

California Trees

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Shade Trees: The Bottom Line

By Jane Braxton Little

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Volume 17, No. 3

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Good News for Trees!



Empowering grassroots efforts and
building strategic partnerships that
preserve, protect, and enhance
California's urban and
community forests.

What's a shade tree worth? Can a single strategically placed tree actually reduce energy use and save homeowners hard-earned dollars?

Across California, urban forest groups are working with local utility companies to find out. Their quest transcends the worthy goal of planting trees for their aesthetic amenities. It also goes beyond the valuable role trees play in storing carbon and reducing greenhouse gases. At a time when global temperatures are rising and the cost of electricity is escalating, programs from Sacramento to Stockton are focused on the bottom line. Driving them is a determination to demonstrate what utility companies and ordinary citizens can do to help save the planet and salvage their budgets, all in their own back—or front—yards.

Some general estimates are already available. A large front yard tree saves \$29 in air-conditioning costs by shading the building and cooling the air. It also adds about \$25 annually to a property's sales price over a 40-year period, according to data developed by the U.S. Forest Service Center for Urban Forest Research in Davis, California.

How to bring those savings home to local utility companies and individual residents is the goal of a variety of shade tree projects throughout America. The most established program in California—perhaps in the nation—is in the state capital. *(continued on page 2)*



Legislation Promotes Shade Tree Programs

By Alice Ewen Walker

On Earth Day 2008, the urban forestry community celebrated the introduction of H.R. 5867, the Energy Conservation Through Trees Act, authored by US Representative Doris Matsui (D - Sacramento). The proposed federal program would encourage utility companies to partner with local nonprofit tree planting organizations to plant trees to reduce residential energy demand. The purpose of the legislation is to help homeowners lower their electric bills (and help utilities lower their peak load demand) by reducing residential energy demand caused by the need to run air conditioners and heaters at a high level. Shade trees not only help miti-

(continued on page 2)



California ReLeaf is a 501(c)(3) nonprofit organization working to empower grassroots efforts and build strategic partnerships that preserve, protect, and enhance California's urban and community forests.

CALIFORNIA ReLEAF
P.O. Box 72496
Davis, CA 95617
(530) 757-7333
(530) 757-7328 fax
info@californiareleaf.org

STAFF:
Martha Ozonoff
Executive Director

Carolyn Foss
Administrative Assistant

Joe Liszewski
Program Manager

Ashley Mastin
Network Coordinator

BOARD OF DIRECTORS:

Chuck Mills
President

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Secretary

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Shade Trees, continued from page 1

The Sacramento Municipal Utility District (SMUD) and the Sacramento Tree Foundation are working together to plant shade trees that increase local energy efficiency. Since launching their partnership in 1990, they have planted 450,000 trees.

SMUD designed the program with singular focus. "This is not a free tree program. This is not an urban forestry program. This shade tree planting program is designed to capture energy and capacity savings for SMUD," says Misha Sarkovich, a SMUD program manager.

It's working. After nearly 20 years, the program has allowed SMUD to reduce the electricity it generates—by an estimated 1.7 million kilowatt hours in 2008. Because the trees planted since 1990 continue to grow, SMUD's benefits increase "year after year after year," Sarkovich says. The shade tree program is one of the factors in its energy efficiency portfolio that contributed to the district's decision to postpone building a new power plant.

Once the average strategically placed tree matures, it saves its Sacramento homeowner 156 kilowatt hours a year, Sarkovich says. At

an average cost of 10 cents per kilowatt hour, each tree knocks \$15 a year off the utility bill.

"That's not a lot of money for an individual homeowner, but we plant a lot of trees in Sacramento. When you multiply something small with something large, you end up with a lot of energy and capacity savings," Sarkovich says.

Location, Location, Location

When a homeowner requests a tree, the Sacramento Tree Foundation schedules a site visit to the property. A "neighborhoods" forester assesses



potential locations and tree species before making a final decision with the homeowner, says Jacobe Caditz, director of the foundation's shade tree program. The forester also evaluates sidewalks, foundations, power lines, and other infrastructure issues that might affect the selection.

Legislation, continued from page 1

gate the urban heat island effect, but also help to shield homes from sun in the summer and cold winds in the winter.

The legislation requires the use of science-based tree-siting guidelines to ensure that trees are not planted in locations that will disrupt pre-existing infrastructure, block solar panels and wind turbines, or damage power lines. Consultation during the development of these guidelines would be provided by local Technical Advisory Committees (TACs) that are composed of local energy and arboricultural experts.

The bill also requires participating utilities to partner with nonprofit tree planting organizations or other municipal infrastructure groups to run the technical side of the program. These nonprofit groups are meant to serve as tree planting experts to complement utilities' financial interest in lowering peak energy demand and reducing consumption. They will provide technical and outreach assistance, work with tree recipients, and ensure that trees are planted in the right place to maximize energy conservation.

