

RESOLUTION NO. 2005-841

Adopted by the Sacramento City Council

November 22, 2005

ADOPTING THE GREENPRINT INITIATIVE

BACKGROUND

- A. The Greenprint is a collaborative urban forest initiative work plan for each of the 28 local governments (22 cities and 6 counties) in our region. The work plan includes adoption of tree canopy goals, policies and ordinances; best management practices; and community involvement strategies.
- B. The Greenprint is a framework to improve the way we plan, design, and manage our trees and urban forest. This framework provides guidelines and goals to help achieve the Greenprint mission of doubling the current tree canopy over the next several decades.
- C. The Greenprint represents the vision of the Sacramento Tree Foundation board and staff, members of the scientific community, urban foresters and arborists, civic and elected leaders, and citizens from throughout the region.
- D. The City of Sacramento, Department of Parks and Recreation, Urban Forest Services Division is already implementing many of the Greenprint recommendations per the Urban Forest Best Management Practices Study.

BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:

Section 1. The City Council adopts the Greenprint Initiative sponsored by the Sacramento Tree Foundation.

Table of Contents:

Exhibit A: Greenprint Initiative – 16 pages

Ayes: Councilmembers Cohn, Fong, Hammond, Pannell, Sheedy, Waters and Mayor Fargo.

Noes: None

Abstain: Councilmember Tretheway, recused

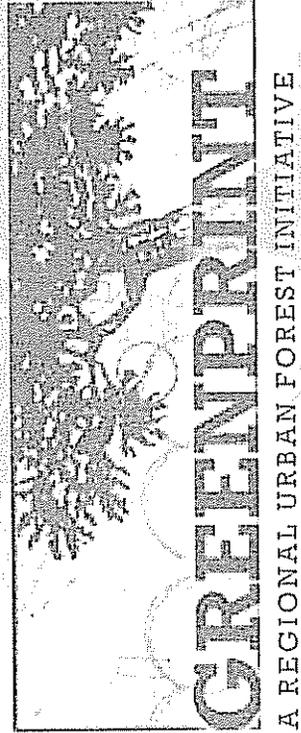
Absent: Councilmember McCarty.

Heather Fargo
Mayor Heather Fargo

Attest:

Shirley Concolino

Shirley Concolino, City Clerk



“An urban forestry program really has no end... It will require the continued commitment of citizens, local tree groups and the elected officials of this generation and those of the future.”

USDA FOREST SERVICE

SACRAMENTO TREE FOUNDATION

June 2005

BACKGROUND

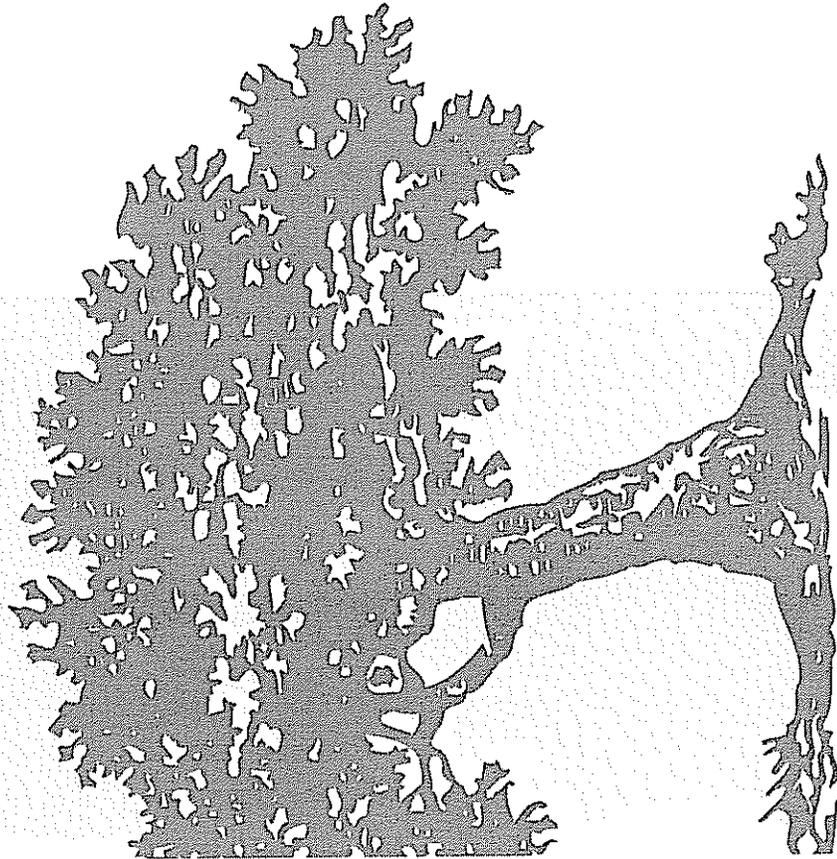
The *State of the Trees Report*, published by the Sacramento Tree Foundation in 2000, laid out a bold vision: to capitalize on the remarkable benefits of trees to create the best urban forest for the Sacramento region.

