



**CA Department of Forestry and Fire Protection (CAL FIRE)  
Urban and Community Forestry Program  
Proposed California Climate Investments Grant Guidelines for  
2016/2017**

*What's in, what's out, what we don't know yet.*



# IMPORTANT NOTES

- The Governor's budget is proposing \$30 million for the Urban and Community Forestry Program in 2016/2017 (begins July 1, 2016). This amount is up from the \$17.8 million in 14/15.
- The funding for the program could change or be eliminated by the legislature or the Governor.
- The grant guidelines that have been released for review are preliminary. We are seeking your advice.
- The preliminary guidelines presented are CAL FIRE's best projection as to the requirements that will be made.
- Everything in the guidelines is subject to review and revision by the Air Resources Board (ARB) and CAL FIRE.
- The legislature and/or Governor could make new requirements for the grant program or the funding source in general.
- The items highlighted in yellow in the grant guidelines are areas that CAL FIRE feels are most likely to change or are newly proposed.
- Last round the funding source was called Greenhouse Gas Reduction Fund. It is now called California Climate Investments.

# **Objectives**

**Program background**

**General grant information**

**What's new with the guidelines**

**Specific grant type information**

**Technical assistance**

**Grant application and scoring processes**



# Program Background

# Overview of AB 32 and SB 535

- **AB 32 – The Global Warming Solutions Act of 2006**
  - ❑ Requires California to reduce its GHG emissions to 1990 levels by 2020.
  - ❑ Helps mitigate risks associated with climate change, while improving energy efficiency, expanding the use of renewable energy resources, cleaner transportation, and reducing waste.
  - ❑ Regulatory and market-based programs aimed at reducing GHG emissions.
  - ❑ California Air Resources Board is the lead agency. They have a “Scoping Plan”, and an “Investment Plan” to achieve the goals set under AB 32.
  - ❑ <http://www.arb.ca.gov/cc/ab32/ab32.htm> - for more information.
- **SB 535 - 2012**
  - ❑ Sets aside a portion of money collected from cap and trade revenue into a trust fund which will dedicate the money to programs and projects that reduce greenhouse gas emissions and mitigate the direct health effects of climate change for the most impacted and disadvantaged communities.
  - ❑ Cal EPA will choose a methodology for using CalEnviroScreen 2.0 to identify disadvantaged communities by the end of September.
  - ❑ <http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/auctionproceeds.htm> for more information. Look under “Background and Resources” and “ARB Guidance”.

# The Greenhouse Gas Reduction Fund (GGRF)

- The Cap-and-Trade Program, a key element of the Scoping Plan, began in 2012.
- Cap-and-trade is a market based regulation that is designed to reduce greenhouse gases (GHGs) from multiple sources. Cap-and-trade sets a firm limit or “cap” on GHGs and minimizes the compliance costs of achieving AB 32 goals.
- Under the cap-and-trade system, companies must hold enough emission allowances to cover their emissions, and are free to buy and sell allowances on the open market.
- A portion of the GHG emissions permits (allowances) established by the Cap-and-Trade Program are sold at quarterly auctions and reserve sales.
- The proceeds of the sales go into a fund (GGRF).
- The Legislature and Governor appropriate the funds in the GGRF for projects that meet the goals of AB 32.

# Urban Forestry Defined

## PRC 4799.09 (CA Urban Forestry Act Definition)

**"Urban forestry" means the cultivation and management of trees and associated vegetation in urban areas for their present and potential contribution to the physiological, sociological, and economic well-being of urban society.**



