Green Schoolyards Grants

Draft for Public Comment

Comments accepted until Dec 30, 2022

California Department of Forestry and Fire Protection
2022/2023
Urban and Community Forestry Program
Grant Guidelines

CAL FIRE will offer online workshops on the entire grant application and administration process for all prospective applicants. Please visit the link below for dates, times, and locations of these workshops or contact your Regional Urban Forester (Appendix F) for details.

CAL FIRE has a list-serve portal for interested members of the public to receive UCF grant program updates, UCF program activities or other notable events. Use the link provided below to subscribe to email updates on Urban and Community Forestry Program Grants.

Urban and Community Forestry Grants Email Updates

Important due dates for this grant cycle are posted and may be updated periodically at this link:

CAL FIRE Urban and Community Forestry Grants Web Page

Grant programs authorized by:

The California Urban Forestry Act of 1978 (*Public Resources Code § 4799.06 – 4799.12*).

IMPLEMENTATION GRANT and PLANNING GRANT APPLICATIONS
DUE: February 17, 2023, by 3:00 PM PDT (tentative)

Note: *These guidelines may be modified if any additional conditions or criteria are required of CAL FIRE. Check back regularly for any updates prior to the due dates.*

TABLE OF CONTENTS

Introduction 4

Green Schoolyards Grant Options Summary 5

Option 1: Implementation Grant 5

Option 2: Planning Grant 5

GENERAL GUIDELINES 6

General Project Requirements 6

Eligible Applicants and Priority Populations 7

Sub-granting 8

Cost Share (Matching) 8

Greenhouse Gas Reduction Methodology 8

Post-grant Maintenance and Long-Term Care of Trees 9

Project Timeline 9

GRANT APPLICATION PROCESS 10

General Application Process (also see Appendix A) 10

Required Supporting Materials and Forms (see Appendix C): 12

THE GRANT REVIEW PROCESS 13

Project Scoring for Planning Grants 13

Project Scoring for Implementation Grants 14

GRANT ADMINISTRATION 16

Communication 16

Grant Agreement Amendments and Modifications 16

Project Signage and Recognition 17

Project Reporting (see also Appendix D) 17

Quarterly Reporting 17

Annual and Post-Grant Reporting 18

Project Inspections and Product Review 18

Time Extensions 19

Payment of Grant Funds 19

Loss of Funding 20

State Audit 21

Repayment of Grant Funds 21

Accounting Requirements 21
Conflict of Interest 22
Prevailing Wage Requirements 22
Green Schoolyards Grant Specifics 23
Purpose 23
Project Eligibility and Application Requirements 23
Eligible Practices 26
Ineligible Practices 26
Eligible Costs (See *Appendix B*) 27
Ineligible Costs 28
APPENDIX A – Implementation Grant and Planning Grant Application Submission 30
APPENDIX B – Eligible Costs and Sample Budget 31
Eligible Costs and Documentation Requirements 31
Application Budget 35
APPENDIX C – Required Forms 36
STANDARD FORMS: 36
OTHER FORMS: 36
APPENDIX D – Grantee Reporting 37
APPENDIX E – CAL FIRE Urban and Community Forestry Program Staff 38
APPENDIX F – CAL FIRE Standards and Specifications for Purchasing, Planting, and Maintaining Trees 39
Nursery Tree Quality 40
Tree Planting 42
Tree Training at Planting and in the Early Years 43
Irrigation 44
APPENDIX G – Management Activities Practices 45
Minimum Data for Urban Tree Inventories 45
Urban Forest Management Plan Best Practices 47
Appendix H - EXPLANATION OF TERMS 48

INTRODUCTION

These grant guidelines share some general information about CAL FIRE's Urban and Community Forestry Grants but are specific to Green Schoolyards projects. For information about the six other types of Urban and Community Forestry grants available, please visit the CAL FIRE Urban and Community Forestry Program Grants Page.

Please read these guidelines carefully. Proposals submitted must be in full compliance with all stated requirements to be considered for funding.

These grant guidelines include information for the use of funds from the State of California General Fund. Benefits of the projects should include reduced greenhouse gas (GHG) emissions, mitigation of extreme heat, enhanced learning environments, increased water supply, cleaner air and water, reduced energy use, flood and stormwater management, recreation, and improved public health. Projects may provide a combination of these benefits, or co-benefits not mentioned, or even benefits that are not yet clearly defined.

Urban and Community Forestry efforts play a significant role in meeting the State's GHG emission reduction targets, climate resilience goals, and goals of climate action plans. CAL FIRE encourages student and resident participation in the development and implementation of each project, although due to the size and complexity of projects, applicants are limited to local government or education agencies, special districts, and nonprofit organizations.

CAL FIRE has prepared this guide to assist eligible entities in applying for and implementing Green Schoolyards grants from the CAL FIRE Urban & Community Forestry Program. CAL FIRE offers these grants to eligible applicants as funding permits. The Green Schoolyards grants are designed to assist with planning and/or implementing multi-benefit projects with a focus on extreme heat, environmental, economic, and social benefits to urban public school campuses and eligible child care facilities with an emphasis on in-need education facilities.

It is important to note that applications will be treated in accordance with Public Records Act requirements and that certain information, subject to those requirements, may be publicly disclosed. Additionally, some project information reported by applicants will be made available on the CAL FIRE and/or other State of California website(s). This information includes, but may not be limited to, the amount of funding that is being spent on projects within and benefiting disadvantaged and low-income communities and maps that show the locations of projects within these communities.

Projects claiming to benefit disadvantaged or low-income communities and/or in-need educational facilities must be designed to avoid substantial burdens (e.g., displacement of low-income disadvantaged community residents and businesses or increased exposure to toxins or other health risks).

Green Schoolyards Grant Options Summary

Option 1: Implementation Grant

All aspects of planning and implementation of the grant project are included in this option following the eligible practices and costs sections below.

Eligible Applicants: cities, counties, qualifying districts (including schools and eligible child care facilities), or nonprofit organizations.

Budget limitations: Between $1,000,000 and $30,000,000 per applicant including $2,000,000 max. per school campus included in the project. Funds paid on reimbursement basis. Advance payment options available to nonprofits serving disadvantaged communities.

Pros: If awarded, the entire project is funded.

Cons: More complex application process that requires more information/knowledge at the time the application is submitted.

Option 2: Planning Grant

All planning aspects of the grant project are included in this option following the eligible practices and costs section for the Implementation Grants. The goal of this option is to complete the plan for implementation of a Green Schoolyards project including preliminary site designs, environmental assessments (e.g., HazMat identification and plan for remediation), CEQA, stakeholder engagement, any permitting, and other steps required for the implementation of the project. The goal of this grant type, grantees are able to have a shovel-ready project including the associated project budget.

At the end of this grant period, applicants can apply for an Implementation Grant with the CAL FIRE Urban and Community Forestry Program or other funding entity when funding is made available.

Eligible Applicants: cities, counties, qualifying districts (including schools and eligible child care facilities), or nonprofit organizations.

Budget limitations: Between $75,000 and $1,500,000 per application including $100,000 max. per school campus included in the project. Funds paid on reimbursement basis. Advance payment options available to nonprofits serving disadvantaged communities.

Pros: Simpler application process. If completed successfully, grantees are in the desirable position to apply for various grant opportunities with a shovel-ready project.

Cons: Funding for project implementation is not guaranteed.

GENERAL GUIDELINES

CAL FIRE Regional Urban Foresters are available for advice and technical expertise in the planning of projects. They will not provide any guidance that will improve the competitiveness of a project but can assist in answering procedural questions, questions about requirements, and urban forestry technical advice. See Appendix E for a list of CAL FIRE Regional Urban Foresters.

Funding of the projects awarded by the CAL FIRE Urban & Community Forestry Program is subject to availability and approval of the Budget Act each fiscal year (July 1-June 30). Grant agreements may not be in place until the spring or early summer following the application deadline, so please plan project timelines accordingly. Implementation Projects must be completed by March 30, 2026 at the latest. Planning Grant Projects must be completed within 9-12 months of executed grant agreement. If selected, the project applicant shall comply with all applicable federal, state, and local laws, rules, regulations, and ordinances in carrying out the grant project.

If the project is selected for funding and the project applicant fails to perform in accordance with the provisions of the enacted agreement, CAL FIRE retains the right, at its sole discretion, to interrupt or suspend the work for which the monies are supplied or to terminate the agreement entirely.

General Project Requirements

- All projects shall reduce greenhouse gas (GHG) emissions and must report those GHG reductions using the most up-to-date version of the California Air Resources Board (CARB) Quantification Methodology for the Urban and Community Forestry Program.
- All projects shall be designed to further the goals of the California Urban Forestry Act of 1978.
- All projects must comply with, or develop, local goals to achieve no net loss of urban tree canopy and/or an increase in urban tree canopy cover from a specific-dated baseline to an established target.
- All projects must optimize the likelihood of long-term success by actions such as improving or developing policies, goals, best practices, standards, strategies, partnerships, staffing, operational structure and culture, training, and/or budgets/funding.
- All grants must include a justification for the grant amount requested. If applicable, the methodology must include the cost of the grant minus any income from products or other revenues received from the grant implementation.
- Projects selected for funding shall report to CAL FIRE at least quarterly on project status and benefits consistent with the reporting requirements. These reporting requirements are captured in Appendix D.
- Projects selected for funding shall invoice at least quarterly and as often as monthly. Progress reports are to be submitted with each invoice.
- The project area must be in an urban area or immediately adjacent to an urban area. Urban areas, for the purposes of these guidelines, are “urban areas” and “urban clusters” as

currently defined by the United States Census Bureau. You can find these definitions at United States Census Bureau's Urban and Rural Definitions.

- Projects must show that they have authentically engaged the local community to develop the project.
- Projects must have multiple benefits (including but not limited to economic, environmental, and social) to school staff, students, and the community. Such benefits must be optimized.
- All projects must produce a finished and usable product, report, and/or action and share it with CAL FIRE. All products funded by CAL FIRE are considered public.
- Grants cannot finance any undertaking or complete any practice designed to supplant rather than supplement existing local agency activities. Such ineligible practices shall consist of any request that CAL FIRE furnish grants to take the place of a regular or ongoing fiscal commitment to a program or project by a local government.
- Any practices that are required as mitigation of any kind may not be financed by this grant program.

Eligible Applicants and Priority Populations

Eligible applicants include cities, counties, qualifying districts, or nonprofit organizations qualified under Section 501(c)(3) of the Internal Revenue Code. Districts include, but are not limited to, school or park districts.

Up to $117 million will be available for Green Schoolyards projects including at least $30 million for grants to eligible child care facilities receiving government funding. The word “School” in these guidelines shall include eligible child care facilities.

Note: Applicants shall obtain a memorandum of understanding (MOU), resolution, or certified letter from the respective local educational or child services agency supporting the project before being awarded a grant.

Overall, at least 70% of funds will be made available to projects that focus on in-need education facilities, which are:

1. School sites located in disadvantaged communities or low income communities as identified by CalEnviroscreen 4.0 (defined in Section 39711 and Section 39713 of the Health and Safety Code) or
2. School sites in which 70 percent or more of the students are eligible for free or reduced-price meals (defined in Section 42238.01 of the Education Code)

With justification, other tools or indices may be used to identify disadvantaged status, such as the California Heat Assessment Tool or Healthy Places Index).

Proof will be required at the application submittal stage and any application not meeting the claimed status will be rejected. Funding recipients will need to report on how the project benefits have addressed the identified community need.

Sub-granting

Sub-granting is allowable under this program. Sub-granting must adhere to and be carried out consistent with these grant guidelines including the process for quantifying the net GHG benefit, criteria for determining benefits to in-need educational facilities and reporting requirements. CAL FIRE must review criteria for sub-granting before any request for proposals can be offered.

Cost Share (Matching)

All grant types require a cost share (matching) rate of 75/25. The proportion of the project's cost funded by CAL FIRE Urban & Community Forestry shall not be greater than 75%. Matching requirements (25%) for State funds may be met with in-kind activities or materials related to the project, as well as with any State funding source related to the project that is not the same as the State source of funding awarded by CAL FIRE.

For example:

Total Project = $1,000,000.00

CAL FIRE Request = $750,000.00

Minimum match required = $250,000.00

Disadvantaged/Low-Income Community and In-Need Educational Facilities Cost Share: Projects that meet the criteria for being in or benefiting a disadvantaged community/low-income community or in-need educational facility will be eligible to have their cost share requirement reduced or completely waived by CAL FIRE. This request must be made during the application process by checking the appropriate box on the form and providing the rationale within the narrative.