As a result, in 2001 elected officials representing twenty municipalities in our six-county region took an exciting leap towards regional collaboration by signing an Urban Forest Compact. The Compact proposed a shared vision and identified goals to optimize the benefits of our region's urban forest.

Over the next three years, an educational campaign produced a video and brochure, both titled *What's the Value of a Tree*. In specific detail they describe the benefits of trees and their financial value to our region. Other educational materials described the significant economic and health benefits that trees provide, and detailed the supporting studies conducted by leading scientists.

Beginning in 2005, residents and stakeholders were invited to participate in a public involvement campaign to contribute their thoughts and ideas in reviewing the first draft of the Greenprint. Over 35 presentations were made to elected bodies, civic groups, professional organizations, service clubs and general community meetings. Hundreds of citizen participants from Colfax to Winters, Live Oak to Galt, and all compass points between helped craft the best approaches to greening our communities.

The Greenprint represents the thinking and vision of the Tree Foundation board and staff, members of the scientific community, urban foresters and arborists, civic and elected leaders and concerned citizens from throughout the region.



Sacramento Regional **GREENPRINT**

GUIDING PRINCIPLES FOR CITIES AND COUNTIES

Our region is remarkably well suited to capture the benefits of trees.

Our hot summers and cool winters enable us to maximize the benefits of shade trees in energy savings, air quality improvement, stormwater runoff retention and community enhancement.

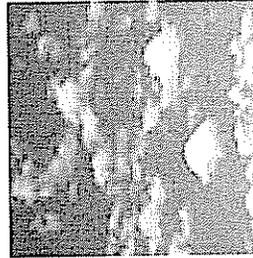
- We recognize the importance of tree canopies and their contributions to clean air and water, stormwater runoff reduction, energy conservation, improved public health, and increased property values.
- We support the protection of native trees, woodlands and riparian areas as key features to sustain our ecosystems and promote our natural heritage.
- We support the importance of citizen awareness and community involvement as major contributors to healthier urban forests, and in building neighborhood unity, community pride and civic trust.
- We support the value of public-private partnerships with business and nonprofit organizations in order to mobilize resources, widen funding sources, and increase the understanding of the importance of trees.
- We support the development of urban forest best management practices, policies and ordinances, and the adoption of urban forest master plans for each of our communities.
- We support coordinated tree planting plans in order to double the tree canopy in our region.
- We support the importance of nurseries and other green industries in providing the highest quality tree stock and state-of-the-art tree and urban forest services.
- We support a regional Greenprint steering committee of elected officials.
- We support a Greenprint Clearinghouse to provide high-quality technical information, education, and funding resources to communities so they can expand, protect, and steward their community trees and urban forest.

Why TREES?

CANOPY MAKES A HEALTHY COMMUNITY

The Greenprint invites our region's cities and counties to develop livable and sustainable communities by building the best urban forests. Scientific investigations by a variety of nationally recognized research institutions have quantified a long list of tree-related benefits including improved air quality, energy conservation, attraction and retention of business, extended roadway life, water quality and stormwater mitigation, erosion prevention, dust removal, skin cancer prevention, summer air temperature relief and more.

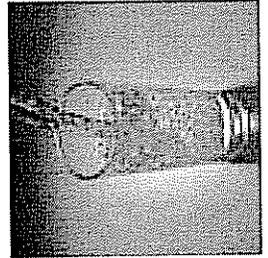
AIR



10 million pounds of air pollutants

\$25 million in annual air pollution clean-up

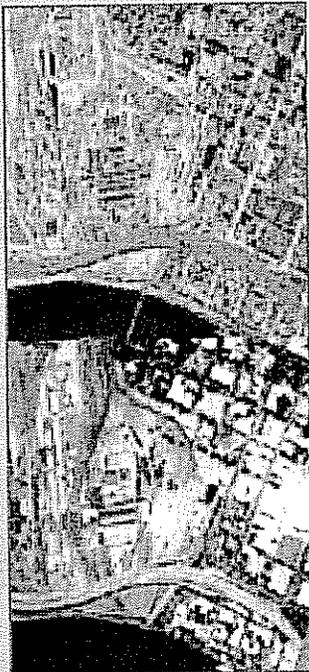
WATER



1.75 billion gallons of rainwater

\$17.5 million in annual stormwater runoff costs

URBAN HEAT ISLAND IMAGE



In 1998, the National Aeronautics and Space Administration (NASA) took flyover thermal image shots of Sacramento to analyze the urban heat island effect. The urban heat island effect is caused by condensed areas of hard surfaces that radiate heat from the sun, which results in higher temperatures. For example, the red areas in the image above are 118° Fahrenheit, while green areas are 82° Fahrenheit. One of the most effective ways to mitigate urban heat islands is to increase shade with tree canopy.