# Overview of the Urban and Community Forestry Program

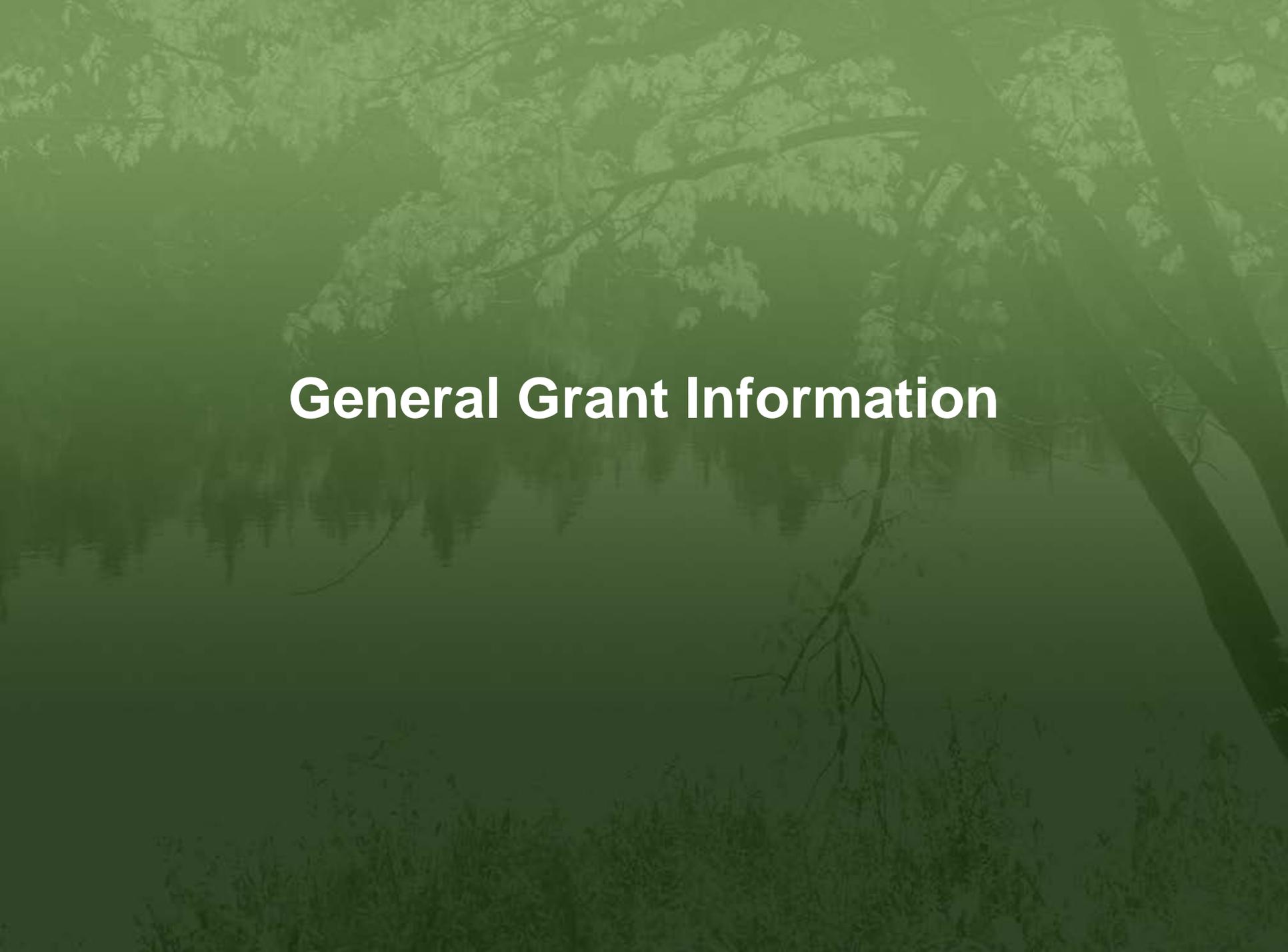
- Established by the California Urban Forestry Act of 1978. The Act is in the Public Resources Code (PRC 4799.06-4799.12). It is only 3-4 pages long and well worth a read.
- Technical assistance and advice – 6 Regional Urban Foresters.
- Public and professional education.
- Encouraging research and technical transfer of information.
- Public events – Tree City USA.
- Regional & local advocacy.
- Fostering partnerships.
- Connecting people.
- Grants to further urban forestry efforts.



# Overview of the Urban and Community Forestry Program

- The purpose of the Urban and Community Forestry Program (U&CF) is to promote expansion and better management of urban forests to help improve the quality of urban environments and the quality of life of urban residents.
- We use an “ecosystem management” perspective to foster sustainability. The simplest, most cost effective solution that provides the most benefits is the best solution.
- We promote projects that provide multi-benefit urban forest solutions to communities that need the benefits.
- We strongly encourage community participation to create a stewardship ethic – a reconnection to the land.



The background of the slide is a green-tinted photograph of a tree with dense foliage, reflected in a body of water. The text is centered over this image.

# **General Grant Information**

# Grant Eligibility

- Projects must reduce GHG emissions and help meet the goals of AB 32. Last year ARB decided this meant that it had to contain a tree planting component. That may or may not be the case in 2016/2017.
- Grant projects must be in an urban area or urban cluster as defined by the US Census Bureau. See this link: <http://www.census.gov/geo/www/ua/2010urbanruralclass.html>
- Last year, grant projects had to be located in a disadvantaged community or be directly serving a disadvantaged community.
  - ❑ Disadvantaged community status was determined using the CalEnviroScreen 2.0 tool.
  - ❑ This may or may not change for 2016/2017.
- Cities, counties, districts and 501C(3) non-profit organizations are eligible to apply (unless otherwise stated in RFP).
- Individuals, companies and federal agencies are not eligible.
- **Concept proposals will be due in mid-November if CAL FIRE receives funding.**

# CAL FIRE General Project Requirements

- **The project must sequester or avoid significant amounts of GHG over a 40 year period. Grantees must track this and report it to CAL FIRE.**
- **We always require best management practices and we provide them to grantees.**
- **CAL FIRE inspects all projects during the project performance period. Annually is our minimum.**
- **Projects must provide multiple benefits to the community.**
- **Projects must strongly consider the current drought in their project design (species selection, irrigation, timing, etc.).**
- **The project must acknowledge both the funding source, and the funding program in signage, publications, etc.**
- **The project must comply with all applicable local and county ordinances, and all applicable state and federal laws and regulations.**
- **Matching funds may be required. This aspect of the programs may remain the same as last year at 25%, or may change. CAL FIRE will likely still have the ability to waive the requirement.**

The background is a monochromatic green image. It depicts a large tree on the right side, with its branches and leaves extending across the top and middle of the frame. The tree's reflection is visible in a body of water that occupies the lower half of the image. The overall scene is serene and natural.

**What's New?**

# The Proposed Changes

- The format of the guidelines is different. We have combined the Procedural Guide and Request For Proposal documents into one document.
- There are only 4 grant types now, not 5. We combined the “*Woods In The Neighborhood*” into “*Green Innovations*”.
  - The same kinds of activities will be eligible, including purchase of land. Urban open space projects will be given strong consideration.
- Grant maximums are currently proposed to go up in some categories. Minimums may or may not be lowered at a later time depending on funding and staffing level.
- Matching requirements may change, though that is not proposed at this time.
- The proportion of funds targeted for disadvantaged communities could change. It is not proposed at this time, and likely is not in CAL FIRE’s control.