This very forward-looking legislation is supported by the Alliance for Community Trees, National Arbor Day Foundation, Pacific Gas and Electric Company, American Forests, Sacramento Municipal Utility District, International Society of Arboriculture, American Public Works Association, California ReLeaf, California Urban Forests Council, American Society of Landscape Architects, and many others.

For more information about this legislation and how you can support it, go to: http://actrees.org/site/stories/energy_conservation_through_trees_act.php.

Alice Ewen Walker is the executive director of the Alliance for Community Trees, a national network of over 160 nonprofit and community organizations dedicated to urban forest education and action.

Tree placement is anything but a random decision. To achieve maximum energy savings, foresters consider a site's cardinal orientation, its distance from the building to be shaded, and the tree's size and species.

SMUD has developed a total of 72 possible shading scenarios that range from planting a large tree on the west side up to 45 feet away from a building, a substantial energy saver, to planting a small tree on the south side immediately adjacent to the building, an insignificant energy saver. Of the 72 placement possibilities, only 27 are allowed in the shade tree program's strict tree siting guidelines for cost effectiveness, says Sarkovich.

"We're after energy and capacity savings," he says. "That's our purpose."

The results speak for themselves. The Tree Foundation plants an average of around 15,000 free shade trees a year to meet its contract with SMUD. The contract requires planting enough shade trees to attain \$1 million in annual energy and capacity savings over the lifetime of the tree, says Caditz.

He also measures the effects in more personal terms. "I can walk a block in any direction from home and find a SMUD shade tree. This program has made such an impact on my neighborhood," Caditz says.

Roseville Weighs In

The success of Sacramento's shade tree program has inspired other cities. In neighboring Roseville, a partnership between Roseville Electric and the Roseville Urban Forest Foundation (RUFF) is nearly as old as SMUD's collaboration with the Sacramento Tree Foundation. The city-owned electric utility, founded in 1911, began planning a shade tree program in 1993 to offset electricity costs for homeowners, businesses, and schools.

"Roseville Electric has always been a forward-looking utility. They've worked hard at getting conservation in place," says Lani Houck, RUFF's program manager.

The residential program begins with a homeowner's application to RUFF. Houck, the foundation's only full-time staff member, does a site visit to determine what to plant and where. Instead of providing a tree, Houck gives homeowners vouchers to buy one. They can also choose to buy their own tree and get a rebate on their electric bill, she says. Roseville's shade tree program for busi-

nesses is similar but business owners planting trees receive a cash rebate. RUFF buys trees for local schools to plant around campus buildings.

The shade tree program had so many participants in its first year that Roseville Electric exceeded the funding it set aside, says David Bradford, program manager. Then the city went into a building spurt, which resulted in unprecedented residential growth. Most of the new developments had little or no landscaping. The city's creative collaborators developed a program two years ago aimed specifically at builders, both residential and commercial. They offer builders a rebate on their electric bills when they install trees properly in approved locations, says Houck. She provides training so they know the where, what, and how of strategic planting to reduce energy.

"It's made a lot of difference. Developers want to do the right thing. If they do, the money is their reward," she says.

And everyone else in Roseville wins, too. Bradford estimates that properly placed shade trees have saved city homeowners up to 40 percent annually on cooling costs. "That's pretty substantial," he says. And because it's so substantial, Roseville continues to allocate \$100,000 annually to the shade tree program. "It's a valued program. People see it as a perk for choosing to live in Roseville. They know the city is invested in the community through shade trees," he says.

PG&E Tests the Waters

The most recent major participant in a California shade tree program is Pacific Gas and Electric Company (PG&E). One of the largest combined natural gas and electric utilities in the United States, the San Francisco-based company is offering a tree to 1,500 residential customers as part of an energy efficiency program started in 2006. The one-year pilot project will assess the merits of adding shade trees to reduce the demand for electricity in homes using air conditioning, said Katie Romans, a PG&E spokeswoman.

The \$320,000 program is testing opportunities for saving energy in San Jose, the Davis/Woodland area, and Stockton, all urban centers with high demands on air conditioning. Each community will receive 500 trees for residential planting. PG&E will use a different system for *(continued on page 4)*

BENEFITS OF THE URBAN FOREST

A large tree in the front yard can provide the following benefits each year:

Save \$29 in summertime air conditioning by shading the building and cooling the air.

Absorb 10 pounds of air pollutants, including 4 pounds of ozone and 3 pounds of particulates.

Intercept 760 gallons of rainfall in its crown, reducing runoff of polluted stormwater and flooding.

Clean 330 pounds of CO₂ from the atmosphere through direct sequestration in the tree's wood and reduced power plant emissions due to cooling energy savings.

Add 1 percent to the sales price of the property, or about 25% each year when annualized over a 40-year period.

Source:
Center for Urban Forest Research, Pacific Southwest Research Station, USDA Forest Service, Davis, CA.

Photo, opposite page:
Proper placement of shade trees depends on the location of pavement, utilities, and distance from the home.

Credit: Sacramento Tree Foundation

Shade Trees, continued from page 3

delivering trees to homeowners in each area.

