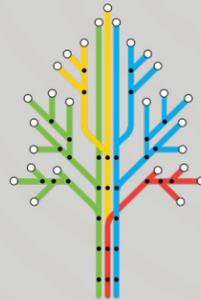




SPRING 2026



PETALUMA
URBAN
FOREST
MANAGEMENT
PLAN



Urban Ecos

Special thanks

We would like to extend our gratitude to the following for sharing their time and expertise with us:

The Urban Forest Management Plan Working Group members

- Ben Anderson, Consulting Arborist
- Gina Benedetti-Petnic, Assistant Director of Public Works
- Patrick Carter, Assistant to the City Manager
- Deb Fox, Climate Action Manager
- Drew Halter, Director of Parks and Recreation
- Heather Hines, Special Projects Manager, Community Development Department
- Eric Leland, ReLeaf Petaluma volunteer
- Charles Little, ReLeaf Petaluma volunteer
- Roger McErlane, Tree Advisory Committee member
- Darren Racusen, Tree Advisory Committee Chair
- Stephanie Sanchez, Tree Advisory Committee member

Funding for this project has been provided from the California Climate Investments program by a grant administered by the California Department of Forestry and Fire Protection (CAL FIRE) Urban and Community Forestry Program.

Front cover: Downtown Petaluma by Scott Hess

ReLeaf Petaluma volunteers
Petaluma Tree Advisory Committee members

City staff from the following departments:

- City Manager's Office
- Community Development
- Parks and Recreation
- Public Works
- Water Resources and Utilities

The Davey Institute for their help with the i-Tree analysis
PlanIT Geo for their work on the canopy analysis
Photo contest competitors for sharing their tree photographs

And a special thanks to Wendy Jacobs for her unceasing work speaking for the trees.



Shops in historic downtown Petaluma by Peter Blottman Photography (iStock)

SPRING 2026

PETALUMA URBAN FOREST MANAGEMENT PLAN

PREPARED BY URBAN ECOS



Our urban trees clean the air, fight climate change, cool our homes, and help protect our waterways.

Petaluma turning basin by Giuseppe Lipari

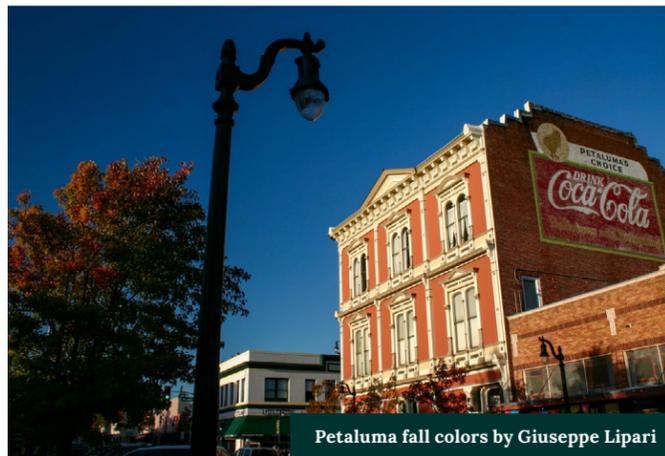
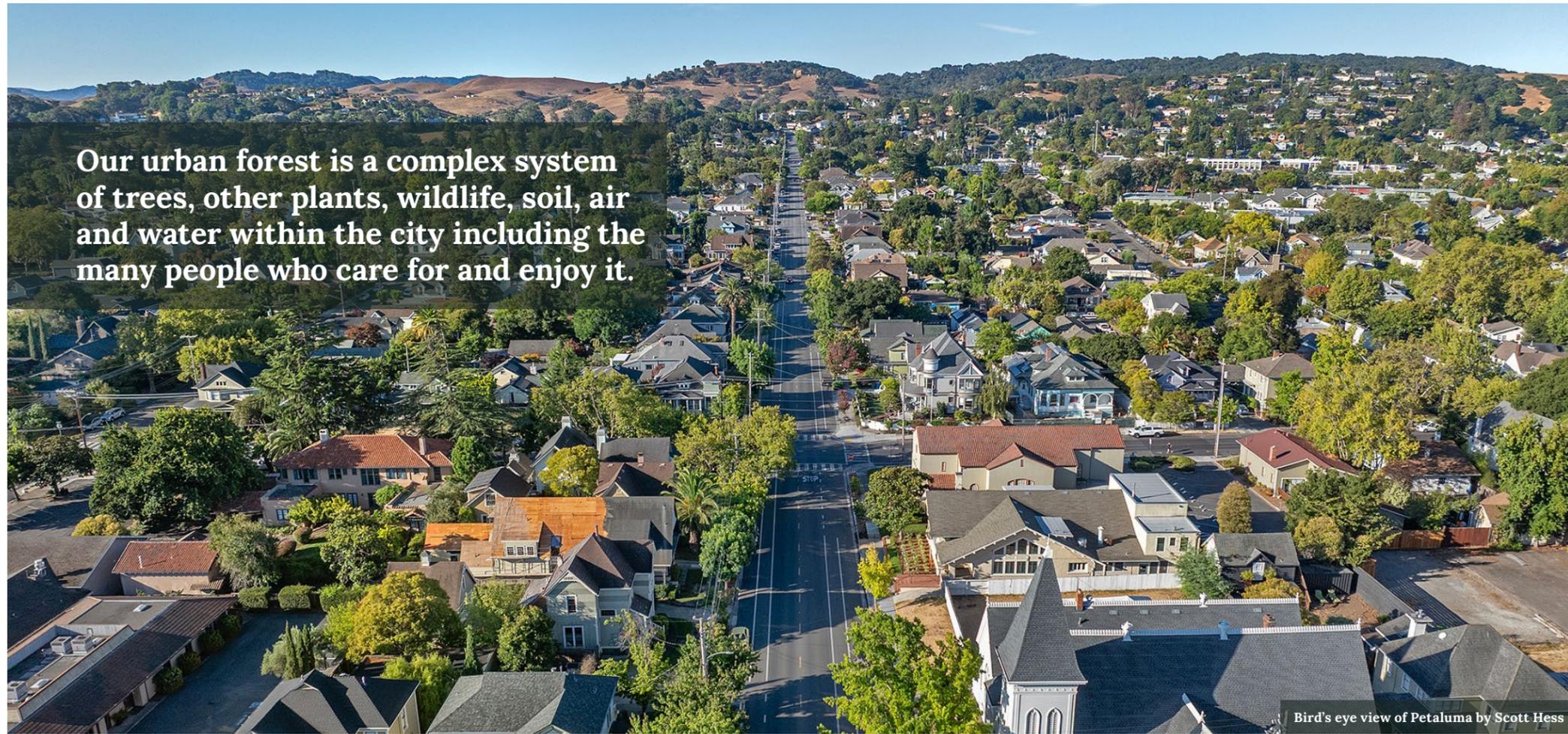
Table of Contents

Vision statement	02
What is an urban forest?	04
Benefits of trees	06
Why an urban forest management plan?	09
Our process	11
Experts	13
The community	13
Data collection and analysis	16
Research	17
On the ground	17
Petaluma's urban forest today	19
The ecological context of Petaluma's urban forest	20
The civic context of Petaluma's urban forest	24
Roles and responsibilities	26
Guiding documents	28
The structure and function of Petaluma's urban forest today	31
Citywide canopy cover	31
Urban forest benefits	37
Trees in parks and along streets	38
Key concerns and recommendations	49
Strategic plan	55
Goal: MANAGE	58
Goal: PROTECT	64
Goal: GROW	68
Goal: ENGAGE	72
Implementation plan	77
Appendices	86

Vision statement: Petaluma thrives in the shade of a well-managed urban forest.

What is an urban forest?

The urban forest is the living system of trees and vegetation that grow in and around our city, together with the soils that sustain them and the habitats they create. Extending across streets, parks, schools, yards, and waterways, the urban forest supports wildlife and local ecosystems while connecting the city to the natural world beyond. As the canopy over our city grows, it provides shade and cooling, cleaner air and water, climate resilience, and healthier, more sustainable places for people to live.



Benefits of Trees

CLIMATE RESILIENCE¹

Urban trees lower temperatures and absorb greenhouse gases — fighting climate change and helping cities adapt to increasing heat.

PUBLIC HEALTH²

Trees clean the air, cool our streets, reduce UV exposure, and support mental well-being, creating healthier neighborhoods block by block.

CLEANER AIR³

Trees intercept and capture many air pollutants (ozone, particulate matter, nitrogen oxides, sulfur dioxide) before they can enter and damage our lungs.

CLEANER WATER⁴

Rainfall is intercepted by the tree canopy, reducing and slowing runoff. The soil under trees filters pollutants before they reach the groundwater.

ECONOMIC VITALITY⁵

Shade from trees lowers energy bills, protects infrastructure, and boosts property values and local business activity.

COMMUNITY LIVABILITY⁵

Tree-lined streets encourage walking, strengthen neighborhood pride, and make public spaces safer and more welcoming.

BIODIVERSITY⁶

Urban forests provide habitat for birds and pollinators, stabilize soil, and support resilient local ecosystems.

1. Norton et al. (2015) "Planning for cooler cities: A framework to prioritise green infrastructure to mitigate high temperatures in urban landscapes." *Landscape and Urban Planning* 134: 127-138
2. Wolf et al. (2020) *Urban trees and human health: A scoping review.* *International Journal of Environmental Research and Public Health* 17:4371.
3. Nowak et al. (2006) "Air pollution removal by urban trees and shrubs in the United States." *Urban Forestry and Urban Greening* 4:115-123.
4. Berland et al. (2017) *The role of trees in urban stormwater management.* *Landscape and Urban Planning* 162:167-177.
5. Wolf (2017) *Social aspects of urban forestry and metro nature.* In: *Routledge Handbook of Urban Forestry.* Chapter 5.
6. Padpa-Schioppa (2017) *Urban forests and biodiversity.* In: *Routledge Handbook of Urban Forestry.* Chapter 9.



CLIMATE RESILIENCE



COMMUNITY LIVABILITY



CLEANER AIR



BIODIVERSITY



PUBLIC HEALTH



ECONOMIC VITALITY



CLEANER WATER



Keller Street, Petaluma by Brycia James (iStock)

Why an urban forest management plan?

We ask our urban trees to shoulder a heavy burden for us: clean our air and water, fight climate change, shelter us with their shade, beautify our streets, give a home to birds and animals. And we ask for that help in a brutal environment: compacted poor soils, polluted air and stormwater runoff, hotter and drier conditions, exposure to vandalism, and poor maintenance.

City trees are a public asset, in some ways like any other bit of civic infrastructure. But while we plan for the maintenance and eventual replacement of most urban infrastructure (no one is surprised when a road needs repaving), too often we leave trees—alive, growing, wild—to fail or thrive on their own. Without intentional management, canopy declines, slowly, quietly, expensively.

Petaluma has adopted ambitious climate commitments, including goals related to carbon reduction, urban heat resilience, and nature-based solutions. A healthy, expanding urban forest is one of the most practical and cost-effective tools available to help meet those commitments. Trees store carbon, cool neighborhoods, reduce energy demand, and improve public health, all while strengthening community resilience. Implementing this plan is therefore not only an environmental priority—in fact one of the cornerstone items of the Climate Action Blueprint—it is also a necessary step toward achieving the City's adopted climate goals.

This urban forest management plan places trees squarely within Petaluma's civic responsibilities. It offers strategic guidance for city staff and other stakeholders to care for trees, grow the urban forest and provide generations of Petalumans with the sustainable and beautiful city they want.



Street trees in declining health by ReLeaf Petaluma



Healthy street trees



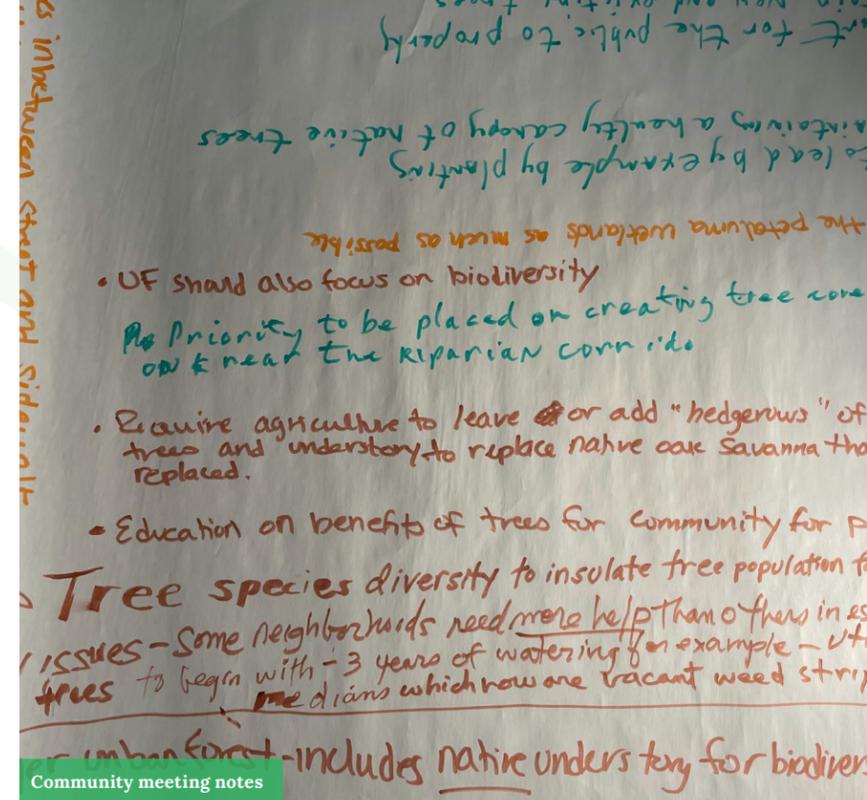
Downtown footbridge by Peter Blottman Photography (iStock)

Our Process

This Urban Forest Management Plan is grounded in local knowledge, community input, and data about the trees themselves. To understand Petaluma's urban forest, we used a five-part process combining professional expertise, public perspectives, field observation, data analysis, and policy review.



Community outreach at the Farmers' Market



Community meeting notes



Community input on vision statement



City Hall from Petaluma City website

EXPERTS

We drew on the experience of Petaluma's urban forestry practitioners through interviews with City staff and key stakeholders, guidance from a dedicated Working Group, and public discussions with the Tree Advisory Committee. These conversations helped identify long-standing issues, practical constraints, and local priorities.



Arbor Day outreach

THE COMMUNITY

We engaged residents through two community meetings, outreach at farmers' markets, and a citywide survey to understand how people experience the urban forest today and what they hope for its future.

Community survey highlights

Survey results showed overwhelming support for the benefits of trees, alongside concerns about maintenance costs and infrastructure conflicts.

Number of respondents:

253

Top three priorities for Petaluma:

1. Improve public infrastructure
2. Clean air and water
3. Climate resiliency

Tree benefits most appreciated (% who find the benefit valuable):

1. Shade & heat reduction (99%)
2. Beautification (98%)
3. Clean air (98%)

Respondents with trees at home:

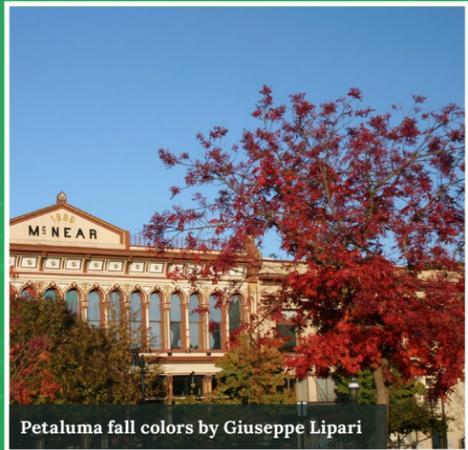
1. 63% had 5 or more trees on their property
2. 55% were happy with the number of trees
3. 42% would like more trees at home

Some misunderstandings:

1. Only 40% are aware that street trees are not cared for by the city.
2. Only 34% are aware that most trees in Petaluma are non-native.
3. Only 29% are aware that a permit is needed to prune a street tree.

