

Grant Application – Supplemental Information

Zev Yaroslavsky Los Angeles River Greenway Improvements Mountains Recreation and Conservation Authority

FROM SMMC PROP 1 GUIDELINES:

2.6. *Climate Change Mitigation*

a. General

Projects that conserve water and produce verifiable and quantifiable greenhouse gas reductions not only help achieve the state's foremost goals, but will deliver tangible co-benefits to the communities in which the projects are built. Pursuant to Section 1.0 of these Guidelines, and the **Santa Monica Mountains Conservancy's Climate Change Policy**, the Executive Director and his designees are required to consider climate change when evaluating projects in order to reduce greenhouse gas emissions and address the impacts of climate change on the state's natural resources. Therefore, all project applicants are required to demonstrate that their project yields measurable greenhouse gas reductions.

The principal goal of this Section is to ensure that the Conservancy funds the development and implementation of projects that lead to significant reductions in greenhouse gas emissions (GHGs) in a manner consistent with the **State Planning Priorities, AB 32, and other state and local Plans**. It is meant to support strategic investment in natural resources projects that help cities address sprawl, incentivize urban infill, and create livable, walkable, healthy communities.

b. Projects

A non-exhaustive list of projects that demonstrate a quantifiable impact on greenhouse gas emissions can be found below. Projects should present innovative activities that reduce GHG emissions, and that are capable of replication in other project sites. Project applicants are encouraged to bring additional project ideas to Conservancy staff.

- Strategic acquisitions to avoid conversion of open space and limit sprawl, reducing the impacts of development and vehicle miles travelled;
- Urban park or greenway projects with a water focus that are co-located with other public amenities to promote infill development by providing open space and public recreation;
- Multiple benefit projects that incorporate green infrastructure or water recycling and filtration techniques to produce verifiable water and energy savings;
- Projects that protect, enhance, or restore water resources including wetlands and urban riparian areas;
- Projects that enhance above and below ground carbon storage through planting trees and other vegetation;*

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- Projects that mitigate heat island effect and improve air quality through tree planting in urban areas dominated by hardscape;*

* **In order to receive funding for projects that involve tree or vegetation planting, applicants must demonstrate that the project uses renewable or non-potable sources of water, such as reclaimed water, captured stormwater, or other method where feasible.** Applicants may include the cost of implementing such technologies or techniques in their grant applications. This requirement applies to all projects receiving funding pursuant to these Guidelines.

a) Greenhouse Gas Reduction Quantification

Applicants must be able to demonstrate greenhouse gas emission reductions that are real, permanent, quantifiable, verifiable, and enforceable. Quantification of greenhouse gas reductions must be done according to the best economic and scientific information available at the time of estimation. Applicants have the burden of measuring and demonstrating emissions reductions, however the Conservancy may assist applicants in selecting tools or methodologies for evaluating carbon benefits. In reviewing a project's climate change impact, the Conservancy shall rely on the Air Resources Board or other qualified professional as described in Section 4.2.(a).

Applicants should calculate the greenhouse gas benefits of projects over a 40 year timeframe. This is based on the nature of investment in natural resources, which requires time to fully realize carbon benefits. As explained in the Scoping Plan, "planting trees today will maximize their sequestration capacity in 20 to 50 years" (71).

In April 2017 the Conservancy authorized a grant of Proposition 84 funds to the Mountains Recreation and Conservation Authority for the Los Angeles River Zev Yaroslavsky Greenway Project. We understand that Proposition 1 may be a more suitable funding source for this project. Unique to the Conservancy's Proposition 1 Grant Guidelines is the requirement to describe how the project would reduce greenhouse gas emissions. The supplemental information below is provided to meet that requirement.

The proposed Project is consistent with the goals set forth in the Santa Monica Mountains Conservancy's Climate Change Policy, State Planning Priorities, and AB 32. The Project seeks to improve a locally and regionally significant public resource for public enjoyment and environmental benefit. The project seeks to mitigate greenhouse gas emissions and address the impacts of climate change on the state's natural resources. Further objectives of the project are to protect the Los Angeles River watershed through the restoration of native habitat, and promote public access to the watershed's land, water, and wildlife resources.

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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.

This multiple benefit project incorporates green infrastructure, trash capture, and water filtration to produce water quality improvement. It is located directly adjacent to the Los Angeles River and through the installation of the proposed Project elements, will result in the protection and enhancement of this precious urban water resource. The Project's existing bioswale is designed to capture and treat stormwater and reduce the volume of water and amount of pollutants expelled into the Los Angeles River untreated, thus protecting and restoring the health of the watershed. The current lack of vegetation within the bioswale prevents it from doing its job to the fullest. The vegetation added would in fact convert it from simply being a swale to being a functioning bioswale that not only captures stormwater but also trash, further helping to clean our waterways.