In San Jose, the program closely resembles the Sacramento model. Our City Forest, a local urban forest group with 15 years of experience, will make site visits to anyone who applies to plant a shade tree, said Rhonda Berry, the organization's director. After identifying the ideal location for energy savings and providing information on tree care and planting, it will be up to the homeowner to plant, water, and care for the tree.

Davis, Woodland, and other Yolo County communities will test another approach to getting trees onto residential properties. Residents can attend workshops explaining how to find the best location for a shade tree and how to care for it once they plant it. This more limited interaction with homeowners has the advantage of requiring less labor by TREE Davis and the Woodland Tree Foundation, the local organizations that are PG&E's partners in the program.

The least labor-intensive model in the company's pilot program is in Stockton, which has no organized urban forest group. There, PG&E will mail rebate coupons to its residential customers, who can redeem them at a local nursery. The nursery will supply the first 500 customers with a shade tree as well as planting and care instructions.

At the end of the year-long pilot program, PG&E officials will evaluate its costs and benefits before deciding whether to make it permanent, Romans says. They will also compare the relative effectiveness of the different tree delivery systems and tree survival rates to help decide which, if any, they will employ in a future program. Using U.S. Forest Service data as a basis, company officials are projecting that each mature tree will save .074 kilowatts of electricity during the late afternoon, when energy costs are highest.

In addition to getting more trees in the ground, PG&E's shade tree program is getting them onto private properties often inaccessible to urban tree groups. Suddenly a vast untapped potential is available for planting, says Berry, San Jose's Our City Forest director. "We've been looking forward to a partnership like this for 15 years. We applaud PG&E for launching this program," she says.

Ruth Williams, TREE Davis executive director, is enthusiastic about her partnership

with PG&E in a project that will save money by saving energy, particularly during peak power demands. Trees are one way to use renewable resources to conserve energy, she says. "This is a step in the right direction. And we're lucky: We get more trees in the ground."

Measuring the Bottom Line

PG&E is venturing into the shade tree arena at a time when policy makers are wrestling with climate change and the role energy production plays in increasing greenhouse gas emissions. As public awareness of global warming grows, utility companies are increasingly focused on measuring the effectiveness of their efforts to curb carbon emissions. They not only need to reduce the greenhouse gases they emit, they also need to measure the effectiveness of their efforts. In fact, reporting their measurable impacts on the environment may soon be a mandatory requirement for utility companies.

To measure these impacts, SMUD has developed a tree benefit estimator. This web-based application calculates the amount of energy savings in kilowatt hours, the capacity savings in kilowatts, and the amount of carbon sequestered from the carbon dioxide stored in planted trees as they mature (<https://usage.smud.org/treebenefit>). The estimator also projects annual energy savings in dollars, using the average cost of electricity combined with cardinal orientation, proximity to the building, and tree species.

Sarkovich says the tree benefit estimator is designed as an easy-to-use tool, free and accessible to anyone: municipality, utility company, or homeowner. It can quantify the potential benefits of urban tree planting to help managers justify investment in shade trees. "A shade tree program doesn't have to cost a lot of money. It can be done on a smaller, less expensive scale," he says.

SMUD and other entrepreneurial utility companies are proving that urban trees have value beyond aesthetics and carbon sequestration. Well-placed trees can reduce the use of energy before any carbon dioxide is emitted. That cuts power generation for utility companies and saves homeowners money. And what a beautiful way to improve the bottom line! ■

Jane Braxton Little is a freelance journalist based in Plumas County, California.



San Jose Mayor Chuck Reed welcomes participants at Our City Forest's PG&E Shade and Save tree planting event in October.

Photo: Our City Forest



Roseville Urban Forest Foundation Board Member Michael Phillips and Program Manager Lani Houck dig holes for new street trees.

Photo: Roseville Urban Forest Foundation

Urban Forests and Climate Change: Project Reporting Protocol

By Greg McPherson, PhD

Urban forests have a role to play in reducing levels of carbon dioxide and other greenhouse gases (GHG) in the atmosphere. However, very few GHG tree projects have been undertaken because of uncertainty regarding their performance and permanence. The Urban Forest Project Reporting Protocol was developed to reduce this uncertainty by providing a standard set of guidelines for use throughout the United States.

What Does This Protocol Do?

The protocol provides detailed guidance to ensure that tree projects meet eligibility requirements, produce GHG reductions that are additional to a baseline, are sustained for at least 100 years, and do not detract from management of existing trees. The protocol also describes how to calculate and report carbon storage by project trees, as well as emissions associated with their maintenance. A separate verification protocol is used by independent verifiers to confirm that results are accurately reported.

The protocol was adopted by the California Climate Action Registry, a private nonprofit organization that serves as a voluntary registry for GHG offset projects in the U.S. Its protocols are widely regarded as meeting the highest quality standards, and their accuracy, transparency, and integrity have earned the Registry a reputation as a respected and internationally recognized leader in climate change issues. Urban forest projects that follow the new protocol will be reported to the Registry's Climate Action Reserve, which will register and serialize GHG reductions. Once these GHG reductions (offsets) are sold or retired, the Climate Action Reserve will track the transaction, adding confidence and credibility to the voluntary carbon market.