Willingness to pay for a street tree (annual):

1. \$0: 12%
2. \$1-20: 14%
3. \$21-40: 15%
4. \$41-60: 20%
5. \$61-80: 8%
6. \$81-100: 18%
7. \$100+: 14%



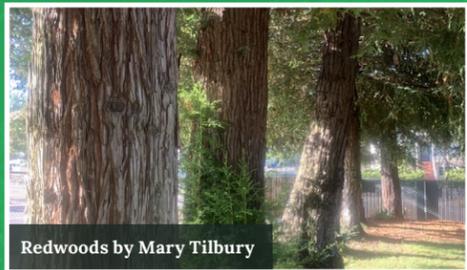
Petaluma fall colors by Giuseppe Lipari

Tree concerns (% worried a little or a lot):

1. Sidewalk damage (70%)
2. Cost of maintenance (62%)
3. Fire risk (50%)

Valued attributes for street trees (% who find the attribute very or somewhat desirable):

1. Supports birds and pollinators (98%)
2. Drought tolerant (97%)
3. Native to the region (83%)



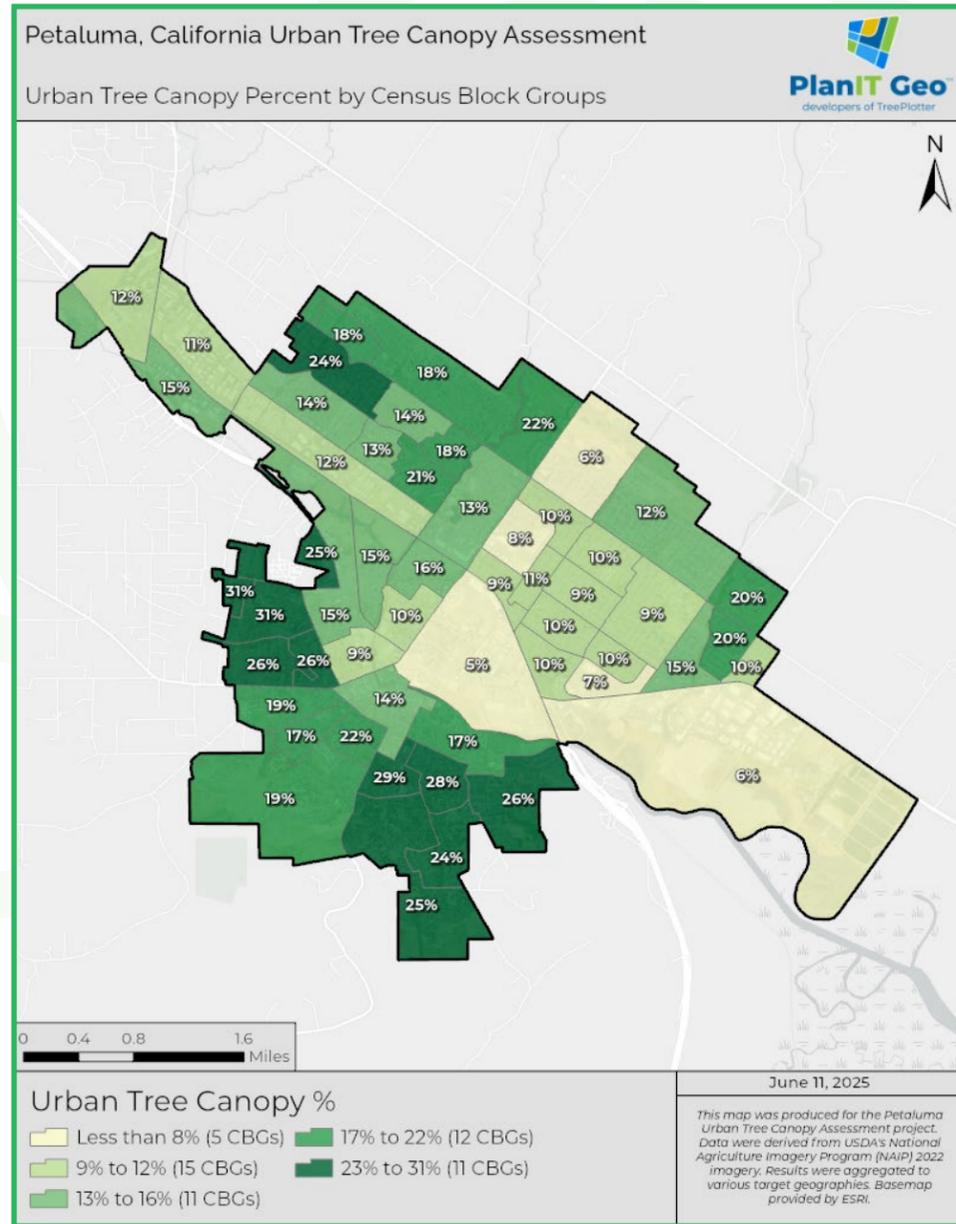
Redwoods by Mary Tilbury



Maples by MaryBeth Ray



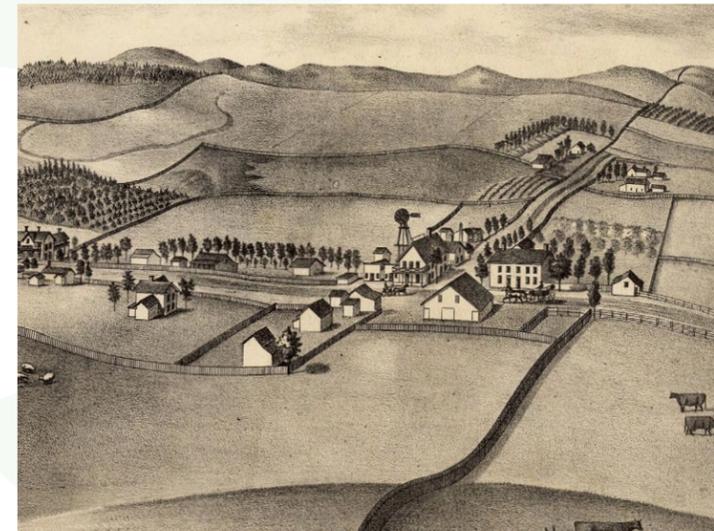
Suburban trees by Sean McCracken



New trees in a park by ReLeaf Petaluma

DATA COLLECTION AND ANALYSIS

To establish an objective baseline, we commissioned a citywide urban canopy study and conducted an on-the-ground inventory and analysis of trees on public property.



Old Petaluma Map from the David Rumsey Map Collection

RESEARCH

We examined the region's natural history and ecological context and reviewed existing City plans, policies, and reports related to the urban forest.



Recent planting site visit

ON THE GROUND

We spent time throughout Petaluma visiting neighborhoods, parks, the historic downtown, major thoroughfares, and recent planting sites.

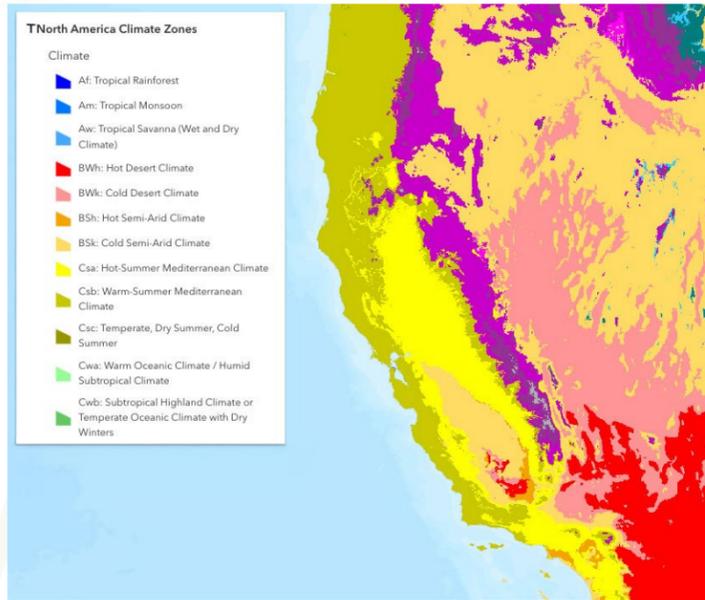


Keller Street, Petaluma by Brycia James (iStock)

Petaluma's urban forest today

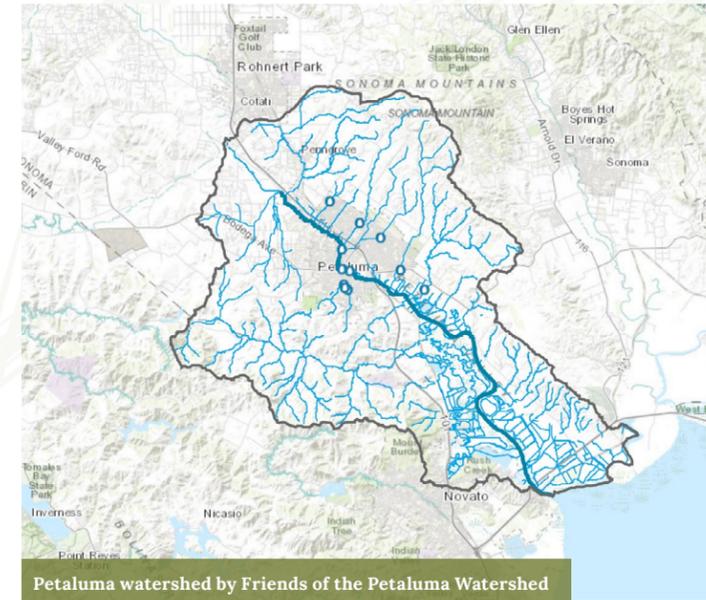
To understand the state of Petaluma's urban forest today, this section examines three of its dimensions: the ecological context in which trees grow, the structure and benefits of the urban forest as revealed through data and fieldwork, and the civic context that determines how trees are managed across the city.

The ecological context of Petaluma's urban forest



MEDITERRANEAN CLIMATE

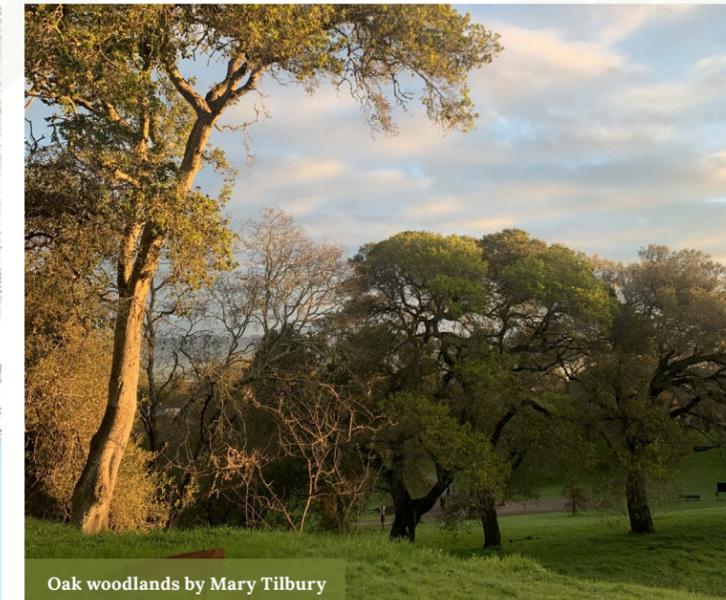
Petaluma's urban forest grows within a Mediterranean climate characterized by cool, wet winters and long, dry summers. This seasonal pattern places predictable stress on trees during the dry growing season and makes water availability a defining factor in tree health and survival. Species selection, planting practices, and long-term care must account for these conditions. As temperatures rise and precipitation patterns shift, these Mediterranean conditions are expected to intensify, increasing pressure on species not adapted to prolonged drought and heat.



Petaluma watershed by Friends of the Petaluma Watershed

A SINGLE WATERSHED

Petaluma sits entirely within a single watershed, an unusual condition for a city. This means that rainfall, runoff, soils, and waterways are tied together across the city. The urban forest plays an important role in shaping water quality, erosion, and downstream conditions throughout the watershed. Because the entire city shares one watershed, urban forest decisions in one neighborhood can affect water quality and downstream conditions elsewhere.



Oak woodlands by Mary Tilbury

OAK WOODLANDS

Before urban development, much of the Petaluma area was characterized by oak woodlands and oak savannas. These landscapes were not static; they were shaped over time by climate, soils, and the land-management practices of Indigenous peoples, including the Coast Miwok. Remnants of these systems provide ecological context for understanding regional habitats and long-term landscape patterns that continue to influence the urban forest today.



California buckeye in Petaluma by jeffwqc (iStock)



Acorn woodpecker by Megan Nagel/USFWS

NATIVE FLORA AND FAUNA

Trees in the urban forest, both native and nonnative, support a wide range of animals and plants, from birds and pollinators to the aquatic life in local waterways. The presence, diversity, and structure of trees influence how well urban areas function as habitat. Even within a developed landscape, the urban forest can strengthen ecological connections across the city.



Bad trees by ReLeaf Petaluma

URBAN CONDITIONS

While Petaluma's urban forest is shaped by its natural history, it grows within distinctly urban conditions. Pavement, buildings, and infrastructure absorb and radiate heat, creating hotter and drier microclimates. Air pollution, stormwater runoff, and soil compaction further stress trees. Grading, underground utilities, and limited planting space restrict root growth and water infiltration. These altered conditions mean that trees in the city face challenges very different from those in surrounding natural landscapes. Urban forest management must address not only species selection, but the physical conditions in which trees grow.



The civic context of Petaluma's urban forest

While the urban forest grows within an ecological context, it is shaped day-to-day by civic systems. Where trees are planted, how they are cared for, and whether they are protected are influenced in Petaluma by multiple city departments, community partners, advisory bodies, and of course, the owners of the properties on which they are planted. Together, these actors operate within a framework of ordinances, regulations, and established practices that shape the urban forest over time.



ROLES AND RESPONSIBILITIES

Responsibility for planting, maintaining, and regulating trees in Petaluma has developed incrementally over time rather than through a single, coordinated framework. This evolution has produced redundancies in some areas while leaving gaps in others.



Tree planting by ReLeaf Petaluma

PLANTING

Tree planting in parks is coordinated by the Parks and Recreation Department, often in partnership with ReLeaf Petaluma, with oversight from the Tree Advisory Committee and the Recreation, Music, and Parks Commission, and following outreach to the public. Planting in the public right-of-way is typically undertaken by the adjacent property owner or ReLeaf Petaluma, requires an encroachment permit and must be consistent with the Approved Street Tree List. Planting in Landscape Assessment Districts and along roads without adjacent property owners is managed by Public Works. Development-related planting is reviewed through the Community Development process. Post-planting inspection and enforcement are not guided by a standard, consistently applied process.

MAINTENANCE

Maintenance of park trees is carried out on an as-needed or emergency basis by Parks staff and tree care contractors. Early establishment care in parks is sometimes supported by ReLeaf Petaluma. Maintenance of trees in the public right-of-way is generally the responsibility of adjacent property owners and may be subject to encroachment permit requirements overseen by Public Works. Trees that present an immediate risk to people or property may be pruned or removed by Public Works, with costs billed to the property owner. Trees in Landscape Assessment Districts and along roads without adjacent property owners are maintained on an as-needed and emergency basis by Public Works staff or contractors.

Currently, there is no proactive, routine maintenance program for public trees. In addition, there is not a consistently applied process for post-maintenance inspection and enforcement of contracted work.



Acacia flowers by MaryBeth Ray



Poplar by John Glover

PERMITTING

Tree removal permits for trees in the public right-of-way are reviewed by Community Development, Public Works, and Parks and Recreation, sometimes in consultation with a contracted arborist. An encroachment permit from Public Works may be required to carry out planting or pruning work in the right-of-way. Responsibility for post-permit inspection and enforcement is not clearly established. (Anticipated revisions to the Tree Preservation Ordinance will significantly affect the permitting process for trees on private property and in the right of way.)

DEVELOPMENT

Tree protection, removal, replacement, and planting requirements associated with development projects are reviewed through the Community Development process, with oversight of the Planning Commission and City Council for larger projects. Public Works and the Building Division are responsible for inspecting required tree protection measures during construction and for ensuring that tree planting requirements have been met. Code enforcement staff within Community Development address post-inspection violations based on complaints.

COMMUNITY OUTREACH

The City does not currently conduct dedicated urban forestry outreach. Public education, volunteer coordination, and community tree planting efforts are led primarily by ReLeaf Petaluma with some support from City departments. As a result, the scope and continuity of outreach efforts depend largely on the capacity of volunteer community partners rather than a municipal program.