SHADE COVER ADDS VALUE TO OUR REGION

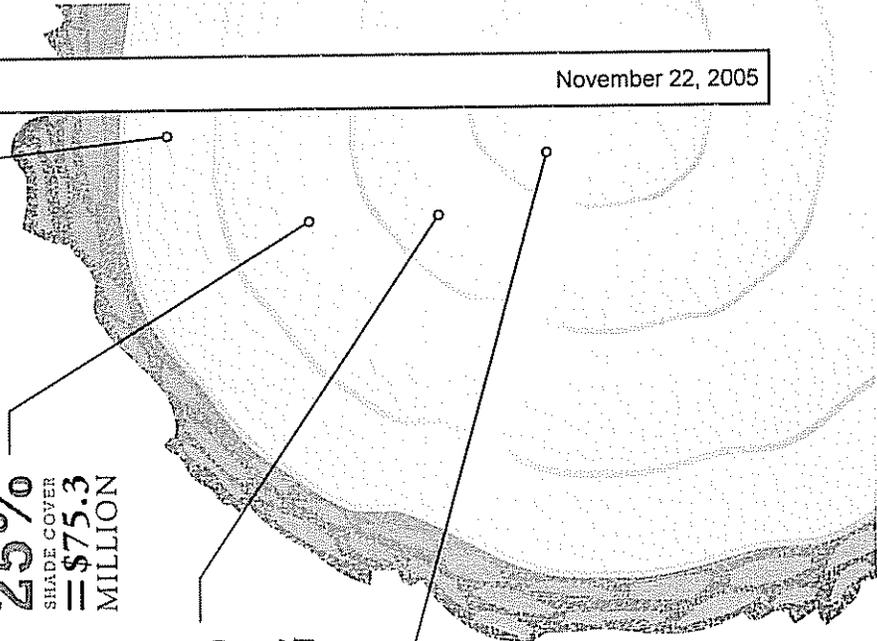
Building an urban forest agenda begins by recognizing the pivotal role of canopy cover in the development of our communities. The Greenprint sets an average 35% shade canopy goal for our region based on the best available science.

35%
SHADE COVER
=**\$105.5**
MILLION

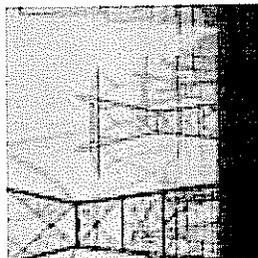
25%
SHADE COVER
=**\$75.3**
MILLION

15%
SHADE COVER
=**\$45.2**
MILLION

10%
SHADE COVER
=**\$30.1**
MILLION



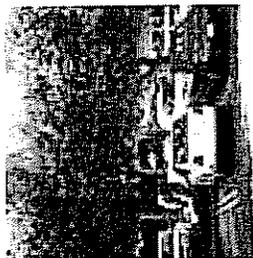
ENERGY



30% annual savings on summer cooling costs

\$50 million in annual energy savings

BUSINESS



Increase in customers and frequency of business

11% increase in retail sales prices

REAL ESTATE



Well-shaded and landscaped yards and neighborhoods

1% increase in home sale value

The GREENPRINT

PURPOSE

To guide cities and counties of the Sacramento Area Council of Governments region in developing urban forest initiatives.

