



# Air Resources Board



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

**Mary D. Nichols, Chairman**  
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**Edmund G. Brown Jr.**  
Governor

TO: Duane Shintaku  
Deputy Director  
Resource Management  
CAL FIRE  
1416 9th Street  
Sacramento, CA 94244

FROM: Cynthia Marvin, Chief  
Transportation and Toxics Division

DATE: June 19, 2015

SUBJECT: GREENHOUSE GAS REDUCTION FUND: CALIFORNIA DEPARTMENT  
OF FORESTRY AND FIRE PROTECTION EXPENDITURE RECORDS  
FOR FISCAL YEAR 2014-15 –URBAN AND COMMUNITY FOREST  
PROGRAM

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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 June 19, 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 (Fund). We appreciate the iterative consultation process with CAL FIRE staff on the development of these records to support expenditures from the Urban and Community Forest Program

This memorandum documents that Air Resources Board (ARB) staff concurred on June 19, 2015 that the attached records are consistent with the statutory requirements of Government Code Section 16428.9 and with ARB's expectations, as documented in the August 6, 2014 final ARB *Interim Guidance to Administering Agencies on Expenditure Record and Fiscal Procedures*.

The CAL FIRE Expenditure Record 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).

If you have any questions concerning this memorandum, please call me at (916) 324-0062 or via email at [Cynthia.Marvin@arb.ca.gov](mailto:Cynthia.Marvin@arb.ca.gov).

## Attachment

*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

Duane Shintaku  
June 19, 2015  
Page 2

cc: (via email)

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**Greenhouse Gas Reduction Fund: Expenditure Record**

**Fiscal Year: 2014-15 Funds**

California Department of Forestry and Fire Protection (CAL FIRE)  
Green Innovations and Woods in the Neighborhood

**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	<ul style="list-style-type: none"> <li>▪ The total expenditure is \$17,847,000.00 (\$15.7 million in grants and \$2.1 million in program/administrative staff) from the Greenhouse Gas Reduction Fund (GGRF) for urban forest management activities that will reduce greenhouse gases (GHG), as appropriated per Items 3540-001-3228 &amp; 3540-101-3228 of SB 852, the Budget Act of 2014 (Chapter 25, Statutes of 2014).</li> <li>▪ This expenditure record covers two of five types of Urban and Community Forestry Program grants being offered, Green Innovations and Woods in the Neighborhood. An unspecified amount of the \$15.7 million for local assistance will be awarded for Green Innovations and Woods in the Neighborhood grants. The amount awarded for this type of project will be determined by the relative strength of the projects submitted in each of the five grants being offered.</li> </ul>
<input type="checkbox"/> Intended recipients	<ul style="list-style-type: none"> <li>▪ Counties</li> <li>▪ Cities</li> <li>▪ Districts</li> <li>▪ Non-profit organizations</li> </ul>
<input type="checkbox"/> Project category	<ul style="list-style-type: none"> <li>▪ Natural Resources, Urban Forestry</li> </ul>
<input type="checkbox"/> Type of projects that will be eligible for funding	<ul style="list-style-type: none"> <li>▪ Urban green infrastructure projects, including tree planting and associated establishment, care, and maintenance costs resulting in a net positive GHG benefit and that give special attention to energy conservation, air quality improvement, storm water capture, and community improvement.</li> <li>▪ Both grant types include projects consistent with the Urban Forestry Act of 1978, such as vegetated swales, rain gardens and drought tolerant landscape conversions.</li> </ul>

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	<ul style="list-style-type: none"><li>▪ Woods in the Neighborhood also includes the purchase of blighted urban lots in disadvantaged communities for purposes of doing one or more of the activities above.</li><li>▪ All of these activities include tree planting as the primary activity</li></ul>
<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 Guidelines.</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 current Cap-and-Trade Auction Proceeds Investment Plan<sup>1</sup> recommends that funds be used to increase biological carbon sequestration through urban forestry and greening and highlights urban forestry's contribution to disadvantaged communities.</li><li>▪ In addition, the First Update to the Scoping Plan<sup>2</sup> recognizes the role that urban forests and green infrastructure play in meeting California's greenhouse gas (GHG) emission reduction goals. In addition to carbon sequestration it describes the additional energy savings and co-benefits that urban forests and green infrastructure provide.</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)