RECENT COORDINATION CHALLENGES

The process for obtaining a permit to remove a tree in the public right-of-way may involve review by up to four City departments and a contracted arborist. At the same time, replacement standards are not always clearly defined in the permit, and post-work inspection is limited.

Similarly, a recent community-led planting effort near a local stream required coordination with several City departments and advisory bodies. After planting, a number of trees had to be removed as newly developed stormwater management plans from the regional water authority revealed conflicts with the planting locations.

GUIDING DOCUMENTS

The management of Petaluma's urban forest is shaped by a collection of policies, codes, plans, and technical standards adopted over time. The following documents represent the primary sources of guidance for tree-related decisions. Together, they establish important protections and standards; however, they were adopted at different times and are not always aligned under a unified urban forest strategy.



Civic trees by Peter Blottman Photography

POLICY DIRECTION

These documents establish Citywide priorities and long-term goals related to land use, climate resilience, and environmental quality.

- General Plan (currently under revision) – Establishes land use and environmental policy guiding tree preservation, development, and public space planning.
- Blueprint for Climate Action (Resolution 2024-141) – Identifies urban forestry and nature-based solutions as key climate strategies.
- City Goals and Priorities – Establishes Tree Preservation Ordinance work and urban forestry initiatives as active policy priorities.

MUNICIPAL CODE AND ZONING ORDINANCES

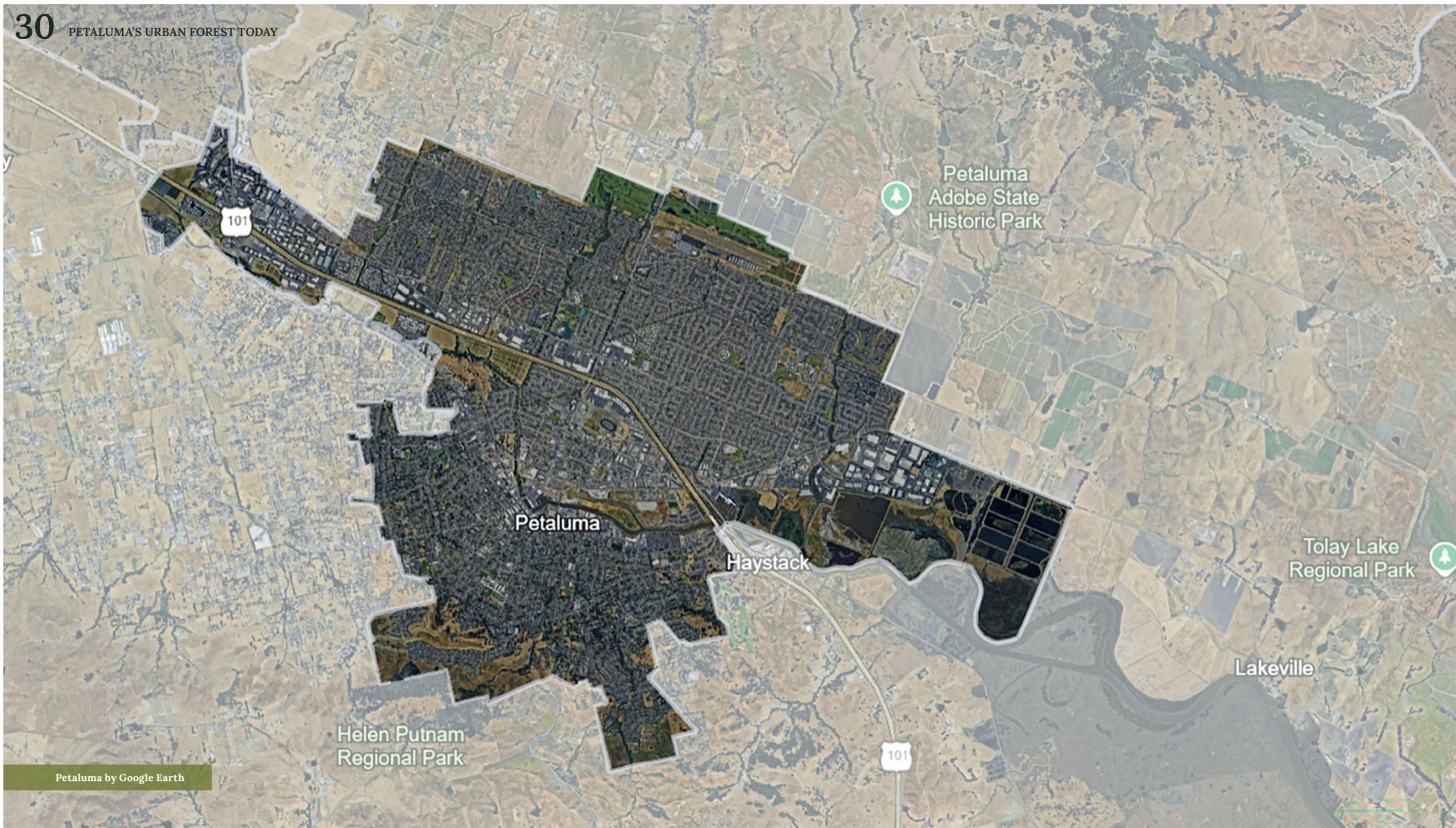
These enforceable regulations govern tree protection, planting, and maintenance.

- Heritage & Landmark Trees (Ch. 8.28) – Establishes designation and protection standards for heritage and landmark trees.
- Trees & Other Vegetation (Ch. 13.08) – Regulates trees in the public right-of-way.
- Implementing Zoning Ordinance (Ch. 14 and 17) – Establishes street tree guidelines (14.010) and tree protection, preservation, and planting requirements associated with development (Ch. 17). Significant revisions to the Tree Preservation Ordinance (Ch. 17) are currently under review.
- SmartCode – Establishes citywide development and streetscape standards, including requirements for street trees and parking lot shade.

TECHNICAL STANDARDS & ADOPTED GUIDANCE

These documents guide species selection, planting design, and implementation.

- Approved Street Tree List
- Heritage Tree List
- Tree Technical Manual
- Integrated Pest Management program (in development)

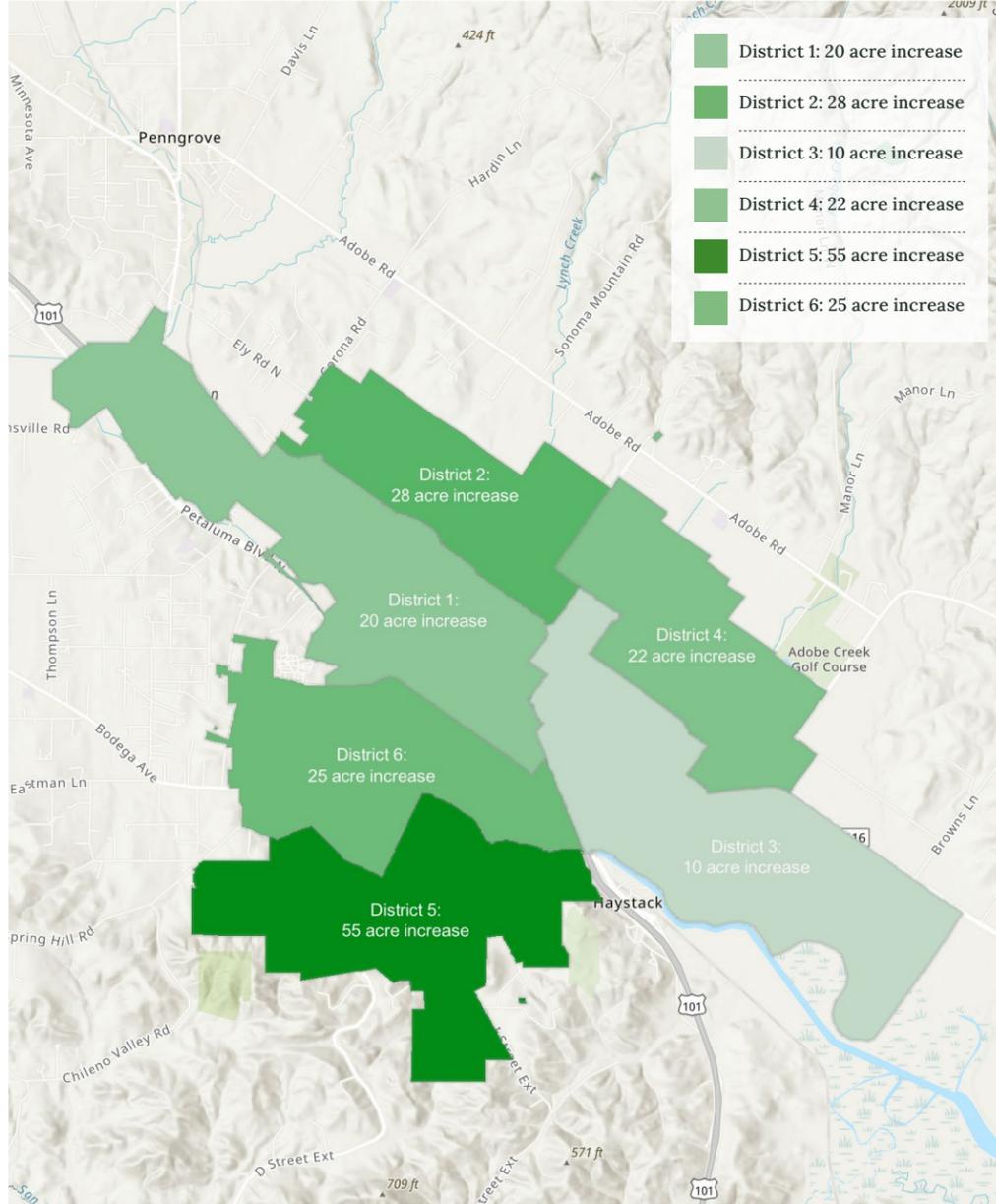


The structure and function of Petaluma's urban forest today

CITYWIDE CANOPY COVER

Analysis of aerial imagery from 2022 shows that tree canopy covers **about 14%** of Petaluma; more than half of the city (52%) is covered in impervious surfaces (roads, buildings, parking lots, sidewalks). This canopy cover is similar to some Bay Area cities, such as Redwood City and Santa Clara, but well below others, including Napa and Windsor. Within Petaluma, canopy cover varies widely, with the highest concentrations along the city's edges where remnant oak woodlands remain, and the lowest levels in industrial areas and the urban core. Canopy cover on public property (12%) is slightly lower than on private property (16%).

Citywide land cover	Percent of city total	Acres
Tree canopy	14.1	1,303
Other vegetation	28.0	2,597
Bare soil	2.9	265
Water	2.7	246
Impervious surface	52.3	4,855
Total		9,267



Large scale canopy loss from Highway 101 expansion

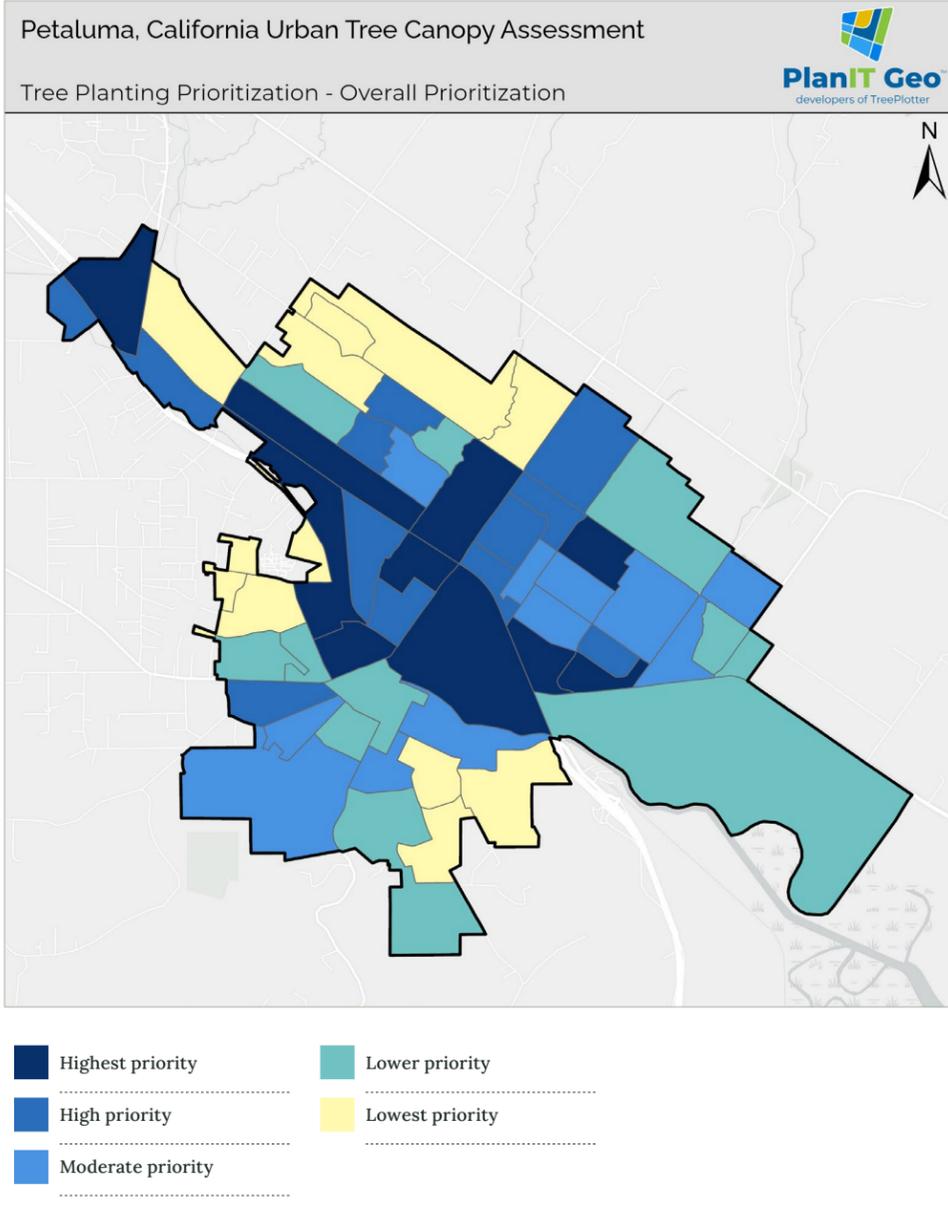
Since 2016, overall canopy cover has increased from **12% to 14%**, though this net gain reflects losses in some areas and gains in others. Most canopy loss is associated with development activity, the expansion of Highway 101, and changes in how some parcels are used. Canopy gains have occurred primarily through the growth of existing trees, particularly along the city's edges. More than **2,000 trees** have been planted in the last three years and are expected to contribute significantly to canopy growth over time as they mature.



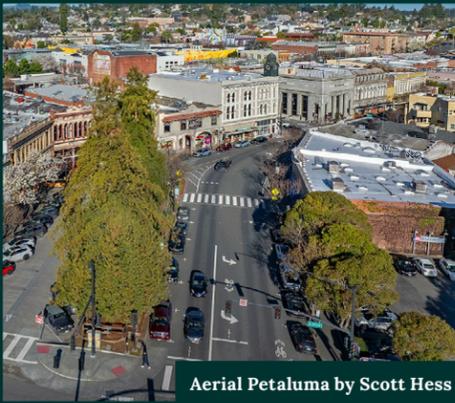
East Washington Boulevard by ReLeaf Petaluma

To help identify where additional canopy would be most beneficial, areas of the city were analyzed using indicators related to existing tree cover, exposure to heat, human health, and insufficient investment in the urban forest. This prioritization highlights **Midtown Petaluma** and areas along **East Washington Boulevard** as having some of the greatest need for additional trees.

For more information on Petaluma's canopy, please see The Urban Tree Canopy Assessment, 2025.