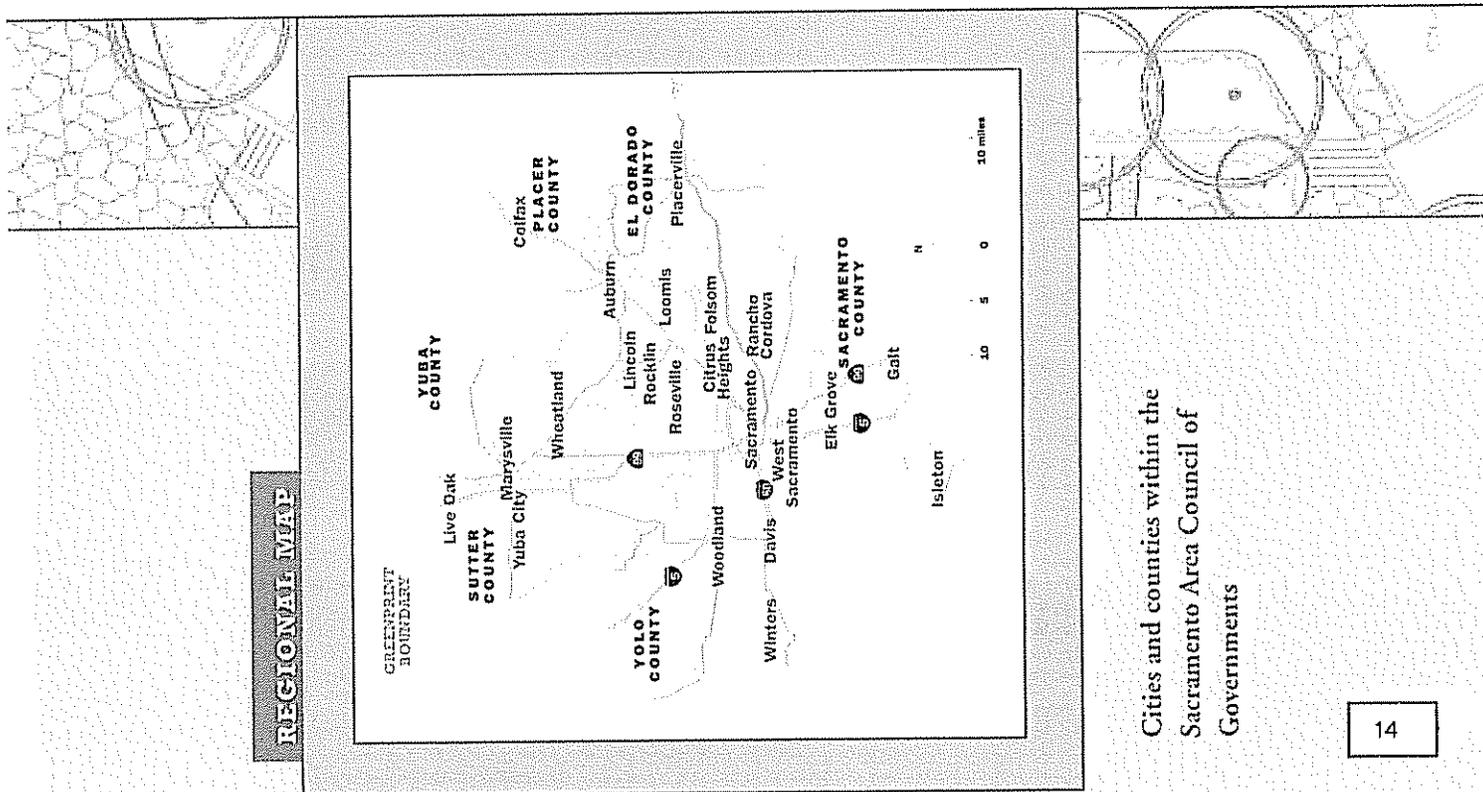
GOALS

- To optimize the benefits of trees throughout our region.
- To create sustainable urban forests.
- To build community-wide appreciation for our urban forests.

ELEMENTS

A successful urban forest program requires attention in three key elements:

- A** *Management of Public Trees*
- B** *Policies and Ordinances*
- C** *Community Partnerships*

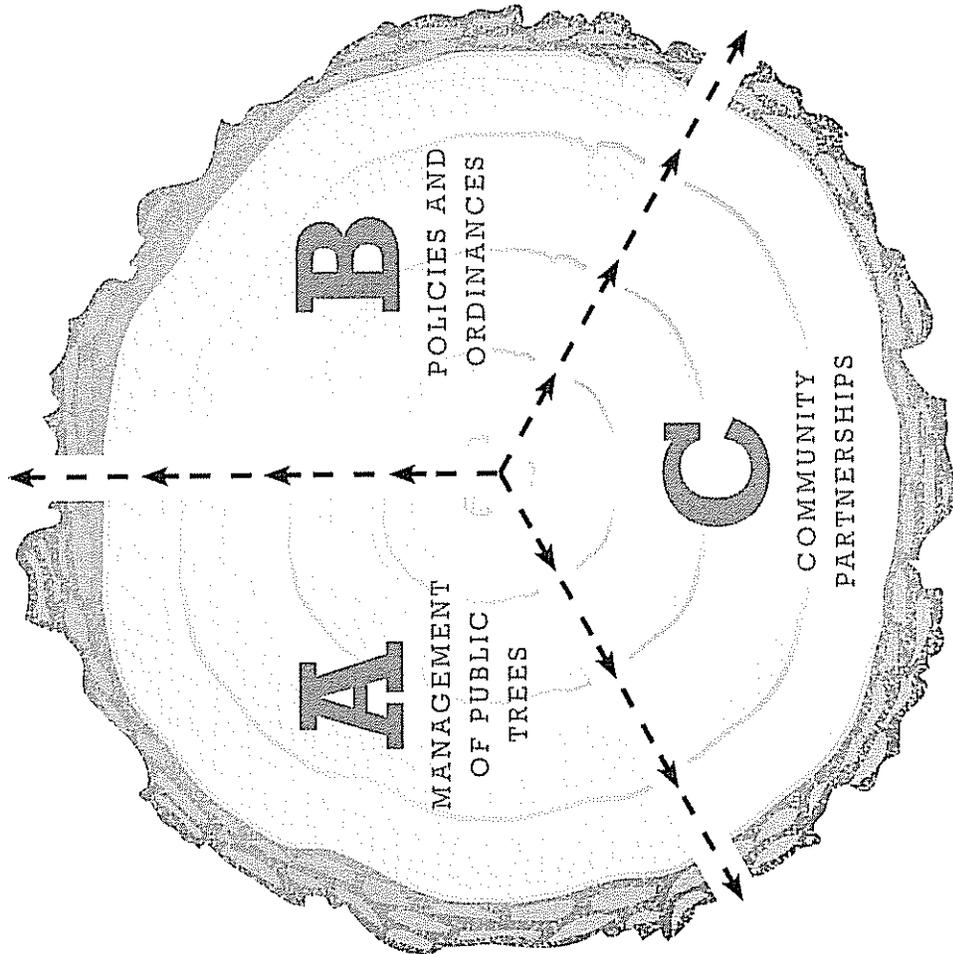


GROWTH RINGS

The Greenprint offers a step-by-step approach to enhancing your urban forest called growth rings. The growth rings represent increasing levels of commitment and benchmarks for progress. There is built-in flexibility for each city and county to determine their particular pathway for achieving progress in each of the growth rings.