Additional landscaping and slope erosion controls will not only improve user experience but will provide watershed protection by preventing erosion and sedimentation in the Los Angeles River. Urban stormwater runoff ("non-point source pollution") washes chemicals (oil, gasoline, salts, etc.) and litter from the roadway surface into Los Angeles River. Currently, no curbs exist at the top of the slope above the project resulting in a large quantity of water that sheet flows from the above neighborhood streets onto the Project site downslope and into the River. The Project will mitigate this issue via additional landscaping to capture trash and erosion control to divert and/or slow down the runoff so that more may be captured in the bioswales, greatly reducing the amount of pollutants and trash from entering the River.

As mentioned, the Project plans for installation of California native trees and shrubs. The purpose of the vegetation is to create habitat for local wildlife, provide shade for greenway users, reduce the Urban Heat Island effect created by the adjacent urban community, generate oxygen, and remove pollutants from the air thus helping to address and reduce Greenhouse Gas (GHG) emissions and helping with the adverse impacts of global warming. The proposed spacing of the vegetation is intended to maximize those benefits. Additionally, through planting of these trees and other vegetation, the Project will enhance above and below ground carbon storage. The installation of irrigation along the slope will ensure that the native plant landscaping will be able to survive and thrive over time. If no irrigation is added, it is likely that the majority of the plants will die, resulting in less habitat, less mitigation of GHG's, an aesthetically unpleasing site, and thousands of dollars of wasted public funding. Although pure ecological restorations frequently do not incorporate permanent irrigation, MRCA has found that approach to be inadequate in urban parks where plants are subjected to more extreme conditions including the heat island effect, trampling, and damage from routine maintenance such as trash removal. Vigorous growth of young

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plants is a vital component for new park plants to succeed. If and when reclaimed water is available at this location, the project can convert to it.

Carbon sequestration will be achieved through the addition of approximately 15 trees to an urban area. The infiltration of stormwater will reduce the amount of imported water needed, indirectly reducing greenhouse gas emissions through the reduced need to pump water to Southern California.

The calculations provided represent the best analysis by our staff:

The i-Tree Design tool was used to calculate the estimated projected GHG sequestered by the Project. i-Tree is a state-of-the-art, peer-reviewed software suite from the USDA Forest Service that provides urban and rural forestry analysis and benefits assessment tools. This tool enabled staff to insert the size and species of each future tree on-site and locate it in relation to the neighboring property boundaries and residential structures. In estimating the amount of GHG sequestered, the tool considered the types of trees that are being installed: How large they will get and their ability to sequester carbon (since different tree types are able to sequester carbon more successfully and at much higher rates than others). The result of these inputs was a total of 77,822 pounds (39 tons) of carbon being sequestered by the Project's trees over a period of 40 years (2,214 pounds per year).

The i-Tree Design tool also calculated that, the trees being installed as part of the Project will intercept approximately 63,350 gallons of stormwater per year. This will also save energy by capturing and infiltrating water into our local aquifers. As mentioned, urban stormwater runoff ("non-point source pollution") washes chemicals (oil, gasoline, salts, etc.) and litter from the roadway surface into Los Angeles River. The more impervious the surface (e.g., concrete, asphalt, rooftops), the more quickly pollutants are washed into our community waterways. Drinking water, aquatic life, and the health of our entire ecosystem can be adversely affected by this process. The vegetation will slow down and capture runoff. The trees will act as mini-reservoirs, controlling runoff at the source and reducing runoff by intercepting and holding rain on leaves, branches, and bark and increasing infiltration and storage of rainwater through the tree's root systems.

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

The Project includes approximately 15 new trees in an urban area that currently has very few. The vegetation (both native, drought-tolerant trees and shrubs) will help to generate oxygen, cool the atmosphere, and reduce the urban heat-island effect caused by the urban environment.

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

Investment in this Project will support the protection of natural resources and facilitate the further development of a livable, walkable, and healthy community, which is a principal goal of this grant program: As part of the Project's scope, MRCA plans to create a new pedestrian access located at Bellaire Avenue street-end. This will enable the local residents and visitors to more conveniently access and utilize the greenway amenity and will encourage more outdoor activity. These proposed new improvements are expected to create better user experiences and watershed benefits. The location of the Project adjacent to a residential community and the river will encourage people to bicycle or walk to the greenway to exercise or simply enjoy the outdoors instead of needing to commute to a similar amenity, thereby reducing GHG emissions from transportation sources. The Project would result in very limited new vehicle trips and, as mentioned, is expected to reduce vehicle miles traveled. Residents and visitors to the Los Angeles River will have a safe and peaceful greenway to access and walk to and through the Project. Visitors will experience native plant communities and see water conservation measures in action, hopefully creating additional stewards of the environment and indirectly helping to improve environmental conditions over the long-term.