Why Is the Protocol Important?

Adoption of the urban forest protocol sets the stage for investment in large-scale tree planting and stewardship projects because projects that adhere to the protocol's guidance will generate real, reliable, additional and credible

GHG reductions. Registered carbon reductions are "quality offset credits" that pose less risk to investors than unregistered credits. The market for quality offset credits is growing as corporations, utilities, and individuals purchase credits to offset their emissions or become carbon neutral.

What Is the Return on Investment?

Although complying with the protocol reduces risk to investors, it can increase project costs because of additional expenses for reporting, verification, and long-term monitoring. Project developers can defray these costs by selling quality offset credits. Currently, offset credits sell for \$5-15 per metric ton (t), but the price is expected to increase to \$50-60 per t by 2020. Credits may be bought for \$100 per t or more to meet the most ambitious reduction targets, such as California's.

It is estimated that for every 1,000 tree sites planted under this protocol, on average about 40-80 t of net CO₂ storage could be registered annually, assuming trees are maintained and kept healthy. This amount could be increased substantially if the reduction in GHG emissions at power plants from cooling savings by tree shade could be included.

Because of difficulties with verification and double-counting, however, this energy conservation reduction can be reported but not registered.

To estimate the cost per ton of carbon stored for a hypothetical urban forestry project, assume that 1,000 tree sites are planted at \$75 each. On average, trees are removed and replaced once at each site over the 100-year period at \$175 unit cost. The average annual cost per tree site for maintenance (pruning, inspection, watering), monitoring, and verification is \$10. The total project cost for 100 years is \$1,250 per site or \$1,250,000. If we conservatively estimate that the average amount of net CO₂ stored annually and registered for the 1,000 sites is 50 t, the total reduction is 5,000 t over the 100-year lifetime. Given these assumptions, the project

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The California Air Resources Board adopted the Urban Forest Project Reporting Protocol at its September 25, 2008 meeting.

Kudos to the Center for Urban Forest Research and CalFire for developing and funding the Protocol.

Many thanks also to members of the California ReLeaf Network, the California Urban Forests Council, and our other partners who signed on to letters of support and spoke in favor of the Protocol. This was a wonderful group effort and California ReLeaf is proud to have played a vital role!

CALIFORNIA RELEAF NETWORK MEMBER PROFILE: Tree Partners Foundation

By Crystal Ross O'Hara

A small but dedicated group in Atwater called the Tree Partners Foundation is changing the landscape and changing lives.

Founded and headed by the enthusiastic Dr. Jim Williamson, the fledgling organization has already formed partnerships with the Merced Irrigation District, Pacific Gas & Electric Company, the National Arbor Day Foundation, Merced College, local school districts and city governments, the California Department of Forestry and Fire Protection, and the Federal Penitentiary at Atwater.

Williamson, who co-founded the Tree Partners Foundation with his wife Barbara in 2004, says the organization grew out of his decades-long practice of giving away trees. The Williamsons value trees for many reasons: the way they connect people to nature; their contribution to clean air and water; and their ability to reduce noise, lower utility bills, and provide shade.

"My wife and I were sitting around thinking, we're not going to live forever, so we'd better start a foundation if we want this to continue," Williamson says.

The Tree Partners Foundation is made up of just seven board members, but they are influential members of the community, including Dr. Williamson, Atwater's mayor, a retired college professor, the director of maintenance for the Atwater Elementary School District, and the city's urban forester.

Despite its size, the foundation has already established a variety of programs and has many more in the works. Williamson and others credit the group's success to a strong board of directors and the formation of so many important partnerships.

"We've been very fortunate," Williamson says. "If I need something it always seems to be there."

Core Goals

Like many nonprofit urban forestry organizations, the Tree Partners Foundation provides



educational opportunities for Atwater and area residents, offering seminars on planting, maintaining, and monitoring the urban forest. The foundation also participates regularly in tree plantings, conducts tree inventories, and provides tree maintenance.

The Tree Partners Foundation has made partnering with government agencies a primary goal. The group provides input on city tree policies, partners with local agencies on grant applications, and urges local governments to place an emphasis on caring for the urban forest.

One accomplishment the foundation is particularly proud of is its success in convincing the City of Atwater to create an urban forester position. "In these [difficult] economic times I was able to show them that it was to their economic advantage to make trees a priority," Williamson says.

Growing Trees, Gaining Skills

One of the most important partnerships the foundation has formed is with the Federal Penitentiary at Atwater. Several years ago Williamson, who as a child helped his grandfather with their family's small arboretum, connected with the former warden of the penitentiary, Paul Schultz, who as a child had helped his own grandfather in his work as the landscaper at Princeton University. The two men dreamed of creating a small nursery at the penitentiary that would provide vocational training to the inmates and trees to the community.

The Tree Partners Foundation now has a 26-acre nursery at the site, with room to expand. It is manned by volunteers from the penitentiary's minimum security facility who gain valuable training to prepare them for life outside the prison's walls.