IMPORTANT NOTE: Cost share expenses must be reported to CAL FIRE on each invoice received. Back-up documentation for cost share must be kept by the grantee and must meet the same rigor as expenses claimed for reimbursement but need not be turned in to CAL FIRE. See also: "State Audit" section below, as well as Appendix D for additional information on documentation.

Greenhouse Gas Reduction Methodology

All projects must quantify GHG reductions using CARB's most current version of the Quantification Methodology for Urban Forestry projects that will be posted at ARB'S CCI Quantification, Benefits, and Reporting Materials.

When reporting, the projected carbon storage 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.

See for example: John F. Kennedy Elementary School

Carbon Stored	**-24,089**	**metric tons CO2e (MT CO2e)**
Avoided Emissions	-29,158	MT CO2e
Project Emissions	+1,000	MT CO2e
Net GHG Benefit	-52,247	MT CO2e

Post-grant Maintenance and Long-Term Care of Trees

For implementation projects that meet the criteria for benefiting a disadvantaged/low-income community or in-need educational facility and are determined by CAL FIRE Urban and Community Forestry Staff to be successfully completed, are eligible to receive up to two maintenance cycles (locally established cycle) of funding for ongoing tree care and maintenance in the post-performance period. A maintenance policy and plan must be in place and be submitted for CAL FIRE review as part of a final report on the project and include evidence of adequate long-term care for all project trees. The plan must be approved by CAL FIRE prior to being eligible for this enhanced maintenance funding. Funds for this component can only be invoiced with the final invoice and are contingent on all other project deliverables having been successfully completed.

PLEASE NOTE: Post-grant maintenance funding must be budgeted for in the application, discussed in the budget discussion section, and be part of the scope of work.

Evidence of adequate long-term care for all project trees must be shown in the grant application regardless of whether post-grant maintenance funding is requested.

Project Timeline

Implementation Grant:

- All project work completed by: **March 30, 2026**
- Projects to be fully invoiced by: **April 30, 2026**

Planning Grant:

- All project work completed by: **March 30, 2024**
- Projects to be fully invoiced by: **April 30, 2024**

GRANT APPLICATION PROCESS

The following grant process and timelines are for general informational purposes. For the current fiscal year application materials please go to the following website:

CAL FIRE Urban and Community Forestry Grant Programs

General Application Process (also see Appendix A)

An application will need to be completed using the online form at (include link to solicitation site when available). The eCivis Grants Portal Application User Guide provides instructions on completing the application. Complete all required and applicable questions for your project.

Applicants are encouraged to start your application as soon as possible to avoid any technical difficulties. In the case of technical difficulties or an inability to utilize the online format, please contact your CAL FIRE Regional Urban Forester (see Appendix E).

Failure to fully complete and submit the application following the prescribed guidelines and funding limits will also result in the rejection of the application. Applications must be submitted using the online format no later than **3:00 PM PDT on February 17, 2023.** Late submissions and submissions other than through the Grants Portal will not be accepted. No exceptions. Late is defined as: after 3:00 PM PDT on the due date – as determined by Grants Portal application.

Upon receipt of an application, CAL FIRE staff will review it for conformance with the California Urban Forestry Act of 1978 (Public Resource Code 4799.06 to 4799.12), the California Code of Regulations (Title 14, Division 1.5, Chapter 9.7), and this Procedural Guide. Such review may include an inspection of the project area, if applicable.

If the application is found incomplete in a material way or the proposed project is not eligible for a grant, the applicant will be informed that the application is ineligible and be provided a reason or reasons for the determination. Only when an application is complete and the project is deemed eligible for a grant, will CAL FIRE staff file the application for consideration in the scoring process.

CAL FIRE will then post on the CAL FIRE website, basic information about the applications that are submitted for consideration at least 10 days before making decisions on grant awards. For each application, this will include: the name of the applying organization, a brief project description, a project location, the amount of funding requested, and if the project will be in a disadvantaged community or provide benefits to a disadvantaged community.

The application will then be scored using the process and criteria explained later in this document (see "Grant Review Process" section).

Notification for Applications:

Following application submission and acceptance, applicants will be notified of the final grant selections as soon as the State's fiscal circumstances allow, and authority to award funds is

given to CAL FIRE. Quality applications that are not able to be funded may be held by CAL FIRE in case additional funding is made available.

Prior to offering an award, CAL FIRE may request changes to the application including methodology, scope of work and deliverables, tree species and numbers, and/or budget if this improves the quality and/or feasibility of the project. Applicants retain the right to decline the proposed changes and/or the grant award.

CAL FIRE will post a summary of all applications selected for awards after funding decisions have been made.

Complete the Application Form:

There will be two application forms available in the CAL FIRE Grants Portal for Green Schoolyards grant applications: one for the Planning Grants and one for the Implementation Grants. Do not submit more than one form per Green Schoolyards Grant Type.

The Planning Grant application is significantly shorter and requires less detail. However, for either application, applications must include an adequate description of the project with clearly defined goals and objectives, how each objective and associated tasks will be addressed and the expected results. Project descriptions must also include information on where the proposed project is located, who will be conducting the work, when the work will be done, and the expected work products or deliverables.

Descriptions must be sufficiently detailed regarding overall work proposed and include costs of each proposed task for CAL FIRE to: 1) write a grant agreement with measurable and quantifiable objectives, and 2) perform a cost analysis of proposed work during the proposal evaluation process. Remember, the requested grant amount cannot be increased.

Do not modify the application to allow more text than space allowable as that text will not be evaluated.

Calculation of Greenhouse Gas Emission Reduction Resulting from the Project:

Implementation applications must demonstrate that the project achieves and maintains a net reduction in greenhouse gas (GHG) emissions calculated using ARB's most current quantification methodology for the grant type.

Complete and Accurate Budget (Appendix B):

Implementation applications must include a detailed line-item budget using the budget form within the CAL FIRE Grants Portal as part of your application. Cost analysis of the proposed project will include all project costs. Total project cost used in the analysis will include the total amount requested from available funds under the CAL FIRE Urban & Community Forestry Program and any cash or in-kind cost share from all other funding sources. Cost share funding sources shall be listed. Applications shall provide information specifically identifying any funding match requirements from any other entity. Matching requirements for State funds may be met with in-kind activities or materials related to the project, as well as with any State funding source related to the project that is not the same as the State source of funding awarded by CAL FIRE. For example, bond funds from another state agency grant

program may be used as match for a grant funded with state general funds or California Climate Investment funds. See Cost Share (Matching) section.

Applicants must justify project costs. Project cost analysis will be based on costs for similar projects that have been implemented as well as on an assessment of proposed costs by CAL FIRE staff. Where possible, costs should be based on actual quotes, bids, or estimates from suppliers and/or subcontractors.

When preparing the budget, while CAL FIRE realizes that budgets included in the application are estimated costs, it is important to keep in mind any increases due to inflation, labor costs, import taxes, or any other costs that may be unanticipated. **The total grant award amount requested cannot increase once the application has been submitted.**

The budget should include the appropriate eligible costs and matching funds as shown in the instructions and example in Appendix B.

Required Supporting Materials and Forms (see Appendix C):

The forms and supporting materials listed in the Appendix must be submitted before a grant agreement can be completed. Failure to submit all forms shall result in funds not being awarded.

Please note, some of the forms require approval from entities with a predetermined meeting schedule and agenda, it is strongly recommended to be proactive to avoid delaying the project in case the application is successful.

THE GRANT REVIEW PROCESS

It is important to note that implementation grant as well as planning grant applications are reviewed and scored independently by numerous individuals. These individuals may or may not be familiar with your organization, past work, or project area. To avoid any sort of bias, grant reviewers are instructed that nothing can be considered for application scoring or prioritization if it is not represented on the application form itself or supporting documentation.

All applications are to be submitted by the due date to CAL FIRE. Each application is reviewed by CAL FIRE staff to ensure it is in conformance with the California Urban Forestry Act of 1978 (Public Resources Code §4799.06 to 4799.12), the California Code of Regulations (Title 14, Division 1.5, Chapter 9.7), the relevant grant category or categories, these guidelines, and requirements of the funding source. If the application is found incomplete in a material way or the proposed project is not eligible for a grant, the applicant will be informed that the proposed project is ineligible. Only when an application is complete, and the project is deemed eligible for a grant will CAL FIRE staff file the application. Omission of any required information will result in disqualification of the proposal.

CAL FIRE strives to provide an objective and un-biased grant review process. To those ends, each application is reviewed and scored by each member of the review team. If any individual reviewer has a potential for bias with an applicant, they will be recused from that review. Each reviewer reads and scores the applications based on specific criteria in these grant guidelines and the California Urban Forestry Act. All reviewers use the same scoring form and conduct their review independently of other reviewers. Proposals are not discussed amongst grant reviewers until after scores are submitted by all reviewers. As an additional bias avoidance measure, the high and low scores for each application are dropped, and the remaining scores are averaged to achieve the overall score for the application. The highest scoring applications will be offered grant awards, based upon how much funding is available.

Request for Record Review:
Within ten business days of the receipt of notice that the application has been denied, the applicant may request that the Director of CAL FIRE or designee personally reconsider the decision of rejection. The request shall identify the applicant and the proposed project and shall briefly state the applicant's reasons for requesting reconsideration. The Director shall consider the application and all correspondence from interested parties in reviewing the decision.

Final Decision by the Director of CAL FIRE:
If the Director finds that the decision to reject the application conforms to these guidelines and the Urban Forestry Act, the Director shall uphold the decision. If the Director finds that the decision to reject the application does not conform to these guidelines or the Act, the Director may approve the application.

Project Scoring for Planning Grants

In-need educational facilities:

- The project focuses on providing a benefit to in-need educational facilities.
- Degree to which students will be involved with the project.
- Degree to which school staff will be involved with the project.

- Degree to which students will benefit from the project.
- The degree to which the school community has been engaged about the project in authentic ways, and/or will be involved in project implementation.

Co-Benefits:

- The degree to which the project uses trees to reduce consumption of finite energy resources, capture storm water, improve air quality, and/or reduce urban heat island effects.
- The degree to which the project will contribute to improved student experience, health, and learning.
- The extent to which the project helps the State meet its climate change adaptation strategies. See: CA Natural Resources Agency's Building Climate Resilience Report.

Project Quality:

- The degree to which the project has effective partnerships.
- The degree to which the project is planned and organized based on a (school) community-driven process.
- The degree to which policies, plans, procedures, staffing, and budgets support long-term success.

Project Scoring for Implementation Grants

In-need educational facilities:

- The project focuses on providing a benefit to in-need educational facilities.
- Degree to which students will be involved with the project.
- Degree to which school staff will be involved with the project.
- Degree to which students will benefit from the project.
- The degree to which the school community has been engaged about the project in authentic ways, and/or will be involved in project implementation.

Greenhouse Gas Benefits:

- The degree to which the project GHG benefit, calculated in accordance with the CARB's most current quantification methodology, is high in relation to the budget requested.
- The reasonableness of the assumptions made by the project proponent in quantifying the GHG benefits of the project.
- The degree to which the project utilizes the largest canopied tree possible for the selected planting sites and shows a preference for existing planting sites or creation of planting sites that can support large-canopied trees.

Co-Benefits:

- The co-benefits of the project are high in relation to the requested budget.

- The degree to which the project uses trees to reduce consumption of finite energy resources, capture storm water, improve air quality, and/or reduce urban heat island effects.
- The degree to which the project involves students and/or the school community in planting and/or maintenance of trees (stewardship).
- The degree to which the project will contribute to improved student experience, health, and learning.
- The extent to which the project helps the State meet its climate change adaptation strategies. See: CA Natural Resources Agency's Building Climate Resilience Report.

Best Management Practices:

- The degree to which the tree species selection is diverse and site appropriate.
- The degree to which the project provides urban forest resources to areas where such resources are absent or replenishes such resources where they are badly depleted.
- The degree to which the quantity and methods of establishment follow-up care practices will lead to long term success of the project.
- The extent to which the project will use locally sourced or recycled water in project design.

Project Quality:

- The degree to which the project has effective partnerships.
- The degree to which the project is planned and organized based on a (school) community-driven process.
- The degree to which policies, plans, procedures, staffing, and budgets support long-term success.
- The degree to which the project will have an education and outreach component that develops public awareness of the need for expanding and managing urban forest resources.

GRANT ADMINISTRATION

The grant period begins on the last date of signature after CAL FIRE and the grantee have both signed the completed grant agreement. CAL FIRE will notify grantees when work may begin. Work includes any activity used for matching.

CAL FIRE will review and approve invoices for payment, maintain the grant agreement documentation, and monitor the agreement to ensure compliance with all provisions.

