

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
 DF-46 (REV 08/15)

Fiscal Year 2016/17	Business Unit 0540	Department Natural Resources Agency	Priority No.
Budget Request Name Green Infrastructure		Program	Subprogram

Budget Request Description
 Green Infrastructure Program

Budget Request Summary
 This proposal would provide \$20 million in Greenhouse Gas Reduction Funds for Green Infrastructure Program projects at the Natural Resources Agency and 1 position for the staffing necessary to implement the program.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed
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Does this BCP contain information technology (IT) components? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	Department CIO	Date
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For IT requests, specify the date a Special Project Report (SPR) or Feasibility Study Report (FSR) was approved by the Department of Technology, or previously by the Department of Finance.

FSR SPR Project No. Date:

If proposal affects another department, does other department concur with proposal? Yes No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Bryan Cash	Date 1/4/2016	Reviewed By	Date
Department Director	Date	Agency Secretary 	Date 1/4/2016

Department of Finance Use Only

Additional Review: Capital Outlay ITCU FSCU OSAE CALSTARS Dept. of Technology

BCP Type: Policy Workload Budget per Government Code 13308.05

PPBA	Original Signed by Amanda Martin	Date submitted to the Legislature 1-8-16
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A. Budget Request Summary

This proposal would provide \$19.857 million in Green House Gas Reduction Funds for Green Infrastructure Program projects at the Natural Resources Agency. It would also provide 1 position and \$143,000 for the staffing necessary to implement the program. The program would be a more greenhouse gas reduction focused version of the Agency's current Urban Greening program.

B. Background/History

Implementation of the California Global Warming Solutions Act of 2006 (AB 32) includes measures that achieve real, quantifiable, cost-effective reductions of GHG emissions and return California to 1990 emission levels by 2020. Since 2006, the State has continued to steadily implement a set of actions that are driving down GHG emissions, cleaning the air, diversifying the energy and fuels that power our society, spurring innovation in a range of advanced technologies and improving natural resource health statewide. These efforts have put California on course to achieve the 2020 emissions limit, and have created a framework for ongoing climate action that can be built upon to maintain and continue reductions beyond 2020. In addition to the near-term GHG emission reduction goals established in AB 32, mid-term and longer-term GHG emission reduction targets have been established in Executive Orders B-30-15 and S-3-05 to reduce greenhouse gas emissions by 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, respectively. The Greenhouse Gas Reduction Fund (GGRF -funded by the Cap-and-Trade Program generated Auction Proceeds, authorized by AB 32) was established to fund measures that allow California to achieve its GHG reduction goals. GGRF will provide the funding for this proposal.

California voters passed the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84) on November 7, 2006. It added Division 43 to the Public Resources Code, Chapter 9 Sustainable Communities and Climate Change Reduction, Section 75065(a), authorizing the Legislature to appropriate \$90 million for urban greening projects that reduce energy consumption, conserve water, improve air and water quality, and provide other community benefits. Chapter 729, Statutes of 2008 (SB 732, Steinberg), established the Urban Greening program which awarded financial assistance to cities, counties, or nonprofit organizations for urban greening projects and plans. Grant guidelines for this competitive program were developed through a public process between October 2009 and February 2010 and are updated as needed. A total of 137 projects were awarded and the final round of awards were made in June 2014.

This proposal would continue the legacy of the Urban Greening program but would focus the program on greenhouse gas reduction through investments in green infrastructure. These investments would include, among other things:

- Multi-benefit storm water projects, including construction of permeable surfaces and collection basins and barriers,
- Green streets and alleys that integrate green infrastructure elements into the street and/or alley design, including permeable surfaces, bioswales, trees, etc.,
- Urban heat island mitigation and energy conservation efforts through landscaping and green roof projects,
- Rain gardens and bioswales to mitigate storm water runoff,
- Greening of existing public lands and structures, including schools
- Non-motorized urban trails that provide safe routes for travel between residence, workplaces, commercial centers, and schools,
- Tree canopy and shade trees, parks, wetlands, and open space.