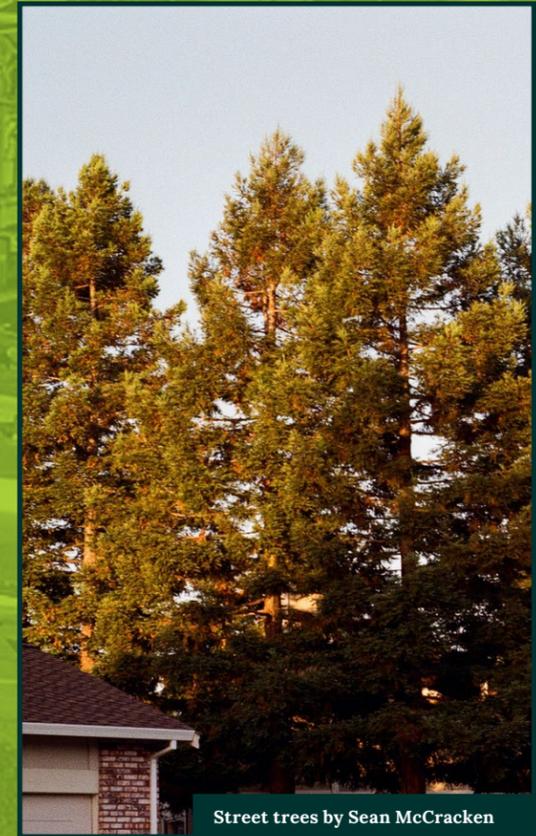


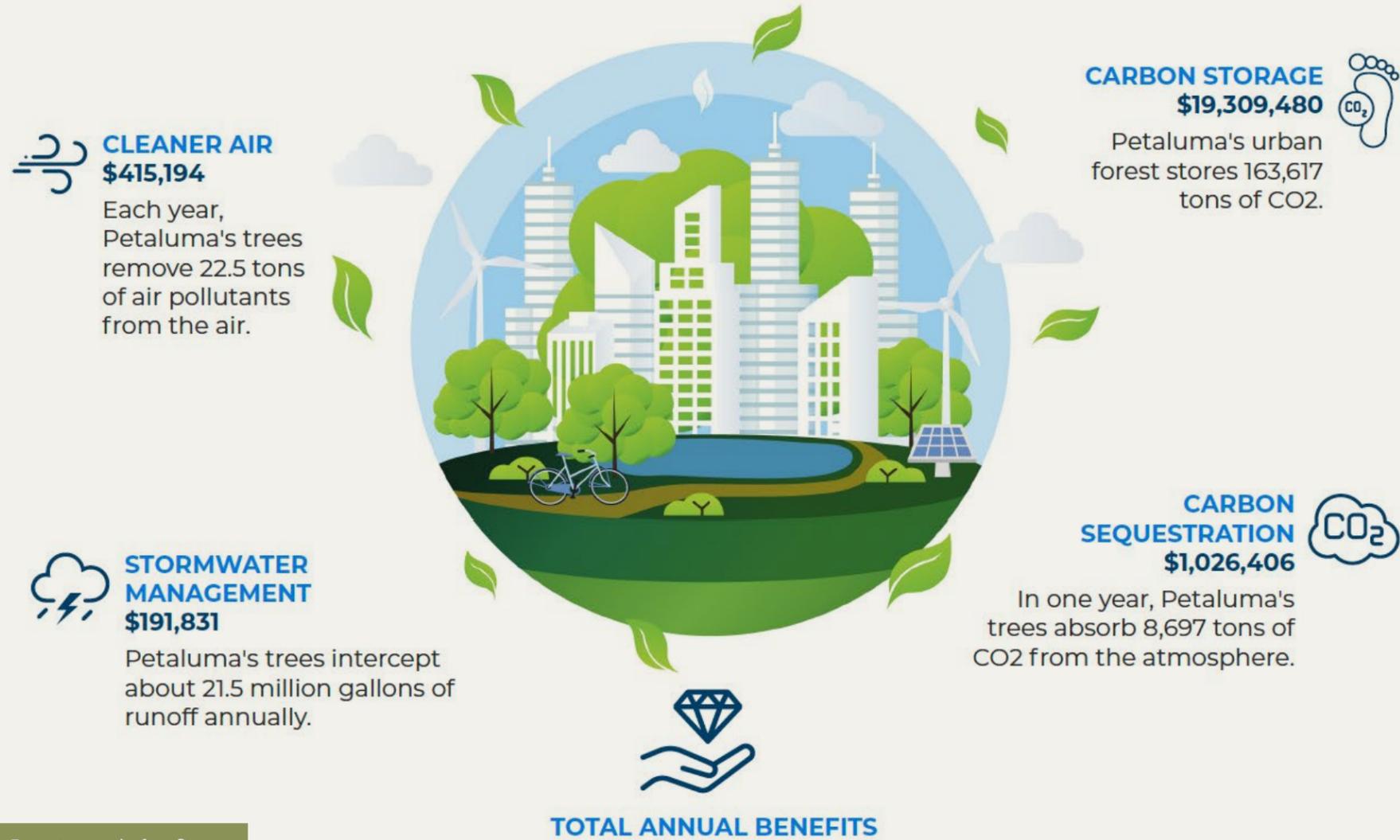
Fun Facts

Acres of tree canopy:	Percent canopy cover:	Canopy growth since 2016:
1,303	14%	159 acres
Percent canopy cover, public land:	Percent canopy cover, private land:	
12%	16%	<small>Aerial Petaluma by Scott Hess</small>

Fun Facts

Number of park trees:	Number of street trees:
3,800	11,700
Number of species in parks:	Number of species along streets:
125	78





Petaluma's trees annually provide **\$1,633,432** in ecosystem benefits.
That equates to approximately \$1,253 per acre of canopy.

Ecosystem service benefits of Petaluma's canopy cover. Data sourced from i-Tree, the US Forest Service, the Arbor Day Foundation, and the U.S. Environmental Protection Agency



Small town Petaluma outlook hills by Andrew Gotshall (Shutterstock)

URBAN FOREST BENEFITS

Using i-Tree modeling, the benefits provided by Petaluma's existing tree canopy were estimated for a number of ecosystem services, including better air quality, improved stormwater management, carbon storage and sequestration, and shade-related energy reductions.

Together, Petaluma's trees are estimated to provide **approximately \$1.6 million in annual ecosystem benefits**, or about **\$1,250 per acre of canopy per year**. The largest contributions come from carbon-related benefits and air quality improvements. In addition, the existing canopy stores an estimated **\$19 million worth of carbon**, representing long-term climate value accumulated over decades of growth.

Because these environmental benefits are closely tied to canopy cover, tree size, and condition, they are not evenly distributed across the city. Areas with larger, healthier trees tend to provide disproportionately greater benefits, a pattern that helps explain differences in environmental conditions and comfort across Petaluma.

TREES IN PARKS AND ALONG STREETS

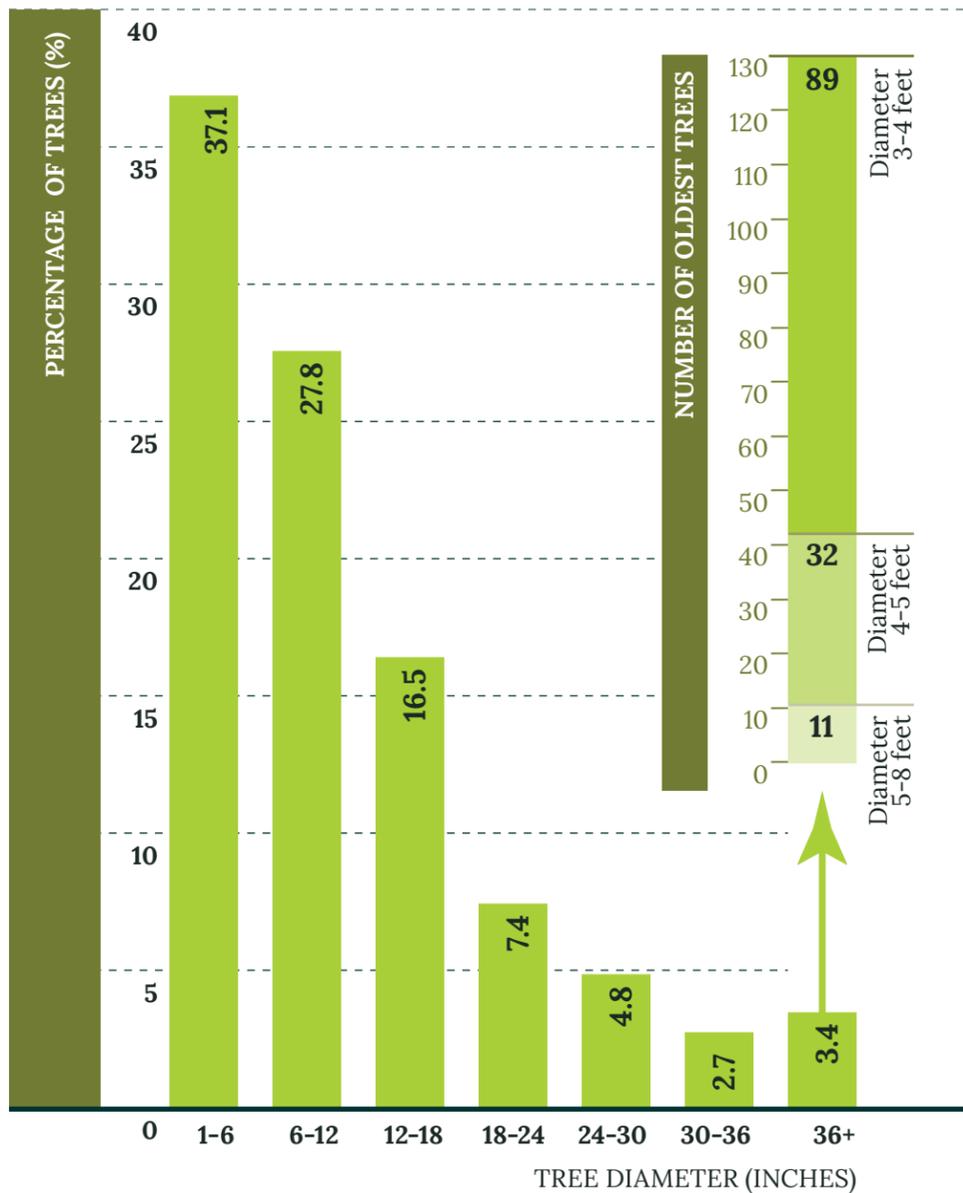
The previous sections presented data on the canopy cover across Petaluma as a whole. To provide guidance to city urban forest managers, a further in-depth analysis of trees on public property was undertaken.



PARK TREES

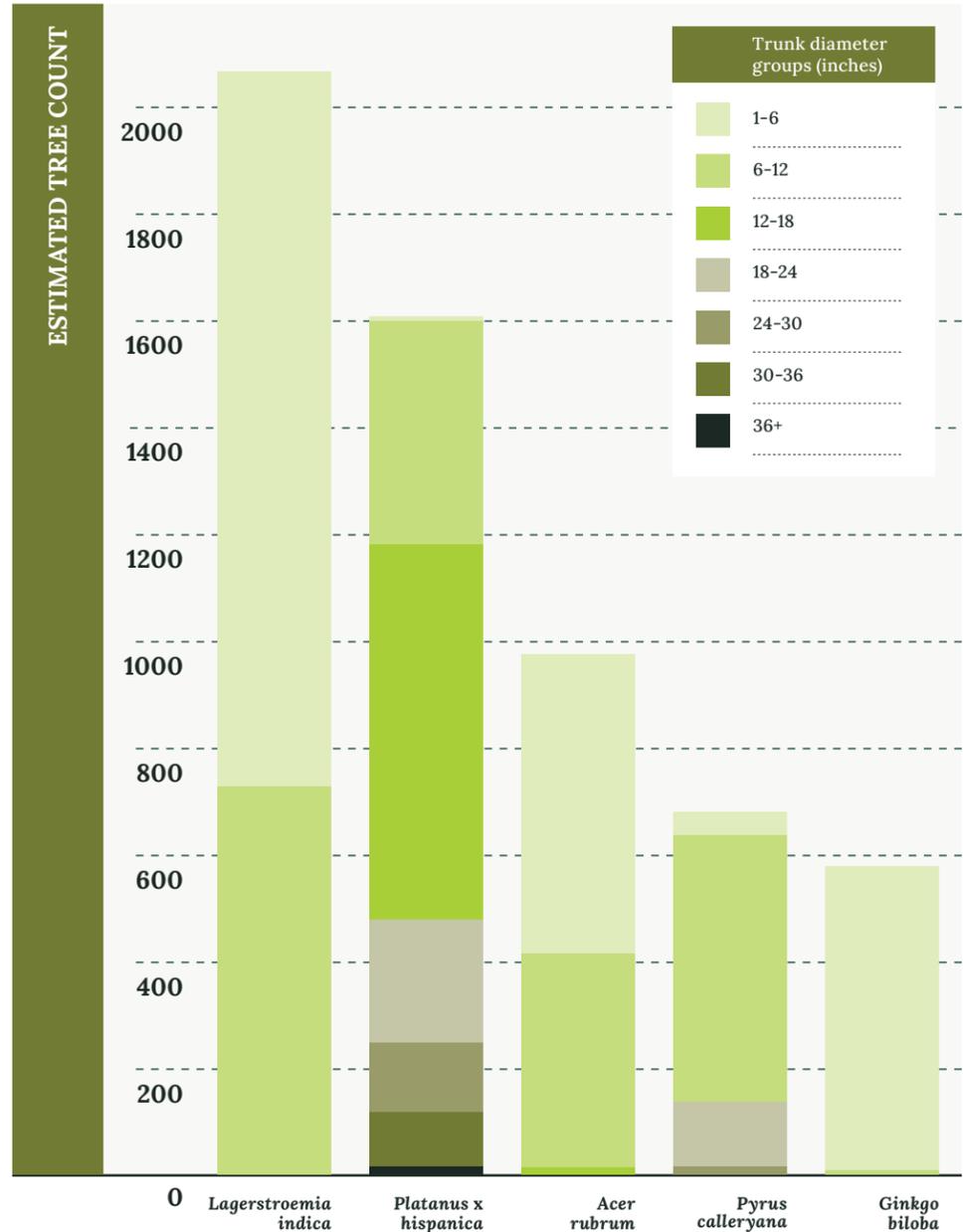
All trees in City parks were inventoried, providing a complete picture of species composition and condition in these spaces. Park trees are represented by 125 species, but the population is dominated by oaks, which account for about one-third of all park trees. While these trees provide substantial ecological and aesthetic benefits, reliance on a small number of species can increase vulnerability to pests, disease, and climate-related stress.

Park trees show a generally healthy size and age distribution, with a strong presence of young trees that supports long-term canopy renewal. At the same time, the proportion of very large, mature trees (3.4%) is high for a city. These trees deliver significant ecosystem services, but they also require specialized maintenance and can present higher long-term management costs.



Park trees by Sasha Kravchenko

Most common park tree species		
Species	Number of trees	Percent of total
<i>Quercus agrifolia</i>	569	15
<i>Sequoia sempervirens</i>	431	11
<i>Quercus lobata</i>	364	9
<i>Platanus × hispanica</i>	328	9
<i>Acer rubrum</i>	162	4
<i>Aesculus californica</i>	130	3
<i>Platanus occidentalis</i>	116	3
<i>Lagerstroemia indica</i>	109	3
<i>Quercus rubra</i>	107	3
<i>Platanus racemosa</i>	94	2
<i>Quercus douglasii</i>	70	2
<i>Liquidambar styraciflua</i>	68	2
<i>Fraxinus angustifolia</i>	119	2
<i>Juglans californica</i>	62	2
<i>Quercus sp.</i>	56	1
<i>Pyrus calleryana</i>	51	1
<i>Acer saccharinum</i>	50	1
<i>Cercis canadensis</i>	45	1
<i>Pistacia chinensis</i>	43	1
Other	810	22
TOTAL	3,836	100



STREET TREES

Street trees were assessed using a random sample inventory, with results extrapolated to describe the broader tree population in the public right-of-way. Approximately 80 species are found along Petaluma's streets, with a species mix that differs substantially from that of parks. Crape myrtles and London plane trees are especially predominant.

Looking more closely at the most common species highlights distinct planting patterns over time. Crape myrtles (*Lagerstroemia indica*) are small-stature trees, and all inventoried individuals have trunk diameters under 12 inches. London plane trees (*Platanus x hispanica*), by contrast, are large trees that were heavily planted in earlier decades—there are 120 trees over 30 inches in diameter, but only 10 trees under 6 inches, indicating limited recent planting.

Other common street trees, including red maple (*Acer rubrum*) and ginkgo (*Ginkgo biloba*), are currently concentrated in smaller size classes and will mature into medium-sized trees over time. Callery pear (*Pyrus calleryana*) is also common, reflecting past planting practices; its declining use in recent years is a result of its poor long-term performance.



