

TO: Greenhouse Gas Reduction Fund Program  
Matthew Botill

FROM: Jared Blumenfeld   
Secretary for Environmental Protection  
California Environmental Protection Agency

Richard W. Corey  
Executive Officer  
California Air Resources Board 

DATE: January 22, 2019

SUBJECT: GREENHOUSE GAS REDUCTION FUND:  
California Air Resources Board

EXPENDITURE RECORD FOR FISCAL YEAR 2018-19  
Prescribed Fire Monitoring

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This Attestation Memorandum documents that the California Air Resources Board completed the attached Expenditure Record on November 26, 2018, for Prescribed Fire Monitoring. The Expenditure Record is consistent with the statutory requirements of Government Code Section 16428.9 to support expenditures from the Greenhouse Gas Reduction Fund.

This Attestation Memorandum and Expenditure Record will be submitted to CARB for public posting on the CARB website at: [www.arb.ca.gov/caclimateinvestments](http://www.arb.ca.gov/caclimateinvestments). Questions on this Attestation Memorandum or Expenditure Record may be directed to Michael Benjamin at 916-322-5350, or [michael.benjamin@arb.ca.gov](mailto:michael.benjamin@arb.ca.gov).

Attachment

cc: Dr. Michael T. Benjamin, Chief  
Air Quality Planning and Science Division  
California Air Resources Board

**Greenhouse Gas Reduction Fund: Expenditure Record**

California Air Resources Board  
Prescribed Fire Monitoring

**Authorizing legislation:** Item 3540-003-3228 of the Budget Act of 2018 (Senate Bill 856), appropriates \$30,000,000 to the Department of Forestry and Fire Protection (CAL FIRE). Provision 2 of this item specifies that up to \$7,000,000 shall be available for emissions monitoring of wildfire and prescribed fire. Provision 2 also states that upon approval by the Director of Finance and 30-day notification in writing to the chairpersons of the Joint Legislative Budget Committee (JLBC), up to \$7,000,000 may be allocated to the Air Resources Board or local air districts for identified wildfire and prescribed fire emissions monitoring needs. On November 6, 2018, the Director of Finance provided written notification to the JLBC that \$5,500,000 of the \$7,000,000 will be used by the Air Resources Board and local air districts for monitoring of prescribed fires as a component of implementing the Forest Carbon Plan.

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

▪ Agency that will administer funding	▪ California Air Resources Board (CARB)
▪ Amount of proposed expenditure and appropriation reference	▪ The total expenditure is \$5,500,000 (\$575,000 for contracts; \$200,000 for travel; \$1,861,500 for equipment, \$863,500 for staff, and \$2,000,000 for the local air districts). The \$2,000,000 for the local air districts will be granted for assistance with monitoring of prescribed burns.
▪ Estimated amount of expenditures for administering agency administrative costs	▪ The estimated amount of expenditures for state agency administrative costs is \$3,500,000.
▪ If applicable, identify laws or regulations that govern how funds will be used	<p>▪ <i>Governor's Executive Order B-52-18</i> – Promotes improved forest management and restoration, and reduces barriers to the use of prescribed burning.</p> <p>▪ <i>SB 1260</i> - Requires CARB and the California Department of Forestry and Fire Protection (CAL FIRE), in coordination with local air districts, to develop and fund a CARB program to enhance air quality and smoke monitoring and provide a public awareness campaign regarding prescribed burns. The bill also intends to promote long-term forest health and wildfire resiliency through fire prevention and forestry management projects undertaken by CAL FIRE and federal land management agencies.</p>

<ul style="list-style-type: none"> <li>Continuation of existing Expenditure Record</li> </ul>	<ul style="list-style-type: none"> <li>This is a new program that does not have an existing Expenditure Record.</li> </ul>
<ul style="list-style-type: none"> <li>Project type(s)</li> </ul>	<ul style="list-style-type: none"> <li>Air quality monitoring of prescribed burns.</li> </ul>
<ul style="list-style-type: none"> <li>Describe the projects and/or measures that will be eligible for funding</li> </ul>	<ul style="list-style-type: none"> <li>Development of a "smoke app" that the public can download and which will provide geographically-tailored information on the cause(s) of smoke in their area, along with information on what to do to minimize smoke impacts.</li> <li>Grant to California Air Pollution Control Officers Association (CAPCOA) to provide support to local air districts to facilitate increased smoke monitoring from prescribed fires.</li> </ul>
<ul style="list-style-type: none"> <li>Intended recipients</li> </ul>	<ul style="list-style-type: none"> <li>Federal agencies</li> <li>State agencies</li> <li>Local public agencies</li> <li>Research institutions</li> <li>Private consultants</li> </ul>
<ul style="list-style-type: none"> <li>Program structure and process for selecting projects for funding</li> </ul>	<ul style="list-style-type: none"> <li>Competitive solicitation, evaluation, and selection of projects according to program guidelines.</li> <li>Applicants for a competitive solicitation must submit a proposal to CARB. CARB will review full applications for completeness and fulfillment of selection criteria. Each project will be scored against selection criteria, and the highest scoring project(s) will be selected for funding.</li> <li>Grant to CAPCOA to provide support to local air districts.</li> </ul>

