

Urban Forestry and the 2040 General Plan

To: the Members of the GPAC, City Staff and Dyatt and Bhatia

From: David Graves

We are blessed to live in a time and place where resources for making the urban forest part of our planning process are growing day by day. As I promised the Parks, Recreation and Tree Commission in June, I have assembled a list of some resources for urban forest planning and analysis; my goal is to focus attention on this area for the General Plan 2040 process going forward. We have many examples of northern California cities that have made urban forestry a central part of their planning process. (I have compiled several in the Appendix.)

In addition, on an international, national and state level, there exists a myriad of resources that can shape and inform our process of making our urban forest a resource for all Napans, now and into the future. Trees in cities provide more than shade and beauty—other benefits include energy savings, storm water capture, longer life for infrastructure and increased property values. The economic case for a vibrant urban forest is unassailable and compelling.

The first document in my list is a comprehensive peer-reviewed report looking at structure, function and value of urban forests in California. It makes the case for our urban forests and the need to invest in their future:

https://www.fs.fed.us/psw/publications/mcpherson/psw_2017_mcpherson005.pdf

The California Governor's Office of Planning and Research (OPR) provides the following resource guide to urban forestry programs in California:

“Urban Forestry

Trees and the urban forest provide a variety of important benefits in the urban environment. Environmental benefits include removing carbon from the atmosphere, reducing energy use, improving air quality, moderating stormwater flows, protecting water quality, improving economic sustainability, and providing habitat for wildlife. In addition to the health benefits realized through the protection and promotion of the environment, trees and urban forests also support the physical and mental health of residents. The urban forest can play a role in meeting carbon reduction mandates

required by the Global Warming Solutions Act of 2006. In short, trees can improve the environment, health, and quality of life in our urban environments where Californians live, work, and play.

In order to establish and maintain the stream of benefits potentially provided by an urban forest, a community's trees need to be well planned-for and managed over the long term. Unlike most other urban infrastructure, the value of the urban forest generally increases over time. Not only are trees and urban forests critical to the community's economic well-being and overall quality of life, but they are an important strategy for addressing chronic disease and obesity.

OPR provides the following information for local governments to plan for a healthy urban forest that optimizes the benefits urban forests can provide to the environment, public health, economy, and more.

Benefits Information

[US EPA Heat Island Mitigation Strategies](#): Trees and other plants help cool the environment, making vegetation a simple and effective way to reduce urban heat islands.

[US Forest Service Pacific Southwest Research Station](#): Research organization highlighting the benefits of urban forests and their value to communities. Includes information about [cool parking lots](#), [stormwater management](#), and more.

[US Forest Service Urban Forests and Climate Change](#): Urban forests have a role to play in reducing levels of carbon dioxide and other greenhouse gases in the atmosphere.

[University of Illinois, Landscape and Human Health Laboratory](#): The Landscape and Human Health Laboratory (LHHL) is a multidisciplinary research laboratory dedicated to studying the connection between greenery and human health.

[University of Washington, Green Cities](#): Research related to how metropolitan nature - including trees, parks, gardens, and natural areas - enhance quality of life in cities and towns. The experience of nature improves human health and well-being in many ways.

Urban Forestry Organizations

[California ReLeaf](#): California ReLeaf works statewide to promote alliances among community-based groups, individuals, and encouraging each to contribute to the livability of our cities and the protection of our environment by planting and caring for trees.

[California Urban Forests Council](#): The CA Urban Forests Council coordinates educational [workshops](#), hosts an [annual conference](#), runs a [certified urban forestry program](#), supports [seven regional councils](#), and

manages the [Invest From the Ground Up](#) offsite link programs related to urban forestry and urban greening.

[Cal Poly Urban Forestry Ecosystems Institute](#): The Urban Forest Ecosystems Institute addresses the increasing need for improved management of the urban forests in California.

[Arbor Day Foundation](#): The Foundation is the largest nonprofit membership organization dedicated to planting trees.

[International Society of Arboriculture](#): Through research, technology, and education, the ISA promotes the professional practice of arboriculture and fosters a greater worldwide awareness of the benefits of trees. Includes a [Western Chapter](#).

[Society of Municipal Arborists](#): SMA is an organization of municipal arborists and urban foresters, and consultants, commercial firms and citizens who actively practice or support some facet of municipal forestry.