# More Proposed Changes

- It is possible that the disadvantaged community criteria and cutoff level could change. CAL FIRE does not make the decisions on this criteria.
- Some project types may not require a tree planting component. CAL FIRE has suggested changes in the proposed guidelines. This is subject to ARB approval.
- We have attempted to expand the detail provided about and clarify the scoring process and scoring criteria.
- Due dates for concept proposals and project applications are just place holders at this time. We will strive to keep them similar to what is proposed.
- The end of the project performance period may change depending on the outcome of the state budget process.
- We are proposing to eliminate the “one application per category” requirement and replace it with allowing a total of three applications.

The background of the slide is a green-tinted photograph of a tree with its reflection in a body of water. The tree's branches and leaves are visible in the upper half, while their reflection is seen in the lower half. The overall color scheme is a monochromatic green.

# **Specific Grant Type Information**

# CAL FIRE Climate Investments Grants

- **Urban and Community Forestry Grants**
  - Green Trees For The Golden State
  - Green Innovations
  - Urban Forest Management Activities
  - Urban Wood and Biomass Utilization
- [http://calfire.ca.gov/resource\\_mgt/resource\\_mgt\\_urbanforestry\\_grants.php#](http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry_grants.php#)



# Types of Grant Projects Proposed for 2016/2017

- **“Green Trees For The Golden State”**

- Urban tree planting projects .
- \$150,000 -\$1,000,000 can be requested.
- Match may be required. 25% as proposed. Can be in-kind. Can be waived.
- Tree establishment care during the grant period is eligible.
- Site preparation is eligible.
- GHG tracking and reporting costs are eligible.
- Up to 10% can be for indirect costs.
- Up to 20% of budget can be for education and outreach.
- Successful projects may be eligible for 1-2 cycles of post-grant maintenance. See guidelines for details.
- All co-benefits (ecosystem services) must be quantified or described.
- Tree species selected should show a preference for trees that are large at maturity (more benefits, including GHG). No palms. No invasive species.
- Trees must meet our *“Specifications for Tree Selection, Planting, and Young Tree Care”* which is found in the Procedural Guide.
- Projects must strongly consider water use when determining tree species to be planted and timing of plantings. We are recommending the use of WUCOLS IV as a web-based tool for this purpose. <http://ucanr.edu/sites/WUCOLS/>

# Types of Grant Projects Continued

- “Green Innovations”

- Green infrastructure projects (vegetated swales, green roofs, green walls, community gardens, green alleys, rain gardens, etc.).
- \$200,000 - \$1,500,000 can be requested.
- Match may be required. 25% as proposed. Can be in-kind. Can be waived.
- Purchase of urban parcels for project purposes is eligible. Must be publicly accessible.
- Site prep and plant establishment care during the grant period are eligible.
- GHG tracking and reporting costs are eligible.
- Up to 10% can be for indirect costs.
- Up to 20% of budget can be for education and outreach.
- Successful projects may be eligible for 1-2 cycles of post-grant maintenance. See RFP for details.
- Any trees planted must meet the same criteria as for “Green Trees For The Golden State” grants. No palms.
- No invasive species.
- All co-benefits (ecosystem services) must be quantified or described.
- Projects must strongly consider water use when determining tree and plant species to be planted and timing of plantings. We are recommending the use of WUCOLS IV as a web-based tool for this purpose.  
<http://ucanr.edu/sites/WUCOLS/>

# Types of Grant Projects Continued

- “Urban Forest Management Activities”

- Management activities are: Urban forest management plans, tree or urban forest related policies and ordinances, tree inventories, and urban forest mapping and analysis.
- \$150,000 - \$1,000,000 can be requested.
- Match may be required. 25% is proposed. Can be in-kind. Can be waived.
- Only cities, counties, and districts are eligible.
- Must have a professional on staff or on contract. See guidelines for details.
- Must have an inventory to do a management plan. Can do both as a project.
- Any mapping and analysis must be used to inform policies and regulations at the local level.
- Any management plan funded must be 40-50 year documents with provision for periodic review and be adopted by the governing entity.
- Tree planting during the grant period may be required and is an eligible expense.
- GHG tracking and reporting costs are eligible.
- Up to 10% can be for indirect costs.
- Up to 20% of budget can be for education and outreach.
- Inventories must follow the “Minimum Data Collection Attributes” in the guidelines.
- Studies and research projects alone are not eligible.

# Types of Grant Projects Continued

- **“Urban Wood and Biomass Utilization”**
  - Development and implementation of an Urban Wood or Urban Biomass Utilization project or program
  - Utilize the tree for its highest and best use(s) that to reduce GHG emissions.
  - \$150,000 - \$750,000 can be requested.
  - Match may be required. 25% as proposed. Can be in-kind. Can be waived.
  - GHG tracking and reporting costs are eligible.
  - Up to 10% can be for indirect costs.
  - Up to 20% of budget can be for education and outreach.
  - The wood to be utilized must come from an urban area.
  - Projects may not remove trees solely for the purpose to utilize them. This must be determined by a qualified professional as determined by CAL FIRE.
  - Projects must show that the removed trees will be replaced with a tree of similar or increased long term benefits within the grant period.
  - Such trees must meet the *Green Trees For The Golden State* grant criteria.
  - Tree planting is an eligible cost. Must follow Green Trees For The Golden State criteria.
  - Projects must show how they will continue to operate after the grant period. CAL FIRE is not interested in stand alone efforts. We are seeking to build capacity for this type of activity to occur without grant assistance in the future.