Street trees in the downtown by Peter Blottman Photography

Most common street tree species		
Species	Number of trees	Percent of total
<i>Lagerstroemia indica</i>	2,070	18
<i>Platanus x hispanica</i>	1,610	14
<i>Acer rubrum</i>	980	8
<i>Pyrus calleryana</i>	680	6
<i>Ginkgo biloba</i>	580	5
<i>Quercus sp.</i>	560	5
<i>Celtis sp.</i>	530	5
<i>Pistacia chinensis</i>	400	3
<i>Quercus lobata</i>	330	3
<i>Quercus agrifolia</i>	300	3
<i>Prunus cerasifera</i>	260	2
<i>Fraxinus angustifolia</i>	250	2
<i>Liriodendron tulipifera</i>	190	2
<i>Platanus occidentalis</i>	180	2
<i>Cercis canadensis</i>	170	2
<i>Arbutus 'Marina'</i>	150	1
<i>Cinnamomum camphora</i>	120	1
<i>Crataegus sp.</i>	120	1
<i>Quercus rubra</i>	120	1
<i>Triadica sebifera</i>	120	1
<i>Gleditsia triacanthos</i>	110	1
<i>Arbutus unedo</i>	100	1
<i>Zelkova serrata</i>	100	1
Other	1,680	14
TOTAL	11,700	100

Fun Facts: Five most common park trees



California live oak

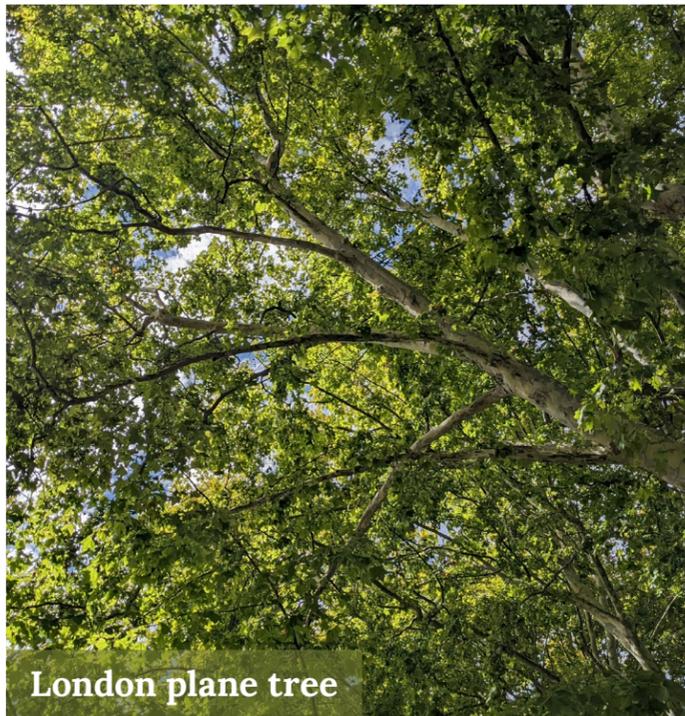
by Mary Tilbury



Red maple



Valley oak



London plane tree



Redwood

Fun Facts: Five most common street trees



Red maple

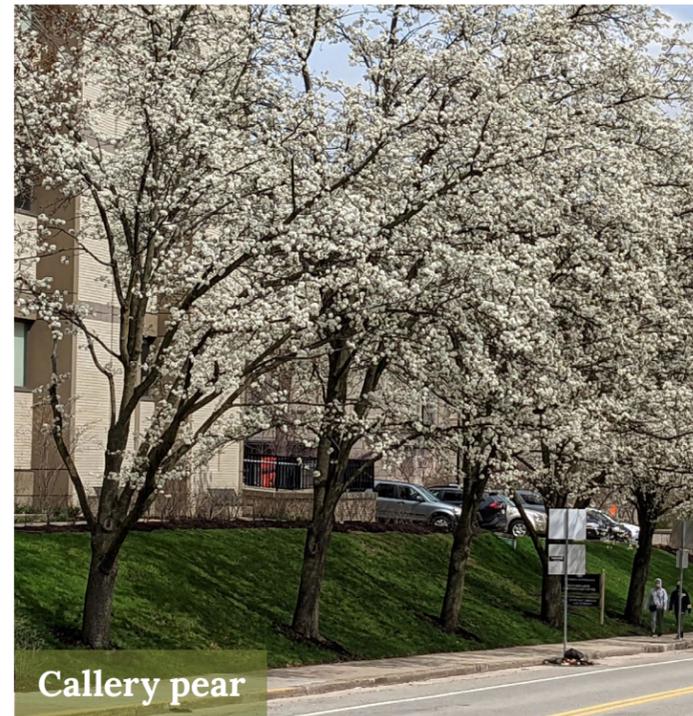
by Giuseppe Lipari



Crape myrtle



London plane tree

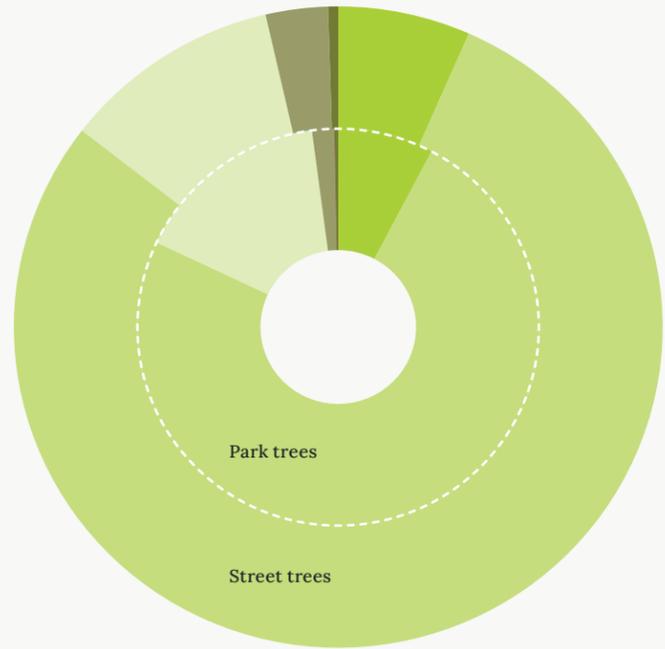


Callery pear



Ginkgo

Condition of Petaluma's trees



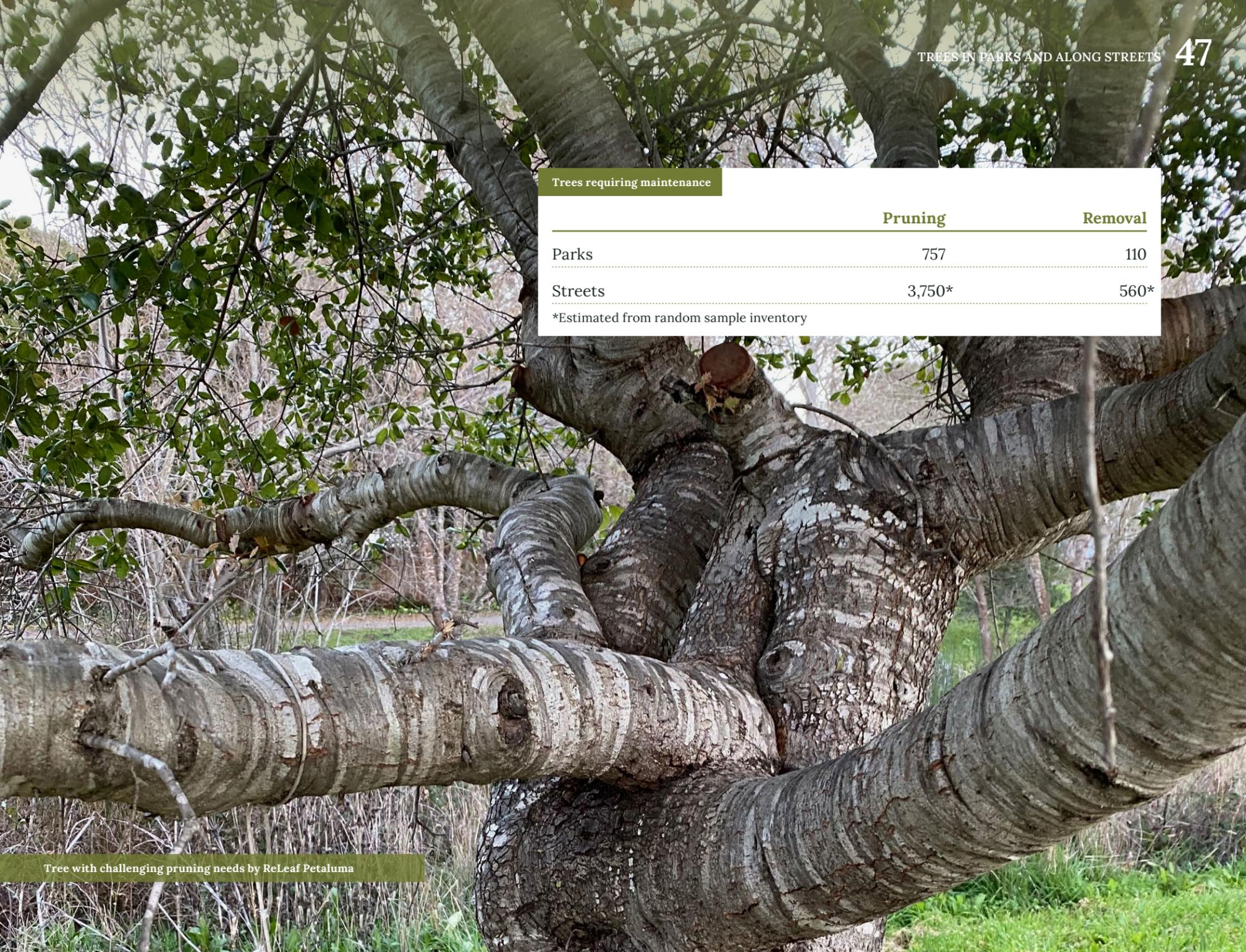
Condition score	Park trees	Street trees
Very good	7.7%	6.6%
Good	74.3%	78.9%
Fair	15.9%	10.9%
Poor	1.8%	3.1%
Dead	0.3%	0.5%

CONDITION AND MAINTENANCE NEEDS OF PARK AND STREET TREES

The condition or health of each tree and its maintenance needs were captured during the inventory, offering insight into species performance and a practical view of the work currently needed by trees. The trees were generally healthy, with more than 80% identified as good or very good. But health differed widely across species, with solid urban performers like crape myrtle and the London plane tree at the top and redbud and Callery pear as poorer performers.

For park trees, data on current maintenance needs indicates where efforts should be targeted to improve public safety and maximize tree survival. For street trees, the results help illustrate the level of effort that would be required if the City were to assume greater maintenance responsibility, while also highlighting where timely care by property owners is most critical to avoid hazards.

For more information on Petaluma's park and street trees, please see *The Municipal Forest Resource Analysis, 2026*.



Trees requiring maintenance	Pruning	Removal
Parks	757	110
Streets	3,750*	560*

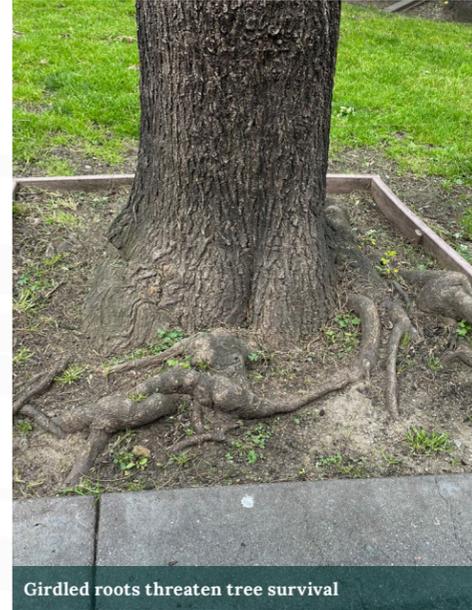
*Estimated from random sample inventory

Tree with challenging pruning needs by ReLeaf Petaluma



Key concerns and recommendations

Drawing on the interviews, community engagement, canopy analysis, policy review, and field observations described above, this plan identifies several recurring themes that shape the future of Petaluma's urban forest. The Key Concerns and Recommendations distill those findings and establish priorities for the Strategic Plan that follows.



Girdled roots threaten tree survival



Street trees in declining health by ReLeaf Petaluma



Unnecessarily tiny planting spaces threaten tree health by ReLeaf Petaluma

Concerns

THE URBAN FOREST LACKS A CLEAR CHAMPION.

Across the City, many people care deeply about the urban forest, but responsibility for trees is scattered. Without a clear champion empowered to speak for the urban forest every day, decisions tend to be reactive rather than intentional. Over time, that makes it harder to protect trees, plan ahead, and support the people who care for them.

MANAGEMENT STRUCTURE IS DIFFICULT TO NAVIGATE.

Tree-related roles and processes span multiple departments, and policies don't always line up. This can be frustrating for staff trying to do their jobs well, confusing for residents, and risky for trees that depend on timely, coordinated care. When the path forward isn't clear, even good intentions can stall.

TREES ARE ESSENTIAL— BUT NOT TREATED THAT WAY.

Trees provide shade, cleaner air and water, beauty, and relief from a warming climate, yet they are often compromised when space, funding, or timelines are constrained. These compromises might seem small today, but their effects will be cumulative and felt for decades to come.

THREATS TO THE URBAN FOREST ARE GROWING.

Climate change, drought and related regulations, pests and disease, aging trees, and ongoing development pressures all place increasing stress on Petaluma's urban forest. These challenges interact with each other, and their effects can compound over time. Without a coordinated, long-term response, the urban forest becomes increasingly vulnerable to sudden and widespread loss.



Petaluma street by Marcel Marchon

Recommendations

GROW THE URBAN FOREST—THOUGHTFULLY, FOR EVERYONE.

Petaluma should commit to growing its tree canopy over time, paying close attention to where shade and cooling matter most in daily life. Planting trees is not the only critical step; choosing the right trees, placing them well, and caring for them as they grow will allow benefits to accumulate over time. A larger, healthier canopy is one of the most practical ways to improve daily life while preparing for a warmer future.

GIVE THE URBAN FOREST A CLEAR CHAMPION.

Strong leadership turns good intentions into consistent action. A dedicated champion ensures that trees are not just everyone's responsibility, but someone's priority—carrying decisions forward, coordinating across departments, and keeping long-term care in focus. With clear leadership, the urban forestry program gains continuity, accountability, and a steady voice in everyday choices.



Caring for young trees by varbenov

CARE FOR TREES AS ESSENTIAL PUBLIC INFRASTRUCTURE.

Trees are valuable, living infrastructure, yet they are rarely managed with the same intention as other City assets. While most public assets are carefully tracked and maintained, trees are more likely to be noticed only when something goes wrong. Unlike most built infrastructure, however, the value of trees increases over time as they grow—delivering greater shade, carbon storage, habitat, and community benefit with each passing year. Caring for trees as public infrastructure means shifting from reaction to stewardship: supporting growth, anticipating risks, and planning for continuity.

NURTURE THE COMMUNITY AND THE TREES.

The urban forest brings the beauty and peace of nature into our everyday lives. By inviting residents to become stewards in the care of trees, the City can build shared knowledge and shared responsibility. When people feel connected to the urban forest, they are more likely to protect it and help it thrive.