Reaching growth ring 4 in all three elements is the ultimate goal. It will take several years, even decades to achieve, depending on local priorities, resources, and commitments.

ELEMENTS OF THE GREENPRINT



ELEMENT A: *Management of*

PUBLIC TREES

City and county streets and parks are home to most of our public trees.

These are often the signature trees of a community, because they are typically the largest and most frequently seen. Properly managed, they serve as models to showcase the best tree selection, pruning, and care. The values of a community are displayed daily by the presence and quality of public trees, or by their absence.

Some of the many components to public tree management include: knowledgeable and experienced staff and contractors, state-of-the-art tree care programs, comprehensive inventories, regular tree assessments, and regular inter-departmental communications.

Adopting an urban forest master plan reinforces the values, goals, and vision of your city or county.

The Greenprint Clearinghouse, managed by the Sacramento Tree Foundation, will have available technical, scientific, and policy-making information and resources to assist Greenprint cities and counties in building optimal public tree management programs.

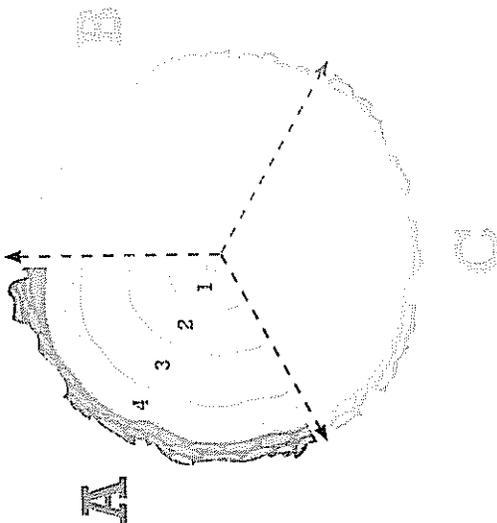
Doubling the region's tree canopy is key to:

- Removing 250,000 tons of carbon dioxide annually¹
- Removing 10 million pounds of air pollutants annually²
- Reducing air pollution by as much as 50%⁶
- Removing 50 tons of nitrogen oxide annually³

¹ *What's the Value of a Tree* video. Sacramento Tree Foundation. 2004.

² E.G. McPherson, et al. *Guidelines for San Joaquin Valley Communities*. March 1999.

⁶ Tree species selection can ensure low biogenic volatile organic compound (BVOC) emissions.



GROWTH RING 1

- ▣ Maintain public trees on an emergency basis
- ▣ Become a Greenprint participant

GROWTH RING 2

- ▣ Assign a liaison to the Greenprint Clearinghouse
- ▣ Conduct an urban forest value assessment¹
- ▣ Convene interdepartmental urban forest stakeholder working group
- ▣ Develop stage 1 of urban reforestation program components²

GROWTH RING 3

- ▣ Develop stage 2 of urban reforestation program components³
- ▣ Adopt an urban forest master plan
- ▣ Adopt staff education and certification guidelines

GROWTH RING 4

- ▣ Form an urban forest department/hire an urban forest coordinator
- ▣ Conduct biannual urban forest department evaluations
- ▣ Publish a state of the urban forest report on 5-year intervals

¹ An urban forest value assessment provides a net value of your urban forest, canopy cover %, and priorities for management direction. The Greenprint Clearinghouse offers this service using a program developed and endorsed by the U.S. Forest Service.

² Mature tree care program; young tree care program; tree purchasing and planting specifications; 5-year planting plan

³ Tree inventory and database; 20-year planting plan; tree hazard, pest and disease management program

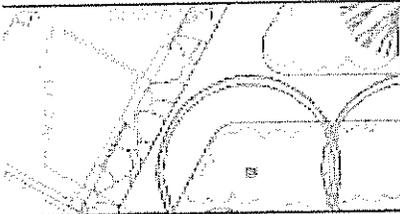
ELEMENT B: *Local Government* **POLICIES and ORDINANCES**

Improving the extent, safety, and health of trees can be advanced by adopting tree policies, ordinances, and plans for both public- and private-property trees. Local urban forest policies support and reflect the image, character, and values of your community.