Member Snapshot

Tree Partners Foundation

Year founded: 2004

Joined Network: 2004

Board Members: 7

Projects include:

Tree planting, education, nursery operation at federal penitentiary in Atwater.

Contact:

Jim Williamson,
Founder & Board President
1081 Winton Way
Atwater, CA 95301
(209) 357-0600

For Williamson, who together with his wife is a counselor in private practice, providing an opportunity for the inmates to learn nursery skills is particularly rewarding. “It’s just a wonderful partnership,” he says of the relationship formed with the penitentiary.

Bigger plans for the nursery are underway. The foundation is working with Merced College to offer satellite classes to the inmates that will provide a certifiable vocational program. The inmates will study topics such as plant identification, tree biology, tree and soil relations, water management, tree nutrition and fertilization, tree selection, pruning, and diagnosis of plant disorders.

Nursery Yields Local Partners

The nursery supplies trees to a variety of agencies and organizations, including local governments, schools, and churches. “We wouldn’t be able to put in the street trees we have and maintain the street trees we have if it wasn’t for the Tree Partners Foundation,” says Atwater Mayor and Tree Partners Foundation Board Member Joan Faul.

The nursery also provides trees suitable for planting under power lines to PG&E for use as replacement trees. And the nursery grows trees for the Merced Irrigation District’s annual customer tree give-away. This year the foundation expects to supply 1,000 15-gallon trees for the irrigation district’s give-away program. “It’s a big cost savings to them, plus it provides funding for our organization,” says Atwater’s Urban Forester and Tree Partners Foundation Board Member Bryan Tassey, whose many jobs include overseeing the nursery.

Tassey, who also teaches at Merced College, says he’s amazed at how much the nursery and the program have evolved in such a short time. “A year ago it was bare ground,” he says. “We’ve come quite a ways.”

Seed Money

Much of the Tree Partners’ accomplishments can be attributed to successful grant writing. For example, the foundation received a \$50,000 USDA Forest Service grant. The generosity of local organizations—including a \$17,500 donation from the Atwater Rotary Club and in-kind donations from local businesses—have also bolstered the Tree Partners’ success.

Williamson says the organization is not interested in competing with local nurseries,

but rather in earning enough money to continue its work in the community.

“My goal in my lifetime is to make the nursery sustainable and I believe we will,” he says.

One goal the Tree Partners Foundation has been working toward for several years is a partnership with the National Arbor Day Foundation (NADF) that would allow the Tree Partners Foundation to act as the provider and shipper of all of NADF’s trees sent to its California members.

Organizations and businesses shipping trees from outside California face strict agricultural requirements. The result is that when California residents join NADF, they receive bare-root trees (6- to 12-inch trees with no soil around the roots) shipped from Nebraska or Tennessee.

The Tree Partners Foundation is in negotiations to become the supplier for NADF’s California members. The Tree Partners would provide tree plugs—live plants with soil at the root ball—which the foundation believes would mean healthier, fresher trees for NADF’s members.

At first, Tassey says, the Tree Partners would need to contract out to local nurseries for many of the trees. But he says he sees no reason why the foundation’s nursery couldn’t one day supply all of the trees to NADF’s California members.

According to Tassey, the National Arbor Day Foundation’s spring and fall shipments currently provide about 30,000 trees annually to California. “The potential in California is huge, which the Arbor Day Foundation is very excited about,” he says. “That’s scratching the surface. We’re anticipating possibly a million trees in five years.”

That, says Tassey and Williamson, would be one more step toward financial stability for the organization and a healthier urban forest for Atwater and beyond. “We’re not rich, but we’re well on our way to becoming sustainable,” says Williamson. ■

Crystal Ross O’Hara is a freelance journalist based in Davis, California.



A sign acknowledging the individuals, agencies, and organizations that made it happen marks the spot of the Tree Partners Foundation nursery at the Federal Penitentiary at Atwater.



Opposite page and above: Tree planting, maintenance, and tree education round out the foundation’s community services and involve both youth and adults.



*The California ReLeaf Network is growing!
Please join us in welcoming six new member groups.*

*Along with fruit trees,
Common Vision brings move-
ment, music, and storytelling
to urban communities
throughout California.*



Common Vision's Fruit Tree Tour has worked with over 40,000 students at more than 100 schools and community centers to plant 3,000 fruit trees in urban areas of California since 2004. Traveling in a veggie oil-powered caravan, 25 earth educators from Common Vision teach students about environmental stewardship, cooperation, and the importance of trees in the urban ecosystem through a day-long program that includes green theatre, drumming, dancing, storytelling, and earth-conscious hip-hop.
www.CommonVision.org

*The Koreatown Youth and
Community Center
spreads its environmental
message to youth and
families in the area's
immigrant communities.*



Friends of Trees Nevada County was founded in 2007 when several community members moved forward with a vision to contribute to the knowledge and appreciation of trees and their ecology in Nevada County.

The group's first project was to create the Nevada City Tree Tour, a guidebook to accompany a walking tour of Nevada City's most prominent trees.