The background is a monochromatic green-tinted photograph of a natural landscape. It features a body of water in the foreground, with the silhouettes of trees and their branches reflected on the surface. The overall composition is serene and nature-oriented.

# **Technical Assistance**

# A Word on Technical Assistance

- **Now is the time to reach out for assistance with planning your projects. We will make ourselves available to any interested organization or individual.**
- **During the grant advertisement and review period, we cannot provide project specific advice to you. This is to avoid any preferential treatment and to avoid providing an unfair advantage to any applicant.**
- **During the grant advertisement and review period, any questions we receive will be recorded. We will answer the question in writing and post the question and the answer to our grants web page in a regularly-updated and downloadable document.**
- **We are available for technical assistance, policy advice, public events, and more any time, whether interested in grants or not.**
- **Please fully read the grant guidelines to help us serve you better. Many of the questions we regularly are asked already have answers in the guidelines.**

# How To Get Assistance With Applications

- Contact your Regional Urban Forester (see website or Procedural Guide).
- The Grant Guidelines.
- Partnerships. Partner with organizations that have expertise in community engagement or expertise in urban forestry, or expertise in another aspect of your project.
- The CAL FIRE website, and other urban forestry websites.



# CAL FIRE Web Site

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www.fire.ca.gov

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**CAL FIRE**

The Department of Forestry and Fire Protection serves and safeguards the people and protects the property and resources of California.

1 2 3 4

**Hot Topics**

**CAL FIRE URGES CAUTION DUE TO HIGH FIRE DANGER**

CAL FIRE is urging Californians to be extremely cautious, especially for the next few days, due to the current weather conditions increasing fire danger. The National Weather Service has issued Red Flag Warnings [More...](#)

**BURN BAN IN EFFECT**

**CAL FIRE DIRECTOR ORDERS BURN BANS ACROSS 31 MILLION ACRES**

CAL FIRE Director Ken Pimlott issued an order to suspend open burning across 31 million acres of State Responsibility Area in California. "In support of the Governor's Drought State of Emergency, I am ordering proclamations suspending burning on State Responsibility Area lands, effective no later than July 1, 2014." [More...](#)

**BE READY TO EVACUATE AND GO! - READY, SET, GO!**

Give your household the best chance of surviving a wildfire by being ready to go and evacuating early. Have an Evacuation Plan; know what to take and where to

**INCIDENT INFORMATION**

Get the latest information on Major Incidents  
[Google Statewide Fire Map](#)  
[Fire Situation Report Video](#)

**Connect With Us**

Tweets from [https://twitter.com/CAL\\_FIRE/official](https://twitter.com/CAL_FIRE/official)

**What's New**

- Help Your Trees Survive the Drought
- Fire Resistant Landscaping
- Vegetation Treatment Program Environmental Impact

# CAL FIRE Web Site

The screenshot shows the CAL FIRE website interface. At the top, there is a navigation bar with the CAL FIRE logo and the text "CAL FIRE" in large letters. Below the logo, there are navigation links: HOME, ABOUT US, PROGRAMS, NEWSROOM, CAREERS, and RESOURCES. A search bar is located on the right side of the navigation bar. The main content area features a large banner image of a forest with the text "Resource Management" overlaid. Below the banner, there is a section titled "Resource Management" with a green arrow icon. The text below this section describes California's natural resources and the CAL FIRE Resource Management Program. A red arrow points from the text "Click Here" to the "Urban Forestry" link in the "Forestry/Landowner Assistance" section. The "Resource Management Program Section Links" section lists various links under different categories: Forest Practice, Forestry/Landowner Assistance, State Forests, and Environmental Protection and Regulations Program. At the bottom right, there is a "Resource Management More Info" section with links to a fact sheet and assessment reports.

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CALFIREWEB CAL FIRE - Resource Mana... +

calfire.ca.gov/resource\_mgmt/resource\_mgmt.php

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Resource Management

Resource Management

California is rich in natural resources. Of the 85 million acres classified as wildlands, nearly 17 million are commercial forest land, half privately-owned and half government-owned. This forest land grows 3.8 billion board feet yearly. Approximately 2 billion board feet of timber is harvested per year, with a value of over \$1 billion. In addition to timber, the state's wildlands also provide valuable watershed, wildlife habitat, and recreation resources.

Maintaining the sustainability of all these natural resources is the goal of the CAL FIRE Resource Management Program. The Department achieves this goal by administering state and federal forestry assistance programs for landowners, demonstrating sound management practices on eight demonstration state forests, enforcing the California Forest Practice Act on all non-federal timberlands, providing research and educational outreach to the public on forest pests such as Sudden Oak Death, and coordinating efforts for fuel reduction to reduce the risk of fire and improve the quality of California ecosystems.

CAL FIRE's mission emphasizes the management and protection of California's natural resources. The Resource Management Program is an integral part of that responsibility.

