



# Air Resources Board



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TO: Duane Shintaku  
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CAL FIRE  
1416 9th Street  
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FROM: Cynthia Marvin, Chief  
Transportation and Toxics Division

DATE: September 17, 2015

SUBJECT: GREENHOUSE GAS REDUCTION FUND: CALIFORNIA DEPARTMENT  
OF FORESTRY AND FIRE PROTECTION EXPENDITURE RECORDS  
FOR FISCAL YEAR 2014-15 – FOREST PRACTICE PROGRAM,  
REFORESTATION, FOREST PEST CONTROL, DEMONSTRATION  
STATE FOREST RESEARCH

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Thank you for submitting the final four expenditure records (attached) on behalf of the California Department of Forestry and Fire Protection (CAL FIRE) on September 11, 2015 to satisfy the requirements of Senate Bill 1018 (Budget and Fiscal Review Committee, Chapter 39, Statutes of 2012) for expenditures from the Greenhouse Gas Reduction Fund. We appreciate the iterative consultation process with your staff on the development of this record to support expenditures from these forest management programs, excluding the Fuels Reduction Program that is covered by a separate expenditure record.

This memorandum documents that the Air Resources Board (ARB) Transportation and Toxics Division concurred on September 16, 2015 that the attached records are consistent with the statutory requirements of Government Code Section 16428.9 and with our expectations, as documented in the August 6, 2014 final ARB *Interim Guidance to Administering Agencies on Expenditure Record and Fiscal Procedures*.

These CAL FIRE Expenditure Records for Fiscal Year 2014-15, along with this memorandum, will be published on the ARB Cap-and-Trade Auction Proceeds website at: [www.arb.ca.gov/auctionproceeds](http://www.arb.ca.gov/auctionproceeds).

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

**Greenhouse Gas Reduction Fund: Expenditure Record**

**Fiscal Year: 2014-15 Funds**

California Department of Forestry and Fire Protection (CAL FIRE)  
Forest Pest Control

**Authorizing legislation:** Item 3540-001-3228 (Senate Bill 852, Chapter 25, Statutes of 2014) appropriated \$17,847,000 and item 3540-101-3228 (Senate Bill 852, Chapter 25, Statutes of 2014) appropriated \$24,153,000 to implement fire risk reductions, forest health activities, and urban forestry projects.

**(1) A description of each expenditure proposed to be made by the state agency pursuant to the appropriation.**

<input type="checkbox"/> Agency that will administer funding	<ul style="list-style-type: none"> <li>▪ California Department of Forestry and Fire Protection (CAL FIRE)</li> </ul>
<input type="checkbox"/> Amount of proposed expenditure and appropriation reference	<p>Items 3540-001-3228 and 3540-101-3228 of the Budget Act of 2014 includes \$24,153,000 (\$22,353,000 in grants, and \$1,800,000 in program/administrative staff) from the Greenhouse Gas Reduction Fund (GGRF) for forest management activities that will reduce greenhouse gases (GHG).</p> <ul style="list-style-type: none"> <li>▪ Of that amount, \$1.5 million will go toward forest pest control management activities as described in this Expenditure Record.</li> </ul>
<input type="checkbox"/> Intended recipients	<ul style="list-style-type: none"> <li>▪ Landowners</li> <li>▪ Agencies</li> <li>▪ Non-profit organizations</li> <li>▪ Native American tribes</li> <li>▪ Universities.</li> </ul>
<input type="checkbox"/> Project category	<ul style="list-style-type: none"> <li>▪ Natural Resources, Forest Pest Control</li> </ul>
<input type="checkbox"/> Type of projects that will be eligible for funding	<ul style="list-style-type: none"> <li>▪ These projects provide grants and technical assistance for forest pest control to support: a) removing trees infected by Sudden Oak Death, pine bark beetles Gold Spotted Oak Borer, pine pitch canker, and Polyphagous Shot Hole Borer, that could spread disease to healthy forests; b) preventing further spread of disease to healthy forests by selectively removing trees which are highly susceptible to attack by pests; c) restoring impacted landscapes through reforestation; and d) utilizing removed trees for wood products or biomass energy.</li> </ul>

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| <input type="checkbox"/> Process for selecting projects for funding | <ul style="list-style-type: none"><li>▪ Competitive solicitation, evaluation and selection of projects according to the program Request for Proposals and Procedural Guides</li></ul> |
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**(2) A description of how a proposed expenditure will further the regulatory purposes of Division 25.5 (commencing with Section 38500) of the Health and Safety Code, including, but not limited to, the limit established under Part 3 (commencing with Section 38550) and other applicable requirements of law.**