Consistent with AB 32, the Green Infrastructure Program would reduce greenhouse gas emissions by implementing projects that achieve multiple-benefits. The green infrastructure components to a given project would vary, but would result in quantifiable GHG reductions achieved via sequestration (urban forestry, plantings, conservation of natural resources); reduced vehicle miles travelled (green streets/alleys; urban trails); and reduced energy use (green roofs, heat island mitigation). These projects would also

better prepare communities for adapting to climate change and provide numerous environmental, community and public health, and economic co-benefits. The Green Infrastructure Program will locate at least 40% of investments in and provide benefits to disadvantaged communities, as identified through CalEnviroScreen. The criteria under this program will be designed to specifically address many of the environmental areas identified by OEHHA including emissions and discharges, exposures, sensitive populations and socioeconomic factors. Historically, the Urban Greening program invested over 70% of the funds in disadvantaged communities as identified by income levels. Therefore, while the goal is to achieve at least 40% of investments in disadvantaged communities using CalEnviroScreen, we believe that the percentage will be much higher.

Reducing GHG emissions is the goal of the Green Infrastructure Program by implementing best management practices to improve the sustainability of existing built environments. The green infrastructure components of a project funded by this program will affect both the production of GHG, and the removal of GHG from the atmosphere, primarily through sequestration of CO₂. Both of these effects on GHGs will be considered: reduced GHG emissions from reduced energy and fossil fuel consumption, and increased sequestration of carbon dioxide through vegetation. Quantification methodologies for green infrastructure practices have not been approved by the Air Resources Board specific to a Green Infrastructure Program, but there are many calculation methodologies, tools, and research that will be used to identify an appropriate approach for this Program. Some example resources include the work of the University of California at Berkeley's Heat Island Group (<https://heatisland.lbl.gov/coolscience/urban-heat-islands>) that estimates full implementation of a "cool communities" strategy using green infrastructure approaches could reduce California emissions by 4 million metric tons of carbon dioxide equivalent per year. Carbon sequestration by urban trees and other vegetation could be measured using a research-based tool such as the U.S. Forest Service I-Tree model to calculate specific benefits of the proposed project. Additionally, water-energy savings achieved from relevant green infrastructure components can be measured using the ARB approved methodology used by the Department of Water Resources for their water-energy grant program.

C. State Level Considerations

This program will help achieve the Governor's goal to reduce greenhouse gas emissions by 40% by 2030 through projects that absorb carbon, reduce energy consumption, reduce vehicle miles traveled and reduce water energy usage.

In addition, Agency will work with potential grantees and other GGRF programs to coordinate investments made in specific areas of the state. This coordination will increase funding efficiency, reduce program overlap and potentially result in a greater collective benefit.

D. Justification

The Green Infrastructure Program would be modeled closely after the Urban Greening Program, which was funded by Proposition 84 general obligation bonds and administered by the Natural Resources Agency on behalf of the Strategic Growth Council. The last round of funding for Urban Greening was awarded in June 2014. Without funding from the Greenhouse Gas Reduction Fund, funding for green infrastructure projects will cease. The Green Infrastructure Program would build on the success of the Urban Greening Program, and benefit from having knowledgeable staff in place with expertise in administering and managing green infrastructure projects. In addition, potential applicants are familiar with the program and the types of projects that would be eligible. Because this is a continuation of an existing program that had a goal to reduce GHG emissions, only minor revisions would need to be incorporated into programmatic guidelines thereby allowing for timely implementation of the program.

E. Outcomes and Accountability

As required, Agency will report GHG reduction outcomes to the Air Resources Board. Because this program is greening the existing built environment, it would not only provide these GHG reductions through the above mentioned methods, but would provide a catalyst for changing the shape of disadvantaged communities throughout the state.

F. Analysis of All Feasible Alternatives

Alternative 1: Fund support for these grants from an alternative source.