To have sufficient time to process final payments and to close out the Grant agreement, the grantee must submit all deliverables and payment requests within 30 calendar days after the project performance period has expired. Invoices received after this date cannot be guaranteed payment. The CAL FIRE Urban & Community Forestry Program staff will arrange for periodic and final project inspections of the project and authorize payments. The State of California may perform an audit of the completed project during the three-year audit period.

Communication

All communication with CAL FIRE regarding grants should contain the Grant ID number in the subject line. Any files shared with CAL FIRE including invoicing, progress reports, data, and modification requests shall follow the below naming convention (8GG12345 is to be replaced by the respective grant ID).

Invoice 2: 8GG12345_inv2
June 30, 2022 Progress Report: 8GG12345_prg rpt_063022
Budget or scope request (<10%) 1: 8GG12345_mod 1_063022
Budget or scope request (>10%) 1: 8GG12345_amend 1_063022
MDCA data: 8GG12345_MDCA_063022
GHG Summary Sheet: 8GG12345_GHG_063022
CAL FIRE Urban Forestry Billing and Reporting Template: 8GG12345_Tracking_063022

Grant Agreement Amendments and Modifications

All amendments or modifications must be requested in advance. A grantee wishing to change the scope of work including species list, planting locations, and partnerships, or budget allocations for line items of an approved project shall submit the proposed change via official letter, on organizational letterhead, to the appropriate CAL FIRE Regional Urban Forester. The letter should reference the grant number assigned to the grant, explain in detail the change being requested, the need for the change and include the revised budget or other necessary attachments, if applicable. Changes to deliverables are discouraged. Minor changes (modifications) can typically be approved by the Regional Urban Forester. More significant changes may require a grant agreement amendment. Grant agreement amendments may be allowed, at the sole discretion of CAL FIRE, for changes to the scope of work or the project budget. Any primary budget line-item increase or decrease by 10% or more of that line item during the grant period will require a grant amendment. The total amount awarded to the grantee can never be increased during the grant period for any reason, nor can the project end date be extended.

Remember, the amount awarded will not be higher than the amount in the grant application.

All correspondence, including email, relating to grant projects must have the grant agreement number featured prominently, and be dated.

Project Signage and Recognition

All grant projects shall have one of the following:

1) At least one project sign, preferably more, at highly visible project locations. All signage shall refer to the funding source that is funding the grant and shall include the names and/or logos of all the project cooperating entities (including the CAL FIRE Urban & Community Forestry Program). Alternative signage may be approved by CAL FIRE prior to posting.
2) Recognition of the funding source and the names and/or logos of all project cooperating entities (including CAL FIRE Urban & Community Forestry Program) in all publications, websites, electronic media, products paid for by the grant, etc.

Signage must be on site for at least three years after a project is complete (where applicable).

Signage designs must be approved by CAL FIRE staff prior to purchase or use. The sign must meet funding source logo and usage guidelines.

The sign must contain the CAL FIRE and USDA Forest Service logos and any funding source logo along with at least the following text in a prominent way:

> ***Funding for this Project was provided by the Governor and Legislature from the 2022/2023 State General Fund as administered by the California Department of Forestry and Fire Protection (CAL FIRE) Urban and Community Forestry Program.***

Signage wording can be shortened to accommodate limited space as long as the main points are addressed.

Signage is not to exceed 5% of project budget. Indirect costs may not exceed 12% of project costs.

Project Reporting (see also Appendix D)

Quarterly Reporting

Grantees shall report and invoice on all projects quarterly unless notified otherwise by CAL FIRE staff. The reporting dates shall be for the periods ending March 30, June 30, September 30, December 30 and reports are due 14 days thereafter. If a grantee chooses to invoice CAL FIRE more often, a project report must be included with each billing package. Invoices shall not be submitted more frequently than monthly. Progress report periods shall not overlap.

Reporting shall follow the format provided by CAL FIRE. Information to be submitted includes project description, project location, funds allocated, matched funds, activities completed, number of trees planted, vegetation planted and location, maintenance activities conducted, tons of biomass diverted from waste, net GHG benefit, and co-benefits achieved such as property acquired to be repurposed as an urban forestry project site and job or job training information, challenges and solutions, and benefits to disadvantaged communities.

Reports must always include the Benefits Calculator Tool ("GHG calculator") spreadsheet in Excel format whenever trees are planted. The Minimum Data Collection Attributes, or MDCA, Excel form must also be completed and submitted whenever trees are planted (see Appendix G) unless CAL FIRE directs to submit tree planting data using a new system. Funding recipients that claim to provide a benefit to a disadvantaged community will need to report on how the project benefits have addressed the identified community need. These records must be retained for at least three years after the completion of the project. All projects will be required to track the above metrics until project closeout (i.e., when tree/vegetation planting is complete or green infrastructure construction is complete).

Annual and Post-Grant Reporting

To evaluate the climate, social, and health impact of the Green Schoolyards Projects long term, additional reporting is required from grantees of this grant type.

Climate and social benefits reports and site photos will be submitted annually during the project as well as for the post grant maintenance period. Templates and procedures will be provided by CAL FIRE.

Components to report on include surface and air temperature changes achieved by this project, activity/area-use changes by students, changes in physical activity by students and staff, changes in test scores, and mental health benefits observed by students and staff. Temperature changes should be reported in quantitative terms, whereas other benefits may be described in qualitative terms using observational evidence.

Project Inspections and Product Review

The Regional Urban Forester (Appendix E) assigned to a grant project will determine when inspections are necessary for the project. This will vary by grant type, scope of work, and timeline of the project to be carried out. At minimum, inspections will occur once per fiscal year (July 1-June 30) during the project. Projects may continue to be inspected annually for up to three years after the grant performance period ends.

Projects that will be developing any media or educational materials (print, digital, video or audio), or other products must allow such materials to be reviewed by CAL FIRE prior to finalization. Copies of such materials must be furnished to CAL FIRE prior to project conclusion. Allow 30-60 days for review of such materials. Copies of such materials must be furnished to CAL FIRE prior to project conclusion. Inspection results will be made available to grantees and follow-up inspections will be conducted if necessary.

Time Extensions

There will be no extensions unless the expenditure period for the grant program is extended via a state budget process involving the Legislature and the Governor. Extensions are not typical and should not be counted on.

For Planning Grants, the deadline is **March 30, 2024.**

For Implementation grants, the deadline is **March 30, 2026.**

Payment of Grant Funds

Note: All funds will be obligated as soon as possible and no later than June 30, 2024, and final invoices must be submitted to CAL FIRE no later than April 30, 2026.

- Payments will be made by CAL FIRE to the Grantee on a reimbursement basis.
- Interest on loans, late fees or other financial penalties incurred by the grantee will not be eligible for reimbursement.
- No work prior to or after the grant period (from the date the grant agreement is fully signed by both parties until March 30, 2026) will be reimbursable.
- Grantees should have adequate cash flow to begin the project.
- When progress payments are desired, each invoice must be accompanied by supporting documents and a progress report (in two separate files).
- Grantees shall submit invoices to the CAL FIRE Urban & Community Forestry Program no more frequently than monthly and at least quarterly.
- CAL FIRE will reimburse all eligible expenses within 45 calendar days upon receipt of an undisputed invoice.
- Reimbursement may require a site inspection prior to payment processing. The need for an inspection is at the discretion of CAL FIRE.
- Each invoice packet must include supporting documents for all project charges which may include payroll summary documentation, vendor receipts, purchase receipts, and other back-up documentation of expenses.
- A progress report or final report shall accompany all requests for payment. If trees were planted in the billing period, the MDCA table (in MS Excel) and GHG Summary table must also be submitted. Please see the "Communication" section for more information.
- CAL FIRE will reimburse the Grantee for all eligible costs under the terms of the agreement.

Advance payments may be considered for nonprofits only, in cases of grantee hardship, and where the project is in and/or provides direct benefits to a disadvantaged or low-income community. Advance payments are solely at CAL FIRE's discretion and a justification will be required to approve of any advanced payments. There are two advance options:

1) Advance payment may not exceed 25% of the grant funds awarded and must be fully expended, and acceptable invoice documentation is received by CAL FIRE, before another advance may be requested. Advances must be fully utilized within a six-month period unless additional time is approved by CAL FIRE. Or
2) Rolling advance of no more than 10% of the grant funds with additional advance requests allowable once 50% of the previous advance has been expended and documents provided to CAL FIRE.

A request for an advance payment must be submitted on official letterhead explaining the amount of the advance and the need via the Grants Portal. The letter must be accompanied by a completed invoice sheet demonstrating the approximate breakdown by primary budget line item of where the advance is to be allocated. The letter and invoice must be signed by the grantee's project representative listed on the grant agreement.

Grantees will be provided the required invoice format (in MS Excel) for reimbursement (or advancement of funds). A Grantee should allow a maximum of 45 days after an undisputed billing package is received for issuance of a reimbursement check. Incomplete billing packages will be returned, or additional information will be requested, and will delay processing. CAL FIRE does not consider a billing package complete until all final documentation that is needed to process the billing is received.

A final invoice must be received by CAL FIRE no later than 30 calendar days after the grant period expires.

Loss of Funding

The following are examples of actions that may result in a Grantee's loss of funding:

- Grantee fails to provide direct, meaningful, and assured benefits to disadvantaged community or low-income community per criteria in CARB Funding Guidelines when such status is claimed.
- Grantee withdraws from the grant program.
- Grantee fails to complete the funded project scope of work.
- Grantee fails to submit all documentation within the time periods specified in the Grant agreement.
- Grantee fails to submit evidence of California Environmental Quality Act (CEQA) compliance within one year of the execution of the grant agreement.
- Grantee changes the project scope or budget without concurrence of the State.
- GHG reductions fail to be achieved by the project when such reductions are claimed.
- Grantee exercises poor communication or responsiveness, jeopardizing CAL FIRE's assurance that project objectives are being met or that CAL FIRE direction is being followed.
- Grantee fails to comply with the terms of the grant agreement unless such failure was due to no fault of the grantee. Such a determination will be made solely by CAL FIRE.

State Audit

Upon completion of the project, the State may audit the project records. A CAL FIRE project is considered complete upon receipt of final grant payment from the State and a final inspection report by CAL FIRE staff that has no required actions specified. The purpose of the audit is to verify that project expenditures were properly documented, and the scope of work completed. The audit would be requested by the State after the final payment request has been received and all project transactions have been completed.

If a project is selected for audit, the grantee will be contacted at least 30 days in advance. The audit should include all books, papers, accounts, documents, or other records of the Grantee, as they relate to the project for which State funds were granted. Projects may be subject to an audit for up to three years after the grant performance period ends.

To expedite the audit, the recipient shall have the project records, including the source documents, and cancelled warrants readily available. The Grantee shall also provide an employee having knowledge of the project and the accounting procedure or system to assist the State auditor. The Grantee shall provide a copy of any document, paper, record, or the like as requested by the State auditor.

All project records must be retained by the Grantee for a period of not less than one year after the State audit or after final disposition of any disputed audit findings. Grantees are required to keep source documents for all expenditures related to each grant for at least three (3) years following project completion and one year following an audit unless the Grantee has a policy requiring a longer retention period.

Repayment of Grant Funds

The State may terminate the grant for any reason at any time if there are allegations supported by reasonable evidence that the grantee has violated any local, state or federal law, policy, or terms of this grant agreement which affects performance of this or any other grant agreement or contract with the State. If a grant is terminated, the grantee may be required to repay funds fully or partially to the State. A grantee whose grant is terminated may be ineligible to apply for future grants. A grantee subject to repay funds may cause delay or denial of invoices on other grants they have with the State.

Accounting Requirements

The Grantee shall maintain an accounting system that follows generally accepted accounting principles. The accounting system must accurately reflect fiscal transactions, including matching funds, with the necessary controls and safeguards. This system shall provide an audit trail, including original source documents such as receipts, progress payments, invoices, mileage records, timecards, etc. The system shall also provide accounting data so the total cost of each individual project can be readily determined. These records shall be retained for a period of not less than three years after the end of the grant performance period. Avoid audit exceptions – keep accurate records.

Conflict of Interest

All applicants and individuals who participate in the review of submitted Project Proposals are subject to state and federal conflict of interest laws. Any individual who has participated in planning or setting priorities for a specific solicitation over and above the public comment process or who will participate in any part of the grant development and negotiation process on behalf of the public is ineligible to receive funds or personally benefit from funds through that solicitation. Failure to comply with conflict-of-interest laws, including business and financial disclosure provisions, will result in the Project Proposal being rejected and any subsequent grant agreement being declared void. Other legal actions may also be taken. Applicable statutes include, but are not limited to, California Government Code section 1090 and Public Contract Code sections 10365.5, 10410, and 10411.