The Koreatown Youth and Community Center has been serving the Koreatown Community in Los Angeles since 1975.

KYCC's programs and services are specifically directed towards recently immigrated, economically disadvantaged youth and their families who experience coping and adjustment difficulties due to language and cultural barriers. Through its environmental program, KYCC's tree planting crews plant street trees throughout LA to help buffer the interface between automobile and pedestrian traffic, especially in school and community areas. Since joining Mayor Antonio Villaraigosa's Million Trees LA Program in January 2007, KYCC has planted over 3,000 street trees and has distributed over 5,600 free shade trees for property owners to plant on their property.
www.kyccla.org

LA Conservation Corps provides classes and service project opportunities to young people so they can learn new skills while contributing to the quality of life in the greater LA area. LA Conservation Corps is proud to have served more than 20,000 young people since 1986. Corps members have planted over 50,000 trees in public spaces throughout the LA region.
www.lacorps.org

The Riverside-Corona Resource Conservation District (RCRCD) is a small government agency that helps conserve the natural resources (soil, water, plants, and wildlife) of parts of western Riverside and San Bernardino Counties in Southern California.



Network Members

Formed in 1991, the California ReLeaf Network is a statewide alliance of community-based organizations that share the common goals of planting and protecting trees, fostering an ethic of environmental stewardship, and promoting volunteer involvement.

NORTHERN CALIFORNIA

Atherton Tree Committee
 California Association of Local Conservation Corps
 California Community Forests Foundation
 California Oak Foundation
 California Urban Forests Council
 Canopy
 CREEC
 CityTrees
 Common Vision
 Fair Oaks Beautification Association
 Friends of Carmel Forest
 Friends of El Cerrito Trees
 Friends of Rodeo, Refugio, and Carquinez Watersheds
 Friends of the Urban Forest
 Friends of Trees Nevada County
 Greater Modesto Tree Foundation
 Keep Eureka Beautiful
 Keep Oakland Beautiful
 Magic
 Marina Tree Committee
 Marin ReLeaf
 Mendocino County ReLeaf
 Merced River Watershed Ecological Restoration Club
 Mountain View Trees
 National AIDS Memorial Grove
 North Hills Landscape Committee
 Oak Habitat Restoration Project
 Our City Forest
 Patricks Point Garden Club
 Petaluma Tree Planters
 Placer Tree Partners
 Richmond ReLeaf
 Roseville Urban Forest Foundation

Sacramento Tree Foundation
 San Mateo Arboretum Society
 San Mateo Park Association
 South San Francisco Beautification Committee
 Stewards of the Coast and Redwoods Streaminders
 TREE Davis
 Tree Partners Foundation
 Urban ReLeaf
 Vacaville Tree Foundation
 Vallemar Conservators
 West Oakland Commerce Association
 Woodland Tree Foundation

CENTRAL CALIFORNIA

Atascadero Native Tree Association
 Carpinteria Beautiful
 CSET
 Goleta Valley Beautiful
 Greenspace: The Cambria Land Trust
 Ojai Valley Land Conservancy
 Santa Barbara Beautiful
 Santa Barbara County ReLeaf
 Santa Margarita Community Forestry
 Tree Foundation of Kern
 Tree Fresno
 Trees for Cayucos
 Tree Guild of Arroyo Grande
 Tree Lindsay
 Tule River Parkway Association
 Urban Tree Foundation
 Visalia Beautification Committee
 WildPlaces

SOUTHERN CALIFORNIA

Arroyo Seco Foundation
 City Beautiful of San Diego
 Community ReLeaf

Coronado Street Tree Committee
 Fallbrook Land Conservancy
 Highland Environmental Education Coalition
 Hollywood/Los Angeles Beautification Team
 Huntington Beach Tree Society
 Ivey Ranch Park Association
 Keep Downey Beautiful
 Keep Riverside Clean & Beautiful
 Koreatown Youth & Community Center
 Los Angeles Community Forest Advisory Committee
 Los Angeles Conservation Corps
 Mountains Restoration Trust
 North East Trees
 Orange County Conservation Corps
 Orange for Trees
 Pasadena Beautiful Foundation
 Professional Tree Care Association of San Diego
 ReLeaf Costa Mesa
 Riverside-Corona Resource Conservation District
 San Bernardino Volunteer Yard Beautification Project
 San Diego Community Forest Advisory Board
 Seal Beach Tree Committee
 ShadeTree Partnership
 Street Tree Seminar, Inc.
 Tree Musketeers
 TreePeople
 Trees for Seal Beach
 Urban Corps of San Diego
 Victoria Avenue Forever
 West Hollywood Tree Preservation Society

If you would like to reach any of the groups listed, or if you are with a group that would like information on membership in the California ReLeaf Network, visit us online at www.californiareleaf.org, or contact Network Coordinator Ashley Mastin, (530) 757-7330, amastin@californiareleaf.org.