**(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 will maintain GHG reductions	<ul style="list-style-type: none"><li>▪ Green Innovations and Woods in the Neighborhood projects vary widely in scope, but all achieve significant emissions reductions and include tree planting. In addition to the carbon sequestration and energy savings resulting from tree planting, green infrastructure projects could also include: vegetated storm water capture projects (includes tree planting and reduces stormwater runoff), and small urban parks (tree planting, drought tolerant vegetation).</li><li>▪ Woods in the Neighborhood projects would also allow local entities to purchase parcels in disadvantaged communities and repurpose them for a community determined purpose that includes tree planting. The additional use of vegetation in these projects may also have a GHG benefit and achieve multiple other co-benefits.</li><li>▪ The timeframe for GHG reductions is 40+ years due to the primary GHG benefit being due to sequestration resulting from tree planting.</li><li>▪ Reductions are maintained by CAL FIRE staff insuring that projects follow best management practices for tree and plant establishment and care. For parcel purchases, a deed restriction will be required that insures the parcel will be used for activities consistent with the CA Urban Forestry Act in perpetuity. All tree planting projects will be assessed and inspected by CAL FIRE Urban Foresters to insure best management practices are followed thus insuring long term survival of the trees.</li></ul>
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**(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.**

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<input type="checkbox"/> Expected co-benefits, particularly environmental, economic, public health and safety	<ul style="list-style-type: none"><li>▪ Urban forestry projects, such as Green Innovations and Woods in the Neighborhood, increase energy conservation, reduce storm-water runoff, extend the life of surface streets, improve local air, soil, and water quality, create jobs, improve business income levels, improve property values, and improve public health outcomes.</li><li>▪ In addition urban forestry projects can increase utilization of removed trees to avoid such trees ending up in a landfill. This helps to meet state waste diversion goals and, if used for biomass energy, state renewable energy goals. By utilizing best management practices required under this program and</li></ul>
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	<p>improving urban forest management, fewer trees will become hazardous or susceptible to insect, disease, and storm damage, all of which improve public safety.</p> <ul style="list-style-type: none"> <li>▪ By undertaking these projects, GHG emissions are reduced, co-benefits are realized, and urban areas are assisted in adapting to climate change realities.</li> </ul>
<ul style="list-style-type: none"> <li><input type="checkbox"/> Disadvantaged community benefits, if applicable, as defined in ARB guidelines</li> </ul>	<ul style="list-style-type: none"> <li>▪ Urban forestry projects, such as Green Innovations and Woods in the Neighborhood, offer many opportunities to be located in and benefit disadvantaged communities which are also located in areas with the least urban forest resources.</li> <li>▪ The proposed urban forestry activities would expand and better manage tree canopy and vegetative cover in disadvantaged communities. By accomplishing this, the activities will provide for all of the numerous environmental, social, and economic benefits that are described in sections above.</li> <li>▪ In addition, local jobs may be created for those living in disadvantaged communities.</li> </ul>
<ul style="list-style-type: none"> <li><input type="checkbox"/> Percentage of total funding that will be expended for projects that benefit disadvantaged communities, per ARB guidelines</li> </ul>	<ul style="list-style-type: none"> <li>▪ All 2014/2015 GGRF funds for Urban Forestry projects , including Green Innovations and Woods in the Neighborhood, will be expended in or will benefit disadvantaged communities as designated by CalEPA.</li> <li>▪ At least \$10 million will be expended in those communities.</li> <li>▪ Work within disadvantaged communities is prioritized in the CA Urban Forestry Act as well.</li> </ul>
<ul style="list-style-type: none"> <li><input type="checkbox"/> How the project will support other AB 32 objectives (see below)</li> </ul>	<p>Other AB 32 objectives supported by urban forestry activities include:</p> <ul style="list-style-type: none"> <li>▪ Maximizing environmental, social and economic co-benefits.</li> <li>▪ Complements State efforts to improve air quality.</li> <li>▪ Direction of public and private (matching funds) investment to disadvantaged communities.</li> <li>▪ Provides opportunities for community institutions and small businesses to participate in and benefit from GHG reduction efforts.</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.**