Grantee must establish conflict of interest policies and procedures and maintain adequate controls to ensure that the grantee or anyone acting on behalf of the grantee does not have any conflicting personal and/or financial interest associated with activities funded by the grant project. CAL FIRE may request additional documentation during the performance of the grant, including during review of financial and/or progress reporting, or during State Audit to verify that a conflict of interest does not exist

Prevailing Wage Requirements

CAL FIRE provides no opinion as to whether projects may be subject to prevailing wage law. For determination on prevailing wage applicability, please contact the Department of Industrial Relations. It is the applicant's responsibility to budget for prevailing wages in their project cost when applicable.

GREEN SCHOOLYARDS GRANT SPECIFICS

Purpose

The purpose of this grant type is to green schoolyards to protect the health, well-being, and educational opportunity of children most vulnerable to increasing temperatures and extreme heat across California. Projects shall be centered around improving the environmental conditions and experiences for school children with the highest levels of co-benefits. Projects will invest in nature-based climate solutions that deliver multiple benefits such as helping to alleviate extreme heat, improving the immediate environment for students as well as supporting outdoor learning and environmental literacy, while also reducing GHG emissions, improving functionality of urban forests, arresting the decline of urban forest resources, increasing climate change resilience, improving the quality of the environment in urban areas, and optimizing co-benefits to school children and surrounding urban residents.

Such projects shall include the planting of trees and should include converting pavement to green spaces on school campuses with a focus on child-accessible areas of campus. Projects may also include strategies such as the installment of natural features for learning and recess such as pocket forests, rain gardens, botanical gardens, natural playgrounds, food producing gardens and landscaping, outdoor classrooms as well as maintenance of planted vegetation for the duration of their expected life span.

Public access is encouraged after school hours to areas identified by the campus for a specific purpose such as recreation or growing food. A joint-use agreement may enable public access while sharing maintenance responsibility and costs with a responsible government entity. A plan must be in place for the maintenance of the respective area to ensure student safety, including activities such as clean up or inspection after public use and prior to student use. An MOU or other agreement format as approved by CAL FIRE with the responsible entity is required.

Project Eligibility and Application Requirements

For Implementation grants, these criteria must be met for a project to be eligible:

- Applicants shall obtain a memorandum of understanding (MOU), resolution, or certified letter from the respective local educational or child services agency supporting the project before being awarded a grant.
- Each school campus included in the project will form a group of staff, including the respective school principal, grounds management, and teachers, to lead/guide the implementation of the project, help optimize the benefits to students and staff, and ensure long-term success of the project.
- The project will report on GHG reductions achieved by the project following CAL FIRE guidelines. Grant requests must include the creation, development, and implementation of projects that improve, expand, and maintain healthy urban trees on California school campuses.
- The amount requested per implementation project shall be between $1,000,000 and $30,000,000. The amount requested cannot exceed $2,000,000 per school campus

included in the project. For example, a $30,000,000 project must include 15 or more campuses.

- Campuses included in the applications must be listed by name in the grant application.
- The project must be located in or immediately adjacent to an “urban area” or “urban cluster” as defined by the U.S. Census Bureau. (U.S. Census Bureau's Urban and Rural).
- The project must have a commitment for active participation from school staff and the school district and must show that the (school) community where the project will occur was, and will continue to be, authentically engaged about the project
- The school district and campus must have or develop policies, best practices, and staff for tree/landscape maintenance, budget, and goals expressed and adopted in long-term plans.
- The applicant must comply in all respects with all applicable local and county ordinances, and all applicable state and federal laws and regulations, including the California Environmental Quality Act (CEQA).
- Projects shall include an education and outreach component. Not more than 20% of grant funds may be used for this component. This component, as part of the overall project, may be shown as project match dollars by the applicant if so desired.
- Grantees shall maintain and operate the project developed pursuant to the grant long term; evidence of adequate long-term care for the trees and other nature-based solution features must be shown.
- Tree planting within the project shall adhere to Appendix G at a minimum. Failure to follow the Standards in Appendix G will lead CAL FIRE to require replacement of the trees at the grantee’s cost or reimburse CAL FIRE the funds used to plant the trees.
- All campus designs must be created or approved by a landscape architect or other qualified professional.
- Tree planting sites must be 36ft^2 in area at minimum, and no less than 3ft in width on any side. Larger is highly preferred.
    - Soil volume recommendations to facilitate tree survival and optimal growth are:
        - Small-stature species: at least 100ft^3 available soil volume
        - Medium-stature species: at least 500ft^3 available soil volume
        - Large-stature species: at least 1,000ft^3 available soil volume
        - A soil depth of more than 4ft is not regarded as a further improvement of rooting space
- Trees and plant materials selected shall be climate appropriate and well suited to the site. One measure of this is that tree and plant species selected are classified as very low, low, or moderate water use species in the WUCOLS IV or are justified for the planting site(s) selected and as approved by CAL FIRE.
- Awarded projects shall comply with the Model Water Efficient Landscape Ordinance or the local agency landscape water ordinance and shall use drought-tolerant plantings, as appropriate.
- The property does not have to be owned by the school/child care facility, however, an MOU or certified letter from the respective owner is required to ensure long-term use and maintenance of the project as well as access to CAL FIRE for inspections.

For Planning Grants, these criteria must be met for a project to be eligible:

- Grant requests must include the creation and development of projects that improve, expand, and maintain healthy urban trees on California school campuses.
- The amount requested per planning project shall be between $75,000 and $1,500,000. The amount requested cannot exceed $100,000 per school campus included in the project. For example, a $1,500,000 project must include 15 or more campuses.
- Campuses included in the applications must be listed by name in the grant application.
- The project must be located in or immediately adjacent to an “urban area” or “urban cluster” as defined by the U.S. Census Bureau. (U.S. Census Bureau's Urban and Rural).
- The project must have a commitment for active participation from school staff and the school district and must show that the (school) community where the project will occur was, and will continue to be, authentically engaged about the project
- The school district and campus must have or develop policies, best practices, and staff for tree/landscape maintenance, budget, and goals expressed and adopted in long-term plans.
- The applicant must comply in all respects with all applicable local and county ordinances, and all applicable state and federal laws and regulations, including the California Environmental Quality Act (CEQA).
- Projects shall include an education and outreach component. Not more than 20% of grant funds may be used for this component. This component, as part of the overall project, may be shown as project match dollars by the applicant if so desired.
- All campus designs must be created or approved by a landscape architect or other qualified professional.
    - Tree planting sites must be $36ft^2$ in area at minimum, and no less than 3ft in width on any side. Larger is highly preferred.
    - Soil volume recommendations to facilitate tree survival and optimal growth are:
        - Small-stature species: at least $100ft^3$ available soil volume
        - Medium-stature species: at least $500ft^3$ available soil volume
        - Large-stature species: at least $1,000ft^3$ available soil volume
        - A soil depth of more than 4ft is not regarded as a further improvement of rooting space
- Trees and plant materials selected shall be climate appropriate and well suited to the site. One measure of this is that tree and plant species selected are classified as very low, low, or moderate water use species in the WUCOLS IV or are justified for the planting site(s) selected and as approved by CAL FIRE.
- Awarded projects shall comply with the Model Water Efficient Landscape Ordinance or the local agency landscape water ordinance and shall use drought-tolerant plantings, as appropriate.

Eligible Practices

- Designing/implementing of Green Schoolyards projects with multiple benefits that give special attention to reducing extreme heat, provision of shade to students during recess and outdoor learning, air quality improvement, storm water management, water quality, or improvement of public health and/or educational outcomes.
- Implementation projects shall include the planting of trees and should include converting pavement to green spaces on school campuses with a priority on the child-accessible areas of campus.
- Planning project should incorporate tree plantings and the conversion of pavement to green spaces on school campuses with a priority on the child-accessible areas of campus in the campus design.
- Projects may include strategies such as removal of impervious surfaces, installment of natural features for learning and recess such as pocket forests, rain gardens, botanical gardens, natural playgrounds, food producing gardens and landscape, outdoor classrooms as well as maintenance of planted vegetation. Projects shall be centered around improving the environmental conditions and experiences for school children with highest levels of co-benefits.
- Projects may include staff recruitment and/or training for maintenance, parent/community engagement and partnerships, and improvements to policy, procedures, best practices, plans, monitoring systems, and analysis or adjustments to funding that will achieve long-term goals including expansion of tree canopy cover on campus.
- Education including curriculum development to enhance hands-on learning and environmental literacy using the created green spaces are eligible.

Ineligible Practices

The following practices will not be funded by this grant program.

- Planting trees that require excessive maintenance such as: excessive long-term watering, fertilizing, exterminating, or controlling plant pests and diseases to survive.
- Projects that plant trees that will eventually conflict with overhead or underground utilities or ground-located infrastructure.
- Projects that will not result in a net GHG benefit.
- Planting (potentially) invasive species as determined by referencing the California Invasive Plant Council or similar reference approved by CAL FIRE.
- Projects that use synthetic fertilizer. Organic fertilizers (e.g., compost, manure) may be used.
- Projects that will supplant a locally funded budget item rather than supplement it.
- Projects taking place on public or private property and that do not show concurrence of the controlling governmental jurisdiction or private property owner (the private property owner must agree to the planting before it may occur).
- Property acquisitions.
- Project elements that are purely aesthetic or are otherwise not eligible under the California Urban Forestry Act.

Eligible Costs (See *Appendix B*)

- Grant funds may be used to support project costs including, but not limited to, planning, permitting (including CEQA), environmental assessment, design, pavement removal, soil testing, remediation of hazardous materials from pavement removal, water-efficient irrigation, and project maintenance**.**
- **Trees, plants, and planting materials (Supplies)**
    - Trees in the #15 (gallon) container size are eligible. Balled and burlapped and bare-root tree stock are also eligible if the size and quality are equivalent. Smaller containerized stock, seedlings, and direct seeding may also be considered by CAL FIRE in situations where appropriate. Larger sized trees may be considered by CAL FIRE if adequate justification is provided.
    - Other larger container sizes may be considered by CAL FIRE in situations where appropriate.
    - Focus should be on shade trees. The largest stature species suitable for a site should be chosen.
    - Fruit trees and other smaller trees in various sizes are eligible with justification. Justification should be based on co-benefits. Such co-benefits may include foci such as hands-on learning opportunities related to food production as part of a school garden or other designated learning space.
    - Site appropriate plants in sizes justified for the project.
    - Planting materials may be: Stakes, ties, and root collar protectors proportional to number of trees being planted; grow tubes for small container, seedling and direct seeding; wood chip surface mulch, soil amendments in areas of hard clay soil or sandy soil; soil where needed to complete backfill; watering tools, cost effective water-efficient irrigation system supplies; and hand tools.
    - Replacement trees. A sub-line item for replacement trees may be budgeted for but may only be used with prior CAL FIRE Regional Urban Forester approval. Such approval will be contingent on the reason the replacement is needed. Any funds left in this line item near the end of the grant may be used to plant additional trees (exceeding the scope of work). Trees required to be replaced due to grantee or subcontractor negligence will not be paid for with grant funds.
- **Labor directly related to the project**
    - Includes young tree establishment costs such as: structural pruning, stake adjustment and removal, and water-wise irrigation. May also include staff hiring or training.
- **Contracts or services for inventory, monitoring, or planning**
    - Costs for collection of current tree inventory data, monitoring/work order databases, or development of plans, procedures, best practices, or standards.
- **Administrative costs**
    - Administrative costs directly related to the implementation of the project are eligible but must be justified.
    - Costs of tracking and reporting GHG reductions for the supplied criteria are eligible.
- **Indirect costs**:
    - A maximum not to exceed 12% of total direct cost. Indirect costs include items such as payroll administration, human resources, computer support, minor equipment,

financing, and office support that are not directly related to the implementation of the project to be funded.

- **Education and signage (may not exceed 20% of costs):**
  - Purchase, development and distribution of education materials and curricula, or events may be funded pending relevance to the scope of the proposed project. A maximum not to exceed 20% of grant request.
  - Funding source and program sign construction and materials.
  - For sign requirement details, please see the "Project Signage and Recognition" section. CAL FIRE staff will approve signage plans on a case-by-case basis.
- **Concrete removal and other special concerns:**
  - In projects where impervious surfaces are being converted to green spaces or expansions of existing planting sites, the costs for removal of asphalt, concrete paving, and/or other hardscape is eligible. If hardscape cuts are to be made, they must create at least 30 square feet of open space for a single tree planting. Larger is preferred.
  - Soils testing to determine the needs for the site are eligible.
  - Remediation of hazardous materials exposed during pavement removal are eligible.
  - Water-efficient irrigation supplies or system components are eligible.
  - Other costs of construction are eligible with justification.
- **Temporary shade structures:**
- Shade structures that last a limited period of time (~ 5 years) while planted trees are young to provide shade to students while trees are growing larger.
  - The goal should be for the trees to provide the needed shade in the long term.
  - Structures should be removed as soon as trees provide a reasonable amount of shade.
  - Shade structures shall not need a concrete foundation or otherwise more permanent affixture.
  - Shade structures shall not interfere with tree growth.
  - Tree maintenance shall not be impacted by the presence of the shade structure.

