect watershed health.

Applicant has conducted outreach to the affected communities.

MRCA staff maintains relationships with local community groups, homeowners associations, and other stakeholders to keep affected communities aware of the

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vegetation management activities. Posted signs provide contact information for the public, and MRCA may partner with local non-profit group (Community Nature Connection) or send staff to attend events in an effort to teach the public about our restoration efforts.

The project adds visitor-serving amenities, accessibility, and public safety improvements to public parkland with multiple ecosystem benefits.

Reducing wildfire risk is a public safety improvement for public parklands. Additionally, managing drought stricken vegetation improves public safety by removing hazardous fuels that not only create a wildfire risk, but also are a risk of injury to people and property caused by weakened roots. Multiple ecosystem benefits include the reduction of invasive species, preventing erosion into surface waters, protecting tree canopy, improving air quality, restoring native habitat, and reduced risk of wildlife deaths due to wildfires.

Project will benefit specially protected species pursuant to the California Wildlife Protection Act of 1990.

In June of 1990 voters of California approved Proposition 117, the California Wildlife Protection Act, prohibiting the sport hunting of the California Mountain Lion and declaring them to be a specially protected species. The local population of mountain lions requires large areas of undisturbed habitat to thrive. Vegetation management reduces the possibility of the destruction of this habitat due to wildfire or erosion, benefiting the Mountain Lion population.

Project has approval from all landowners to complete the project, or Applicant is the landowner.

The vegetation management project will be performed only on land owned and/or managed by the MRCA.

The project demonstrates a reduction in baseline greenhouse gas emissions through carbon sequestration or other innovative techniques or project designs, such as diverting organic material from landfills.

The removal of weedy invasive species benefits the long-term health of larger native trees, such as oaks, sycamores, and walnuts that sequester carbon. The long-term viability of these trees is important for the region's adaptations to climate change. Organic matter removed during vegetation management is chipped and used as mulch, and not taken to landfills. MRCA utilizes pre-emergent herbicides that prevent the re-sprouting of invasive species as an innovation to reduce ongoing costs.

Fuel modification by brushing retains the CO₂ emissions within the carbon sinks of plant material and prevents their release in atmospheric concentrations. The proposed project will prevent an approximated 71,000 metric tons of CO₂ from being released into the atmosphere by drought stricken trees and shrubs. Healthy trees will aid in reducing Greenhouse Gas (GHG) emissions through carbon sequestration helping to provide clean air for California's residents and helping with the adverse impacts of global warming. Refer to Appendix A for carbon emissions calculations.

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The project contributes to tree canopy cover and/or greenways in urban areas to mitigate heat island effects and promote public health and recreation.

All areas affected by the proposed project are located in the urban metropolis of Los Angeles. The project will benefit tree canopy health by removing invasive competition species, ensuring the ongoing public health benefits contributed by those trees. Additionally, through its protection of drought-tolerant California native trees and shrubs, the project will protect and create additional habitat for local wildlife; ensure public enjoyment of this wildlife and habitat; provide shade to reduce Urban Heat Island effects; promote infiltration; generate oxygen; and sequester carbon and remove pollutants from the air thus helping to further promote and allow for public health and recreation.

The project acquires and/or maintains wildlife corridors and linkages to provide connections between areas of undeveloped lands, particularly significant public lands and key habitat ecosystems.

The areas affected by the proposed grant include many major and minor wildlife corridors that will be benefitted by the reduction of wildfire risk.

The project develops or maintains multi-use trails that connect communities, provides access to public resources and reduces vehicle miles traveled.

The proposed project will benefit regional multi-use trails by reducing the risk of wildfire. These trails provide access to public lands.

The project engages local communities through outreach, education, and interpretation regarding long-term stewardship and climate change awareness.

MRCA staff maintain relationships with local community groups, homeowners associations, and other stakeholders to keep affected communities aware of our activities. Posted signs provide contact information for the public, and may partner with local non-profit group (Community Nature Connection) or send staff to attend events in an effort to teach the public about our restoration efforts. Partnering with Community Nature Connection would provide interpretive services regarding the impacts of climate change on native species habitat.

Project utilizes a local job training entity for a portion of the work.

MRCA recruits staff for the Fire Division from a variety of sources, including job training entities such as the Los Angeles Conservation Corps and training programs such as the Rio Hondo Fire Academy.

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Appendix A: Carbon Emissions Calculations

$$\text{CO}_2 \text{ emissions} = A_{\text{burned}} \times C_{\text{density}} \times f_{\text{combustion}} \times 3.66$$

CO₂ emissions = Carbon Dioxide emissions from Forest Fires

A_{burned} = Area burned in hectares (ht)

C_{density} = Carbon density in tons of Carbon per hectare in Tier 2 (105 tC/ht)

f_{combustion} = combustion factor (0.45)

3.66 = Carbon to Carbon Dioxide conversion (44/12)

RATIO = 70.01 metric ton of carbon dioxide per acre burned

Source: <http://www3.epa.gov/ttn/chief/firesummit/Flugge.pdf>
Referencing IPCC 2003 and IPCC 2006

Estimate of 1014 acres brushed.
Based on 2015/16 MRCA vegetation management activity

$$\text{CO}_2 \text{ emissions} = 410.35 \text{ ht} \times 105 \text{ tC/ht} \times 0.45 \times 3.66 = 70,964 \text{ metric tons of CO}_2$$

By funding the proposed project, it would allow MRCA to do our part in keeping approximately 71,000 metric tons of CO₂ from entering the atmosphere.

**Budget for Grant Application
Vegetation Management - Proposition 1**

Grant Amount: \$ 750,000.00

| Required for All Bond Funded Grants | | |
|---|---|----------------------|
| G/L Acct. | G/L Name | Total Budget |
| (A) PAYROLL Related Expenses: | | |
| Enter TOTAL Payroll Related Expenses Here →→→→ [Note: No need to fill out the individual payroll line items below] | | \$ 388,000.00 |
| Several | Direct Salaries, Payroll Taxes, Benefits | \$ 271,600.00 |
| 9998, 9999 | Administrative Cost | \$ 116,400.00 |
| (B) NON-PAYROLL Expenses: | | |
| 3007 | Supplies/Maint - Weeds/Brushing | \$ 21,000.00 |
| 5111 | Land & Building Improvement - Roads | \$ - |
| 5112 | Land & Building Improvement - Materials | \$ - |
| 5113 | Land & Building Improvement - Equipment | \$ 1,000.00 |
| 5114 | Land & Building Improvement - Sub Contractors | \$ 300,000.00 |
| 5115 | Land & Building Improvement - Design/Pre-Construction | \$ - |
| 6575 | Equipment - Fire & First Aid | \$ 30,000.00 |
| 7777 | Equipment Allocation | \$ 10,000.00 |
| Totals: | | \$ 750,000.00 |