**CAL FIRE plans to open the SRA grant & Cap and Trade grant application process in early October**

Resource Management Program Section Links

Forest Practice

- THP
- LTO
- Forestry Practice GIS Data

Forestry/Landowner Assistance

- Urban Forestry
- State Nurseries
- Pest Management
- CFIP

State Forests

- Jackson DSF
- Latour DSF
- Boggs Mountain DSF
- Mountain Home DSF
- Soquel DSF

Environmental Protection and Regulations Program

- Environmental Protection Program
- Climate Change
- Archaeology
- Biomass
- Regulations (coming soon)
- Timberland Conversions
- Capital Outlay
- Program Timberland Environmental Impact Reports (PTEIR)
- Fuels Treatment
- Public Notices

Resource Management More Info

- Resource Mgmt. Fact Sheet (PDF)
- Assessment(s) of Forests and

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**Click here for grant info.** (Points to "Urban & Community Forestry Grants" link)

**Links and resources.** (Points to "Urban & Community Forestry" link)

**Click here for contact info.** (Points to "Urban & Community Forestry More Info" link)

**Click here for program info.** (Points to "Urban Forestry Field Specialists" link)

# CAL FIRE Web Site

advocates for the best possible urban forests in California. [CAL FIRE's Fire and Resource Assessment Program \(FRAP\)](#), which provides a variety of products including a detailed report on California's forests and rangelands. FRAP provides extensive technical and public information for statewide fire threat, fire hazard, watersheds, socio-economic conditions, environmental indicators, and forest-related climate change.

Other partners include, other state agencies, non-profit organizations, private urban forestry and arboricultural companies, power and utility companies, cities, counties, special districts, and professional organizations. These varied partners are brought together via the Director's advisory committee for urban and community forestry, the California Urban Forestry Advisory Committee (CUFAC). Together they discuss trends, address concerns, develop suggestions for consideration by CAL FIRE management, and provide support and information to their local communities on urban forestry issues.

California's State Urban Forestry Program also works with our Fire Prevention Program in advocating fire-safe landscaping for homeowners and communities. Landscape design, tree selection and especially maintenance are critical elements in reducing the spread of fire and the risk to adjacent buildings. Even well-designed landscapes can become hazardous if not properly maintained. The program encourages compliance with the 100-foot defensible space requirement for communities in the urban wildland interface areas (PRC 4291) and offers suggestions for types of trees, landscape designs and pruning methods to assist homeowners in meeting that standard.

CAL FIRE Urban and Community Forestry is dedicated to California's efforts under AB32 to adapt to and mitigate [Climate Change](#). An approved Urban Forestry [project reporting](#) and [project accounting](#) protocol are now available. A summary of the protocols and how urban forestry projects can contribute to achieving climate change goals is also available.

### What's New

- [California Urban Forestry Advisory Committee Charter](#)
- [CAL FIRE Urban and Community Forestry Program Strategic Plan](#)
- [Tree City USA Renewal Information](#)
- [Urban Forest Management Plan Toolkit](#)
- [Urban Forest Map](#)
- [Urban Tree Carbon Calculator](#)
  - [CTCC Instructions](#)

### Tree Growing, Buying and Care Guidelines

- [Guideline Specifications for Nursery Tree Quality](#)
- [Strategies for Growing a High-Quality Root System, Trunk, and Crown in a Container Nursery](#)
- [Tree Quality Cue Card](#)
- [Tree Quality Cue Card \(Espanol\)](#)
- [Tree Planting Cue Card](#)
- [Tree Planting Cue Card \(Espanol\)](#)
- [Tree Training Cue Card](#)
- [Tree Training Cue Card \(Espanol\)](#)
- [Root Management Cue Card](#)
- [Root Management Cue Card \(Espanol\)](#)
- [Structural Pruning - Medium-aged Trees](#)
- [Pruning at Planting](#)
- [Restoring Topped Trees](#)

**Click here for more program info and tools.**

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HOME ABOUT US PROGRAMS NEWSROOM CAREERS RESOURCES

Urban and Community Forestry

Urban and Community Forestry Program Greenhouse Gas Reduction Fund (GGRF) Grants

Procedural Guide (for all five grant project types - read this first.)

Project Type	Description	Grant Amount	Match* State/Others	Forms
"Green Trees For The Golden State"	Urban tree planting projects and tree establishment care during the grant period. Preference will be given to the planting of trees to optimize the multiple benefits of urban forests in environmental justice communities with special attention given to GHG sequestration and avoided GHG emissions.	\$150,000 - \$750,000	75/25	RFP Concept Proposal
Urban Forest Management For GHG Reduction	For cities, counties, and districts only. Establishing a new jurisdiction-wide tree inventory, and/or urban forest mapping and analysis, and/or long term management plan or updating existing versions of these critical management components. May include policy integration and ordinance development. Applicants must show how GHG will be reduced by the project.	\$150,000 - \$750,000	75/25	RFP Concept Proposal

Urban Forestry Grants Section Links

- Urban & Community Forestry Program GGRF Procedural Guide
- UCF Grants Webinar Registration - Wednesday, September 24, 2014 1:00 - 3:00 PM
- Urban & Community Forestry Program

Resource Management Links

- Forest Practice
- Forestry/Landowner Assistance
- Environmental Protection and Regulations Program
- State Forests
- Climate Change

Urban & Community Forestry More Info

- Urban Forestry Advisors
- Regional Urban Foresters & Area Map (PDF)
- Urban and Community Forestry Fact Sheet
- Urban Forestry Economics Fact Sheet
- Urban Forestry Ecosystem Institute (UFEI)
- California ReLeaf
- California Urban Forest Council
- Center for Urban Forest Research
- Project Learning Tree
- Arbor Week
- Grants at UFEI
- SelecTree
- Tree City USA Fact Sheet

Back to Program Page

Funding related announcements

Brief project type info and files

Resource links

# Disadvantaged Communities

- Must be determined by using CalEnviroScreen 2.0.  
Link: <http://oehha.ca.gov/ej/ces2.html>
- CAL FIRE will use the most current Cal EPA and ARB guidance to determine disadvantaged status.
- The criteria are subject to change by the legislature, governor, Cal EPA and ARB.
- The cutoff point for disadvantaged status is not determined by CAL FIRE. It was the top 25% of CES scores
- The percentage of funds that will be directed to disadvantaged communities is not yet determined. It is likely that CAL FIRE will not make this decision. For the last round, it was 100% of the funds to be in or serving disadvantaged communities.
- Finalized grant guidelines will have more specifics on this topic.