Ineligible Costs

The following are ineligible costs:

- Decorative tree grates and decorative tree guards or other purely aesthetic items.
- Tree removal (though this could be used to meet matching requirements with CAL FIRE approval). If allowed funding for removal and replacement of trees in urban areas that are associated with a natural disaster, extraordinary natural event, or pest and/or disease outbreak may be eligible. These event types will require justification and any tree proposed to be removed must be approved in advance by a CAL FIRE Regional Urban Forester. Location data (GPS coordinates), species, reason for removal, and picture prior to removal must be shared with CAL FIRE during the approval process. Projects must show that the removed trees were replaced with a tree of similar or improved long term carbon storage and co-benefits.
- Inefficient irrigation valves, pumps, sprinkler control timers or overly costly and elaborate irrigation systems, or irrigation systems that are unable to be proved as effective long-term.

- Root barriers. (Note: any use of root barriers as part of a project must be approved by a CAL FIRE Regional Urban Forester).
- Trees that rely upon excessive amounts of water to survive.
- Trees that, in CAL FIRE's assessment, are inappropriate for the chosen site or require excessive maintenance.
- Trees of a stock size other than 15-gallon without prior approval provided by CAL FIRE based on provided justification.
- Small trees that do not provide a co-benefit related to food access, hands-on learning, or environmental literacy in a designated learning space.
- Palms are not eligible.
- Invasive or likely invasive species are not eligible.
- Food (unless as part of approved per diem travel expenses), refreshments, etc.
- Promotional materials (e.g., t-shirts, paraphernalia) or other supplies unnecessary for carrying out the operations of the project aside from education and outreach.
- Gifts

APPENDIX A – IMPLEMENTATION GRANT AND PLANNING GRANT APPLICATION SUBMISSION

Applicants must complete the online application form at:

(include link to solicitation site when available)

It is important that applicants note the following:

- The application should be submitted by the individual that will be actively managing or have an administrative role associated with the grant project should the project be selected for funding.
- Refer to the eCivis Grants Portal Application Submittal User Guide for instructions on how to access and navigate the Grants Portal in order to submit your application(s).
- Applicants must answer all required questions which are identified with asterisks (*).
- Other questions are either optional or may not apply to all grant types.
- Site photos that adequately show the current state of the school site are required as part of the application.
- Each applicant is limited to one proposal per Green Schoolyards grant option thus one planning grant and one implementation grant application at maximum.
- Applicants must make sure they fill out all relevant sections for the grant type they are applying for. If applicants do not, their application will not be scored.

APPENDIX B – ELIGIBLE COSTS AND SAMPLE BUDGET

Important Recommendations:

Following are some recommendations to strongly consider as you prepare project costs:

1) CAL FIRE strongly recommends that applicants take inflationary costs into consideration during budget planning. Examples of this may be: known or projected salary or benefit cost increases for employees, cost of delivery of tree stock increasing, costs of permits increasing, etc. Such cost increases should be planned for up front. Keep in mind that the overall cost of your project will not be able to go up during the grant period.

2) CAL FIRE also strongly recommends two practices that will greatly simplify project billing. First, adopt a per diem rate for any travel costs. The most effective way to do this is by adopting the State per diem rates. See the travel costs item in the table below for a link. Second, adopt the IRS mileage rate for vehicle travel and simply record miles travelled in each vehicle used on the project. Both practices will greatly reduce the volume of receipts and back-up documentation that will be required for reimbursement.

Eligible Costs and Documentation Requirements

Project costs must be consistent with the approved project proposal and incurred during the performance period as specified in the grant agreement. Project elements that do not produce a direct GHG benefit (e.g., education, research, planning, etc.) must be linked with on the ground activities that do, or they will not be eligible costs.

Use the table below as a reference while constructing a budget for both the application.

Budget Item	Eligible Cost	Required Documentation
Salaries and Wages	Salaries and wages of employees employed by the grantee who are DIRECTLY engaged in the execution of the grant project. Limited to actual time spent on the grant project. Examples of expenditures would be time related to site visits, project monitoring, and completion of reporting related to the grant project. Staff time related to accounting, business services, etc. are allowed only if those functions are not included in the grantee's overhead cost. Cost of employee leave (vacation, sick) is eligible only if the employee is working 100% on the grant. Lump sum payment of accrued leave balance is only eligible for reimbursement if the employee was hired for the sole purpose of working on the grant. Volunteer rates for matching funds purposes can be found at: Independent Sector's Value of Volunteer Time	A payroll summary of all employees' time spent on the project must be provided. Payroll documentation should show a nexus between time worked on the project and wages paid to the employee after the fact. Timesheets or similar documentation detailing days and hours worked on the project must be maintained and kept for audit purposes (they need not be sent to CAL FIRE with invoices unless otherwise instructed by CAL FIRE).
Benefits	Employer contribution share of fringe benefits associated with employees (paid from salaries and wages Budget Item) who are directly engaged in the execution of the grant project. This will include Social Security, Medicare, Health Insurance, Pension Plan costs, etc. as applicable for the specific employee.	Same documentation as Salaries and Wages. Payroll summary documentation showing wages and hours paid to the employee and associated fringe benefits. Back-up documentation to be kept by the grantee for audit records.
Contractual	Direct consultant and contractual services necessary to achieve the objectives of the grant. Examples of contractual costs will be Arborist or other qualified professional supervision/certification, GHG verification contractor, accountant, or bookkeeper, etc. Procurement of contractual services should be documented to ensure selection on a competitive basis and documentation of cost analysis.	Invoices from Consultant/Contractor identifying expenditure, services performed and period of services. Documents related to consultant/contractor selection analysis shall be kept by the grantee but available for audit purposes.

Travel	Travel cost associated with travel to and from project sites, meetings, etc. directly related to the grant project and must be considered reasonable and necessary for the completion of the project. Reimbursement rates shall be consistent with the grantee's written travel policy. Absent a written policy, per diem shall not exceed the California Standard Per Diem Rate allowable by the U.S. General Services Administration (CalHR Per Diem Rates Look-Up). Mileage rates shall not exceed the rates allowable by IRS (Standard Mileage Rates).	Receipts identifying travel cost (i.e. lodging, rental cars). Mileage must be documented by either employee travel claims that are signed by the employee or vehicle mileage logs for vehicles owned by the grantee. Per Diem must be documented by employee travel claims.
Supplies[1]	Supplies that are used in the direct support of the project are allowable. Supplies exceeding $500 per unit cost shall be documented to ensure procurement of supplies on a competitive basis and documentation of cost analysis.	Receipts or invoices identifying items purchased, cost and date of purchase. Documentation related to cost analysis of procurement of supplies exceeding $500 shall be kept by the grantee but available for audit purposes.
Equipment[2]	Equipment consists of items exceeding $5,000 or more per unit cost and a tangible useful life of more than one year. The purchase of vehicles is not allowed as an equipment cost. However, the cost to lease vehicles and/or equipment for use during the grant may be charged to the grant. Usage of equipment owned by the grantee may be charged to the grant at a rate set by the California Department of Transportation "Labor Surcharge and Equipment Rental Rate" guide (Construction). Purchase of equipment using grant funds is allowable only with prior approval by CAL FIRE. A cost-benefit analysis to justify the cost of purchasing equipment versus leasing must be provided. Procurement of equipment must be done on a competitive basis and include documentation of price analysis. *Note: The grantee must include proposed use and maintenance plans for the equipment after the project performance period in the application. Disposition of the equipment beyond the project performance period is subject to CAL FIRE approval.*	Cost of leased equipment charged to the grant must be substantiated with receipts identifying equipment leased, dates equipment was leased, lease rate and total cost. Usage of grantee equipment must be substantiated with an equipment usage log, equipment used, rate and total rental cost. Cost of equipment purchased shall be substantiated by purchase receipt. Documentation related to price analysis of procurement of equipment shall be kept by the grantee but available for audit purposes. Disposition of the equipment must be approved by CAL FIRE in writing at the end of the grant term. Indirect costs are not allowed for equipment with a per unit cost of $5,000.00 or more.

Outreach/ Education	Costs associated with development and implementation of effective education and outreach activities such as curriculum development, educational materials, outreach/education events and professional services such as communications, marketing, advertising, or web development.	Invoices or receipts identifying the item and cost charged to the grant. Food and participation incentives are ineligible.
Other	Other costs that do not fit in any of the above categories. Costs must be directly related to the grant project. Costs such as rent, utilities, phones, general office supplies, etc. that must be apportioned to the grant are considered indirect costs unless written justification is submitted and approved by CAL FIRE.	Invoices or receipts identifying the item and cost charged to the grant.
Indirect Costs	Costs associated with doing business that are of a general nature and are incurred to benefit two or more functions within the grantee organization. These costs are not usually identified specifically within the grant agreement, project, or activity, but are necessary for the general operation of the organization. Examples of indirect costs include salaries and benefits of employees not directly assigned to a project; functions such as personnel, accounting, budgeting, audits, business services, information technology, janitorial, and salaries of supervisors and managers; and rent, utilities, supplies, etc. Functions included as direct versus indirect costs must be applied consistently for all activities within the grantee organization, regardless of fund source. Indirect costs are capped at 12% of CAL FIRE share of the budget.	Applied on a percentage (%) basis on direct costs except for equipment with a per unit cost of $5,000.00 or more.

[1] For grantees that grow their own tree stock: it is not appropriate to charge retail rates for trees grown specifically for the project. Wholesale costs may be applied. Charges for growing materials, labor, etc. may all be part of those wholesale costs.

[2] For equipment: any equipment purchased by a grant should be equipment that is solely used for eligible grant activities. For example, a portable sawmill may be purchased for use in an urban wood grant project. Equipment like vehicles are more general in nature and may not be purchased with grant funds. Vehicles can, however, be leased with grant funds and charged against the grant at a rate that is commensurate with the percentage of time the leased vehicle is used for the purposes of the grant project. Likewise, pre-existing vehicles can be charged against the grant project, preferably with the IRS mileage rate as linked above in the table.

NOTE: Food is not an eligible expense other than food related to per diem travel costs as described in the chart above.

Application Budget: It is recommended that applicants consider the Application Sample Budget on the CAL FIRE Urban and Community Forestry Grants Program website (not yet on website) as well as the eCivis Grants Portal Application Submittal User Guide when preparing an application budget. This will adequately prepare applicants for the application process, and for managing project costs if awarded a grant. It will also be useful when proposing any modifications or amendments during the grant project period. It will be provided to project applicants as an MS Excel file.

The budget should include the below line items, as they apply to the proposed project, with additional lines within each category for positions/deliverables/activities.

1. Salaries & Wages
2. Employee Benefits
3. Contractual
4. Travel & Per Diem
5. Supplies
6. Equipment
7. Outreach & Education
8. Indirect cost: Not to exceed 12% of total direct costs excluded equipment cost.

For each line item (and sub-line) in the budget, the following information is required:

Unit: if more than one, you can enter multiple units

Unit Cost: per unit cost (NOTE: if Unit and Unit Cost is used, the Cost field will automatically be populated with the Unit number multiplied by the Unit Cost)

Extended Cost: this is indented to represent the total item cost including requested funds and cost share if applicable, which could differ from the budgeted amount

Cost: total amount budgeted for this item, represents the amount of grant funding requesting for this item

Indirect Cost: this field can be calculated in different ways based on your budget settings. If included as a percentage, you can check or uncheck this field to include it in your total indirect costs. If included as Itemized, you can put any amount desired for this item in the Indirect Costs field. If included as Not Applicable, you can mark this budget item as Indirect Cost and the amount in the Cost field will be included in your total indirect costs.

Cost Share: this field can be calculated in different ways based on your budget settings. If included as a percentage, you can check or uncheck this field to include it in your total Cost Share. If included as Itemized, you can put any amount desired for this item in the Cost Share field. If included as Not Applicable, you can mark this budget item as Cost Share and the amount entered in the Cost field will be included in your total Cost Share.

APPENDIX C – REQUIRED FORMS

The below forms must be submitted before a grant agreement can be completed. As some of these require approval from entities with a predetermined meeting schedule and agenda, it is strongly recommended to be proactive to avoid delaying the project, in case the application is successful.