Resources: Programs and Grants

State and Federal Resources

[CAL FIRE Urban Forestry Program, Regional Staff, and Grants](#): Under the authority of the [California Urban Forestry Act of 1978](#), the Urban & Community Forestry Program works to expand and improve the management of trees and related vegetation in communities throughout California.

[Strategic Growth Council Urban Greening Grants](#): These grants fund public jurisdictions (including council of governments, countywide authority, a metropolitan planning organization, local government, nonprofit organization, special district, or joint powers authorities) and nonprofit entities in developing a master urban greening plan that will ultimately result in projects to help the State meet its environmental goals and the creation of healthy communities.

[USDA Forest Service Urban and Community Forestry](#): The Forest Service supports projects and research related to a diverse array of urban and community forestry issues.

Resources for Local Governments

[CA Urban Forests Council Management Plan Toolkit](#): The Toolkit website can be used by anyone managing a large population of trees in or near urban areas. The website is intended to help urban forest managers develop management plans that are appropriate for their urban forests.

[ISA Tree Ordinance Guidelines](#): Tree ordinances are among the tools used by communities striving to attain a healthy, vigorous, and well-managed community forest.”

The USDA established a National Urban and Community Forest Advisory Council with the passage of the 1990 Farm Bill. The latest plan issued by the Council covers the period 2016-2026 :<https://urbanforestplan.org/engage/>. Here is another one from the UN's Food and Agriculture Organization: <http://www.fao.org/sustainable-forest-management/toolbox/tools/tool-detail/en/c/284846/>

As described above, the USDA Forest Service has a very comprehensive program to support urban forests; our regional resource is the Pacific Southwest Research Station, in Albany and Davis.

Urban Tree Canopy analysis is a necessary first step in managing our urban forest. Here is an example in action in San Jose, CA:

<http://www.sanjoseca.gov/DocumentCenter/View/23211>

California's carbon cap-and-trade program can provide monetary support for urban forestry, as described here by Dr. Greg McPherson of the USFS Southwest Research Station:

https://www.fs.fed.us/psw/publications/mcpherson/psw_2014_mcpherson004_gra_y.pdf

Here is the Air Resources Board's page on Urban Forestry and GHG goals:

<https://fundingwizard.arb.ca.gov/grants/13660>

Citizen engagement in supporting and advocating for urban forests is central to a successful tree program. Establishing an urban forest database can and should enlist citizens in neighborhood data collection via one of many software tools. Here is a description of the aptly-named i-Tree:

<https://www.itreetools.org>

In conclusion, the time to act on our urban forest is now, when tree policy can be an organic part of General Plan 2040. Our collective stewardship can make an immense difference to ourselves and to those who will inherit this City. All that is needed is a commitment to act. The knowledge and resources are there for us to use wisely.

Appendix: Examples of Urban Forestry Plans of California Cities and several NGO's advocating and working for urban forests:

Palo Alto's policy and Master Plan:

<https://www.cityofpaloalto.org/gov/depts/pwd/trees/ufmp.asp>

<https://www.cityofpaloalto.org/civicax/filebank/documents/36187>

Palo Alto's Tree Advocacy NGO:

<https://canopy.org/tree-info/trees-in-palo-alto/o>:

A Perspective on Green Infrastructure in Palo Alto:

<http://www.deeproot.com/blog/blog-entries/perspectives-on-land-use-development-trends-and-green-infrastructureinterview-with-a-planning-department-arborist-in-palo-alto>

Sacramento's policy and Master Plan:

<https://www.cityofsacramento.org/Public-Works/Maintenance-Services/Trees/About-Urban-Forestry>

<https://www.cityofsacramento.org/Public-Works/Maintenance-Services/Trees/About-Urban-Forestry/Urban-Forest-Master-Plan>

Sacramento's Urban Forest NGO:

<https://www.sactree.com/pages/380>

City of Albany Climate Action Plan (III-46-48 lay out urban forestry goals)

<https://www.albanyca.org/home/showdocument?id=11490>

City of Davis—recipient of a CalFire grant for \$514,000 for tree planting and urban forest planning:

<https://cityofdavis.org/Home/Components/News/News/5563/>

Davis Urban Forest NGO:

<http://www.treedavis.org>

City of Redlands Street Tree Policy Manual (with detailed analysis of opportunities)

<https://ciredlandsca.us/clerk/2012staffreports/120117K3-att.pdf>

Redwood City tree NGO:

<https://www.citytrees.org>