**Element (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.**

<ul style="list-style-type: none"> <li>How the expenditure is consistent with the Investment Plan and the Scoping Plan</li> </ul>	<ul style="list-style-type: none"> <li>Assembly Bill 1532 requires that GGRF funds be appropriated in a manner that is consistent with the three-year Cap-and-Trade Auction Proceeds Second Investment Plan. The Second Investment Plan recommends that the forest sector perform several actions to achieve positive climate benefits: <ul style="list-style-type: none"> <li>For forest-related black carbon, improving the health and resiliency of forests and reducing wildfire risk and severity through active management.</li> <li>Continuing to promote management to improve forest health as a mechanism to foster sustainable forests for long-term carbon storage.</li> </ul> </li> <li>The 2017 Update to the Climate Change Scoping Plan identified key strategies and recommendations to continue</li> </ul>
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reducing greenhouse gas (GHG) emissions and achieve the goals and purposes of Health and Safety Code Division 25.5. The update to the Scoping Plan recommends:

- Investment in strategies that ensure forested lands are managed in ways that maximize their carbon benefits while also ensuring landscape resilience; protecting and enhancing the State's water supplies; safeguarding the State's wildlife, fish, and plants; and promoting sustainable rural communities.

**Element (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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| <ul style="list-style-type: none"> <li>▪ Describe how expenditures will facilitate the achievement of GHG emission reductions in the State</li> </ul> | <ul style="list-style-type: none"> <li>▪ Increased smoke monitoring will enable more accurate assessment and review of the forest fuel reduction projects undertaken by CAL FIRE and federal land management agencies. These activities, in turn, are expected to result in net greenhouse gas and air pollution benefits.</li> <li>▪ The CAL FIRE and federal land management agencies' projects will improve the stability of forest carbon through activities that promote forest resilience; increase carbon sequestration and storage; reduce mortality and associated GHG emissions from wildfire, drought, and pest damage; and restore impacted landscapes through reforestation. This will be done by forest fuel reduction treatments in the form of increased prescribed burning, which will reduce the threat of catastrophic wildfires.</li> <li>▪ Fuel reduction treatments by CAL FIRE and federal land management agencies are expected to reduce fuel loading, thereby reducing the risk of large, uncontrolled wildfires and associated GHG emissions while also improving the stability of forest carbon in remaining vegetation. The result is that the best, healthiest trees remain for greater carbon sequestration and fire, drought, and pest resistance. Thinning overstocked stands reduces competition among trees, thereby promoting carbon sequestration and avoiding future mortality.</li> </ul> |
| <ul style="list-style-type: none"> <li>▪ Explain when GHG emission reductions and/or co-benefits are expected to occur and how</li> </ul>             | <ul style="list-style-type: none"> <li>▪ Fuels reduction treatments by CAL FIRE and federal land management agencies are an initial source of GHG emissions as biomass is removed from the treatment area. A net GHG and air pollution benefit from fuel reduction activities occurs as a result of improved tree growth, and avoided wildfire emissions from an expected reduction in fire severity. The time required to achieve a net GHG and air pollution</li> </ul>  |

they will be maintained	benefit will vary depending on site characteristics and treatments employed but is expected to be achieved between 7 and 15 years.
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**Element (4) A description of how the administering agency considered the applicability and feasibility of other non-greenhouse gas reduction objectives of Division 25.5 (commencing with Section 38500) of the Health and Safety Code.**

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| <ul style="list-style-type: none"> <li>Expected co-benefits, particularly environmental, economic, public health and safety, and climate resiliency</li> </ul> | <ul style="list-style-type: none"> <li>CARB's air monitoring of prescribed burns will provide the public with information not routinely available on air quality in their area and promote community engagement.</li> <li>Forest health projects undertaken by CAL FIRE and federal land management agencies can take many forms (e.g., reforestation, pest control, etc.) and the specific co-benefits achieved by any forest health project will vary depending on the activities employed. Despite the variation, all forest health projects are expected to result in healthier, more resilient forests that provide numerous co-benefits including: <ul style="list-style-type: none"> <li>Prescribed burning will reduce the number and intensity of catastrophic wildfires, thereby leading to improvement of air quality.</li> <li>Avoiding or reducing the impacts to forests from catastrophic wildfire.</li> <li>Maintaining or improving water quality by impeding erosive runoff that can discharge sediments into streams.</li> <li>Healthy resilient forests that are more resistant to fire and climate change.</li> <li>Well-managed forested landscapes that lessen the risk to life, public safety, and infrastructure.</li> <li>Support biodiversity and wildlife adaptation to climate change and maintain functional wildlife habitat for state and federally listed species.</li> <li>Maintenance of functional refugia and migration corridors for wildlife.</li> <li>Maintenance of the diversity of natural communities that are increasingly stressed by climate change.</li> <li>Preservation of cultural resources.</li> <li>Enhanced recreational opportunities and tourism revenue.</li> </ul> </li> </ul> |
| <ul style="list-style-type: none"> <li>How the project will support other objectives of</li> </ul>   | <ul style="list-style-type: none"> <li>CARB's enhanced air monitoring and public awareness program will meet CARB's directives in Senate Bill 1260 (Chapter 642, Statutes of 2018) to develop and fund a program to enhance air quality and smoke monitoring, and to</li> </ul>   |