STANDARD FORMS:

Forms will be available through the CAL FIRE Urban and Community Forestry Grant Programs website and via the links below:

Payee Data Record form (STD. 204): The STD. 204 form indicates that local government entities do not need to fill it out. CAL FIRE utilizes this form internally for all grantees, so it is required that all applicants fill it out.

Nondiscrimination Compliance Statement form (STD. 19)

A Drug-Free Workplace Certification form (STD. 21)

Environmental Checklist (not yet on the website)

Resolution (not yet on the website)

Signage Example (not yet on the Web)

Budget template (not yet on the Web)

OTHER FORMS:

California Air Resources Board Job Co-benefit Modeling Tool

CCI Quantification, Benefits, and Reporting Materials Page

APPENDIX D – GRANTEE REPORTING

The required reporting form and spreadsheet will be distributed to grantees. Progress reporting will be done every three months (quarterly) unless the CAL FIRE Regional Urban Forester requires a different reporting standard. For each report, the grantee will be required to report:

Financial

- Grant funds expended for the reporting period, and to date for the grant.
- Matching funds expended for the reporting period and to date for the grant.
- Total funds expended for the reporting period and to date for the grant.

Planting

- The number of trees planted in the reporting period and to date for the grant.
- Any other plants planted in the reporting period and to date for the grant.
- Minimum Data Collection Attributes Spreadsheet (MDCA) (will be provided to grantee).
- MDCA tree data to be reported for each reporting period and for the project to date includes: unique tree number identifier, tree funder, scientific name, street address, other location information, city or urban area, ownership type, latitude and longitude (x/y coordinate), census tract, priority population (DAC/LIC) status, date planted, tree stock size, and the type of growing space.
- A description of all tree and plant maintenance activity completed during the reporting period.

Project Benefits

- The net GHG benefit (metric tons CO2e) for the reporting period and for the grant to date.
- Quantification (when possible) and description of co-benefits for the reporting period.

Partnerships

- A description of the role of project partners during the reporting period and any challenges or successes derived from the partnerships.

Priority Populations

- A list of the disadvantaged and/or low-income census tracts worked in during the reporting period (per ARB Guidance).

Scope of Work Reporting

- A general description of activities, events, or milestones completed during the reporting period.
- Any planned events or milestones expected for the next reporting period.
- A description of any challenges faced and if the challenges were overcome. Any assistance needed.
- Planned events and future planned activities or milestones.

Grant Products

- Representative project photos and/or maps.
- Grant products produced (ex.: educational materials, event fliers, etc.)

APPENDIX E – CAL FIRE URBAN AND COMMUNITY FORESTRY PROGRAM STAFF

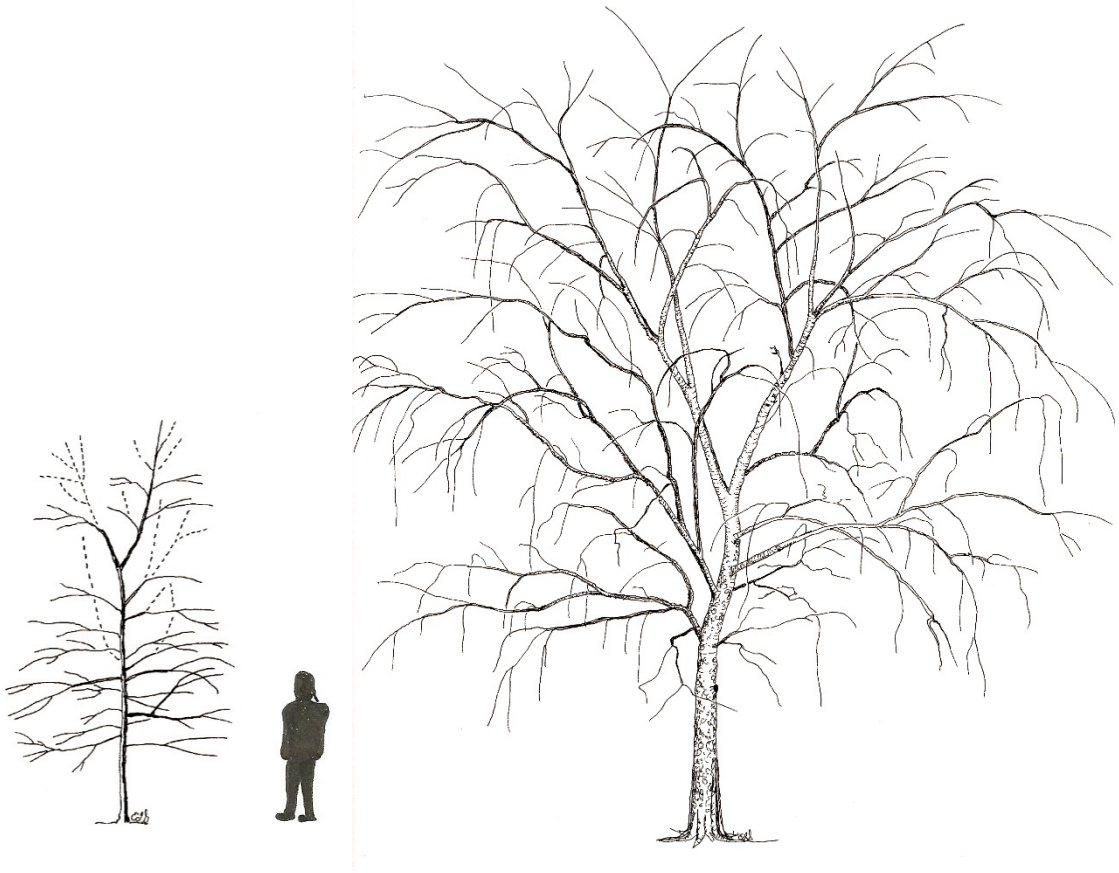
Regional Urban Foresters

Name	Counties Served	Phone	Email
Vacant (For questions, contact Julia Gowin)	Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lake, Lassen, Modoc, Napa, Placer, Plumas, Sacramento, San Joaquin, Shasta, Sierra, Siskiyou, Solano, Sutter, Tehama, Trinity, Yolo, Yuba	NA	NA
Tanner Mar	Alameda, Contra Costa, Del Norte, Humboldt, Marin, Mendocino, San Francisco, San Mateo, Santa Clara, Santa Cruz, Sonoma	(415) 265-9059	Tanner.Mar@fire.ca.gov
Jessica Casas	Calaveras, Fresno, Kern, Kings, Madera, Mariposa, Merced, Monterey, San Benito, San Luis Obispo, Santa Barbara, Stanislaus, Tulare, Tuolumne	(559) 753-3661	Jessica.casas@fire.ca.gov
Greg Dion	Inyo, Mono, Riverside, San Bernardino	(909) 553-8057	Greg.Dion@fire.ca.gov
Henry Herrera	Los Angeles, Ventura	(213) 200-7115	Henry.Herrera@fire.ca.gov
Marco DeAnda	Imperial, Orange, San Diego	(619) 937-1410	marco.deanda@fire.ca.gov

Other Program Staff

Name	Title	Phone	Email
Walter Passmore	State Urban Forester	(916) 214-5420	Walter.Passmore@fire.ca.gov
Julia Gowin	Urban Forestry Supervisor, Northern California	(916) 201-8942	Julia.Gowin@fire.ca.gov
Lynnette Short	Urban Forestry Supervisor, Southern California	(619) 937-1410	Lynnette.Short@fire.ca.gov
Eileen Hollett	Urban Forestry Education Specialist	(916) 584-5167	Eileen.Hollett@fire.ca.gov
Vacant	Urban Forestry Analyst	NA	NA

APPENDIX F – CAL FIRE STANDARDS AND SPECIFICATIONS FOR PURCHASING, PLANTING, AND MAINTAINING TREES



This Appendix is a compilation of the *Guideline Specification for Nursery Tree Quality: Strategies for Growing a High-Quality Root System, Trunk, and Crown in a Container Nursery, and the Tree Care Cue Cards*. It has been prepared to instruct grantees on how to select, plant, and care for young trees.

Illustrations by Edward F. Gilman, Professor, Environmental Horticulture Department, IFAS, University of Florida; adaptions from Arboriculture: Integrated Management of Landscape Trees, Shrubs and Vines, 4th ed., by R. W. Harris, J. R. Clark, and N. P. Matheny (Prentice Hall, 2003).

Urban Tree Foundation

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION CAL FIRE SINCE 1885

CALIFORNIA ReLEAF

WESTERN CHAPTER INTERNATIONAL SOCIETY OF ARBORICULTURE

Developed as a project of CAL FIRE, Western Chapter of International Society of Arboriculture, California ReLeaf, and the Urban Tree Foundation. *Copyright © 2011 Brian Kempf and Ed Gilman*

Nursery Tree Quality

I. GENERAL SPECIFICATIONS

Proper Identification: All trees shall be true to name as ordered or shown on planting plans and shall be labeled individually or in groups by species and cultivar (as appropriate).

Compliance: All trees shall comply with federal and state laws and regulations requiring inspection for plant disease, pests, and weeds. Inspection certificates required by law shall accompany each shipment of plants. Clearance from the local county agricultural commissioner, if required, shall be obtained before planting trees originating outside the county in which they are to be planted. Even though trees may conform to county, state, and federal laws, the buyer may impose additional requirements.

Inspection: The buyer reserves the right to reject trees that do not meet specifications as set forth in these guidelines or as adopted by the buyer. If a defect or substandard element can be corrected easily, appropriate remedies shall be applied. If destructive inspection of a root ball is to be done, the buyer and seller shall have a prior agreement as to the time and place of inspection, number of trees to be inspected, and financial responsibility for the inspected trees.

Delivery: The buyer shall stipulate how many days prior to delivery that delivery notification is needed. Buyer shall stipulate any special considerations to the nursery prior to shipment.

II. HEALTH AND STRUCTURE SPECIFICATIONS

These specifications apply to deciduous, broadleaf evergreen, and coniferous species. They do not apply to palms. Note that leaf characteristics will not be evident on deciduous trees during the dormant season.

Crown: The form and density of the crown shall be typical for a young specimen of the species or cultivar. The leader shall be intact to the very top of the tree.

Leaves: The size, color, and appearance of leaves shall be typical for the time of year and stage of growth of the species or cultivar. Trees shall not show signs of moisture stress as indicated by wilted, shriveled, or dead leaves.

Branches: Shoot growth (length and diameter) throughout the crown shall be appropriate for the age and size of the species or cultivar. Trees shall not have dead, diseased, broken, distorted, or otherwise injured branches.

Trunk: The tree trunk shall be relatively straight, vertical, and free of wounds (except properly made pruning cuts), sunburned areas, conks (fungal fruiting bodies), wood cracks, bleeding areas, signs of boring insects, cankers, girdling ties, or lesions (mechanical injury). The terminal bud on the leader shall be intact to the very top of the tree, and it shall be the highest point on the tree. A #15 tree has a minimum caliper of 0.75 inches.

Roots: The root system shall be substantially free of injury from biotic (e.g., insects and pathogens) and abiotic (e.g., herbicide toxicity and salt injury) agents. Root distribution shall be uniform throughout the container substrate and shall be appropriate for the species or cultivar. At time of inspection and delivery, the root ball shall be moist throughout. Roots shall not show signs of excess soil moisture conditions as indicated by stunted, discolored, distorted, or dead roots.

Shade trees that grow to be large shall have one relatively straight central leader (Figure 1). Heading the tree is acceptable provided the central leader is reestablished in the nursery.

Main branches (Figure 2) shall be well distributed along the central leader, not clustered together. They shall form a balanced crown appropriate for the cultivar or species.

The diameter of branches (Figure 3) that grow from the central leader, or trunk, shall be no larger than two-thirds (one-half is preferred) the diameter of the trunk measured just above the branch.

The largest branches shall be free of bark inclusions that extend into the branch union (Figure 4).

Small-diameter branches (Figure 5), particularly on trees less than 1-inch caliper, should be present along the lower trunk below the lowest main branch. These branches shall be no larger than 3/8 inch in diameter.

The trunk shall be free of wounds, sunburned areas, conks (fungal fruiting bodies), wood cracks, bleeding areas, signs of boring insects, cankers, or lesions. Properly made recent or closed pruning cuts are acceptable.

The trunk caliper (diameter) and taper (Figure 6) shall be sufficient so that the tree remains vertical without a stake.