# GHG Quantification

- **Methods may vary by project type.**
- **Estimates of carbon emissions and reductions must be as accurate as possible.**
- **Projects must project their GHG reductions and emissions for a minimum of 40 years.**
- **The required tool is the USDA Forest Service Urban Tree Carbon Calculator, or a similar tool that uses the same underlying science, such as the iTree suite of tools (all these tools are free).**
- **Direct sequestration of GHG and any avoided GHG emissions resulting from co-benefits of the project may be taken into consideration.**
- **When reporting, the projected direct sequestration must be reported separately from the avoided emissions. In addition, any emissions associated with the project must be reported.**
- **A net GHG benefit must result when taking these three reported numbers into account. The higher the GHG benefit, the higher the project will score.**

# GHG Quantification

- CAL FIRE and/or ARB will determine if the methodology is acceptable.
- If improved tools become available CAL FIRE may require that the better tool be utilized.
- Please see the guidelines for more on this.
- Work to estimate GHG for your project during the application process cannot be reimbursed.



# The USDA Forest Service Urban Tree Carbon Calculator

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CAL FIRE - Urban and Com... x

www.fire.ca.gov/test/draft\_resource\_mgt\_urbanforestry.php

calenviroscreen 2.0

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- [SelectTree](#)
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**Located here on the Urban and Community Forestry Program Page under the heading "What's New".**

# The USDA Forest Service Urban Tree Carbon Calculator

- MS Excel based. Download is a .zip file. Also download the instructions.
- Must input information to get a result.
- For maximum GHG benefits (and co-benefits), trees should grow to large size at maturity.
- Not all planting sites can support a large mature tree.
- You will need to determine a % mixture for small statured, medium statured, and large statured trees.
- You can use known species in the calculator, though the list of species is not going to have all that are available.
- You will need to use a species that is similar to what you intend to plant to determine the best estimate of GHG benefit using the calculator.
- The calculator also gives you some metrics for co-benefits associated with GHG reductions.
- The output will have both carbon sequestered by the tree, and the avoided emissions for the tree.

# Forest Service Urban Tree Carbon Calculator

The screenshot shows the Microsoft Excel interface for the Carbon Calculator. The spreadsheet is titled "CarbonCalculator31.xls [Compatibility Mode] - Microsoft Excel". The active cell is E11, containing the text "3 (Inland Empire)".

The spreadsheet is divided into several sections:

- Figure 1: Project Data entry** (rows 8-15): A table for entering project data. The "Climate Zone" dropdown is currently set to "3 (Inland Empire)". A tooltip for "Climate Zones" is visible, stating "Enter code 1-16, see help for details".
- Figures 6 & 9: Tree and Building Data entry** (rows 17-29): A table for entering tree and building data. The "Species code and scientific name" is "EUSI (Eucalyptus sideroxylon)".
- Figures 7-10: Carbon Calculator Results (annual)** (rows 31-37): A table showing energy and emission reductions. The "Energy reductions" table shows 182.94 kWh/tree for cooling and -0.020 MBtu/tree for heating. The "Emission reductions (CO2 equivalents)" table shows 72.4 kg/tree for cooling, -1.1 kg/tree for heating, and 71.3 kg/tree for cooling + heating. The "CO2 Sequestration" is 114.6 kg/tree, "Total CO2 Stored" is 1549.9 kg/tree, and "Above ground biomass" is 658.8 kg/tree.

A red callout box on the right side of the spreadsheet contains the text: "Every cell has a help feature. There is also a help guide file." A red circle highlights a "Help Command" menu that appears over the spreadsheet, with options for "Help for Selected Cell" and "Help Menu".

# Forest Service Urban Tree Carbon Calculator

Table E8/11. Example output summary table for results from CCC for combined carbon storage/energy conservation project.

Summary of Carbon Calculator Results (annual)									
Tree ID	Species code	Energy reductions		Emission reductions (CO2 equivalents)			CO2 Sequestration (kg/tree)	Total CO2 Stored (kg/tree)	Above ground biomass (dry weight) (kg/tree)
		Cooling (kWh/tree)	Heating (MBtu/tree)	Cooling (kg/tree)	Heating (kg/tree)	Cooling + Heating (kg/tree)			
1	BRPO	21.67	-0.004	8.3	-0.2	8.1	11.2	54.4	23.1
2	CICA	722.39	0.040	275.6	2.1	277.8	117.3	2516.4	1069.6
3	CICA	0	0	0	0	0.0	117.3	2516.4	1069.6
4	CICA	0	0.040	0	2.1	2.1	117.3	2516.4	1069.6
5	CICA	722.39	0.012	275.6	0.7	276.3	117.3	2516.4	1069.6
<b>Total</b>		1,466	0.088	560	5	564	481	10,120	4,302

Output Help

Avoided emissions

A sample output table from the Calculator.