California Air Resources Board Expenditure Record for Prescribed Fire Program

AB 32 and related statutes	<p>provide a public awareness campaign regarding prescribed burns.</p> <ul style="list-style-type: none"> <li>▪ The fuel reduction treatments and forest health projects undertaken by CAL FIRE and federal land management agencies will also support another Assembly Bill 32 objective to improve air quality by reduction of wildfire emissions, including air toxics.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Percentage of total funding that will be expended for projects that are located in and benefit priority populations<sup>1</sup> per CARB guidance</li> </ul>	<ul style="list-style-type: none"> <li>▪ The fuel reduction treatments and forest health projects undertaken by CAL FIRE and federal land management agencies are not expected to implement projects within disadvantaged communities due to the location of forested lands in rural areas. However, the projects are expected to fund projects that are located in, and will provide benefits to, low-income communities.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Describe the benefits to priority populations per CARB guidance</li> </ul>	<ul style="list-style-type: none"> <li>▪ CARB's air monitoring of prescribed burns will provide the public with information not routinely available on air quality in their area. These data will also allow air districts to better understand local air quality and thus improve the burn permitting process while minimizing impacts to local communities.</li> <li>▪ The fuel reduction treatments and forest health projects undertaken by CAL FIRE and federal land management agencies are expected to provide significant air quality benefits statewide due to a reduction in the number and intensity of catastrophic wildfires.</li> <li>▪ The projects will provide direct air quality benefits to communities affected by wildland fires. It is expected that some of these communities will be low-income communities.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Explain strategies the administering agency will use to maximize benefits to disadvantaged communities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not applicable.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Explain how the administering agency will avoid potential</li> </ul>	<ul style="list-style-type: none"> <li>▪ The CARB's enhanced air monitoring and public awareness program is designed to avoid and mitigate the potential public health impacts of emissions from prescribed fires on</li> </ul>

<sup>1</sup> Priority populations include residents of: (1) census tracts identified as disadvantaged by California Environmental Protection Agency per SB 535; (2) census tracts identified as low-income per AB 1550; or (3) a low-income household per AB 1550. See Section VII.B for more information on the definitions of priority populations.

substantial burdens to disadvantaged communities and low-income communities or, if unknown, explain the process for identifying and avoiding potential substantial burdens	<p>surrounding communities, by incorporating smoke modeling forecasts and an improved public awareness process.</p> <ul style="list-style-type: none"> <li>▪ CARB's program will be providing funds to local air districts to improve smoke monitoring capabilities, which will allow the districts and local communities to make decisions that limit health effects.</li> </ul>
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**Element (5) A description of how the administering 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.**

<ul style="list-style-type: none"> <li>▪ How the administering agency will track / report progress to make sure projects are implemented per requirements in statute and CARB guidance</li> </ul>	<ul style="list-style-type: none"> <li>▪ CARB will require funding recipients to maintain records and submit annual status reports.</li> <li>▪ In addition, CARB will conduct periodic reviews of selected projects and air district participation. If a funding recipient does not perform in accordance with CARB's program requirements, the recipient will be subject to the remedies for non-performance, as identified in CARB's guidelines.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Describe the approach that will be used to document GHG emission reductions and/or other benefits before and after project completion.</li> </ul>	<ul style="list-style-type: none"> <li>▪ CARB staff will calculate the net GHG reductions from the CAL FIRE and federal land management agencies' prescribed fire projects described herein using methods approved by CARB for FY 2017-18 (see <a href="http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm">http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/quantification.htm</a>).</li> </ul>
<ul style="list-style-type: none"> <li>▪ Type of information that will be collected to document results, consistent with CARB guidance</li> </ul>	<ul style="list-style-type: none"> <li>▪ To determine the job benefits, the agency will compile data from funding recipients on jobs provided, both the quality and quantity, consistent with CARB guidance.</li> <li>▪ CARB will report on the numbers of prescribed fires that are monitored for air quality using equipment purchased through this project.</li> <li>▪ CARB will report on the numbers of acres treated with prescribed burning, and progress in meeting the</li> </ul>

California Air Resources Board Expenditure Record for Prescribed Fire Program

	<p>Governor's directive to eventually treat 500,000 acres of state lands and 500,000 acres of federal lands.</p> <ul style="list-style-type: none"><li>▪ CARB will report on the number of pieces of equipment purchased through this program.</li><li>▪ CARB will report on the number of proposals received for the development of a smoke app.</li></ul>
<ul style="list-style-type: none"><li>▪ How the administering agency will report on program status</li></ul>	<ul style="list-style-type: none"><li>▪ CARB will regularly report on expenditures, status of grant projects, and project benefits in reports that follow CARB guidelines. At a minimum, such reports will include expenditures, net GHG benefit and co-benefits, and acres treated.</li></ul>