RCRCD provides technical advice to land users, educational programs for the community, and conducts on-the-land conservation projects. www.rcrcd.com

Tree Lindsay has made a noticeable difference in the community by cultivating strong relationships with the city administration, school district, and other community groups. Since 1999, Tree Lindsay has planted close to 700 trees. This number includes plantings at every school and park in Lindsay.

LA Conservation Corps members have planted more than 50,000 trees in the Los Angeles area since 1986.



RESOURCES

For more information on urban trees and climate change, visit: <http://www.fs.fed.us/psw/programs/cufr/>

You can download a copy of the protocol at: <http://www.climateregistry.org/tools/protocols/project-protocols/urban-forest.html>

(Please note: the hyphenated words in the above url need to remain hyphenated when you type in the url.)

Urban Forest Protocol, *continued from page 5*

cost is \$250 per t of carbon offset credit (\$1,250,000/5,000 t).

This example suggests that urban forestry projects will not be the most cost-effective option for climate protection based solely on net carbon storage. However, city trees provide other services, or co-benefits, that make them attractive investments. Utilities may reimburse projects for the GHG emission reductions that trees produce through energy conservation. Stormwater management agencies and air quality districts may purchase runoff reduction and pollutant uptake services. Urban trees produce a host of other local benefits that people easily understand and experience first-hand. These “charismatic” qualities of urban forestry offset credits will make tree projects attractive for some investors, even though their cost per ton may be relatively high.

What the Protocol Means for You

Adoption of the protocol means that the services of professional arborists and urban foresters will be needed for planning and implementing tree projects. Management practices that increase tree growth and performance cost effectively over the long term will be highly valued. Also, employment opportunities will grow for independent verifiers of urban forest projects.

The Urban Forest Protocol is especially valuable to local governments interested in sustainable activities for their communities. Cities can reap multiple benefits from tree projects, and collect on financial rewards through selling carbon offset credits. For the first time, municipal foresters will be able to sell some of the services their trees provide to defray the costs of management.

Utilities will be under considerable pressure to reduce their emissions and are likely to ramp up their investment in carbon offset credits and in energy conservation efforts. Some will institute their own tree projects, providing new leadership opportunities for utility arborists. Other utilities will purchase carbon offset credits from local tree projects led by different project developers.

Colleges and universities that are integrating sustainability as a core value in campus operations will start tree planting and stewardship projects. Grounds managers, students, and faculty can share learning opportu-

nities as they select and locate appropriate species, properly plant trees, and implement exemplary maintenance and monitoring programs.

Nonprofit tree groups can partner with cities and utilities to create cost-effective projects that foster community goals, such as increasing tree canopy in areas with the fewest trees.

Considering a Tree Project?

Thinking about starting a GHG tree planting and stewardship project in your community? Here are some questions and answers.

AM I AN ELIGIBLE PROJECT DEVELOPER? At this time only cities, counties, special districts, utilities, and educational campuses are eligible project developers. Nonprofits, corporations, and others can participate as project partners.

CAN I MEET THE BASELINE BY MAINTAINING A STABLE POPULATION OF EXISTING TREES? On average, cities and campuses must plant a new tree for every tree they remove. Once this baseline is attained, net carbon stored by project trees can be reported as additional to the baseline.

WHERE WILL MY TREE SITES BE LOCATED? Tree sites must be spaced at least 5 m (16 ft) apart. Careful site selection will improve cost-effectiveness. Projects are not restricted to California, and can be implemented anywhere in the U.S.

HOW WILL I QUANTIFY CARBON STORAGE? The CUFR Carbon Tree Calculator (CTCC) is a spreadsheet tool that can be used to estimate tree carbon based on field measurements and growth models.

WHAT LEVEL OF TREE MONITORING IS REQUIRED? A full inventory of project tree sites is required every 10 years, using either field surveys or remote sensing.

HOW OFTEN WILL I REPORT PROJECT ACTIVITY? Before registering reductions from a project you prepare a Project Submittal Form to list your project. Then, annually, you submit reports through the Registry’s online registration software and have the project verified.

Dr. Greg McPherson is director of the USDA Forest Service’s Center for Urban Forest Research in Davis, California.

Legislative Update, *continued from back page*

landscape and urban forestry projects; acquisition, enhancement or restoration of resource lands; and roadside recreation projects. Working in partnership with our friends at the California Council of Land Trusts (CCLT), California ReLeaf Network members played a key role in preserving this vital funding source.

Thank you to Governor Schwarzenegger for his strong support of urban forestry in the signed State Budget.

Urban Forestry Victories in 2008

The following bills will become state law beginning January 1, 2009:

AB 2045 (DE LE TORRE) In possibly our proudest legislative accomplishment this year, the revision of the 1978 Urban Forestry Act was signed by the Governor on September 27. California ReLeaf was the official bill sponsor and we worked with a myriad of partners to garner support, including reviewing the bill language, writing letters of support, testifying in front of key legislative committees, and at the 11th hour, when the Governor threatened a veto of all “non-essential bills”, rallying the troops to help change his mind. The Act helps guide CalFire’s urban forestry program and this bill adds new language to better reflect the role that urban forests play in improved air and water quality, energy and water conservation, climate change mitigation, and recreational and other community benefits. We appreciate all of your hard work in helping to make this a reality!