Sequestration

# Urban Forestry Websites

- [http://calfire.ca.gov/resource\\_mgt/resource\\_mgt\\_urbanforestry.php](http://calfire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php). This is CAL FIRE's Urban and Community Forestry Program page. It has numerous resources and links.
- [www.ufe.org](http://www.ufe.org) - Urban Forest Ecosystems Institute @ Cal Poly San Luis Obispo. Includes on-line tree selection software SelecTree. The site is sponsored by CALFIRE and the USDA Forest Service.
- <http://www.fs.fed.us/psw/programs/uesd/uep/> - the USFS Pacific Southwest Research Station. Lots of free downloads. The site has research publications, presentations, etc.
- <http://depts.washington.edu/hhwb/> - Green Cities: Good Health website. This USFS/University of Washington web site provides an overview of the scientific evidence of human health and well-being benefits provided by urban forestry and urban greening.
- [http://www.isa-arbor.com/education/resources/educ\\_TreeOrdinanceGuidelines.pdf](http://www.isa-arbor.com/education/resources/educ_TreeOrdinanceGuidelines.pdf) - Online tree ordinance guideline document. This has evolved from a CAL FIRE publication from 1991.
- <http://www.itreetools.org/> - iTree is a state-of-the-art, peer-reviewed software suite from the USDA Forest Service that provides urban forestry analysis and benefits assessment tools.
- <http://ufmptoolkit.com/index.htm> - Urban Forest Management Plan Toolkit. Helps organizations organize and compose urban forest management plans. The site provides numerous resources in this regard.
- <http://www.laurbanresearchcenter.org/> - Fosters collaboration and generates science, science delivery, technology transfer and communication to sustain the health and diversity of natural urban ecosystems and enhance the quality of life within the urban landscape of the Los Angeles metropolitan region.

# More Urban Forestry Websites

- [www.treesaregood.com](http://www.treesaregood.com) - the International Society of Arboriculture (ISA) public information pages. The ISA Certifies Arborists.
- <http://www.hort.cornell.edu/UHI/> - the Urban Horticulture Institute at Cornell University. This is a good technical information site.
- [www.caufc.org](http://www.caufc.org) - the California Urban Forest Council. The organization advocates for urban forestry. They provide education and training workshops. They certify urban foresters. They have a series of 7 regional urban forest councils.
- [www.californiareleaf.org](http://www.californiareleaf.org) - the California ReLeaf Network. An organization comprised of over 90 non-profits dedicated to urban forestry throughout California. This organization advocates for urban forestry.
- <http://www.cfr.washington.edu/research.envmind/> - Research on social aspects of urban forestry.
- <http://lhhl.illinois.edu/about.htm> - research on the social effects of landscape on human health.
- <http://www.greenlaws.lsu.edu/> - a site with compilations of various environmental laws, including ordinances.
- <http://www.fs.usda.gov/ccrc/> - the USDA Forest Service Climate Change Resource Center.



# CAL FIRE

## Regional Urban Foresters



### Regional Urban Foresters

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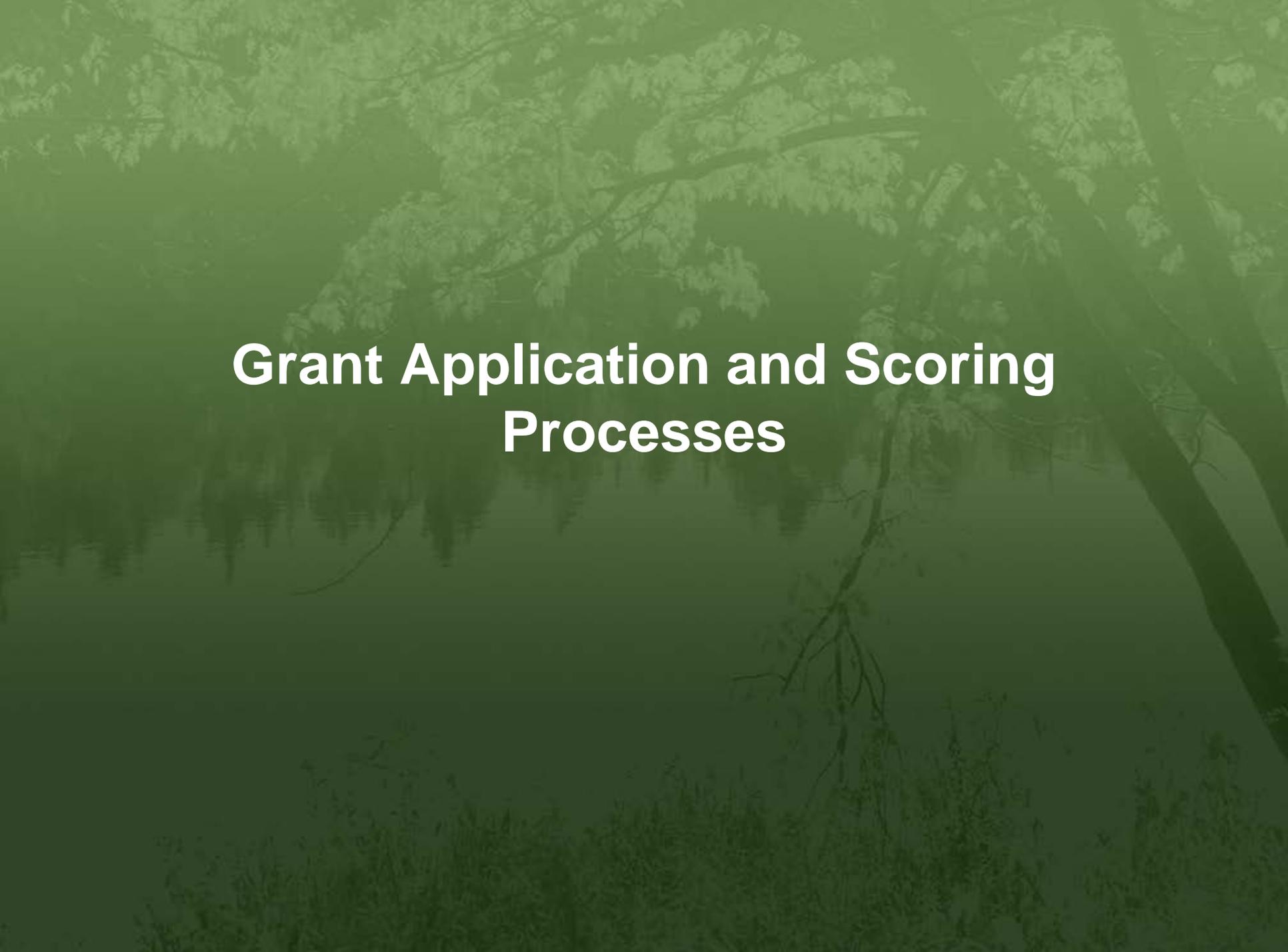
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For more information visit:  
[http://www.fire.ca.gov/resource\\_mgt/resource\\_mgt\\_urbanforestry.php](http://www.fire.ca.gov/resource_mgt/resource_mgt_urbanforestry.php)

