

erial view of High Point neighborhood green infrastructure and green space: © Erin Spaulding

Building a Sustainable and Equitable Green Infrastructure Workforce

Learnings from the Green Infrastructure Workforce Collaborative

Puget Sound cities are increasingly investing in green infrastructure—including tree canopy, rain gardens, and bioswales—in lieu of traditional gray infrastructure. Green infrastructure provides significant net benefits over the long-term, including effectively working with natural systems to reduce flooding, moderate heat waves, replenish water supplies, improve air quality, and enhance life for local residents.

Green infrastructure projects can also support robust local economic development with goodpaying jobs and rewarding career paths.

But, project implementers often struggle to maintain a consistent pipeline of projects and find workers who are trained to do this specialized work, and prospective workers lack equitable training opportunities and entry points into the field.

The Green Infrastructure Workforce Collaborative brings together practitioners

and decision makers in the Puget Sound region to expand sustainable and equitable career paths for qualified workers to design, install, and maintain green infrastructure projects, thereby fully realizing the economic development potential of the region's shift to green infrastructure.

Over the last five years, the Workforce Collaborative has increased access to career paths; designed a training curriculum; launched pilots to address training and workforce gaps; created venues for information-sharing and collaboration across practitioners, workers, and decision makers; and ground-truthed work with frontline communities who have experienced barriers to entering the field. This document captures learnings from the Workforce Collaborative's efforts and highlights opportunities to make progress toward the vision of a robust green infrastructure workforce in the region.

History of the Workforce Collaborative

Emerging from conversations in regional spaces such as the Puget Sound Green Infrastructure Summit, practitioners and decision-makers involved with green infrastructure projects gathered in early 2020 to discuss challenges related to workforce development for the growing green infrastructure field in central Puget Sound. Participants compared notes on the challenges that hinder development of a sustainable green infrastructure workforce, including the sporadic nature of the work, funding instability, and the lack of cross-sector coordination.

These early conversations helped surface the specific factors that prevent many prospective workers from finding a foothold in the green infrastructure field:

- Traditional training programs that have historically provided training opportunities for green infrastructure jobs are not as accessible for low-income workers and historically marginalized communities as they do not provide living wages and may require moving to participate.
- In addition, these training options do not provide the level of training necessary to cover the broad range of skills necessary for the many phases of a green infrastructure project, from planning and design to implementation, maintenance, and stewardship.
- Meanwhile, the inconsistent project pipeline and often seasonal nature of green infrastructure jobs means workers do not have a consistent source of work and often lack a clear path for advancement to support a sustainable career.

Participants recognized that solving these interconnected challenges would require a cross-sector approach—no one entity could possibly have the funding, expertise, and

reach to tackle these challenges alone. These early conversations and shared agreement of the challenges and opportunities resulted in the decision to create a collaborative network now known as the Green Infrastructure Workforce Collaborative.

Active & Past Participants

Pierce Conservation District

Snohomish Conservation District

King County

City of Seattle

City of Tacoma

Washington State Dept of Transportation

Washington State University, Stormwater Center

University of Washington

Clover Park Technical College

EarthCorps

Pacific Education Institute

Dirt Corps

Mithun

Stone Soup Gardens

SiteWorkshop

The Nature Conservancy

SM Watts Consulting

Urban Systems Design

Accomplishments

Commitment to green infrastructure throughout Puget Sound represents a huge opportunity for economic and workforce development, but to fully realize this potential, project implementers, local decision-makers, and workers need to collectively create the enabling conditions for sustainable workforce development.

The Green Infrastructure Workforce Collaborative creates this venue for green infrastructure practitioners and decisionmakers to surface challenges, problem-solve together, and highlight what is working. Over the last five years, members of the Workforce Collaborative have made significant progress toward their vision of sustainable workforce development.

Cross-Sector Problem Solving

The Workforce Collaborative provides regular opportunities for cross-sector collaboration, allowing for space to easily identify and troubleshoot workforce issues. This has led to identification of early priorities (including the workforce curricula and training pilot) and natural cross-pollination and problem-solving.

Mapping the Green Infrastructure Field

In 2023, the Workforce Collaborative commissioned a report by the Seattle Jobs Initiative (SJI) looking at existing roles in the green infrastructure field, including the pathway to those careers, demand for specific roles, and typical compensation. As part of this project, SJI produced a dashboard highlighting career pathways and training programs across Washington State. This effort provided an invaluable baseline for the Workforce Collaborative's work and spotlighted opportunities to support growth in the field.

