



KEY ACTION AREA:

Prioritize nature-based solutions

The need

Nature-based solutions can help the South-Central Puget Sound address rising heat and smoke risks while improving community health, reducing inequities, strengthening local economies, providing cobenefits, and protecting natural resources.⁷³ NbS also provide an opportunity to integrate Indigenous-led solutions, support Indigenous stewardship practices, and center Indigenous knowledge and lived experiences as essential to climate resilience. NbS strategies such as climate-smart tree canopies, green roofs, green walls, and pocket forests offer improved smoke-event air quality and other environmental and social cobenefits, including community cohesion.⁷⁴ Integrated water-focused strategies like rain gardens, street trees, permeable surfaces, and building-scale reuse enhance resilience by capturing and filtering stormwater, recharging groundwater, and reducing flooding. With cross-jurisdictional coordination, aligned policies, workforce investment, and public-private partnerships, the region can scale NbS that deliver immediate cooling and clean-air benefits, support local businesses, and lower building cooling costs, all while strengthening long-term climate and water security.

Action plans for high-priority strategies

The following action plans outline steps to implement selected high-priority strategies and identify key partners and existing efforts to build on.



Waterfront with a view of Olympic Mountain in Bremerton, Washington



This is an excerpt from the C2ES Regional Action Roadmap for Extreme Heat and Wildfire Smoke, informed from conversations from the South-Central Puget Sound Climate Resilient Communities Accelerator.

Find the full Roadmap here: <https://www.c2es.org/document/puget-sound-action-roadmap>.



HIGH-PRIORITY STRATEGY: Expand climate-smart tree canopy to reduce urban heat effects, prioritizing frontline communities and neighborhoods.

Expanding climate-smart tree canopy can significantly reduce urban heat and improve air quality, especially in frontline neighborhoods that face the greatest exposure during heat and smoke events. This action plan strengthens that outcome by coordinating a regional urban forestry strategy, advancing public-private partnerships, and launching pilot projects and workforce training programs that increase tree cover, improve long-term maintenance, and deliver cooling, health, and equity benefits.

STEPS:

- 1. Develop a regional urban forestry strategy for heat and smoke resilience** that aligns existing efforts under a shared plan.
 - Map current tree canopy to identify low-canopy, high-heat, high-smoke exposure zones across the five-county region using existing data sources such as American Forests' *Tree Equity Score Analyzer Tool*⁷⁵ and the *Washington State Department of Health's Environmental Health Disparities (EHD)*⁷⁶ map. Also consider identifying alternative transportation areas (e.g., sidewalks, bus stops, bike trails).
 - Compile and examine lessons learned from current tree canopy expansion efforts to understand barriers to implementation and maintenance.
 - Create a long-term, sustainable financing strategy, which could include community funds, public-private partnerships and other methods of stacking funding from public, private, and philanthropic resources.
 - Set target canopy expansion and NbS goals informed by health and equity metrics (e.g., historic redlining), including for street trees, rain gardens, and green infrastructure. The canopy expansion targets should also consider how to include goals for remediating large impermeable hot surfaces, such as parking lots.
 - Develop a "climate-resilient tree species list" that prioritizes native and non-invasive species for the region and explore partnerships with nurseries and holding facilities—including county conservation districts and parks' propagation facilities—across the region to ensure supply and availability.
- 2. Convene a working group of public and private partners to coordinate implementation** of the regional urban forest and NbS strategies.
- 3. Build private-sector partnerships** to advance investments in urban forests, including by:
 - identifying past or current pilot projects on urban forests and synthesizing findings and best practices to inform and strengthen future projects
 - identifying land developers, business improvement districts, chambers of commerce, major employers and manufacturers, and industrial sites in low-canopy locations across the region
 - identifying existing employee volunteer programs at major employers and local non-profits that offer corporate partnerships to elevate opportunities for companies to partner with community-based organizations on tree planting and maintenance activities
 - designing a series of pilot projects in a variety of settings and community types that demonstrate the multiple benefits of public-private partnerships on tree canopy and NbS investments for communities and businesses.
- 4. Advocate for and support adoption of supporting policies and codes** for tree preservation, expansion, and maintenance, including, for example:
 - developing and compiling model land-use codes, tree preservation ordinances, and stormwater or green infrastructure policies that tie in resilience to heat and smoke
 - incorporating tree canopy and vegetation requirements in sites near high-exposure buildings (e.g., schools)
 - increasing parking lot landscaping and tree requirements, as well as required soil volume minimums for trees to provide cooling in high-heat locations and improve tree health.
- 5. Support existing programs or launch a new regional training program** for arborists, green-infrastructure installers, landscapers, and maintenance crews to develop a climate-ready workforce to support the expansion of tree canopy.