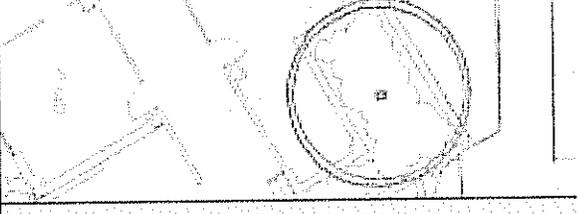
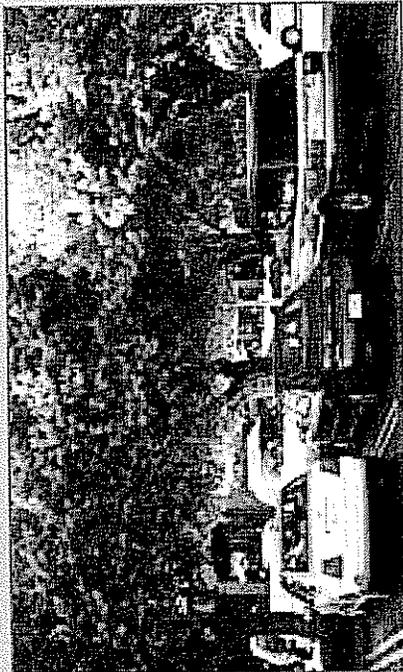
Cities and counties throughout the region have a variety of policies and ordinances to protect and preserve trees. Throughout the region, the requirements vary widely from the species and sizes of trees protected, to the planting replacement ratios and mitigation requirements for removal. This is a great starting point from which to build a better future.

The Greenprint Clearinghouse will provide information, guidance, and workshops to develop model policies and ordinances that can be adopted throughout the region. This approach offers consistency throughout the region, creating a regional approach to the protection, replacement, and mitigation of trees.

¹⁰ E.G. McPherson, et al. *Guidelines for San Joaquin Valley Communities*. March, 1999.
¹¹ K.J. Scott, et al. *Effects of Tree Cover on Parking Lot Microclimate and Vehicle Emissions*. Journal of Arboriculture, Vol. 25, No. 3, 1999.

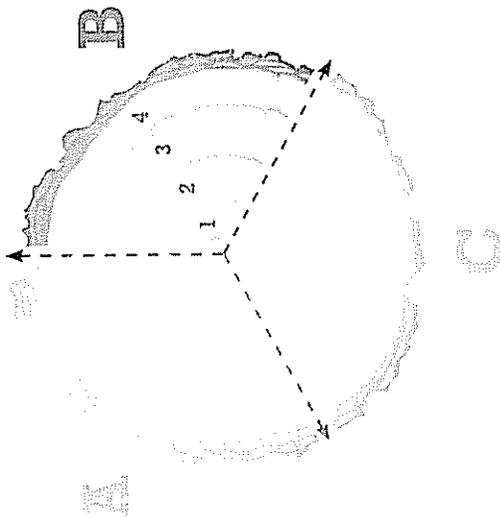


TRANSPORTATION



Shade trees on our streets and in parking lots are key to:

- ▣ Extending the life of asphalt pavement up to 10 years¹⁰
- ▣ Reducing hydrocarbon emissions from parked cars by 18%¹¹
- ▣ Reducing temperatures in parked cars by 60° Fahrenheit¹¹



GROWTH RING 1

- Adopt street and park tree protection ordinance/policy

GROWTH RING 2

- Develop stage 1 of comprehensive urban forest ordinance components¹²
- Adopt street, median, and parking lot planting and design guidelines
- Implement sustainable funding for urban forest activities

GROWTH RING 3

- Develop stage 2 of comprehensive urban forest ordinance components¹³

GROWTH RING 4

- Adopt urban forest goals in the general plan and community plans¹⁴
- Finalize comprehensive set of urban forest ordinances and policies

¹² Shade cover objectives for various land uses, tree replacement and mitigation policies

¹³ Healthy tree protection and preservation, ordinance compliance program

¹⁴ Urban heat island mitigation policy, green infrastructure principles, smart growth and green planning policies

ELEMENT C: *Community*

PARTNERSHIPS

The most significant element to creating a healthy urban forest is the role played by private property owners and volunteers, because 80% of the urban forest is located on private land. Cities and counties that create partnerships with their community members and businesses are more likely to succeed in their urban forest plans and programs.

Developing public, private, and nonprofit partnerships provides support for mobilizing widespread volunteerism. These partnerships create effective, long-term solutions for our cities and counties to develop a sustainable urban forest.

Community organizations including TREE Davis, the Woodland Tree Foundation, Placer Tree Partners, the Roseville Urban Forest Foundation, and the Sacramento Valley Urban Forest Council are poised to provide resources for tree planting, urban forest stewardship, and community education.

Shaded neighborhoods and business districts increase:

- Home sale prices by 1%¹⁵
- Property values by 10%¹⁵
- Retail sale prices by 11%¹⁶

ECONOMY



¹⁵ Sacramento Association of Realtors. 2004.

¹⁶ Kathleen L. Wolf. November 1998. Center for Urban Horticulture. Fact Sheet #5. University of Washington.