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| <input type="checkbox"/> How the expenditure is reflected in the three-year Investment Plan | <ul style="list-style-type: none"><li>▪ AB 1532 requires that GGRF monies be appropriated in a manner that is consistent with the three-year Investment Plan. The 2013 Cap-and-Trade Auction Proceeds Investment Plan<sup>1</sup> recommends that funds be used for forest management to sequester carbon.</li><li>▪ In addition, the First Update to the Scoping Plan<sup>2</sup> recognizes the key role that forests must play in meeting California's GHG emission reduction goals. It describes a series of policies, actions, and strategic investments to enhance, protect, and conserve California's natural and working lands in ways that will provide important climate benefits, specifically recommending better management of forests to ensure net forest carbon storage in the face of an increased threat from pests.</li><li>▪ CAL FIRE's proposed expenditures on forest pest control projects are designed to capitalize on these climate change mitigation opportunities, further the GHG emission reduction regulatory purposes of Section 38500, and align with the priorities of the Investment Plan. This is achieved by implementing forest management projects that maintain, stabilize and increase carbon sequestration and reduce emissions by avoiding catastrophic impacts to forests.</li></ul> |
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**(3) A description of how a proposed expenditure will contribute to achieving and maintaining greenhouse gas emission reductions pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code.**

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| <input type="checkbox"/> Expected time frame when reductions will be achieved and how expenditure | <ul style="list-style-type: none"><li>▪ The goal of this grant program is to fund forest pest control projects for the purpose of achieving a net GHG benefit. In order to be deemed complete and eligible for consideration of funding, project proposals are required to include a clear description of the estimated net GHG benefit that will be achieved through project implementation.</li></ul> |
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<sup>1</sup> Cap-and-trade auction proceeds investment plan: fiscal years 2013-14 through 2015-16.

[http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/final\\_investment\\_plan.pdf](http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/final_investment_plan.pdf)

<sup>2</sup> First Update to the Climate Change Scoping Plan

[http://www.arb.ca.gov/cc/scopingplan/2013\\_update/first\\_update\\_climate\\_change\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf)

will maintain  
GHG  
reductions

- These projects enhance carbon sequestration and avoid GHG emissions through a) removing trees infected by Sudden Oak Death, pine bark beetles, Gold Spotted Oak Borer, pine pitch canker, and Polyphagous Shot Hole Borer that could otherwise spread pests to healthy forests; b) preventing further spread of disease to healthy forests by selectively removing trees which are highly susceptible to attack by pests; c) restoring impacted landscapes through reforestation; and d) utilizing removed trees for wood products or biomass energy.
- A net GHG benefit from pest control projects occurs after the completion of project activities as a result of reduced tree mortality, biomass utilization, and improved tree growth.
- Reforestation activities can be an initial source of emissions as a result of site preparation activities. As tree seedlings grow, however, they accumulate carbon in the form of wood and result in a net GHG benefit throughout their life. The time required to achieve a net GHG benefit will vary depending on the site preparation activities and the species planted but a net benefit is expected to be achieved within 10 years of planting.
- Projects that do not immediately result in a GHG benefit must be sustained at least until a net GHG benefit is realized and maintained for 10 years, during which time CAL FIRE will monitor projects for compliance with the terms of the grant. The grant recipient will provide access to CAL FIRE as needed, for periodic monitoring of selected projects.

**(4) A description of how the state agency considered the applicability and feasibility of other nongreenhouse gas reduction objectives of Division 25.5 (commencing with Section 38500) of the Health and Safety Code.**

Expected co-benefits, particularly environmental, economic, public health and safety

Forest pest control projects will provide direct and indirect public benefits by reducing threats such as wildfire, insects and disease that could result in forest conversion to non-forested ecosystems (grass or shrublands) and by reforesting impacted areas. A summary of co-benefits include:

- Maintaining or improving water quality by impeding erosive runoff that can discharge sediments into streams
- Healthy resilient forests that are more resistant to fire and climate change
- Well managed forested landscapes which lessen the risk to life, public safety, and infrastructure
- Functional wildlife habitat for state and federally listed species

- Habitat, refugia and migration corridors for wildlife, and maintain the diversity of natural communities that are increasingly stressed by climate change
- Maintenance of, and improved air quality
- Preservation of historic and cultural resources (such as species and habitats of cultural significance to Native Tribes)
- Green/ bioenergy development
- Reduction of fossil fuel-based energy demand
- New and existing employment opportunities
- Enhanced recreational opportunities and tourism revenue

Co-benefits of Forest Pest Control projects go beyond reducing losses from pest-induced tree mortality and the associated emissions of decaying dead trees. The pest control projects improve overall forest health, increasing resistance and resilience to future negative drought and pest impacts, thus reducing future catastrophic levels of tree mortality.