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<p><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.</p>	<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 quantification methodologies for all forestry projects in order to ensure that only projects with a net GHG benefit are funded with GGRF funds.</li><li>▪ Green Innovations and Woods in the Neighborhood projects will include tree planting. For tree planting activities, the Center for Urban Forest Research (CUFR) Tree Carbon Calculator will be used to quantify GHG emission reductions from carbon sequestration and energy savings. See this link to download the tool and the instructions: <a href="http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php">http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php</a>.</li><li>▪ Other tools can be used to estimate net GHG benefits of the project but they must be existing and proven tools that are supported by empirical literature.</li></ul>
<p><input type="checkbox"/> Type of information that will be collected to document project results, as described in ARB guidelines</p>	<ul style="list-style-type: none"><li>▪ Those awarded grants will report to CAL FIRE quarterly on actual trees planted by species and their locations, status of removed trees, and maintenance activities.</li><li>▪ The project co-benefits will vary by project, but co-benefits will be documented and reported by the project proponent. Examples are: kilowatt hours of energy to be saved, acre feet of storm water runoff reduced, pounds of particulate matter removed from the air, vehicle miles travelled reduced, number of job years provided (and associated pay and benefits), number of trainings held, etc.</li></ul>
<p><input type="checkbox"/> How the agency will report on program status</p>	<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, the net GHG benefit, and other applicable co-benefits.</li><li>▪ Reports will begin once projects have started work and will continue until project completion or, if needed, a timeframe post-project-completion as specified by ARB guidelines.</li></ul>

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**Greenhouse Gas Reduction Fund: Expenditure Record**

**Fiscal Year:** 2014-15 Funds

California Department of Forestry and Fire Protection (CAL FIRE)  
Urban Wood and Biomass Utilization Projects

**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	<ul style="list-style-type: none"> <li>▪ The total expenditure is \$17,847,000.00 (\$15.7 million in grants and \$2.1 million in program/administrative staff) from the Greenhouse Gas Reduction Fund (GGRF) for urban forest management activities that will reduce greenhouse gases (GHG), as appropriated per Items 3540-001-3228 &amp; 3540-101-3228 of SB 852, the Budget Act of 2014 (Chapter 25, Statutes of 2014).</li> <li>▪ This is one of five types of Urban and Community Forestry Program grants being offered. An unspecified amount of the \$15.7 million for local assistance will be awarded for Urban Wood and Biomass Utilization grants. The amount awarded for this type of project will be determined by the relative strength of the projects submitted in each of the five grants being offered.</li> </ul>
<input type="checkbox"/> Intended recipients	<ul style="list-style-type: none"> <li>▪ Counties</li> <li>▪ Cities</li> <li>▪ Districts</li> <li>▪ Non-profit organizations</li> </ul>
<input type="checkbox"/> Project category	<ul style="list-style-type: none"> <li>▪ Natural Resources, Urban Forestry</li> </ul>
<input type="checkbox"/> Type of projects that will be eligible for funding	<ul style="list-style-type: none"> <li>▪ Urban forest wood residue utilization and vegetation waste diversion and related costs. The focus of this program is to incentivize the utilization of removed urban trees or biomass for its highest and best use(s) resulting in reduced net GHG emissions and/or carbon sequestration.</li> <li>▪ Eligible projects include those that better utilize urban forest resources that are to be removed for an urban forest management objective (such as public safety) thereby avoiding them being taken to a waste disposal location where they decay and emit GHGs.</li> <li>▪ Project types include 1) utilization of removed tree wood for</li> </ul>