Workforce Training Curriculum

Green infrastructure projects require a variety of skills spanning project design, construction, and maintenance, yet because the field is relatively new, training programs are limited and there are no standard learning outcomes focused on the full suite of skills needed. To address this, the Workforce Collaborative drew on the expertise of its members to design the Western Washington Green Infrastructure Curriculum, a free and adaptable resource that is now being deployed to train workers across the region for this highly specialized work.

"Addressing the vast stormwater problem requires a team approach from public and private entities all working together. The Green Infrastructure Workforce Collaborative coalesces around building a workforce with a specialized skill set to support implementation and maintenance of green infrastructure. The Collaborative supports career development, including for those facing traditional barriers to employment, preparing participants to compete in this growing and essential field, creating a win-win from the employer to the employees and trainees." —Tatiana Dreisbach, Washington State Dept of Transportation

Training Pilots

To support the continued expansion of handson learning and more equitable entry points, members of the Workforce Collaborative helped shape training pilots incorporating the curriculum, including the Seattle Opportunity Work Corps with Seattle Public Utilities, Machinists Institute, and Seattle Jobs Institute; and the Pierce County GSI Training pilot with the City of Tacoma, Palmer Scholars, The Nature Conservancy, and Pierce Conservation District. These and other training programs piloting the curriculum are creating positive feedback loops for ongoing improvements to the curriculum and expanding pathways for frontline communities to pursue green infrastructure jobs.

Community Accountability Structure

The Workforce Collaborative designed a Community Accountability Structure (CAS) in partnership with frontline communities to build in regular feedback from communities not equitably represented in the green infrastructure field. The community members who participate in the CAS are appropriately compensated for their contribution. This structure ensures the input and perspectives of those the Workforce Collaborative seeks to serve are reflected in its work. The CAS was formalized in Spring 2025 and is being implemented in King County with plans to extend it to support efforts underway in Pierce County.

Policy Advocacy

The Workforce Collaborative has initiated a Washington State-level policy advocacy strategy to establish the funding streams needed to maintain project pipelines and sustainable careers and remove barriers to equitable, living wage, healthy, and safe career opportunities. The strategy builds on the success of the curriculum and on-theground training pilots, including continuing to develop employer-informed curriculum and expanding training in Puget Sound counties and municipalities.



Scholars from the Pierce County GSI Training Pilot installing a rain garden as part of their hands-on learning. This pilot was developed by multiple partners to address a gap in accessible, place-based green infrastructure training for early career individuals in Pierce County while providing equitable access to the benefits of green infrastructure: © Janieka Ellington / Palmer Scholars

Enabling conditions

To ensure long-term success, early efforts focused on developing solid infrastructure and enabling conditions. This included the following:

- Cross-sector regional representation: From the start, the Workforce Collaborative was intentionally built with regional representation from government agencies, educational institutions, nonprofits, businesses, and conservation districts.
- Active and consistent member engagement: The Workforce Collaborative's successes are directly tied to member involvement and strong member retention. Regular, facilitated virtual meetings and a shared Google Drive for the full Collaborative and project-specific work has provided stability and consistency. In addition to sharing expertise from their sector and role, many participants have built on the learnings and challenges and identified opportunities to support the Workforce Collaborative's vision in their day-to-day work.
- ▼ Trusted representatives of frontline communities: The Workforce Collaborative has strived to ensure its work directly benefits frontline communities. The Workforce

- Collaborative has leaned on trusted representatives, equity consultants, and their extended networks to strike the careful balance of ensuring input on ideas without overburdening frontline communities.
- Charter: As part of its foundation, the Workforce Collaborative created a charter to establish structure, membership, working agreements, and definitions. This charter also solidified a shared mission, purpose, and values related to equity and community engagement.
- **Funding:** The durability and impact of the Workforce Collaborative would not have been possible without a consistent and stable source of seed funding to support facilitation, collaborative projects, and member participation.
- Sharing Best Practices: In addition to sharing best practices among the Workforce Collaborative, members have also tested proposals and pilots by presenting them to local and national colleagues, such as sharing at the annual Puget Sound Green Infrastructure Summit and participating in a learning workshop with PowerCorps Philadelphia.



Future areas of focus

Improved collaboration and accountability

Since its inception, the Workforce Collaborative has intentionally created a cross-sector space with robust representation from multiple counties, government agencies, educational institutions, nonprofits, businesses, and conservation districts. But it has not deeply engaged a few key constituencies, including early career workers and larger businesses that are consistent green infrastructure employers. In future years, this will be a focus of recruitment alongside expanding geographic representation and addressing any natural attrition of existing participants.

In addition, the Workforce Collaborative will be focused on expanding the Community Accountability Structure in priority geographic areas to ensure that project development and implementation benefits communities who have not traditionally engaged in this sector.