A core co-benefit from these projects is a reduction in wildfire hazard and resultant wildfire emissions due to removal of the large quantities of dead trees spread throughout California's forested landscapes. Benefits include lower total acres burned, less intense fires, and improved resilience after wildfire, ensuring increased survival of trees and vegetation that will continue to sequester carbon into the future. Fires can result in significant impairment of water quality. Sedimentation of streams and reservoirs and can cause major runoff/debris flows that result from flooding. Healthy forests protect against erosion and stream sedimentation; reduce property damage and losses due to wildfires, improved public health due to reducing air pollutants, and increased socio-economic activity in rural areas of California. Less wildfire hazard means less risk to public safety, lower fire suppression costs, reduced property damage, and better air and water quality.

Socio-economic benefits also result from the projects and are related to the use of removed trees for wood products or feedstock for bioenergy electricity production. Cutting, harvesting, and utilizing trees provides jobs and secondary economic activity in the rural communities from which the trees are removed.

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Disadvantaged community benefits, if applicable, as defined in ARB

- These grants are not expected to directly benefit disadvantaged communities.

guidelines	
<input type="checkbox"/> Percentage of total funding that will be expended for projects that benefit disadvantaged communities, per ARB guidelines	<ul style="list-style-type: none"> <li>▪ These grants are not expected to directly benefit disadvantaged communities.</li> </ul>
<input type="checkbox"/> How the project will support other AB 32 objectives (see below)	<ul style="list-style-type: none"> <li>▪ The forest pest control projects will also support other AB 32 objectives including complementing the State's effort to improve air quality and providing opportunities for community institutions and small businesses to participate in and benefit from GHG reduction efforts via issuing grants to nonprofit organizations.</li> </ul>

**(5) A description of how the state agency will document the result achieved from the expenditure to comply with Division 25.5 (commencing with Section 35800) of the Health and Safety Code.**

<input type="checkbox"/> Approach that will be used to document net GHG reductions before and after project completion. Include citations for references that support methodology.	<ul style="list-style-type: none"> <li>▪ Project proponents and CAL FIRE will calculate the net GHG benefit from the program described here using ARB-approved quantification methodologies. CAL FIRE will work closely with ARB to improve GHG reduction methodologies for all forestry projects in order to ensure that only projects with a net GHG benefit are funded with GGRF funds.</li> <li>▪ A net GHG benefit for CAL FIRE's forest pest control projects are calculated by comparing the project scenario to the no-project scenario at the end of a 25-40 year project life. The project scenario is an estimate of the onsite carbon stocks as a result of implementing the treatment and subsequent tree growth, carbon stored long-term in wood products, and avoided emissions from the production of biomass energy. The no-project scenario is an estimate of the onsite carbon stocks when the project is not implemented. This quantification approach is consistent with the accounting principles of the ARB Compliance Offset Protocol for U.S. Forest Projects<sup>3</sup>.</li> </ul>
<input type="checkbox"/> Type of information that will be collected to document	<ul style="list-style-type: none"> <li>▪ Grantees will collect and report project results to CAL FIRE for entry into the Department's CAL Mapper Information System. Information such as acres treated, acres planted, location of projects, funds expended, solid wood or biomass</li> </ul>

<sup>3</sup> <http://www.arb.ca.gov/regact/2014/capandtrade14/ctusforestprojectsprotocol.pdf>

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project results, as described in ARB guidelines	products generated, and net GHG benefit will be collected and recorded.
<input type="checkbox"/> How the agency will report on program status	<ul style="list-style-type: none"><li>▪ CAL FIRE will regularly report on expenditures, status of grant projects, and project benefits in reports prepared and submitted according to ARB guidelines.</li><li>▪ At a minimum, such reports will include expenditures, net GHG benefit, and co-benefits.</li></ul>

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