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	<p>wood products and replanting of removed trees, or 2) vegetation waste diversion for use in electricity generation or biofuel production.</p> <ul style="list-style-type: none"> <li>▪ It is not the intention of the program to fund tree removals specifically for the purpose of utilization, or programs that intend to do so. In addition, project proponents must be able to show that trees that were removed have been replaced.</li> </ul>
<ul style="list-style-type: none"> <li>❑ 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> </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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<ul style="list-style-type: none"> <li>❑ How the expenditure is reflected in the three-year Investment Plan</li> </ul>	<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 biomass energy production.</li> <li>▪ In addition, the First Update to the Scoping Plan<sup>2</sup> encourages the sustainable use of biomass obtained from forest management practices to produce energy.</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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<ul style="list-style-type: none"> <li>❑ Expected time frame when reductions will be achieved and how expenditure will maintain GHG reductions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Urban trees and other biomass at times must be removed for public safety or forest health purposes. Most of the removed biomass currently ends up in landfills, where it decays (emits GHGs). These projects will seek to change this dynamic. The purpose of these projects would be to use the wood and other biomass for their highest and best use.</li> <li>▪ By converting urban tree trunks into high quality wood products the carbon contained in them does not decay in a landfill. It is put to a better use. The GHG reductions are immediate since wood products retain more carbon than landfilled biomass. Wood products retain carbon stored long-term and a portion can be considered permanently stored (100 years).</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)

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- Biomass (tree trimmings, landscaping clippings, etc.) can be repurposed for electricity generation or biofuel production. Both of these activities emit less than fossil fuel related electricity generation and fuel production. The GHG reduction is immediate and is the result of lower emissions in production of the fuel and/or electricity compared to fossil fuel based energy.
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**(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.**

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| <input type="checkbox"/> Expected co-benefits, particularly environmental, economic, public health and safety | <ul style="list-style-type: none"> <li>▪ Urban wood and biomass utilization projects increase utilization of removed trees by avoiding such trees ending up in a landfill helping to meet state waste diversion goals.</li> <li>▪ Utilizing biomass for fuels or electricity generation replaces using traditional petroleum based fuels and avoids emissions associated with open pile burning or methane from decomposition. This helps to meet state renewable energy goals.</li> <li>▪ By utilizing best management practices as required by the program, and improving urban forest health, fewer trees will be hazardous or susceptible to insect, disease, and storm damage, all of which improve public safety.</li> <li>▪ By undertaking these projects, GHG emissions are reduced, co-benefits are realized, and urban areas are assisted in adapting to climate change realities.</li> </ul> |
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| <input type="checkbox"/> Disadvantaged community benefits, if applicable, as defined in ARB guidelines | <ul style="list-style-type: none"> <li>▪ Urban forestry projects offer many opportunities to be located in and benefit disadvantaged communities, which are also located in areas with the least urban forest resources.</li> <li>▪ The proposed urban forestry activities would help to better manage urban forests in disadvantaged communities. By accomplishing this, the activities will provide for all of the numerous environmental, social, and economic benefits that are described in sections above.</li> <li>▪ In addition, local jobs may be created for those living in disadvantaged communities.</li> </ul> |
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| <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>▪ All 2014/2015 GGRF funds for Urban Forestry projects , including Urban Wood and Biomass Utilization, will be expended in or will benefit disadvantaged communities as designated by CalEPA.</li> <li>▪ At least \$10 million will be expended in those communities.</li> <li>▪ Work within disadvantaged communities is prioritized in the CA Urban Forestry Act as well.</li> </ul> |
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Other AB 32 objectives supported by urban forestry activities include:

- How the project will support other AB 32 objectives (see below)
    - Maximizing environmental, social and economic co-benefits.
    - Complements State efforts to improve air quality.
    - Direction of public and private (matching funds) investment to disadvantaged communities.
    - Provides opportunities for community institutions and small businesses to participate in and benefit from GHG reduction efforts.
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**(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.**