Pros

- This would allow the program to continue funding projects.

Cons

- This would put pressure on the alternative funding source.

Alternative 2: Approve the funding and position as requested.

Pros

- This approach would not draw on a separate funding source and would allow the GGRF funds to be invested in a timely and effective manner.

Cons

- Other programs would not receive additional funding from GGRF.

G. Implementation Plan

Guidelines from the Urban Greening Program would be modified and outreach would occur in the first quarter of the fiscal year. Because staff and applicants are already familiar with the Urban Greening Program and it has similar goals, the transition to the Green Infrastructure Program will be quick and seamless. The solicitation process would occur in the 2nd quarter followed by the evaluation process. Awards would be made by the end of the fiscal year.

H. Recommendation

We would recommend Alternative 2 as it would continue the legacy of the Urban Greening Program and would allow investments to occur in a timely and effective manner. In addition, we would recommend the following provisional language to allow sufficient time for the projects to be completed:
The funds appropriated in this item are available for expenditure and encumbrance until June 30, 2019, for support, local assistance, or capital outlay.

BCP Fiscal Detail Sheet

BCP Title: Green Infrastructure Program

DP Name: 0540-002-BCP-DP-2016-GB

Budget Request Summary

	FY16					
	CY	BY	BY+1	BY+2	BY+3	BY+4
Positions - Permanent	0.0	1.0	1.0	1.0	1.0	1.0
Total Positions	0.0	1.0	1.0	1.0	1.0	1.0
Salaries and Wages						
Earnings - Permanent	0	75	75	75	75	75
Total Salaries and Wages	\$0	\$75	\$75	\$75	\$75	\$75
Total Staff Benefits	0	35	35	35	35	35
Total Personal Services	\$0	\$110	\$110	\$110	\$110	\$110
Operating Expenses and Equipment						
5301 - General Expense	0	2	2	2	2	2
5302 - Printing	0	3	3	3	3	3
5304 - Communications	0	2	2	2	2	2
5306 - Postage	0	1	1	1	1	1
5320 - Travel: In-State	0	15	15	15	15	15
5324 - Facilities Operation	0	10	10	10	10	10
54XX - Special Items of Expense	0	19,857	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$19,890	\$33	\$33	\$33	\$33
Total Budget Request	\$0	\$20,000	\$143	\$143	\$143	\$143

Fund Summary

Fund Source - State Operations						
3228 - Greenhouse Gas Reduction Fund	0	143	143	143	143	143
Total State Operations Expenditures	\$0	\$143	\$143	\$143	\$143	\$143
Fund Source - Local Assistance						
3228 - Greenhouse Gas Reduction Fund	0	19,857	0	0	0	0
Total Local Assistance Expenditures	\$0	\$19,857	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$20,000	\$143	\$143	\$143	\$143

Program Summary

Program Funding						
0320 - Administration of Natural Resources Agency	0	20,000	143	143	143	143
Total All Programs	\$0	\$20,000	\$143	\$143	\$143	\$143

Personal Services Details

		Salary Information			CY	BY	BY+1	BY+2	BY+3	BY+4
		Min	Mid	Max						
Positions										
1089	- Assoc Park & Recr Spec (Eff. 07-01-2015)				0.0	1.0	1.0	1.0	1.0	1.0
Total Positions					0.0	1.0	1.0	1.0	1.0	1.0
Salaries and Wages										
1089	- Assoc Park & Recr Spec (Eff. 07-01-2015)				0	75	75	75	75	75
Total Salaries and Wages					\$0	\$75	\$75	\$75	\$75	\$75
Staff Benefits										
5150350	- Health Insurance				0	21	21	21	21	21
5150600	- Retirement - General				0	14	14	14	14	14
Total Staff Benefits					\$0	\$35	\$35	\$35	\$35	\$35
Total Personal Services					\$0	\$110	\$110	\$110	\$110	\$110