Downtown by Peter Blottman Photography (iStock)

Strategic Plan

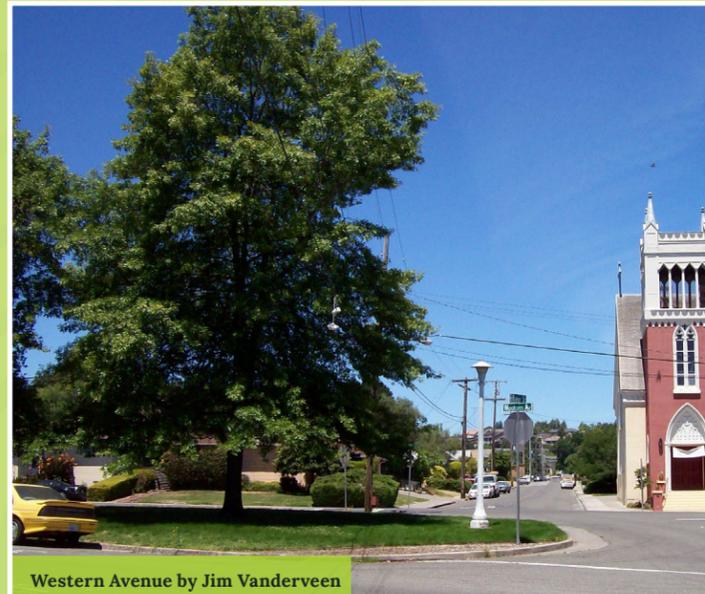
The Strategic Plan translates the findings of this Urban Forest Management Plan into four clear goals: Manage, Protect, Grow, and Engage. The *goals* define the City's long-term direction for its urban forest, the *strategies* outline the approaches needed to achieve each goal, and the *actions* identify specific steps for implementation over time. Together, this framework provides a practical roadmap for strengthening stewardship, improving coordination, and growing a healthier, more resilient urban forest—turning Petaluma's climate and resilience commitments into visible, sustained action across the city.



Petaluma city street by City of Petaluma

Manage

MANAGE Petaluma’s urban forest to protect public safety, support climate action, and ensure trees are cared for as essential public infrastructure.



Western Avenue by Jim Vanderveen

Protect

PROTECT Petaluma’s urban forest so existing trees can continue to provide shade, habitat, and climate benefits for the community.



Tree planting event by ReLeaf Petaluma

Grow

GROW Petaluma’s urban forest to improve the environment, reduce heat, and share the benefits of trees across neighborhoods and generations.



Partnering with community groups by ReLeaf Petaluma

Engage

ENGAGE the community in caring for Petaluma’s urban forest to build understanding, grow partnerships, and share stewardship.

Goal: MANAGE *Manage Petaluma's urban forest to protect public safety, support climate action, and ensure trees are cared for as essential public infrastructure.*



Pedestrians walk in the historic core of downtown Petaluma by Matt Gush

Goal: MANAGE

STRATEGY M1

Unify all tree management work in one program.

Tree-related work is currently spread across many departments, with no one specifically responsible for the trees. This strategy coordinates tree care across the city to grow the urban forest while increasing efficiency.

- **Action M1.1: Hire a full-time urban forester.** Fund a permanent urban forester to lead the City's tree work and carry out this Management Plan. This person will be the main point of contact for all tree-related tasks across departments, from managing planting and maintenance to reviewing permitting to overseeing trees during development projects. Give the role steady funding and the authority to match.
- **Action M1.2: Define each department's role in tree management.** Spell out each department's tree-related responsibilities, including Parks and Recreation, Community Development, and Public Works, with the urban forester coordinating across all three. Clear roles mean fewer gaps, less duplicated effort, and no tasks falling through the cracks.

- **Action M1.3: Add support staff for the urban forester.** As funding allows, add field and administrative support for the urban forester. This will be especially important as updates to the Tree Preservation Ordinance bring in more permit applications.
- **Action M1.4: Keep urban forestry staff trained and current.** Require continuing education so staff stay up to date as regulations, best practices, and conditions change.

STRATEGY M2

Build a real funding plan for urban forestry.

The City spends money on trees across multiple departments, but because those costs are buried in other budget lines, it's hard to know exactly how much. Tree-related revenue isn't tracked separately either, so there's not a clear connection between what comes in and what goes out. And without defined service levels, there's no way to know whether current spending is enough. This strategy brings the money into focus — what's being spent, what's coming in, and what it will actually take to manage the urban forest responsibly.

- **Action M2.1: Find out what the City already spends on trees.** Review budgets across all departments to find every dollar going to tree-related work, whether it's labeled that way or not. Do the same for revenue coming in through permits, fines, grants, and other sources.
- **Action M2.2: Create an Urban Forestry Fund.** Set up a dedicated fund for all tree-related revenue, including permits, fines, mitigation payments, and in-lieu fees, and spend it on trees. This makes the money easier to track and ensures tree-related revenue actually goes back to the urban forest.
- **Action M2.3: Decide what level of tree care the City will provide, and pay for it.** Set clear standards for how the City manages the urban forest, including tree planting and maintenance, permitting, inspections, and enforcement, then fund the work to meet those standards. Where current funding falls short, identify new sources. (See Appendix I for more on funding.)

STRATEGY M3

Understand and monitor the urban forest.

The City can't manage what it doesn't know it has. Petaluma has started inventorying its trees, but coverage is incomplete and the data isn't built into day-to-day operations. The park tree inventory, for example, was completed, but there isn't a system in place to keep it current. This strategy finishes the data collection, puts it to use, and makes sure it stays up to date.

- **Action 3.1: Finish the street tree inventory.** The City has already inventoried a sample of its street trees and most major roads. Complete the job by surveying all remaining street segments to CAL FIRE standards, including documenting what maintenance each tree needs.
- **Action M3.2: Put the tree inventory data to work.** Integrate tree data into the City's existing software and workflows so it actually gets used — for scheduling maintenance, reviewing permits, planning capital projects, and enforcing the Tree Preservation Ordinance. This also keeps the inventory current, since staff will be updating it as part of their regular work.

- **Action M3.3: Measure the canopy every five years.** Use a citywide canopy assessment to track how the urban forest is changing over time and whether the City is meeting its goals. CAL FIRE currently offers simplified versions of this analysis.

STRATEGY M4

Set standards, then enforce them.

Right now, the City doesn't have clear, written standards for how tree work should be done. Without them, it's hard to hold anyone accountable — contractors, developers, community groups, or City staff — because the expectations aren't well defined in the first place. This strategy puts standards on paper and builds in the oversight to make sure they're followed.

- **Action M4.1: Establish clear technical standards for tree work in one place.** Make the City's Tree Technical Manual (see Strategy P3 below) the single source for how tree work gets done — planting, maintenance, protection, and mitigation. Contracts, permits, staff procedures, and development conditions should all point back to the Manual instead of each setting their own rules.
- **Action M4.2: Tighten up tree care contracts.** Make sure every tree care contract spells out exactly what's expected, consistent with the Tree Technical Manual — from planting and pruning to post-planting care and performance quality.
- **Action M4.3: Establish inspection procedures for tree-related work.** Create clear procedures for verifying that tree work, whether on public property or required by a permit, actually meets City standards. When it doesn't, require it to be fixed.
- **Action M4.4: Track outcomes to improve standards and procedures.** Track inspection results and field observations in the inventory to spot recurring problems, then use what you find to update contracts, procedures, training, and the Tree Technical Manual.

Goal: MANAGE

STRATEGY M5

Deal with hazardous trees promptly.

Public safety comes first. Hazardous trees on public property and in rights-of-way must be identified and addressed before someone gets hurt. This strategy sets up those systems.

- **Action M5.1: Fix hazardous trees on City property.** Use the tree inventory to identify hazardous trees and address the risks through pruning, removal, or other needed work.
- **Action M5.2: Address hazardous street trees promptly.** Use the existing street tree inventory and drive-by inspections of unsurveyed blocks to identify hazardous trees, then work with adjacent property owners to make sure problems are corrected quickly, consistent with existing municipal requirements.
- **Action M5.3: Explore expanding the sidewalk repair program to cover street tree care.** The City already helps property owners with sidewalk repairs. Extending that program to include tree maintenance would improve care and reduce costs that currently fall unevenly on individual property owners, particularly in lower-income neighborhoods. It's also a practical step toward more consistent City involvement in street tree management.

STRATEGY M6

Move from emergency fixes to planned maintenance.

Addressing hazards keeps people safe, but trees on City property also need ongoing attention to stay healthy. That means regularly observing both the trees and the conditions they're growing in, identifying problems early, and correcting them — whether that's a tree that needs pruning or a site where soil, irrigation, or other conditions are working against the trees. This strategy builds a maintenance program to do all of that.

- **Action M6.1: Review current maintenance practices in City parks.** Review how park trees are currently being maintained — including irrigation, particularly with reclaimed water, pruning, and general care — and identify practices that are actively harming tree health. Use the results to correct problems immediately and inform the maintenance program going forward.
- **Action M6.2: Inspect City trees on a regular schedule.** Start with annual drive-by assessments of City-managed trees to identify maintenance needs and set priorities, track these observations in the inventory, then expand the inspection program as resources allow.

- **Action M6.3: Maintain City trees on a planned schedule.** Use inspection results to plan, schedule, and budget for routine care, rather than waiting until something fails.

STRATEGY M7

Study what it would take for the City to maintain street trees.

Street trees benefit everyone, but right now their care falls mostly on whoever lives next to them. The result is uneven maintenance and unfair costs. Taking over street tree care citywide would be a major commitment, so this strategy focuses on figuring out what it would cost, how it could be funded, and what it would look like in practice.

- **Action M7.1: Understand the street tree population and what it takes to maintain it.** Use the completed street tree inventory to build a picture of what's out there — how many trees, what species, their age and condition — and use that to estimate what a reasonable, ongoing maintenance program would cost.
- **Action M7.2: Estimate the full cost of caring for Petaluma's street trees.** Estimate what it would cost, annually and long-term, for the City to take over street tree care at a responsible service level, including planting, pruning, removals, establishment care, and sidewalk impacts.

- **Action M7.3: Identify realistic funding options for City-managed street tree care.** Evaluate a short list of viable funding approaches that could support street tree maintenance at scale, weighing stability, equity, feasibility, and alignment with the City's climate goals. (See Appendix I for more on funding options.)
- **Action M7.4: Present the City Council with a plan for City-managed street tree care.** Based on the cost and funding analysis, present the City Council with a framework that lays out what level of street tree care the City could take on, what it would cost, how it would be funded, and under what conditions to move forward.

STRATEGY M8

Plan for urban wood use.

When the City removes or prunes trees, the wood has to go somewhere. Right now, much of it ends up as waste. This strategy looks for ways to put that material to productive use — reducing emissions and getting more value out of every tree.

- **Action M8.1: Build local partnerships for reusing urban wood.** Connect with local mills, woodworkers, composters, and other partners who can put wood from City tree work to good use. Prioritize nearby options to keep transportation costs and emissions low.
- **Action M8.2: Require contractors to reuse or divert wood, not dump it.** Include clear requirements in tree care contracts for how wood from pruning and removals is handled. Contractors should prioritize milling, composting, or other productive uses over landfill disposal, and document what happens to the material.

STRATEGY M9

Track progress.

You can't improve what you don't measure. This strategy sets up a simple framework for tracking how the urban forest is doing and whether the City's management efforts are working.

- **Action M9.1: Choose the right metrics for urban forest health.** Choose a focused set of measures to track the health of the urban forest and the performance of the City's management program — things like canopy coverage, planting and removal numbers, maintenance activity, permit turnaround, funding levels, and climate benefits. With an up-to-date inventory, these metrics are readily available.
- **Action M9.2: Publish an annual urban forest report.** Publish an annual report on urban forest conditions, accomplishments, challenges, and priorities for the year ahead. This keeps the public and City leadership informed and holds the program accountable.

Goal: PROTECT *Protect Petaluma's urban forest so existing trees can continue to provide shade, habitat, and climate benefits for the community.*



Older oak trees by Jessica Warner

Goal: PROTECT

STRATEGY P1

Protect trees during development.

Petaluma needs new housing and development, and it needs its trees. The City already has rules to protect trees during construction, but tree impacts are often identified too late in the design process, and the burden of enforcement has fallen on City staff rather than the developer's own professionals. This strategy gets trees into project design earlier and puts the responsibility for protection where it belongs — on the development team, with clear City oversight.

- **Action P1.1: Require tree planting plans early in project review.** Developers should submit a preliminary planting plan — showing proposed tree locations, planting areas, and expected canopy — before site plans or tentative maps are approved. Getting trees into the design early means they won't be an afterthought squeezed in after grading and infrastructure decisions are already locked in.
- **Action P1.2: Require a project arborist from start to finish.** When a development project could affect trees, require the developer to hire a qualified arborist who stays involved throughout, from application through post-construction. The project arborist identifies impacts, specifies

protections, monitors construction, and checks in with the City's urban forester at key milestones to make sure requirements are followed.

- **Action P1.3: Enforce tree protection during construction.** Make tree protection the project arborist's responsibility to verify and document, not the City's to chase down. Require the arborist to inspect protections at critical construction phases and report to the City's urban forester, who reviews the documentation and spot-checks conditions in the field. When protections aren't followed, require immediate correction and apply consequences.

STRATEGY P2

Make tree rules clear and easy to follow — then enforce them.

The City has tree-related requirements throughout its code — for permits, development, mitigation, parking lots, and more. But if the rules are confusing or hard to navigate, compliance suffers. And if no one follows up to confirm requirements were met, the rules lose their effectiveness. This strategy addresses both sides.

- **Action P2.1: Simplify the tree permitting process.** Make it easier to understand and comply with tree permit requirements by reducing paperwork, lowering or eliminating

fees, consolidating review across departments, and making permit information easier to find. Establish clear follow-up procedures so permitted work and required mitigation actually get completed.

- **Action P2.2: Verify that tree protection requirements are met.** Using the tracking systems established in Action M3.2, confirm that tree-related requirements are actually carried out — replacements planted, mitigation completed, parking lot shade standards met, and new trees surviving through their establishment period.

STRATEGY P3

Keep the rules current.

Standards and codes only work if they reflect current best practices and real conditions on the ground. This strategy makes sure the City's tree-related policies and technical guidance stay up to date.

- **Action P3.1: Maintain a Tree Technical Manual.** Update and adopt a comprehensive Tree Technical Manual as the single reference for how tree work should be done in Petaluma. It should cover planting, maintenance, protection, and mitigation, and apply consistently across City contracts, staff procedures, permits, development conditions, and community planting.

- **Action P3.2: Review tree-related policies and codes periodically.** Regularly revisit the Tree Preservation Ordinance, General Plan policies, approved tree lists, and related standards to make sure they're still achieving their goals and remain clear, practical, and appropriately protective.

STRATEGY P4

Plan ahead for threats to the urban forest.

Trees face a growing list of challenges — pests, drought, fire, utility conflicts, and climate change. Rather than reacting to each crisis as it comes, the City needs to anticipate these threats and manage them proactively.

- **Action P4.1: Plant a wider variety of species for resilience.** Reduce the City's vulnerability to any single pest or climate threat by diversifying what gets planted. Follow a guideline like the 10-20-30 rule, which suggests no more than 10% of one species, 20% of one genus, or 30% of one family should be planted across the city, or develop a local variation and stick to it. (See Appendix III on nonnative species in urban areas.)
- **Action P4.2: Make sure trees still get water as conservation rules tighten.** New state regulations will require the City to stop irrigating nonfunctional turf as soon as this

year, which could seriously harm trees that depend on that water. Coordinate with Water Resources, Parks and Recreation, and Landscape Assessment Districts to keep trees watered within the rules, and help HOAs, commercial property owners, and residents understand how the requirements apply to trees.

- **Action P4.3: Stay ahead of emerging pests and diseases.** Threats like those facing Petaluma's large oak population are real and evolving. Monitor emerging risks, coordinate with regional and state partners, and develop response plans — keeping City staff, community partners, and property owners informed as conditions change.
- **Action P4.4: Balance fire safety with tree preservation.** Trees are increasingly being removed over wildfire and defensible-space concerns, sometimes based on insurance pressure or guidance that doesn't reflect local conditions. Work with fire officials to clarify what's actually required, what's recommended, and what's unnecessary — protecting public safety without losing trees that don't need to come down. (See Appendix II for more on wildfire and urban forestry.)

- **Action P4.5: Work with utilities to reduce tree conflicts.** Establish communication protocols with PG&E and other utilities before tree work happens near power lines or underground infrastructure. Push for pruning practices that meet the City's Tree Technical Manual standards, and where conflicts keep recurring, consider species changes that reduce long-term problems.

Goal: GROW *GROW Petaluma's urban forest to improve the environment, reduce heat, and share the benefits of trees across neighborhoods and generations.*



Planting new trees by ReLeaf Petaluma

Goal: GROW

STRATEGY G1

Grow the canopy.

More trees means a cooler, healthier, more livable Petaluma. Reaching the goal of roughly 18% canopy coverage in the coming decades means planting more trees on streets, in parks, on private property, and in the areas that need them most.