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- Approach that will be used to document net GHG reductions before and after project completion. Include citations for references that support methodology.
    - 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 quantification methodologies for all forestry projects in order to ensure that only projects with a net GHG benefit are funded with GGRF funds.
    - Urban Wood and Biomass Utilization projects will include tree replacement and will result in maintaining tree canopy cover (TCC). For tree planting activities, the Center for Urban Forest Research (CUFR) Tree Carbon Calculator will be used to quantify GHG emission reductions from carbon sequestration and energy savings. See this link to download the tool and the instructions: [http://calfire.ca.gov/resource\\_mgt/resource\\_mgt\\_urbanforestry.php](http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php).
    - Other tools can be used to estimate net GHG benefits of the project but they must be existing and proven tools that are supported by empirical literature.
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  - Type of information that will be collected to document project results, as described in ARB guidelines
    - Those awarded grants will report to CAL FIRE quarterly on actual trees planted by species and their locations, status of removed trees, volume of woody biomass diverted from landfills, and maintenance activities.
    - The project co-benefits will vary by project, but co-benefits will be documented and reported by the project proponent. Examples are: kilowatt hours of energy produced, number of job years provided (and associated pay and benefits), number of trainings held, etc.
  - How the agency will report on program status
    - CAL FIRE will regularly report on expenditures, status of grant projects, and project benefits in reports prepared and submitted according to ARB guidelines.
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- At a minimum, such reports will include expenditures, the net GHG benefit, and other applicable co-benefits.
  - Reports will begin once projects have started work and will continue until project completion or, if needed, a timeframe post-project-completion as specified by ARB guidelines.
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**Greenhouse Gas Reduction Fund: Expenditure Record**

**Fiscal Year:** 2014-15 Funds

California Department of Forestry and Fire Protection (CAL FIRE)  
Green Trees for the Golden State

**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	<ul style="list-style-type: none"> <li>▪ The total expenditure is \$17,847,000.00 (\$15.7 million in grants and \$2.1 million in program/administrative staff) from the Greenhouse Gas Reduction Fund (GGRF) for urban forest management activities that will reduce greenhouse gases (GHG), as appropriated per Items 3540-001-3228 &amp; 3540-101-3228 of SB 852, the Budget Act of 2014 (Chapter 25, Statutes of 2014).</li> <li>▪ This is one of five types of Urban and Community Forestry Program grants being offered. An unspecified amount of the \$15.7 million for local assistance will be awarded for Green Trees for the Golden State grants. The amount awarded for this type of project will be determined by the relative strength of the projects submitted in each of the five grants being offered.</li> </ul>
<input type="checkbox"/> Intended recipients	<ul style="list-style-type: none"> <li>▪ Counties</li> <li>▪ Cities</li> <li>▪ Districts</li> <li>▪ Non-profit organizations</li> </ul>
<input type="checkbox"/> Project category	<ul style="list-style-type: none"> <li>▪ Natural Resources, Urban Forestry</li> </ul>
<input type="checkbox"/> Type of projects that will be eligible for funding	<ul style="list-style-type: none"> <li>▪ Urban tree planting projects and associated establishment care and maintenance costs that result in a net positive GHG benefit.</li> </ul>
<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 Guidelines.</li> </ul>

**(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 to increase biological carbon sequestration through urban forestry and greening and highlights urban forestry's contribution to Disadvantaged Communities.</li><li>▪ In addition, the First Update to the Scoping Plan<sup>2</sup> recognizes the role that urban forests play in meeting California's GHG emission reduction goals. In addition to carbon sequestration it describes the additional energy savings and co-benefits that urban forests provide.</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 will maintain GHG reductions	<ul style="list-style-type: none"><li>▪ Tree planting in urban areas will sequester carbon (starting in year 1) over a period of 40+ years.</li><li>▪ In addition, such trees avoid emissions through direct shading of buildings, reducing the urban heat island effect, and capturing and infiltrating storm water which can recharge aquifers and lead to reduced need to import or pump water.</li><li>▪ Estimates of direct carbon storage by trees as well as avoided emissions provided by the trees planted will be provided by grant applicants.</li><li>▪ All tree planting projects will be assessed and inspected by CAL FIRE Urban Foresters to insure best management practices are followed thus insuring long term survival of the trees.</li></ul>
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**(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.**