Finally, the Workforce Collaborative will continue to support relationship building and expand its membership through workshops, networking Happy Hours, and other inperson gatherings.

Increasing accessibility to green infrastructure career paths

The Workforce Collaborative's vision is to create career paths within a stable and consistent green infrastructure field. Achieving this vision requires a multi-faceted approach, including better defining the types of roles within the field, the training and experience needed to move from one role to another, and how this influences access to the sector for frontline communities

In future years, the Workforce Collaborative will continue to support training expansion with more robust curricula and hands-on learning through pilots in partnership with communities, municipalities, agencies, businesses, and others. This will include continued implementation, adaptation, and potential expansion of the Western Washington Green Infrastructure Curriculum in alignment with the job needs of employers.

Key priorities will be developing on-the-job learning experiences such as internships and apprenticeships and creation of a certification program for green infrastructure roles, which will support more consistency for workers and employers.



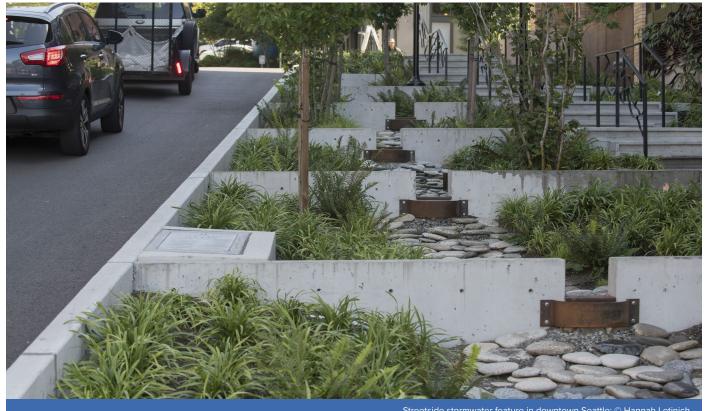
Finally, the Workforce Collaborative would like to develop a communication and engagement structure to provide visibility for its work and better promote training and job opportunities to prospective workers.

Harmonizing supply and demand

Given the nascent nature of the green infrastructure field, there is often an imbalance between active projects and appropriately trained workers. Depending on available projects and funding, at any given moment, there can be too many trained workers for available positions or more positions than available workers.

Many factors contribute to these imbalances, including the pacing of funding for installation and ongoing maintenance of green infrastructure projects; the timing of implementation of and/or access to green infrastructure projects to support a growing workforce; and a general undervaluing of the benefits of nature in urban spaces. As noted above, while green infrastructure provides significant net benefits over the long term including reducing flooding, moderating heat waves, replenishing water supplies, and improving air quality—gray infrastructure has predictable maintenance needs, and this short-term accounting too often sways decision-making.

In future years, the Workforce Collaborative will seek to support policy advocacy that aligns onthe-ground initiatives to better harmonize the design, construction, and maintenance of green infrastructure projects with available workers, which will benefit project implementers, workers, and Puget Sound communities. For example, the Workforce Collaborative could advocate for a "Green Benefit District" that might enable expansion of a number of projects across a geographic area through collection of fees that could fund green infrastructure installation and stewardship.



Streetside stormwater feature in downtown Seattle: © Hannah Letinich



A robust green infrastructure workforce

The Green Infrastructure Workforce Collaborative is an innovative, cross-sector initiative focused on creating the enabling conditions for a robust green infrastructure workforce in Puget Sound.

Since its inception in 2020, the Workforce Collaborative has made significant progress toward helping the region fully realize the economic potential of the region's shift to green infrastructure.

In just five short years, the Workforce Collaborative has enabled spaces for cross-sector, regional collaboration for networking, problem-solving, and information-sharing across practitioners, workers, and decision makers, allowing them to more easily identify and troubleshoot workforce issues; spotlighted accessible career pathways; collaboratively designed a regional curriculum to support skill development for young adults and existing workforce; and launched pilots to address training and workforce gaps, such as a place-based green infrastructure training pilot in Pierce County.

Looking to the future, the Workforce Collaborative's ambitious agenda includes increasing the accessibility of green infrastructure career paths and better harmonizing green infrastructure project needs with an available trained workforce.

Join Us!

Join the Green Infrastructure Workforce Collaborative and be part of a vibrant and solutions-oriented community of green infrastructure practitioners, decision-makers, and workers who are all dedicated to helping the Puget Sound region fully realize the economic benefits of a shift to green infrastructure.

Learn more at: cityhabitats.org/workforce Hannah Kett, Convener hannah.kett@tnc.org