GROWTH RING 1

- Sponsor community and neighborhood tree plantings
- Recognize volunteer contributions

GROWTH RING 2

- Conduct media events for tree projects and Greenprint milestones
- Create partnerships to develop: local preferred tree list, landscape and planting guidelines, and outreach to form NeighborWoods¹⁷ groups
- Gain recognition as a Tree City USA¹⁸

GROWTH RING 3

- Form a Citizen Advisory Tree Committee
- Grow partnerships to develop: structured support for NeighborWoods leaders, groups and projects; residential tree care guide; and business guide to trees
- Develop and implement private partnership tree planting and grant programs
- Earn a Tree City growth award¹⁹
- Create partnerships with school districts for tree plantings

GROWTH RING 4

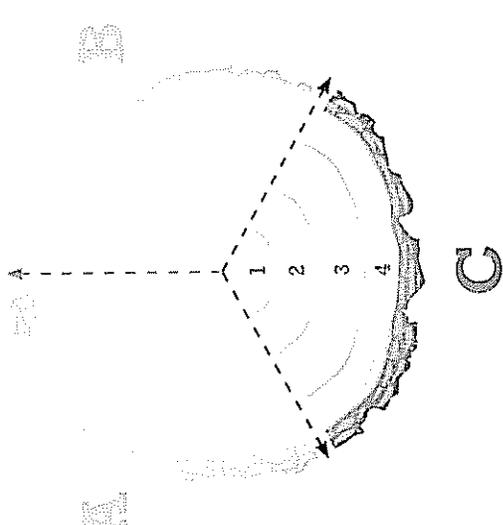
- Through partnerships: support NeighborWoods groups to develop neighborhood-level urban forest master plans, and host recognition events for community tree heroes and champions
- Gain recognition as a Sterling Tree City USA²⁰

¹⁷ NeighborWoods is an established Sacramento Tree Foundation program, and modeled nation-wide by the Alliance for Community Trees and Home Depot.

¹⁸ Tree City USA is a National Arbor Day Foundation program that requires an awardee to have a tree board or department, a tree care ordinance, a community forestry program with \$2 per capita annual budget, and an Arbor Day observance.

¹⁹ A Tree City Growth Award is given by the National Arbor Day Foundation to recognize Tree City USA participants for completing activities to strengthen local tree care programs.

²⁰ Sterling Tree City USA is awarded to Tree City USA participants who earn a Tree City Growth Award for ten consecutive years.



Call to ACTION

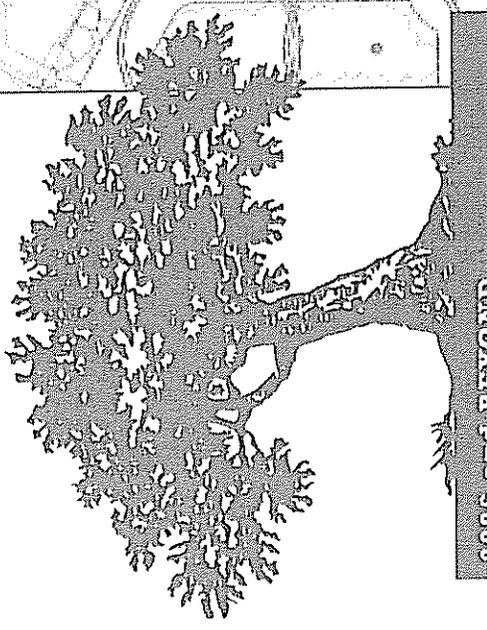
THE REAL WORK BEGINS IN YOUR COMMUNITY

Securing the benefits of an expanded urban forest will require the concerted effort of each city and county in the Sacramento region, along with the attention of hundreds of thousands of volunteers, over the next several decades. This unprecedented undertaking begins with the ratification of this document.

The real work begins in your community. Education of the general public, government, businesses, and organizations is vital to building a strong support base for implementing the programs and partnerships in the Greenprint. Stewarding five million trees to maturity is a massive undertaking far beyond the reach of any one city or county. By joining together, we will attract new investors and resources to the region, building the mutual support necessary to achieve the Greenprint.

REGIONAL AND LOCAL ORGANIZATIONS

- American Institute of Architects
- American Lung Association
- American Planning Association
- American River Conservancy
- American Society of Landscape Architects
- Association of Environmental Professionals
- Building Industry Association
- Clean Air Partnership
- Davis Tree Commission
- Earth Day Sacramento
- Environmental Council of Sacramento
- North Sacramento Chamber of Commerce
- Placer Tree Partners
- Power Inn Business and Transportation Association
- Roseville Urban Forest Foundation
- Sacramento Area Council of Governments
- Sacramento Bee
- Sacramento County Tax Payers League
- Sacramento Metro Chamber of Commerce
- Sacramento Metropolitan Air Quality Management District
- Sacramento Municipal Utility District
- Sacramento Valley Urban Forest Council
- Tree DAVIS
- TreeLink
- Urban Land Institute
- U. S. Forest Service, Center for Urban Forest Research
- Valley Vision
- WALK Sacramento
- Woodland Tree Foundation



2006 and BEYOND

Local urban forest master plans adopted
Greenprint implementation
Greenprint Clearinghouse established

2005

Adoption by cities and counties
Final Greenprint
Elected officials summit
Public education and involvement campaign

2001-2004

Draft Greenprint
Value of a Tree video and brochure
Meetings with staff and stakeholder groups
Initial meeting with elected officials

GREENPRINT TIMELINE

GREENPRINT CLEARINGHOUSE

The Sacramento Tree Foundation will work with all 28 cities and counties in the Sacramento Area Council of Governments region to encourage and assist in the implementation of the Greenprint by creating the Greenprint Clearinghouse.