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<input type="checkbox"/> Expected co-benefits, particularly environmental, economic,	<ul style="list-style-type: none"><li>▪ Urban forestry projects, such as Green Trees for the Golden State, increase energy conservation, reduce storm-water runoff, extend the life of surface streets, improve local air, soil, and water quality, create jobs, improve business income levels, improve property values, and improve public health</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)

<p>public health and safety</p>	<p>outcomes.</p> <ul style="list-style-type: none"> <li>▪ In addition urban forestry projects can increase utilization of removed trees to avoid such trees ending up in a landfill. This helps to meet state waste diversion goals and, if used for biomass energy, state renewable energy goals. By utilizing best management practices required under this program and improving urban forest management, fewer trees will become hazardous or susceptible to insect, disease, and storm damage, all of which improve public safety.</li> <li>▪ By undertaking these projects, GHG emissions are reduced, co-benefits are realized, and urban areas are assisted in adapting to climate change realities.</li> </ul>
<p><input type="checkbox"/> Disadvantaged community benefits, if applicable, as defined in ARB guidelines</p>	<ul style="list-style-type: none"> <li>▪ Urban forestry projects, such as Green Trees for the Golden State, offer many opportunities to be located in and benefit disadvantaged communities which are also located in areas with the least urban forest resources.</li> <li>▪ The proposed urban forestry activities would expand and better manage tree canopy and vegetative cover in disadvantaged communities. By accomplishing this, the activities will provide for all of the numerous environmental, social, and economic benefits that are described in sections above.</li> <li>▪ In addition, local jobs may be created for those living in disadvantaged communities.</li> </ul>
<p><input type="checkbox"/> Percentage of total funding that will be expended for projects that benefit disadvantaged communities, per ARB guidelines</p>	<ul style="list-style-type: none"> <li>▪ All 2014/2015 GGRF funds for Urban Forestry projects , including Green Trees For The Golden State, will be expended in or will benefit disadvantaged communities as designated by CalEPA.</li> <li>▪ At least \$10 million will be expended in those communities.</li> <li>▪ Work within disadvantaged communities is prioritized in the CA Urban Forestry Act as well.</li> </ul>
<p><input type="checkbox"/> How the project will support other AB 32 objectives (see below)</p>	<p>Other AB 32 objectives supported by urban forestry activities include:</p> <ul style="list-style-type: none"> <li>▪ Maximizing environmental, social and economic co-benefits.</li> <li>▪ Complements State efforts to improve air quality.</li> <li>▪ Directs public and private (matching funds) investment to disadvantaged communities.</li> <li>▪ Provides opportunities for community institutions and small businesses to participate in and benefit from GHG reduction efforts.</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.**

<p><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.</p>	<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 quantification methodologies for all forestry projects in order to ensure that only projects with a net GHG benefit are funded with GGRF funds.</li> <li>▪ For tree planting projects and activities, the Center for Urban Forest Research (CUFR) Tree Carbon Calculator will be used to quantify GHG emission reductions from carbon sequestration and energy savings. See this link to download the tool and the instructions: <a href="http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php">http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php</a>.</li> <li>▪ Other tools can be used to estimate net GHG benefits of the project but they must be existing and proven tools that are supported by empirical literature.</li> </ul>
<p><input type="checkbox"/> Type of information that will be collected to document project results, as described in ARB guidelines</p>	<ul style="list-style-type: none"> <li>▪ Those awarded grants will report to CAL FIRE quarterly on actual trees planted by species and their locations, status of removed trees, and maintenance activities.</li> <li>▪ The project co-benefits will vary by project, but co-benefits will be documented by the project proponent. Examples are: kilowatt hours of energy to be saved, acre feet of storm water runoff reduced, vehicle miles travelled reduced, number of job years provided (and associated pay and benefits), number of trainings held, etc.</li> </ul>
<p><input type="checkbox"/> How the agency will report on program status</p>	<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, the net GHG benefit, and other applicable co-benefits.</li> <li>▪ Reports will begin once projects have started work and will continue until project completion or, if needed, a timeframe post-project-completion as specified by ARB guidelines.</li> </ul>