ESSENTIAL LEADERS AND PARTNERS:

- **Nonprofit:** community-based organizations, unions representing arborists and landscaping workers
- **Public:** natural resource, planning, and urban forest departments; public works departments; soil and water conservation districts; Washington State University (WSU) Extension; Washington State Department of Natural Resources; Washington State Department of Transportation; local transportation departments
- **Private:** landscape architects, businesses located in urban-heat islands, major employers, business improvement areas

EXAMPLES AND EXISTING EFFORTS:

- *Greening Research in Tacoma Project (G.R.I.T.)*⁷⁷
- City of Seattle's *Executive Order 2025-09: Actions to Increase Tree Preservation on Private Property*⁷⁸
- *Seattle Parks Foundation's Tree Equity Network*⁷⁹
- *Seattle Jobs Initiative Green Stormwater Infrastructure Careers* program⁸⁰
- *SODO Business Improvement Area's Green Space Plan*⁸¹
- The Climate Change Response Framework's *Climate Change Vulnerability of Urban Trees for the Puget Sound Region, Washington*⁸²
- Downtown Denver Partnership's *Urban Forestry Initiative*⁸³
- City of Phoenix's *Cool Corridor's Program*⁸⁴
- Groundwork Hudson Valley's "*Green Team*" *Youth Employment Program*⁸⁵
- Anne Arundel County Watershed Stewards Academy's *Climate-Resilient Tree Species List*⁸⁶
- Pocket forests, such as *Brookline's Mini-Forests*⁸⁷, using the *Miyawaki Method*⁸⁸



HIGH-PRIORITY STRATEGY: Advance NbS that preserve and protect water resources to ensure clean, reliable supply and provide cobenefits for heat resilience and air quality.

NbS can protect and restore the region's water resources while simultaneously delivering cooling, cleaner air, and public-health benefits that strengthen resilience to extreme heat and wildfire smoke. This action plan advances that vision by coordinating cross-sector partners, piloting multi-benefit green-infrastructure projects, and embedding water-resilience practices into planning, public campaigns, and code updates to ensure communities and businesses have a clean, reliable, climate-ready water supply.

STEPS:

1. **Convene a cross-sector working group** of urban planners, landscape architects, agricultural stakeholders, environmental groups, public health, and private business leaders to co-identify NbS that protect water resources and provide cobenefits for heat and smoke resilience across the region, possibly taking an *Integrated Water Resources Management (IWRM) approach*.⁸⁹
2. **Identify gaps and needs** by mapping existing water assets, green infrastructure, and cooling spaces to identify vulnerable and under-resourced communities that lack equitable access to NbS.
3. **Advance shared understanding of NbS** by hosting conversations with communities and cross-sector leaders to reassess assumptions about water-intensive (e.g., lawns) and impermeable (e.g., pavement) surfaces and introduce nature-based strategies for water conservation and heat and smoke resilience.
4. **Pilot multi-benefit public-private projects** by designing and implementing two or three demonstration projects where green infrastructure supports both private company operations and neighboring community resilience, achieving water conservation, cooling, and social benefits.
5. **Embed water resilience in public campaigns** by integrating water conservation and resilience messaging into public health, social, and climate campaigns, leveraging existing platforms like Puget Soundkeeper's Swim Guide to provide accessible, multi-channel information, and equipping businesses with messaging and practices they can use to strengthen operations and educate employees.
6. **Advocate for building code and planning updates** that support water reuse, green infrastructure, and nature-based cooling strategies across the region.

ESSENTIAL LEADERS AND PARTNERS:

- **Nonprofit:** community-based organizations, conservation NGOs, community foundations
- **Public:** municipal and urban planners, business improvement areas, planning commissioners, city council members, wastewater treatment plants, sewer and water districts, public utility districts, soil and water conservation districts, watershed programs
- **Private:** engineers, engineering firms, local businesses, landscape architects

EXAMPLES AND EXISTING EFFORTS:

- *Sprinkler Recreation Park Splash Pad*⁹⁰
- *Seattle Public Utilities (SPU)'s RainCity Partnership*⁹¹
- *Water Reuse Case Study: Brooklyn, NY*⁹²
- The University of Washington's (UW) *Landscape Architecture Program*⁹³ in the College of Built Environments