# CAL FIRE

## Regional Urban Foresters



The background of the slide is a green-tinted photograph of a tree with its reflection in a body of water. The tree's branches and leaves are visible in the upper half, while their reflection is seen in the lower half. The overall color scheme is a monochromatic green.

# **Grant Application and Scoring Processes**

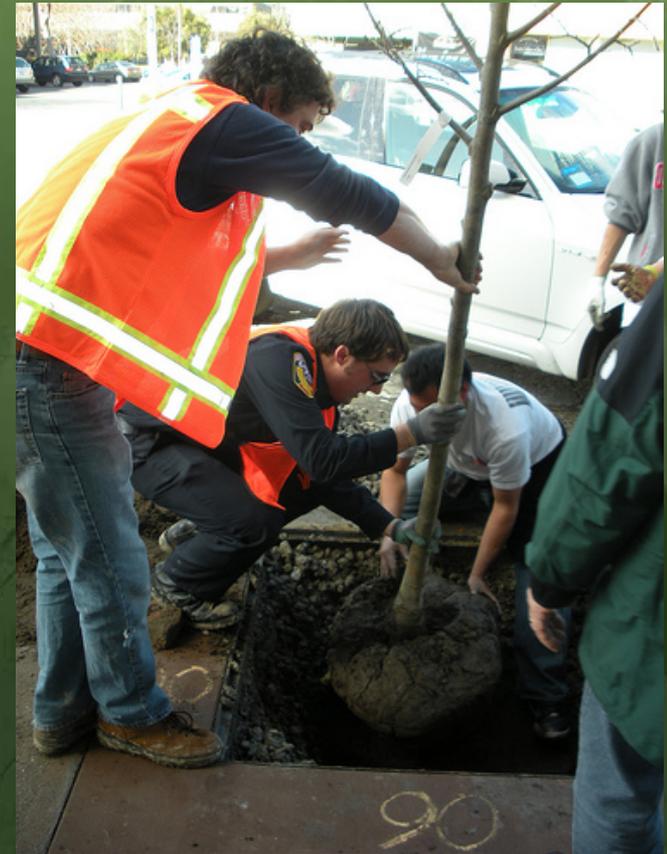
# Grant Application

- ❑ The process is outlined in the grant guidelines!
- ❑ Two stage application process.
- ❑ **Concept Proposal stage**
  - Used to score projects. Short application form (not available yet) is project type specific and 5-7 pages in length.
  - Scores determine which projects will be invited to submit additional information in the Project Application process.
  - Concept proposals must be submitted electronically on the provided form.
  - CAL FIRE generally invites about 50% more Concept Applicants to the Project Application process than it will be able to fund.
- ❑ **Project application stage**
  - Used to gather additional project information and prioritize projects.
  - More detailed application (10-14 pages).
  - Several required attachments.
  - Forms for applying will be provided to successful concept proposal proponents.
  - Not all project applications can be funded. In the last round, 29 out of 59 were funded.

# Grant Scoring

- ❑ The process is outlined in the grant guidelines!
- ❑ The grant review team is composed of at least 9 individuals. They may or may not be familiar with you, your organization, your past work, or the project area proposed. Do not assume that they know you, your work, or the area you are in.
- ❑ Grant reviewers are instructed that nothing can be considered for scoring that is not in the actual concept proposal or project application package.
- ❑ Each reviewer reads and scores the Concept Proposals using the same scoring form and independently of the other reviewers.
- ❑ The form used for scoring uses a set of pre-determined questions that is the same on every form for the grant type. Each question is assigned a point scale. The total possible is 100 points.
- ❑ The high and low score for each concept proposal are dropped, and the remaining scores are averaged to achieve the overall score.
- ❑ The cutoff score for each grant category are determined using the relative strength of concept proposals received in that category.
- ❑ The highest scoring projects in each category are invited to submit a project application.
- ❑ Project applications are prioritized by the grant review team using a matrix of required and preferred attributes that are pre-determined. The highest priority projects are funded.

# QUESTIONS AND ANSWERS



# Thank You!

John Melvin

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