**Greenhouse Gas Reduction Fund: Expenditure Record**

**Fiscal Year:** 2014-15 Funds

California Department of Forestry and Fire Protection (CAL FIRE)  
Urban Forest Management for GHG Reduction

**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	<ul style="list-style-type: none"> <li>▪ The total expenditure is \$17,847,000.00 (\$15.7 million in grants and \$2.1 million in program/administrative staff) from the Greenhouse Gas Reduction Fund (GGRF) for urban forest management activities that will reduce greenhouse gases (GHG), as appropriated per Items 3540-001-3228 &amp; 3540-101-3228 of SB 852, the Budget Act of 2014 (Chapter 25, Statutes of 2014).</li> <li>▪ This is one of five types of Urban and Community Forestry Program grants being offered. An unspecified amount of the \$15.7 million for local assistance will be awarded for Urban Forest Management for GHG Reduction grants. The amount awarded for this type of project will be determined by the relative strength of the projects submitted in each of the five grants being offered.</li> </ul>
<input type="checkbox"/> Intended recipients	<ul style="list-style-type: none"> <li>▪ Counties</li> <li>▪ Cities</li> <li>▪ Districts</li> <li>▪ Non-profit organizations</li> </ul>
<input type="checkbox"/> Project category	<ul style="list-style-type: none"> <li>▪ Natural Resources, Urban Forestry</li> </ul>

<p>☐ Type of projects that will be eligible for funding</p>	<ul style="list-style-type: none"> <li>▪ Urban forest inventories, management plans, mapping, analysis, tree planting (required), and related costs. The program will fund urban forest management plans that set canopy and/or planting goals, inventories of urban trees and/or tree canopy, mapping and analysis to support management plans and inventories. These activities lead to better management of existing urban forest resources.</li> <li>▪ The program requires that inventories, mapping, and analysis are used to support management plans and/or local ordinances and policies. Competitive proposals will show that they are going to adopt their management plan and/or policy legislatively at the local level – committing the entity to following the plan or policy. Competitive proposals will have measurable outcomes to their long term policy or planning document.</li> <li>▪ All funded proposals must have an “early action” tree planting component to them.</li> </ul>
<p>☐ Process for selecting projects for funding</p>	<ul style="list-style-type: none"> <li>▪ Competitive solicitation, evaluation and selection of projects according to the program Request For Proposals and Procedural Guidelines.</li> </ul>

**(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.**

<p>☐ How the expenditure is reflected in the three-year Investment Plan</p>	<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 current Cap-and-Trade Auction Proceeds Investment Plan<sup>1</sup> recommends that funds be used to increase biological carbon sequestration through urban forestry and greening and highlights urban forestry’s contribution to Disadvantaged Communities.</li> <li>▪ In addition, the First Update to the Scoping Plan<sup>2</sup> recognizes the role that urban forests play in meeting California’s GHG emission reduction goals. In addition to carbon sequestration it describes the additional energy savings and co-benefits that urban forests provide.</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)

**(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 will maintain GHG reductions	<ul style="list-style-type: none"><li>▪ Improved systematic management emits less in activities like tree trimming, and over 40+ years will lead to higher levels of large tree retention and additional planting of vacant potential tree sites. Numerous larger, healthier trees that sequester more carbon, avoid more emissions, and provide more co-benefits as a result. Such activities will also allow for an increase in the activities of the other urban forestry related project types.</li><li>▪ The timeframe for GHG reductions is 40+ years due to the primary GHG benefit being due to sequestration resulting from the “early action” tree planting.</li><li>▪ Reductions are maintained by CAL FIRE staff insuring that projects follow best management practices for tree and plant establishment and care. All tree planting projects will be assessed and inspected by CAL FIRE Urban Foresters to insure best management practices are followed thus insuring long term survival of the trees. The long term management GHG benefits come from legislatively setting tree canopy or planting goals at the local level via urban forest management plan.</li></ul>
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**(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.**