- **Action G1.1: Expand the number of street trees by 50%.** Grow the street tree population from 12,000 to 18,000 by planting a net gain of at least 250 street trees per year through City staff, contractors, and community partners. Required mitigation plantings for removed trees count toward this target.
- **Action G1.2: Add 250 park and open space trees per year.** Plant a net gain of at least 250 trees annually in parks and open spaces. In natural areas and along waterways, prioritize native species that support local ecosystems.
- **Action G1.3: Encourage 500 trees to be planted on private property trees per year.** Support this by following through on development planting requirements, enforcing parking lot shade standards, reaching out to commercial property owners and homeowners, and creating a simple online system where residents can register new trees to help track progress.

- **Action G1.4: Plant where the need is greatest.** Use the City’s canopy analysis and planting prioritization framework to focus efforts in areas with low canopy, high heat, poorer health outcomes, and lower incomes — so canopy growth supports equity and climate adaptation.
- **Action G1.5: Plant big trees wherever they’ll fit.** Choose large-canopy species whenever space and infrastructure allow. Bigger trees deliver far more shade, cooling, habitat, and climate benefit over time. Smaller species still make sense where conditions are tight.

STRATEGY G2

Partner with the community to plant more trees.

The City can’t do this alone. Community organizations bring capacity for outreach, volunteer coordination, and hands-on planting that the City doesn’t have. This strategy builds on those partnerships.

- **Action G2.1: Support ReLeaf Petaluma and other community planting partners.** Community groups can lead outreach, find planting sites, organize volunteers, plant trees, and provide early care. The City supports these efforts with technical guidance, site preparation, departmental

coordination, and access to City facilities and resources where feasible.

STRATEGY G3

Make it easier to plant trees on public property.

If the City wants more trees, the process for planting them shouldn’t be a barrier. This strategy reduces unnecessary steps so that straightforward planting projects can move forward quickly.

- **Action G3.1: Simplify permitting for street tree planting.** Publish clear criteria for when a street tree planting request can be approved through a quick, routine review. Straightforward requests get processed fast; sites with potential conflicts get a closer look. This builds on the permitting improvements in Action P2.1.
- **Action G3.2: Let Parks staff approve routine park tree planting.** Give qualified Parks and Recreation staff the authority to approve and carry out tree planting without extensive review or public outreach. Save committee and community input for big-picture park planning, not individual planting decisions.

STRATEGY G4

Build a forest that lasts.

A healthy urban forest isn’t just about planting more trees — it’s about planting the right mix and planning for what comes next as older trees reach the end of their lives.

- **Action G4.1: Broaden the species palette.** As noted in Action P4.1, plant a wider range of species suited to urban conditions, including resilient nonnatives that can handle poor soil and drought. Use inventory data to guide species selection so each new planting moves the City toward a more diverse, resilient mix. (See Appendix III on nonnative species in urban areas.)
- **Action G4.2: Plant the next generation before the current one is gone.** Use inventory data to identify areas where trees are aging or declining, and prioritize those areas for new plantings. Getting younger trees established before older ones come down keeps the canopy continuous.

STRATEGY G5

Lead by example: make trees a priority in City projects.

The City can’t ask developers, property owners, and community groups to plant trees while overlooking its own opportunities. Major capital projects like road rebuilds, the Fairgrounds and McNear Peninsula reenvisionings, and infrastructure upgrades are some of the best chances to add trees at scale. This strategy makes sure those opportunities don’t get missed.

- **Action G5.1: Get trees into City projects early.** Consider tree planting, canopy growth, and preservation during the early stages of capital improvement planning, street redesigns, and public space projects, before layouts are locked in.
- **Action G5.2: Design public projects so trees actually thrive.** Make sure public projects give trees what they need to reach maturity — enough planting space, soil volume, irrigation, and room to grow. A tree that’s set up to succeed is infrastructure; one that isn’t is an expense.

Goal: ENGAGE *ENGAGE the community in caring for Petaluma's urban forest to build understanding, grow partnerships, and share stewardship.*



Caring for trees by Alicia Keshishian

Goal: ENGAGE

STRATEGY E1

Make the urban forester the go-to person for trees.

Petaluma's urban forester should be someone residents know about and know how to reach — a visible resource for questions, guidance, and support on anything tree-related.

- **Action E1.1: Develop public education and outreach on urban forestry.** Use City communications and community events to share information about tree benefits, proper care, common pests, and available resources. Participate in events like Arbor Day and Future Fest to connect with residents.
- **Action E1.2: Make the urban forester easy to reach.** Make sure residents know there is an urban forester and how to reach them for help with tree-related questions on public or private property.
- **Action E1.3: Provide clear guidance on tree permits and regulations.** Communicate clearly about tree protection requirements, permitting, and what's expected, especially if the Tree Preservation Ordinance expands to cover private property. Getting ahead of new requirements with proactive outreach reduces confusion and pushback.

STRATEGY E2

Empower community organizations to get involved.

The City doesn't need to do all the outreach and education itself. Community groups are often better positioned to reach residents, especially in underserved neighborhoods.

- **Action E2.1: Support community-led planting, stewardship, and outreach.** Provide technical guidance, training, and coordination to organizations like ReLeaf Petaluma, schools, and neighborhood groups to expand participation in tree planting and care — particularly in neighborhoods with fewer existing resources.

STRATEGY E3

Build partnerships with agencies and utilities.

Decisions made by PG&E, fire officials, and other agencies directly affect Petaluma's trees. The City needs a seat at those tables.

- **Action E3.1: Build working relationships with utilities, agencies, and other partners.** As described in Strategy P4, work proactively with PG&E, fire officials, and other agencies to advocate for tree-friendly practices, coordinate on tree-related decisions, and make sure Petaluma's urban forestry goals are part of regional planning.



Preserved downtown Victorian house with street trees by Peter Blottman Photography



Shovel ready by SrdjanPav (iStock)



Implementation Plan

	TIMELINE	RESPONSIBLE
MANAGE		
Strategy M1: Unify tree management in one program.		
Action M1.1: Hire a full-time urban forester.	Year 1	City Manager, Administrative Services
Action M1.2: Define each department's role in tree management.	Years 1-2	All relevant program leads
Action M1.3: Add support staff for the urban forester.	Year 3-5	Urban forester, City Manager, Administrative Services
Action M1.4: Keep urban forestry staff trained and current.	Ongoing	Urban forester
Strategy M2: Build a real funding plan for urban forestry.		
Action M2.1: Find out what the City already spends on trees.	Years 1-2	Urban forester, Administrative Services, all relevant program leads
Action M2.2: Create an Urban Forestry Fund.	Year 1-2	Urban forester, Administrative Services
Action M2.3: Decide what level of tree care the City will provide, and pay for it.	Years 3-5	Urban forester, all relevant program leads
Strategy M3: Understand and monitor the urban forest.		
Action M3.1: Finish the street tree inventory.	Years 1-2	Urban forester
Action M3.2: Put the tree inventory data to work.	Years 3-5	Urban forester, Public Works, Community Development, Parks and Recreation

	TIMELINE	RESPONSIBLE
MANAGE		
Action M3.3: Measure the canopy every five years.	Year 5+ and ongoing	Urban forester
Strategy M4: Set standards, then enforce them.		
Action M4.1: Establish clear technical standards for tree work in one place.	Years 3-5	Urban forester, Public Works, Community Development, Parks and Recreation, Tree Advisory Committee
Action M4.2: Tighten up tree care contracts.	Years 3-5	Urban forester, Purchasing
Action M4.3: Establish inspection procedures for tree-related work.	Years 3-5	Urban forester, Public Works, Community Development
Action M4.4: Track outcomes to improve standards and procedures.	Years 5-10	Urban forester
Strategy M5: Deal with hazardous trees promptly.		
Action M5.1: Fix hazardous trees on City property.	Years 1-2	Urban forester, Public Works, Parks and Recreation
Action M5.2: Address hazardous street trees promptly.	Years 1-2	Urban forester, Public Works
Action M5.3: Explore expanding the sidewalk repair program to cover street tree care.	Years 3-5	Urban forester, Public Works, City Manager
Strategy M6: Move from emergency fixes to planned maintenance.		
Action M6.1: Review current maintenance practices in City parks.	Years 1-2	Urban forester, Parks and Recreation
Action M6.2: Inspect City trees on a regular schedule.	Years 3-5	Urban forester, Public Works, Parks and Recreation

	TIMELINE	RESPONSIBLE
MANAGE		
Action M6.3: Maintain City trees on a planned schedule.	Years 3-5	Urban forester, Public Works, Parks and Recreation
Strategy M7: Study what it would take for the City to maintain street trees.		
Action M7.1: Understand the street tree population and what it takes to maintain it.	Years 5-10	Urban forester, Public Works
Action M7.2: Estimate the full cost of caring for Petaluma's street trees.	Years 5-10	Urban forester, Public Works
Action M7.3: Identify realistic funding options for City-managed street tree care.	Years 5-10	Urban forester, City Manager, Public Works, Administrative Services
Action M7.4: Present the City Council with a plan for City-managed street tree care.	Years 5-10	Urban forester, Tree Advisory Committee
Strategy M8: Plan for urban wood use		
Action M8.1: Build local partnerships for reusing urban wood.	Years 3-5	Urban forester, Public Works, Parks and Recreation
Action M8.2: Require contractors to reuse or divert wood, not dump it.	Years 3-5	Urban forester, Purchasing
Strategy M9: Track progress.		
Action M9.1: Choose the right metrics for urban forest health.	Years 3-5	Urban forester
Action M9.2: Publish an annual urban forest report.	Years 3-5 and ongoing	Urban forester

	TIMELINE	RESPONSIBLE
PROTECT		
Strategy P1: Protect trees during development.		
Action P1.1: Require tree planting plans early in project review.	Years 1-2	Urban forester, Community Development
Action P1.2: Require a project arborist from start to finish.	Years 1-2	Urban forester, Community Development
Action P1.3: Enforce tree protection during construction.	Ongoing	Urban forester, Public Works
Strategy P2: Make tree rules clear and easy to follow – then enforce them.		
Action P2.1: Simplify the tree permitting process.	Years 1-2	Urban forester, Community Development, Public Works
Action P2.2: Verify that tree protection requirements are met.	Ongoing	Urban forester
Strategy P3: Keep the rules current.		
Action P3.1: Maintain a Tree Technical Manual.	Years 3-5	Urban forester, Tree Advisory Committee

	TIMELINE	RESPONSIBLE
PROTECT		
Action P3.2: Review tree-related policies and codes periodically.	Years 5-10	Urban forester
Strategy P4: Plan ahead for threats to the urban forest.		
Action P4.1: Plant a wider variety of species for resilience.	Years 1-2	Urban forester, Public Works, Parks and Recreation
Action P4.2: Make sure trees still get water as conservation rules tighten.	Years 1-2 and ongoing	Urban forester, Climate Action, Water Conservation
Action P4.3: Stay ahead of emerging pests and diseases.	Years 1-2 and ongoing	Urban forester, Climate Action, Integrated Pest Manager
Action P4.4: Balance fire safety with tree preservation.	Years 1-2 and ongoing	Urban forester, Climate Action, Fire Bureau
Action P4.5: Work with utilities to reduce tree conflicts.	Years 1-2 and ongoing	Urban forester

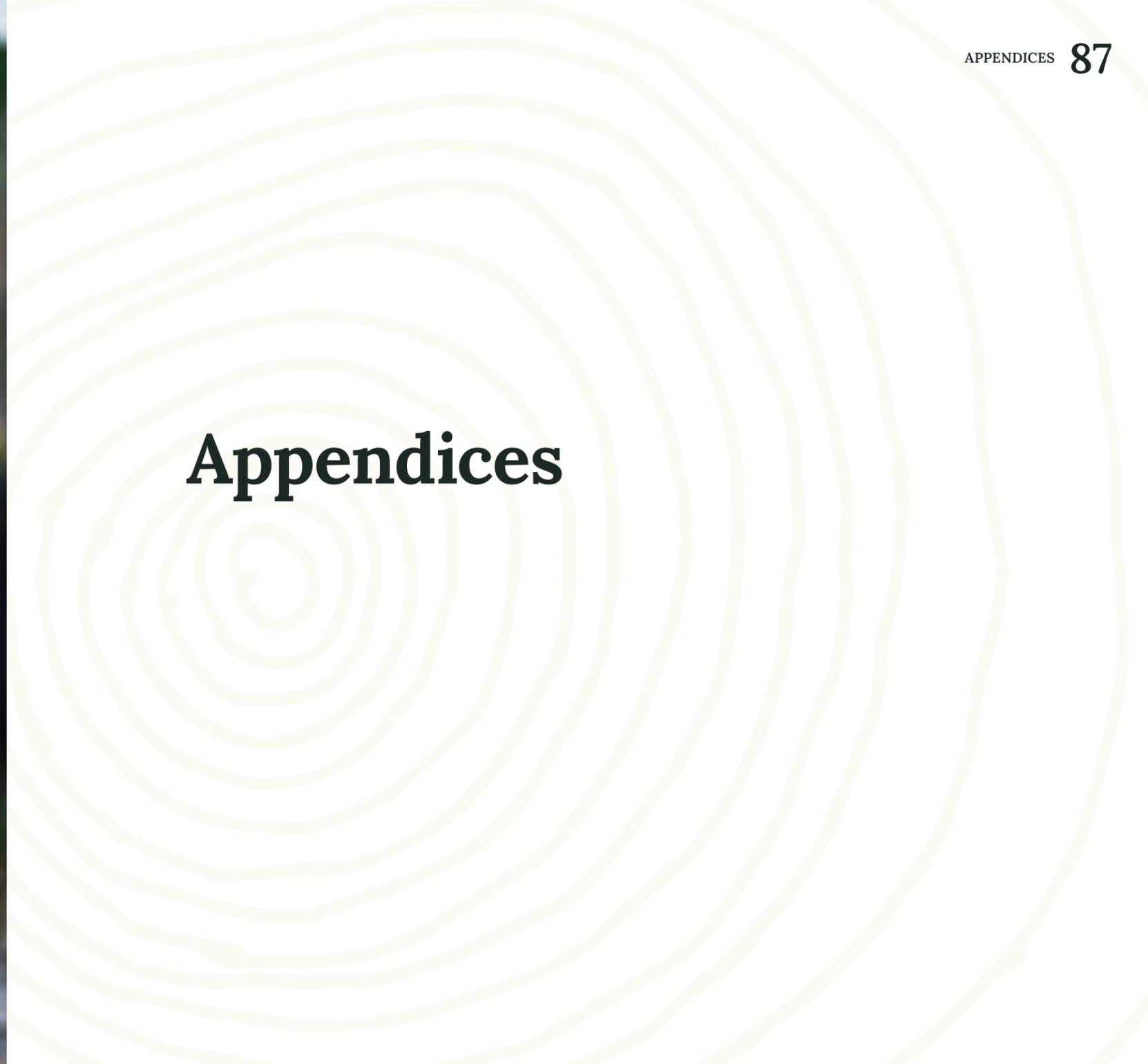
	TIMELINE	RESPONSIBLE
GROW		
Strategy G1: Grow the canopy.		
Action G1.1: Expand the number of street trees by 50%.	Years 3-5 and ongoing	Urban forester, Public Works, ReLeaf Petaluma
Action G1.2: Add 250 park and open space trees per year.	Years 3-5 and ongoing	Urban forester, Parks and Recreation, ReLeaf Petaluma
Action G1.3: Encourage 500 private property trees to be planted per year.	Years 3-5 and ongoing	Urban forester, ReLeaf Petaluma
Action G1.4: Plant where the need is greatest.	Years 1-2 and ongoing	Urban forester, Public Works, Parks and Recreation, ReLeaf Petaluma
Action G1.5: Plant big trees wherever they'll fit.	Years 1-2 and ongoing	Urban forester, Public Works, Parks and Recreation, ReLeaf Petaluma
Strategy G2: Partner with the community to plant more trees.		
Action G2.1: Support ReLeaf Petaluma and other community planting partners.	Years 1-2	Urban forester, ReLeaf Petaluma and community groups
Strategy G3: Make it easier to plant trees on public property.		
Action G3.1: Simplify permitting for street tree planting.	Years 1-2	Urban forester, Public Works
Action G3.2: Let Parks staff approve routine park tree planting.	Years 1-2	Urban forester, Parks and Recreation, Tree Advisory Committee

	TIMELINE	RESPONSIBLE
GROW		
Strategy G4: Build a forest that lasts.		
Action G4.1: Broaden the species palette.	Years 1-2 and ongoing	Urban forester, Climate Action, Public Works, Parks and Recreation
Action G4.2: Plant the next generation before the current one is gone.	Years 1-2 and ongoing	Urban forester, Climate Action, Public Works, Parks and Recreation
Strategy G5: Lead by example: make trees a priority in City projects.		
Action G5.1: Get trees into City projects early.	Years 3-5	Urban forester, Community Development
Action G5.2: Design public projects so trees actually thrive.	Years 3-5	Urban forester, Community Development

	TIMELINE	RESPONSIBLE
ENGAGE		
Strategy E1: Make the urban forester the go-to person for trees.		
Action E1.1: Develop public education and outreach on urban forestry.	Years 1-2 and ongoing	Urban forester, ReLeaf Petaluma
Action E1.2: Make the urban forester easy to reach.	Years 1-2 and ongoing	Urban forester
Action E1.3: Provide clear guidance on tree permits and regulations.	Years 1-2	Urban forester, Public Works, Community Development
Strategy E2: Empower community organizations to get involved.		
Action E2.1: Support community-led planting, stewardship, and outreach.	Years 1-2 and ongoing	Urban forester, community groups
Strategy E3: Build partnerships with agencies and utilities.		
Action E3.1: Build working relationships with utilities, agencies, and other partners.	Years 1-2	Urban forester



Young maple trees by Grigorenko (iStock)



Appendices

Appendix I. Funding Pathways to Support Implementation of the Urban Forest Management Plan

Implementation of this Urban Forest Management Plan (UFMP) will require sustained funding over time. However, not all actions require significant new revenue. Several high-impact steps—particularly unification of tree management work under an urban forester, cross-department coordination, establishment and enforcement of technical standards, improvements in inspections and permitting, and policy alignment—can be advanced through relatively modest and strategic investment.