The root collar (the uppermost roots) (Figure 7) shall be within the upper 2 inches of the soil media (substrate). The root collar and the inside portion of the root ball shall be free of defects, including circling, kinked, and stem-girdling roots. Roots at the surface should grow mostly straight to the side of the container. You may need to remove soil near the root collar to inspect for root defects.

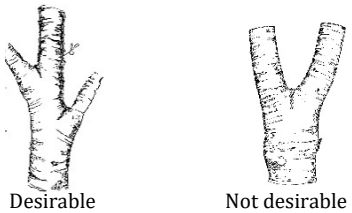
The tree shall be well rooted in the soil media. Roots shall be uniformly distributed throughout the container, meaning that roots should not be concentrated at the bottom of the root ball. Some roots should contact the container wall in the top half of the root ball (Figure 7). When the container is removed, the root ball shall remain intact. When the trunk is lifted, both the trunk and root system shall move as one. The imprint of the liner or smaller container shall not be visible (Figure 7).

The root ball shall be moist throughout at the time of inspection and delivery. The roots shall show no signs of excess soil moisture as indicated by poor root growth, root discoloration, distortion, death, or foul odor. The crown shall show no signs of moisture stress as indicated by wilted, shriveled, or dead leaves or branch dieback.

Figure 2.

Desirable Not desirable

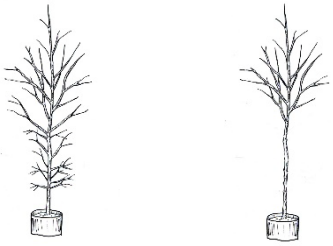
Figure 3.



Desirable Not desirable

Figure 4.

Figure 5.

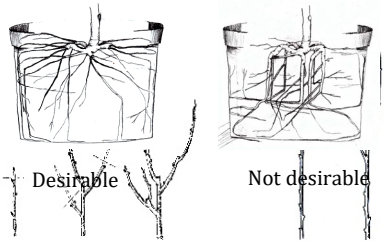


Desirable Not desirable

Figure 6.

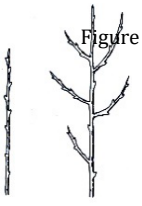
Desirable Not desirable

Figure 7.



Desirable Not desirable

Figure 1.



Tree Planting

Selecting quality trees: Planting quality trees begins by selecting the right tree for the right location and choosing vigorous, structurally sound trees from the nursery.

Digging the hole: A firm, flat-bottomed hole will prevent trees from sinking. Dig the hole only deep enough to position the root collar even with the landscape soil surface (Figure 8). Use a rototiller or shovel to loosen soil in an area three times the size of the root ball. This loose soil promotes rapid root growth and quick establishment.

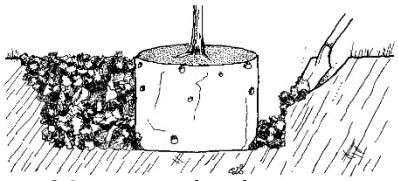


Figure 8. Loosening soil in a large area around the root ball allows for rapid root growth and quick establishment.

Installing the tree: Remove soil and roots from the top of the root ball to expose the root collar; cut away any roots that grow over the collar (Figure 9). Cut any roots that circle or mat along the sides and bottom of the root ball (Figure 10). The root collar shall be even with the landscape soil after planting (see Figure 9). Backfill with soil removed from the hole. Minimize air pockets by packing gently and applying water. Build a berm 4 inches tall around the root ball to help force water through the root ball. Enlarge the berm as the tree establishes.

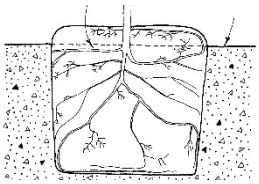


Figure 9. Remove soil and roots growing over the root collar (A) and place collar level with soil surface (B).

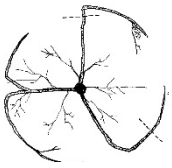


Figure 10. Cut roots at (A) to form new roots that grow away from the trunk. Do not cut roots at (B), since the root defects will regrow.

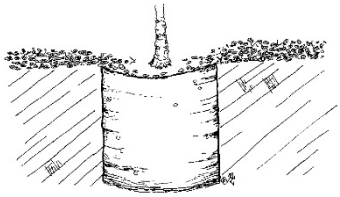


Figure 11. Mulch shall taper to a slightly thinner layer on top of the root-ball.

Mulching: A layer of organic mulch, such as leaf litter, shredded bark, or wood chips, helps protect tree roots from temperature extremes and conserves soil moisture. Mulch also helps prevent grass from competing with the tree for water and nutrients. The mulched area makes it easier to operate mowers and weed eaters without hitting the trunk and compacting soil. Apply mulch to a depth of 3 to 4 inches (slightly thinner on top of the root ball) (Figure 11).

Staking: The method of staking is dependent on a tree's ability to stand on its own and the location of the planting site. Staking is used to hold trees erect, allow the root ball to anchor, and protect the trunk from damage by equipment. Stakes should be removed when the tree can stand on its own and the root ball is anchored. Stakes should be positioned away from the tree and secured to the trunk at the point where the tree stands straight. Do not use wire or any strap that will girdle the tree or damage the bark. If a tree cannot stand straight on its own after staking, a splint stake tied directly to the trunk made of bamboo, spring steel, or a fiberglass rod may be used to straighten the upper trunk and/or leader. Avoid using square wood secondary stakes. Acceptable staking examples may be seen below (Figures 12, 13, and 14).

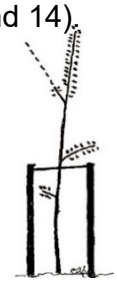


Figure 12. Double staked with splint

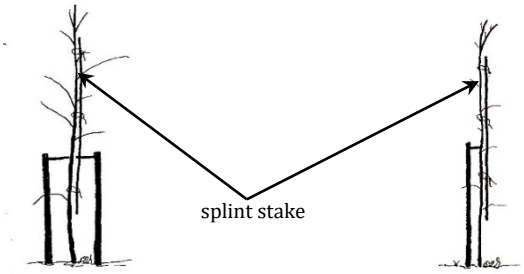


Figure 13. Double staked with splint

Figure 14. Single staked with splint

Tree Training at Planting and in the Early Years

Trees that grow to be large are more structurally sound and cost-effective to maintain when trained with a central dominant leader that extends 30 feet or more into the crown (Figure 15). Vigorous, upright branches and stems that compete with the central leader can become weakly attached (Figure 15).

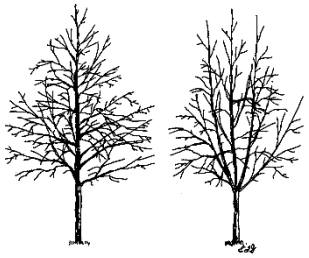


Figure 15. Good tree structure (left); poor structure (right).

Trees with branches spaced along the central leader, or trunk (Figure 15) are stronger than trees with branches clustered together (Figure 15). Prune trees at planting to one central leader by removing or shortening (shown) competing stems (Figure 16). All branches and stems shall be considerably shorter than the central leader after pruning is completed (Figure 16).

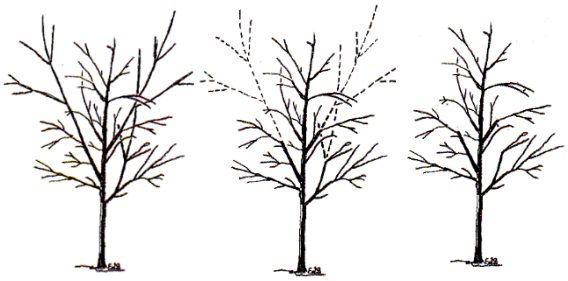


Figure 16. Shorten competing stems to improve structure.

Reduction cuts can be used on trees at planting to subordinate branches that are codominant (Figure 20). Some upright stems and branches can be removed entirely back to the trunk. Heading cuts may have to be used occasionally.

Remove or shorten branches that are larger than half the trunk diameter at planting and every few years thereafter. Shorten them by cutting back to a live lateral branch (Figure 17). This lateral branch shall be pointed away from the trunk and it should not be growing upright. The central leader shall be more visible in the crown center after pruning. Only large-diameter branches need to be pruned because they compete with the leader and could be weakly attached (Figure 17, L). Small branches (Figure 17, S) do not need pruning because they will not compete with the leader.

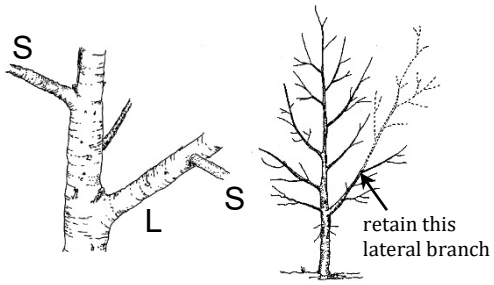


Figure 17. Only large branches need pruning (L). Small branches (S) do not need to be pruned.

The best way to shorten large or long stems and branches is to cut them back to a live lateral branch (Figure 19). This slows growth on the pruned parts and encourages growth in the dominant leader creating sound structure.

Remove larger branches by making three cuts. This prevents the bark from peeling or splitting off the trunk below the cut. Make the final cut back to the branch collar (enlarged area around union of branch where it joins the trunk).

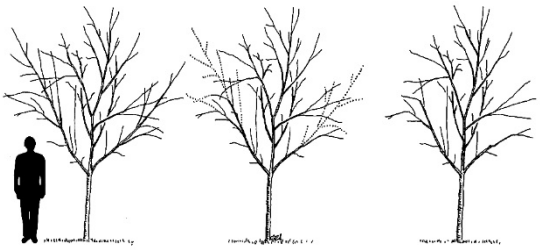


Figure 18. Shortening larger low branches concentrates growth in the leader and improves tree structure.

Structural Pruning Checklist

1. Develop and maintain a central leader.
2. Identify the lowest branch in what will become the permanent crown.
3. Prevent branches below the permanent crown from growing larger than half the trunk diameter.
4. Space main branches along the central leader.
5. Reduce vigorous upright stems back to lateral branches or remove entirely (Figure 20, next page).

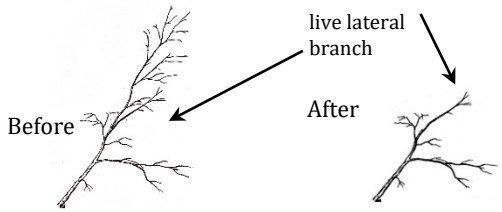


Figure 19. Reduce a stem back to a live lateral branch to slow its growth.

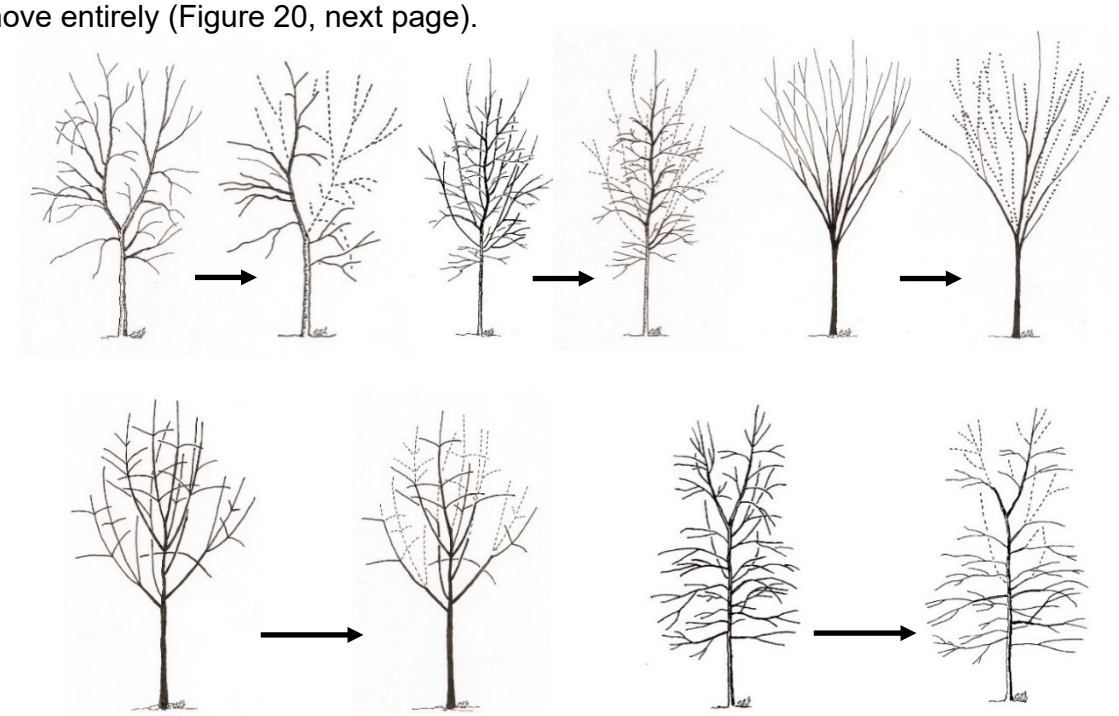


Figure 20. Before and after pruning at planting for

Irrigation

Consistent irrigation is critical for tree establishment.