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<input type="checkbox"/> Expected co-benefits, particularly environmental, economic, public health and safety	<ul style="list-style-type: none"><li>▪ Urban forestry projects, such as Urban Forest Management for GHG Reduction, increase energy conservation, reduce storm-water runoff, extend the life of surface streets, improve local air, soil, and water quality, create jobs, improve business income levels, improve property values, and improve public health outcomes.</li><li>▪ In addition urban forestry projects can increase utilization of removed trees to avoid such trees ending up in a landfill. This helps to meet state waste diversion goals and, if used for biomass energy, state renewable energy goals. By utilizing best management practices required under this program and improving urban forest management, fewer trees will become hazardous or susceptible to insect, disease, and storm damage, all of which improve public safety.</li><li>▪ By undertaking these projects, GHG emissions are reduced, co-benefits are realized, and urban areas are assisted in adapting to climate change realities.</li></ul>
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<p><input type="checkbox"/> Disadvantaged community benefits, if applicable, as defined in ARB guidelines</p>	<ul style="list-style-type: none"> <li>▪ Urban forestry projects offer many opportunities to be located in and benefit disadvantaged communities, which are also located in areas with the least urban forest resources.</li> <li>▪ The proposed urban forestry activities would expand and better manage tree canopy and vegetative cover in disadvantaged communities. By accomplishing this, the activities will provide for all of the numerous environmental, social, and economic benefits that are described in sections above.</li> <li>▪ In addition, local jobs may be created for those living in disadvantaged communities.</li> </ul>
<p><input type="checkbox"/> Percentage of total funding that will be expended for projects that benefit disadvantaged communities, per ARB guidelines</p>	<ul style="list-style-type: none"> <li>▪ All 2014/2015 GGRF funds for Urban Forestry projects for, including Urban Forest Management Activities, will be expended in or will benefit disadvantaged communities as designated by CalEPA.</li> <li>▪ At least \$10 million will be expended in those communities.</li> <li>▪ Work within disadvantaged communities is prioritized in the CA Urban Forestry Act as well.</li> </ul>
<p><input type="checkbox"/> How the project will support other AB 32 objectives (see below)</p>	<p>Other AB 32 objectives supported by urban forestry activities include:</p> <ul style="list-style-type: none"> <li>▪ Maximizing environmental, social and economic co-benefits.</li> <li>▪ Complements State efforts to improve air quality.</li> <li>▪ Direction of public and private (matching funds) investment to disadvantaged communities.</li> <li>▪ Provides opportunities for community institutions and small businesses to participate in and benefit from GHG reduction efforts.</li> </ul>
<p><b>(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.</b></p>	
<p><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.</p>	<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 quantification methodologies for all forestry projects in order to ensure that only projects with a net GHG benefit are funded with GGRF funds.</li> <li>▪ Urban Forest management activities will include tree planting and will result in increases in tree canopy cover (TCC). For tree planting activities, the Center for Urban Forest Research (CUFR) Tree Carbon Calculator will be used to quantify GHG emission reductions from carbon sequestration and energy</li> </ul>

	<p>savings. See this link to download the tool and the instructions:  <a href="http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php">http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php</a>.</p> <ul style="list-style-type: none"> <li>▪ Other tools can be used to estimate net GHG benefits of the project but they must be existing and proven tools that are supported by empirical literature.</li> </ul>
<p><input type="checkbox"/> Type of information that will be collected to document project results, as described in ARB guidelines</p>	<ul style="list-style-type: none"> <li>▪ Those awarded grants will report to CAL FIRE quarterly on actual trees planted by species and their locations, status of removed trees, and maintenance activities.</li> <li>▪ The project co-benefits will vary by project, but co-benefits will be documented and reported by the project proponent. Examples are: kilowatt hours of energy to be saved, acre feet of storm water runoff reduced, pounds of particulate matter removed from the air, vehicle miles travelled reduced, number of job years provided (and associated pay and benefits), number of trainings held, number of trees inventoried, canopy cover goal legislatively adopted, etc.</li> </ul>
<p><input type="checkbox"/> How the agency will report on program status</p>	<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, the net GHG benefit, and other applicable co-benefits.</li> <li>▪ Reports will begin once projects have started work and will continue until project completion or, if needed, a timeframe post-project-completion as specified by ARB guidelines.</li> </ul>