This appendix outlines potential funding pathways for consideration. It is intended to inform evaluation and decision-making, not to prescribe a single approach.

I. A Strategic First Investment: An Urban Forester Position

Establishing and funding a dedicated urban forester position would substantially increase the City’s capacity to implement the UFMP and accomplish a cornerstone of the climate action plan. A professional lead for urban forestry could coordinate maintenance standards, development review, planting programs, data management, contractor oversight, grant applications, and community partnerships.

With appropriate authority and cross-departmental coordination, a dedicated urban forester could enable implementation of approximately two-thirds of the UFMP’s Action items. This step represents a high-leverage investment that strengthens accountability, improves efficiency, and reduces long-term risk. Funding for a temporary urban forester is currently available from a US Forest Service grant. Following this, the City should consider allocating General Fund resources or reallocating existing departmental funds to support this role.

II. Clarify and Formalize Existing Investment

Urban forestry activities are currently supported through a combination of departmental budgets and grant-funded expenditures. These investments are not always organized as a unified program, which can make it difficult to understand the City’s total level of commitment or to plan for long-term needs.

As a foundational step, the City should identify and consolidate all current spending related to urban forestry, including maintenance, emergency response, planting, and permitting to establish a clear baseline and evaluate how those resources are allocated.

In many communities, a clearer understanding of existing expenditures reveals opportunities to shift from reactive spending toward more predictable, preventive care over time. Treating trees as public infrastructure includes managing them with the same emphasis on long-term stewardship applied to other public assets.

III. The Urban Forestry Fund

The Tree Preservation Ordinance currently under development establishes an Urban Forestry Fund to receive and manage revenues associated with tree protection, permitting, and related activities. Creating a dedicated fund provides a transparent structure for reinvesting tree-related payments into the long-term health and expansion of the urban forest.

- Potential revenue sources for the Urban Forestry Fund may include:
- In-lieu tree replacement fees.
- Permit application and review fees for protected trees.
- Administrative penalties or mitigation payments resulting from unauthorized removal or non-compliance.
- Development-related impact or mitigation fees adopted pursuant to City policy.

Allocations within City capital improvement projects where tree planting or replacement is incorporated into project budgets.

By consolidating these revenues within a dedicated fund, the City can ensure that tree-related payments—whether from individual property owners or development activity—are reinvested in planting, establishment care, canopy monitoring, and related program support.

IV. Transient Occupancy Tax (TOT): Visitor-Based Contribution

Petaluma may consider establishing a new Transient Occupancy Tax (TOT) to support urban forestry management (similar to a program implemented by the City of San Luis Obispo). A visitor-based contribution can be framed as an investment in sustainable and responsible travel, linking tourism activity to climate mitigation, shade, and community resilience.

Potential applications include:

- Park and street tree maintenance and establishment.
- Canopy expansion in high-visibility or visitor-serving areas.
- Support for community stewardship and education initiatives.

Any new or increased TOT would require voter approval pursuant to state law. Allocation of existing TOT revenue would require Council direction and consideration of broader City funding priorities.

A TOT-based approach offers a transparent mechanism to align visitor activity with long-term investment in public shade, climate resilience, and neighborhood livability.

V. Grants and External Funding

State, federal, and philanthropic grants can support urban forestry initiatives, particularly for:

- Planting and canopy expansion.
- Climate resilience projects.
- Workforce development and youth training.
- Inventory completion and canopy analysis.

Grants are often competitive and episodic. They are best viewed as opportunities to accelerate or expand specific initiatives rather than as reliable long-term maintenance funding. Dedicated staff capacity significantly improves competitiveness for these resources.

VI. Voluntary Contributions

Voluntary funding mechanisms may provide supplemental revenue and strengthen community engagement around urban forestry. These approaches are best viewed as complementary to core City funding rather than as primary funding sources for ongoing maintenance operations.

Potential options include:

- Optional utility bill add-ons through Community Choice Aggregation programs, such as with Sonoma Clean Power.
- Community donation or subscription programs administered through a nonprofit fiscal sponsor.
- Business sponsorships or block-level contributions.

These mechanisms can help build visibility and shared ownership of the urban forest and may support targeted planting or stewardship efforts. However, because participation levels and revenue are inherently variable, voluntary programs should not be relied upon to fund core staffing or long-term maintenance obligations.

VII. Long-Term Revenue Options

If baseline funding, the Urban Forestry Fund, and supplemental sources prove insufficient to meet adopted UFMP goals—particularly with respect to long-term street tree maintenance cycles—the City may evaluate dedicated revenue mechanisms to provide greater stability and predictability.

Potential options could include:

- A voter-approved parcel tax dedicated to urban forestry operations and maintenance.
- A voter-approved sales tax increment or other legally permissible general tax measure.
- Other revenue mechanisms authorized under state law and aligned with broader City funding priorities.

Any dedicated or special tax would require voter approval pursuant to state law and should be evaluated in the context of community priorities, service levels, and the City's overall fiscal strategy.

Appendix II. Wildfire Context for Urban Forest Management

Petaluma is located within a region that has experienced significant wildfire events in recent years. Wildfire risk influences development standards, vegetation management practices, insurance requirements, and emergency preparedness. This appendix provides regulatory and operational context relevant to urban forestry management. It does not replace or supersede fire management plans or applicable state and county regulations.

The Geographic Context

California divides land into Local Responsibility Areas (LRA) and State Responsibility Areas (SRA), which determine primary responsibility for wildland fire suppression. The City of Petaluma is located entirely within a Local Responsibility Area (LRA), meaning the Petaluma Fire Department has primary responsibility for fire response within city limits.

State Fire Hazard Severity Zone (FHSZ) mapping identifies portions of the City as Moderate Fire Hazard Severity Zone, with a small area designated as High Fire Hazard Severity Zone. No areas within city limits are currently designated as Very High Fire Hazard Severity Zone.

CAL FIRE mapping also identifies limited areas in the southwestern corner of Petaluma as Wildland–Urban Interface (WUI), where built development and vegetated landscapes meet. The WUI can experience more complex fire behavior due to the interaction between structures and surrounding vegetation, including increased ember exposure and the potential for fire to move between vegetated areas and built environments. As a result, building standards, defensible space requirements, and vegetation management practices may be more closely tied to wildfire considerations in these areas.

A portion of the Petaluma WUI is designated as a Mutual Threat Zone (County responds to City), reflecting coordinated response arrangements across jurisdictional boundaries.

Urban forestry planning and maintenance practices should be aware of these designations, particularly in areas near open space, naturalized corridors, or WUI boundaries.

The Regulatory Context

The intersection of urban tree management and wildfire risk is reflected in several regulations.

LOCAL HAZARDOUS VEGETATION AND FIRE PREVENTION AUTHORITY

The City's Hazardous Vegetation and Weed Abatement Ordinance authorizes the Fire Prevention Bureau to require correction of combustible vegetation conditions, including dead or hazardous trees, where fire risk is present. In addition, designation of a tree as a fire hazard by the Petaluma Fire Department or other qualified authority is grounds for approval of a Tree Removal Permit under the pending revisions of the Tree Preservation Ordinance.

STATE DEFENSIBLE SPACE REQUIREMENTS

Under California Public Resources Code §4291, defensible space requirements apply within all State Responsibility Areas (SRA) and within Local Responsibility Areas (LRA) that are designated as Very High Fire Hazard Severity Zones (VHFHSZ).

As of this Plan's adoption, no areas within the City of Petaluma's incorporated city limits are located in an SRA, and no areas are designated as LRA-VHFHSZ. Accordingly, state-mandated defensible space requirements under §4291 do not currently apply within city limits.

However, most of the land adjacent to the incorporated city limits (including neighborhoods with Petaluma mailing addresses) is located within State Responsibility Area and therefore subject to state defensible space requirements. Fire hazard designations are based on jurisdictional boundaries and official hazard maps, not postal address.

At the same time, wildfire-related vegetation management remains a statewide policy focus, and future updates to hazard mapping could alter applicable requirements. Urban forestry staff should remain aware of state-level changes to Fire Hazard Severity Zone designations and related legislation.

Agency Roles and Coordination

Urban forestry management intersects with multiple agencies whose responsibilities relate to wildfire risk, vegetation management, and emergency response.

ENTITY	WILDFIRE AND URBAN FORESTRY ROLE
Petaluma Fire Department	Fire response within city limits; enforcement of hazardous vegetation and fire prevention standards; issuance of written hazard determinations where applicable.
CAL FIRE	Establishes Fire Hazard Severity Zone (FHSZ) maps; primary wildland fire suppression authority in State Responsibility Areas outside city limits; may assume command during large regional wildfire incidents.
PG&E	Conducts vegetation management and line-clearance activities pursuant to state and federal wildfire mitigation and electrical reliability requirements. These activities are governed by utility regulations and may operate independently of local tree preservation standards.
City Community Development Dept.	Reviews development proposals, including projects near WUI-designated areas where vegetation management or fuel modification conditions may apply.
Public Works Department	Oversees maintenance of street trees and public vegetation within city limits, including removal of hazardous trees and coordination with Fire Prevention staff when wildfire-related concerns arise.

The Insurance Context

In addition to public wildfire regulations, private homeowners’ insurance practices increasingly influence vegetation management decisions in California. Insurance carriers may evaluate properties for wildfire exposure using inspections, aerial imagery, and hazard mapping, and may require vegetation clearance, pruning, or removal of trees near structures as a condition of continued coverage.

These determinations are made independently of City tree protection regulations. Within the City of Petaluma, tree removal or major pruning remains subject to applicable permitting requirements, even when insurance-related vegetation concerns are identified. Clear documentation and early communication with City staff can help property owners navigate situations where insurance requirements intersect with local tree regulations.

Implications for Urban Forestry Management

Wildfire context does not alter the City’s commitment to maintaining and growing a healthy urban canopy. However, it does shape how certain decisions are evaluated, particularly in areas near open space or within designated WUI boundaries.

Urban forestry staff should:

- Be aware of Fire Hazard Severity Zone (FHSZ) designations when evaluating planting, maintenance, or removal decisions.
- Coordinate with Fire Prevention staff when hazardous vegetation conditions are identified or when properties are located near WUI-designated areas.
- Recognize that documented fire hazard determinations may influence tree management outcomes.
- Understand that utility vegetation management activities are governed by state and federal wildfire mitigation and reliability standards.
- Monitor updates to statewide hazard mapping and related legislation that could affect future requirements within city limits.

Appendix III. The role of nonnative plants in cities

There is a strong voice in Petaluma for the predominant or even exclusive use of native tree species. The allure of native plants is clear—they are the best source of habitat and food for our native fauna, they tie us to the natural history of our city, and they would seem to be best suited to the growing conditions. This appendix will argue that, despite these advantages, the case for relying on the use of native species in an urban environment is short-sighted.

Urban environments are not “native” environments

Urban areas are built environments. They are hotter, drier, more polluted, and with poorer soils than the environment that existed prior to the development of the city. Plants that evolved to survive in the pre-existing natural environment should not be expected to survive in the modern one.

An additional concern exists in California: about half of our native tree species are riparian, i.e., they grow along streambeds and river banks that provide a continuous source of water. Outside of a riparian corridor, they require heavy irrigation and well-drained and aerated soil.

Finally, urban areas have many structural constraints that do not exist in natural spaces. Trees planted along streets shouldn't have shallow roots that damage sidewalks. They shouldn't sprawl too close to the ground and block foot and vehicle traffic and sight lines. They can't be too tall when planted under powerlines. They need to be amenable to heavy pruning to keep them away from traffic signs and trucks. They shouldn't have messy fruit or slippery acorns or weak branching, all of which pose hazards to pedestrians. They can't be too prone to pest outbreaks because many cities have banned the use of pesticides, leaving trees unable to be treated.

A broad species palette that includes nonnative species, especially those that have been shown to thrive under urban conditions, allows urban forest managers to choose the right tree for the right place, even when faced by a multitude of constraints and a challenging environment.

The threat of pests and diseases in a globalized world

New pests and diseases that threaten our wild and urban forests appear on our shores all the time in this globalized world. Many, of course, fail to find a foothold. But those that do can bring unimaginable destruction. To take a prominent example, Dutch elm disease is estimated to have killed 50 to 100 million elm trees in the United States since it was introduced to this country in 1930. In Minneapolis, the native American elm represented 95% of trees planted along boulevards. In just one year (1977), 190,000 of them died. This heavy reliance on one species in many U.S. cities had a twofold impact on the disease: it was able to spread easily from one tree to the next and, although it had only one target, the end of all the elms meant the end of nearly all the trees. A broader palette of species would have meant a smaller fraction of the urban forest killed.

In California, most urban areas have a very small number of native tree species. In Petaluma, there are about ten: *Acer macrophyllum*, *Aesculus californica*, *Arbutus menziesii*, *Quercus agrifolia*, *Quercus garryana*, *Quercus kelloggii*, *Quercus lobata*, *Salix laevigata*, *Salix lasiandra*, *Umbellularia californica*. (Contrast this with East Coast cities, where the number of native tree species will be on the order of 50 to 75.)

Of the ten native species in Petaluma, three are riparian species and require high amounts of water, and thus are not suitable for most urban sites. Of the remaining seven, four are oak trees, and oak trees are currently threatened by two significant pests in Northern California: sudden oak death and the newly arrived Mediterranean oak borer. A heavy reliance on native species means a heavy reliance on oaks, which leaves the urban forest vulnerable to disease.

Species diversification is protection against pests and diseases.

Climate change reduces the relevance of locally adapted evolution

One key argument often made in favor of native plants is that they have evolved over the centuries to their regional climate. But as we have so recently seen with years of drought followed by winters of record-breaking rainfall, the climate of California is changing quickly and dramatically. The plants adapted to the climate of the 20th century are unlikely to be the plants of the 21st century. Because we cannot reliably predict the effects of climate change, planting a diversity of species is the best hedge against disaster.

A city's forest reflects the city's people

It is reasonable to assume that native plant advocates are motivated by goodwill and a sincere desire to conserve nature as they see best. But the history of the native plants movement is not without its problematic side, which has long been tied to concerns about “impurity” and the “inferiority” of other cultures.

The desire for “pure” nature in wildland areas might be a reasonable philosophical approach, but cities are a cultural construct, and the trees in them reflect the cultures of all of those who have come before us. Waves of immigrants from around the world have brought their plants with them—for comfort, for sustenance, so that they would feel less alien in their new home. Petaluma's plant palette should reflect the diversity of the people who call this city home.

This page intentionally left blank.



PETALUMA
**URBAN
FOREST
MANAGEMENT
PLAN**