1 Information Resource Center

Collect and distribute new and existing urban forest information.

2 Regional Working Groups

Convene regional working groups to develop new policy models and urban forest initiatives.

3 Community Involvement

Sponsor community events and assist in the establishment of new nonprofit urban forest organizations.

4 Urban Forest Achievement Recognition

Highlight successes and acknowledge growth ring advancements and regional achievements.

5 Fundraising

Provide information and opportunities to fund new tree programs.

SPECIAL THANKS TO:

Sacramento Regional Urban Forest Compact Signatories 2001

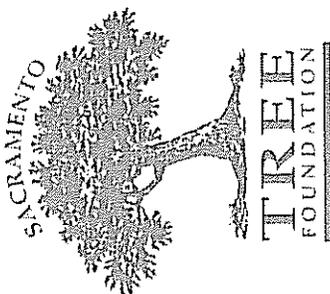
- Tim Ramey, *City of Citrus Heights*
- Ken Wagstaff, *City of Davis*
- Rusty Dupray, *County of El Dorado*
- Rick Soares, *City of Elk Grove*
- Kerri Howell, *City of Folsom*
- Pam Pratt, *City of Isleton*
- Tim Dant, *City of Lincoln*
- Mel Wilkins, *City of Live Oak*
- Miguel Ucovich, *City of Loomis*
- Paul McNamara, *City of Marysville*
- Ted Gaines, *County of Placer*
- Ken Yorde, *City of Rocklin*
- Gina Garbolino, *City of Roseville*
- Bonnie Pannell, *City of Sacramento*
- Illa Collin, *County of Sacramento*
- Joan Bechrel, *County of Sutter*
- Oscar Villegas, *City of West Sacramento*
- Roy Crabtree, *City of Wheatland*
- Harold Anderson, *City of Yuba*
- Jeff Monroe, *City of Woodland*
- Lois Volk, *County of Yolo*
- Larry Carr, *SMUD*
- Bruce Mangerich, *Grain Joint Union High School District*

Greenprint Designated Elected Officials 2005

- Keith Nusbitt, *City of Auburn*
- James Shelby, *City of Citrus Heights*
- Sherrie Blackmun, *City of Colfax*
- Don Saylor, *City of Davis*
- Rusty Dupray, *El Dorado County*
- Rick Soares, *City of Elk Grove*
- Kerri Howell, *City of Folsom*
- Darryl Clare, *City of Galt*
- Michael Gomez, *City of Isleton*
- Tom Cosgrove, *City of Lincoln*
- Mel Wilkins, *City of Live Oak*
- Miguel Ucovich, *Town of Loomis*
- Christina Billica, *City of Marysville*
- Ted Gaines, *Placer County*
- Marian Washburn, *City of Placerville*
- Linda Budge, *City of Rancho Cordova*
- Ken Yorde, *City of Rocklin*
- Gina Garbolino, *City of Roseville*
- Bonnie Pannell, *City of Sacramento*
- Illa Collin, *Sacramento County*
- Dan Silva, *Sutter County*
- Oscar Villegas, *City of West Sacramento*
- Roy Crabtree, *City of Wheatland*
- Harold Anderson, *City of Yuba*
- Jeff Monroe, *City of Woodland*
- Helen Thomson, *Yolo County*
- David Doolittle, *Yuba City*
- Don Schrader, *Yuba County*

Greenprint Committee Members

- Eric Douglas
- Connie Gallippi
- Rob Kerth
- Judith Lamare
- Ray Trettheway
- Karen Wilson



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 916-924-TREE
 www.sactree.com

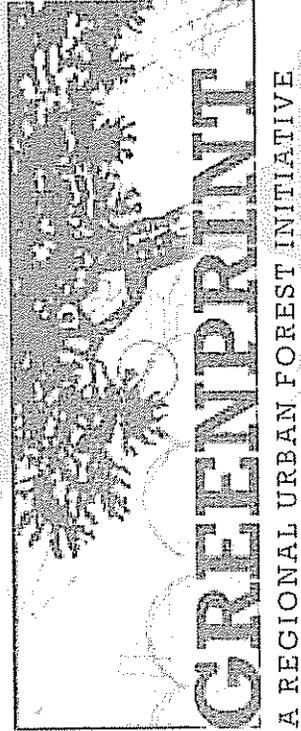
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 USFS Urban & Community Forestry
 County of Sacramento
 National Tree Trust
 Kelly Foundation
 City of Folsom
 City of Rocklin
 City of Davis
 County of Yolo
 Pacific Gas & Electric
 City of West Sacramento
 Teachers Foundation
 Union Pacific

Consultation and design by Marketing by Design Sacramento, CA



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EXHIBIT A



“ An urban forestry program really has no end... It will require the continued commitment of citizens, local tree groups and the elected officials of this generation and those of the future. ”

USDA FOREST SERVICE

SACRAMENTO TREE FOUNDATION
June 2005