- Apply about 3 gallons of water per inch of trunk diameter to the root ball 2 or 3 times per week for the first growing season.
- Increase volume and decrease frequency as the tree becomes established. Weekly irrigation during the second year and bimonthly irrigation during the third year should be sufficient for establishment.
- Once established, irrigation requirements depend on species, planting site, climate, and soil conditions.
- Irrigation devices should be regularly checked for breaks and leaks.
- Consider use of recycled water when available and where the species will tolerate it and the recycled water quality is adequate.

IMPORTANT NOTE: Tree species selected must be classified as very low, low, or moderate water use species in the WUCOLS IV or must be justified for the planting site(s) selected.

APPENDIX G – MANAGEMENT ACTIVITIES PRACTICES

Minimum Data for Urban Tree Inventories

If a Green Schoolyards grant project conducts campus tree inventories, the below attributes should be included:

- **Mapping coordinate.** X and Y coordinate locations (latitude and longitude). Each tree and planting site will be located using GIS and/or GPS equipment.
- **Location.** The tree's physical location in relation to public Right of Way and/or public space will be recorded. *(Optional and recommended: consider collecting distance and azimuth from buildings.)*
- **Species.** Trees will be identified by *genus* and *species*.
- **Diameter.** Tree trunk diameter will be recorded. This should be to the nearest 1-inch.
- **Stems.** The number of stems a tree has will be recorded.
- **Condition.** In general, the condition of each tree will be recorded in one of the following categories adapted from the rating system established by the International Society of Arboriculture:

Excellent	100%
Very Good	90%
Good	80%
Fair	60%
Poor	40%
Critical	20%
Dead	0%

- **Maintenance need.** The following maintenance categories (*or similar approved by CAL FIRE prior to collection*) will be collected:
  1. Priority 1 Removal. Trees designated for removal have defects that cannot be cost-effectively or practically treated. Most of the trees in this category will have a large percentage of dead crown and pose an elevated level of risk for failure. Any hazards that could be potential dangers to persons or property and seen as potential liabilities would be in this category. Large dead and dying trees that are high liability risks are included in this category. These trees are the first ones that should be removed.
  2. Priority 2 Removal. Trees that should be removed but do not pose a liability as great as the first priority will be identified here. This category would need attention as soon as "Priority One" trees are removed.
  3. Priority 3 Removal. Trees that should be removed, but that pose minimal liability to persons or property, will be identified in this category.

4. Priority 1 Prune. Trees that require priority one pruning are recommended for trimming to remove hazardous deadwood, hangers, or broken branches. These trees have broken or hanging limbs, hazardous deadwood, and dead, dying, or diseased limbs or leaders greater than four inches in diameter.
5. Priority 2 Prune. These trees have dead, dying, diseased, or weakened branches between two and four inches in diameter and are potential safety hazards.
6. Large Tree Routine Prune. These trees require routine horticultural pruning to correct structural problems or growth patterns, which would eventually obstruct traffic or interfere with utility wires or buildings. Trees in this category are large enough to require bucket truck access or manual climbing.
7. Small Tree Routine Prune. These trees require routine horticultural pruning to correct structural problems or growth patterns, which would eventually obstruct traffic or interfere with utility wires or buildings. These trees are small growing, mature trees that can be evaluated and pruned from the ground.
8. Training Prune. Young, large-growing trees that are still small must be pruned to correct or eliminate weak, interfering, or objectionable branches to minimize future maintenance requirements. These trees, up to 20 feet in height, can be worked with a pole-pruner by a person standing on the ground.
9. Stump Removal. This category indicates a stump that should be removed.
10. Plant Tree. During the inventory, vacant planting sites will be identified by street and address. The size of the site is designated as small, medium, or large (indicating the ultimate size that the tree will attain), depending on the growing space available and the presence of overhead wires.

- **Clearance Required.** Trees, which are causing or may cause visibility or clearance difficulties for pedestrians or vehicles, will be identified, as well as those trees blocking clear visibility of signs or traffic signals.
- **Hardscape Damage.** Damage to sidewalks and curbs by tree roots are noted. Notes on potential fixes for the problem are encouraged (redesign options etc.…)
- **Overhead Utilities.** The inventory indicates whether overhead conductors or other utilities are present at the tree site that could result in conflicts with the tree.
- **Grow space.** The area within the growing space is categorized as:

  T Tree Lawn

  W Well/Pit

  M Median

  P Raised Planter

  O Open/Unrestricted

  I Island

  U Unmaintained Area

- **Space Size.** The narrowest dimension of the Grow Space, in feet. (I.e., 3'x3' cut-out, 4' parkway strip, open parkland, etc.).
- **Notes.** Additional information regarding disease, insect, mechanical damage, etc. can be included in this field.

Urban Forest Management Plan Best Practices

If a Green Schoolyards grant project includes the development of a management plan, the below should be included:

- Management plans must be informed by the constituents of the school/school district that have been authentically engaged in the plan's creation.
- Management plans must be developed based on reliable, collected data, such as a tree inventory, urban forest mapping and analysis, urban forest economic analysis, etc.
- Management plans must be a long term (40-50 year), comprehensive document, not solely a maintenance plan.
- Management plans must address the entire school/school district in some form (regulations, incentives, best practices, etc.).
- There shall be a provision for periodic review of any urban forest management plan.
- A management plan must be referenced in an ordinance, a general plan element, or be officially adopted by the governing body in another binding, enforceable way as approved by CAL FIRE staff.
- Any management plan must set a tree canopy cover goal for the jurisdiction. The goal must, at minimum, maintain the current tree canopy cover level (No Net Loss policy).
- Management plans must address the following: tree maintenance (including best management practices), wildfire (if applicable), urban wood utilization, and roles of the jurisdiction's agencies. This may be done by referencing other policy documents.

CAL FIRE Recommends: Grantees should strongly consider using the following resources.

- Vibrant Cities Lab: "The US Forest Service, American Forests and the National Association of Regional Councils created Vibrant Cities Lab to help city managers, policymakers and advocates build thriving urban forest programs".
- UFMP Toolkit. Provides a "how-to" approach to develop an Urban Forest Management Plan (UFMP). The toolkit will lead you through a planning process and provide helpful references and additional tools.
- The American Public Works Association guide for Urban Forest Management Plans.
- iTree. A series of urban forest analysis tools are available for free on the iTree website.
- Arbor Day Foundation's Tree City USA. All cities engaging in Management Activities Grants should consider applying for Tree City USA status. It is a free municipal recognition program that has been in existence since 1976. A CAL FIRE Regional Urban Forester can assist you with this.

APPENDIX H - EXPLANATION OF TERMS

TERM	EXPLANATION
Agreement	A legally binding agreement between the State and another entity.
Amendment	A formal modification or a material change of the agreement, such as term, more than 10% of a primary budget category cost, or scope of work.
Application	The term "Application" means the individual application form identified as Attachment A and its required supporting attachments for grants pursuant to the enabling legislation and/or program.
Appropriation	A Legislative budget authorization from a specific fund to a specific agency or program to make expenditures or incur obligations for a specific purpose and time period.
Authorized Representative	The designated position identified by the resolution as the agent to sign all required grant documents including, but not limited to, Grant agreements, Application forms (Attachment A) and payment requests.
CEQA	The California Environmental Quality Act as stated in the Public Resources Code Section 21000 et seq.; Title 14 California Code of Regulations Section 15000 et seq. CEQA is a law establishing policies and procedures that require agencies to identify, disclose to decision makers and the public, and attempt to lessen significant impacts to environmental resources that may result from the agency's proposed Project. For more information refer to https://opr.ca.gov/ceqa/.
Child Services Agency	Governing body of educational/child care facilities responsible for making administrative, strategic, managerial, and budgetary decisions.
Co-benefit	Benefit, other than GHG emission reductions, that results from GGRF investments. Co-benefits may be environmental, social, or economic.
Consultant Services	Services which provide a recommended course of action or personal expertise, such as accounting, consulting environmental professionals, etc.
Contractor	An entity contracting with the grantee for services and generally receives a Form 1099 for tax purposes.
Disadvantaged Community	Areas that are disproportionately affected by multiple types of pollution and areas with vulnerable populations. The Secretary for Environmental Protection at CalEPA is responsible for identifying disadvantaged communities for all CCI investments. For additional information, please refer to: CalEPA's GHG Invest.
Eligible Childcare Facilities	Nonprofit child care facilities receiving government funding.

Employee	Individuals employed directly by the grantee and generally receives a W-2 for tax purposes.
Encumbrance	A commitment of funds guaranteeing a source of payment for a specific agreement.
Execution of an Agreement	The act of signing an agreement, which provides a legal basis for required performance by parties to the agreement.
GHG reductions or Net GHG benefit	The sum of the GHG emission reductions and sequestration, less any GHG emissions resulting from project implementation. GHG emission reductions and net benefits are determined in accordance with ARB's quantification methodologies.
Indirect Costs	Expenses of doing business that are of a general nature and are incurred to benefit at least two or more functions within an organization. These costs are not usually identified specifically with a grant, Grant agreement, Project, or activity, but are necessary for the general operation of the organization. Examples of Indirect Costs include salaries and benefits of employees not directly assigned to a Project; functions such as personnel, business services, information technology, janitorial, and salaries of supervisors and managers. Indirect costs may only be applied as a % of direct costs within the agreement, cannot be applied towards equipment costs, and cannot exceed 12%.
Local Educational Agency (LEA)	A public board of education or other public authority within a state that maintains administrative control of public elementary or secondary schools in a city, county, township, school district, or other political subdivision of a state such as school districts or county offices of education.
Low-income Community	Communities that are either at or below 80 percent of the statewide median income or at or below the threshold are designated as low-income by the California Department of Housing and Community Development's (HCD) 2016 State Income Limits. The Secretary for Environmental Protection at CalEPA is responsible for identifying low-income communities for the purpose of CCI investments. For additional information, please refer to: CalEPA's GHG Invest.
Minor Equipment	Equipment costing less than $5,000 per unit and typically having a lifespan longer than the term of the grant. Minor equipment includes such items as digital cameras used to document project pre and post conditions, global positioning systems (GPS), etc. Only Minor equipment will be eligible for application towards Indirect Costs calculations.
Miyawaki Method	A method of establishing groves of trees or pocket forests that uses densely planted trees and complementary plants. The method emphasizes native species, soil health, wildlife habitat, carbon sequestration and provision of ecosystem benefits. One important goal is to accelerate the natural succession process to obtain a climax forest.

Modification	An agreement modification is an informal agreement that moves dollars in the line item and task budgets not to exceed 10% of a primary budget line item, changes deliverable due dates, or makes a minor change in the work in accordance with the intent of the legislation. It does not require a formal amendment of the grant agreement.
Nonprofit Organization	Any California corporation organized under Sections 501(c) (3) of the Federal Internal Revenue Code. A letter of determination certifying nonprofit status will be required prior to project approval.
Operating Expenses (Direct Cost)	Any cost that can be specifically identified as generated by and in accordance with the provisions or activity requirements of the agreement.
Personnel Services	This budgeted amount includes salaries and benefits for wage earning personnel employed by the grantee/contractor (not a subcontractor) and working on the project.
Pocket Forest	Small groves of trees and associated vegetation covering an area between 4,356 to 43,560 square feet.
Project Performance Period	The time-period, as described in the Project Scope of Work, when costs may be incurred. Only Eligible Costs incurred during the Project Performance Period will be paid by the State.
Project	The term “Project” means the activity or work to be accomplished utilizing grant funds and match (if applicable).
Project Scope of Work	The term “Project Scope of Work” as used herein defines the individual scope of work or activity describing in detail the proposed tasks identified as described in enabling legislation and in the application.
Project Budget Detail	The term “Project Budget Detail” as used herein defines the proposed detailed budget plan identified in Appendix B.
Resolution	The purpose of a resolution by a Grantee’s governing body is to allow the entity to sign agreements and amendments for a specific project; i.e., it allows the designated entity to enter an agreement with the State of California, and it designates someone to sign on behalf of the Grantee’s governing board. A signed resolution must be submitted at the time Project Proposals are returned to CAL FIRE’s Grants Management Unit, Sacramento Headquarters. See Appendix B for resolution format.
School	California public K-12 educational facilities as well as eligible child care facilities.