AB 2537 (FURUTANI) This bill is also a major priority and victory for urban forest advocates. As many of you will remember, the provision to exempt volunteers from being paid prevailing wage on state-funded public works projects is due to expire in January 2009. Without the exemption, a huge number of urban forestry tree planting and care projects would be impossible to complete. This bill extends the exemption for three years, buying the conservation community some precious time to make the exemption permanent. Despite the simple nature of the extension and the obvious need for action, this bill ran into problems in August, and appeared all but dead four days before the Legislature adjourned. Supported by several newspaper editorials scolding the Legislature for holding

the bill up, California ReLeaf joined a coalition of environmental organizations spearheaded by CCLT in a grassroots effort in the last days of the session to move the bill to the Senate and Assembly Floors, where it passed with strong bipartisan support.

AB 2494 (CABALLERO) This bill creates the Housing Related Parks Program, and will be the vehicle used to distribute the \$200 million in Proposition 1c for Housing Urban-Suburban-and-Rural Parks, after allocation by the Legislature. Under the bill, California’s cities and counties are incentivized to improve the quality of life for critically underserved communities by receiving funding for park and recreation facilities (which includes community gardens and landscaping) in exchange for their demonstrated support of affordable housing. Led by our colleagues at CCLT, ReLeaf joined in an effort to successfully secure an 11th hour amendment to the bill that names nonprofits as eligible partners with local governments for receiving these funds.

SB 1399 (SIMITIAN) In another victory for California’s urban trees, SB 1399 protects existing trees from being removed if they block, or partially block, solar panels. Brought on by a lawsuit filed by homeowners who were forced to remove their mature redwoods that were shading a portion of their neighbor’s solar panels, this bill protects homeowners from having their existing trees removed in favor of the solar panels. In a strange case of dueling environmental priorities, more reasonable heads prevailed—score one for the trees!

SB 732 (STEINBERG) This bill establishes the Strategic Growth Council within state government, which will be charged with distributing \$150 million from Proposition 84 for planning grants and urban greening, after allocation by the Legislature. The Council is comprised of numerous state secretaries, including the Resources Agency and Cal EPA. While planning grants are reserved as incentives for local governments, nonprofits are eligible for urban greening funds, which will support a variety of projects including urban forestry, local parks, community green spaces, and urban streams.

Chuck Mills is associate director of the California Council of Land Trusts and the president of California ReLeaf’s Board of Directors; Martha Ozonoff is executive director of California ReLeaf.

Legislative Action a Priority In 2008

Last year, California ReLeaf asked Network members and other urban forestry interests to identify priority areas within urban forestry where you believe California ReLeaf is most needed. Of the many choices offered within this survey, increased involvement in public policy scored near the very top.

This year, the staff and board of California ReLeaf took those requests to heart, and we sponsored our first bill, which fittingly brings the Urban Forestry Act of 1978 into the 21st Century (see AB 2045, *this page*). We also actively supported other key urban forestry legislation, worked with budget committee staff and members to secure critical conservation dollars for urban forestry, and worked with the Administration in developing essential urban forestry protocols.

Thank you to California ReLeaf Network members and our partners in the conservation community for your critical role in this year’s successful legislative efforts.

For more information on these and other legislative issues, please contact Martha Ozonoff at California ReLeaf, mazonoff@californiareleaf.org, (530) 757-7333.



About

California Trees

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Send comments, submissions, and subscription requests to:

California ReLeaf
Attn: Editor
P.O. Box 72496
Davis, CA 95617
caltrees@californiareleaf.org

Edits & Layout: Stephanie Funk



Despite ongoing state budget turmoil, and a continuing economic crisis, 2008 marks the year that urban forestry became a viable and visible topic at the State Capitol. This final synopsis of the year's legislative session not only highlights the tremendous urban forestry successes of 2008, but also highlights the increased role California ReLeaf and our Network members played in achieving those successes. Thanks to all of you for your continued support and efforts to realize these goals.

Urban Forestry Survives Budget Storm

Governor Arnold Schwarzenegger signed the 2008-2009 State Budget package passed by

the Legislature in late September, thus ending an 85-day delay that culminated with unprecedented controversy over the final deal reached between the Administration, State Senate and State Assembly. Some highlights:

The California Department of Forestry and Fire Protection's (CalFire) urban forestry program received funding for \$7.2 million from Proposition 40 and Proposition 84 for competitive grants. The grants provide funding for the establishment or revision of an urban forestry management plan, urban forestry education projects, inventory of urban forestry resources, tree planting projects, and other innovative urban forestry programs.

The Environmental Enhancement and Mitigation Program (EEMP) was fully funded at \$10 million. The EEMP is administered jointly by Caltrans and the Resources Agency and provides funding for projects that mitigate the environmental impacts of modified or newly constructed transportation projects. The following types of activity are eligible for funding: highway

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California ReLeaf
P.O. Box 72496
Davis, CA 95617

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