Green Seattle Partnership Models Regional Urban Natural Areas Restoration Efforts

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The Green Seattle Partnership (GSP) was launched in 2005 to create a model for urban forest natural area restoration in the Puget Sound region of western Washington. To date, thirteen other municipalities and one county have adopted the Green City Partnership model to utilize a 20-year strategic planning process to prioritize and guide natural area restoration programing. Initial planning work includes taking stock of the community and ecological resources and defining costs. Not all prioritization and planning efforts live in the strategic plan. During the fourteen years since the launch of the GSP, annual planning efforts have been responsive to broader city and community priorities, as well as to current conditions captured in work records and monitoring data.

INTRODUCTION

The Green Seattle Partnership (GSP) was launched in 2005 to create a model for urban forest natural area restoration in the Puget Sound region of western Washington. To date, thirteen other municipalities and one county have adopted the Green City Partnership model to utilize a 20-year strategic planning process to prioritize and guide natural area restoration programing. Initial planning work includes taking stock of the community and ecological resources and defining costs. Not all prioritization and planning efforts live in the strategic plan. During the fourteen years since the launch of the GSP, annual planning efforts have been responsive to broader city and community priorities, as well as to current conditions captured in work records and monitoring data.

CONTEXT

By the 1990s natural areas in Seattle were visibly declining, scarred by a legacy of logging, mounting urban pressures, and aggressive invasive species like English ivy, which climbs and topples trees, as well as keeping seedlings and understory plants from establishing. Community activists, students, and fledgling non-profit groups working in Seattle's forested natural areas helped to jumpstart Seattle Parks and Recreation's forest restoration program in 1994 (Seattle Parks and Recreation 2004). The GSP vision and mission (GSP 2004) were based loosely on a model of urban forest sustainability which embraces community engagement and a disciplined approach to managing a healthy urban forest (Clark et al. 1997).

This Green City Partnership model has subsequently been adopted over thirteen thousand acres of urban natural areas in twelve municipalities, with planning underway in two additional municipalities and one county. The combined jurisdictions are home to 1.5 million people, or over half of the urban population of the Puget Sound region. The different Green City Partnerships vary widely by population size, natural area acreage and socioeconomic status. For example, Green Redmond Partnership (Green Redmond Partnership 2009), is the home of Microsoft with an ever-growing population, boasts a single park almost equivalent in acreage to all the areas managed as part of the Green Snoqualmie Partnership in the foothills of the Cascade Mountains.
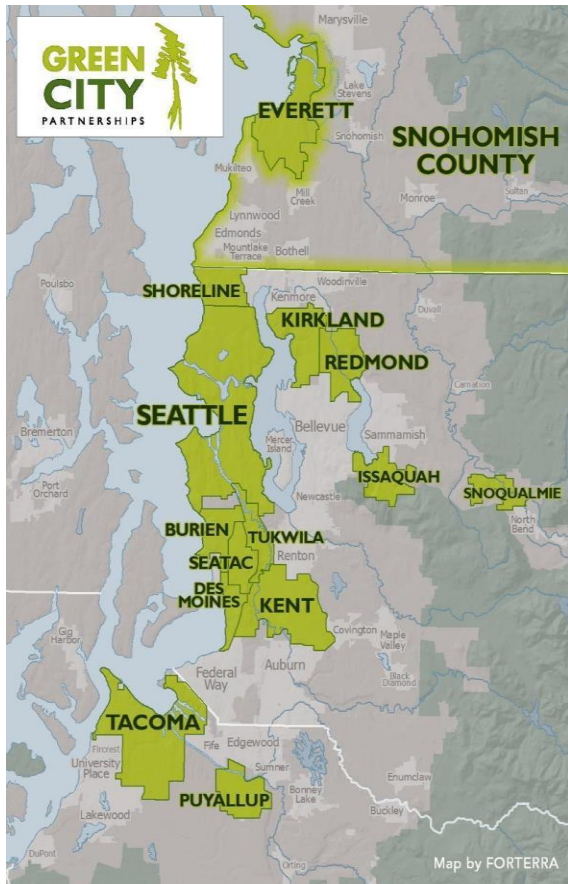
Image 1. Map of Green City Partnerships across the Puget Sound region in western Washington, as of 2019 (Credit: Forterra)

GOALS

- Green City Partnerships commonly operate with three interdependent goals captured in 20-year plans: 1) restore a set number of natural area acres, 2) engage and galvanize residents to participate and advocate for the urban forest, and 3) identify resources for current and long-term natural area stewardship.
- GSP further refined the goals in the 2017 Plan Update (GSP 2017), with an extended restoration timeline, sub-objectives, and strategies that breakdown these broad goals into measurable metrics on everything from volunteer participation and equity priorities to leveraged dollars.
- GSP has identified ecological goals for each management unit using reference ecosystems and target forest types (GSP 2015), which includes criteria for transitioning sites to long-term maintenance and stewardship (Buchner 2016).

APPROACH USED

The 20-year plans are the central planning feature of the Green City Partnerships. Drafting the plans starts with an assessment of forest conditions (Ciecko et al. 2016). In Seattle, the first comprehensive inventory of habitat on public lands took place from 1999–2000 (Ramsay et al. 2004). The baseline assessment mapped the scope and scale of native and invasive species, which was then used to conduct a natural area "Tree-iage" (see figure 1 below). A Tree-iage score is assigned to each management unit based on a matrix of threat (invasive cover) by health (canopy cover and composition). This can be an important way to tell the story of the forest's health and visualize the condition of each management unit within a park.
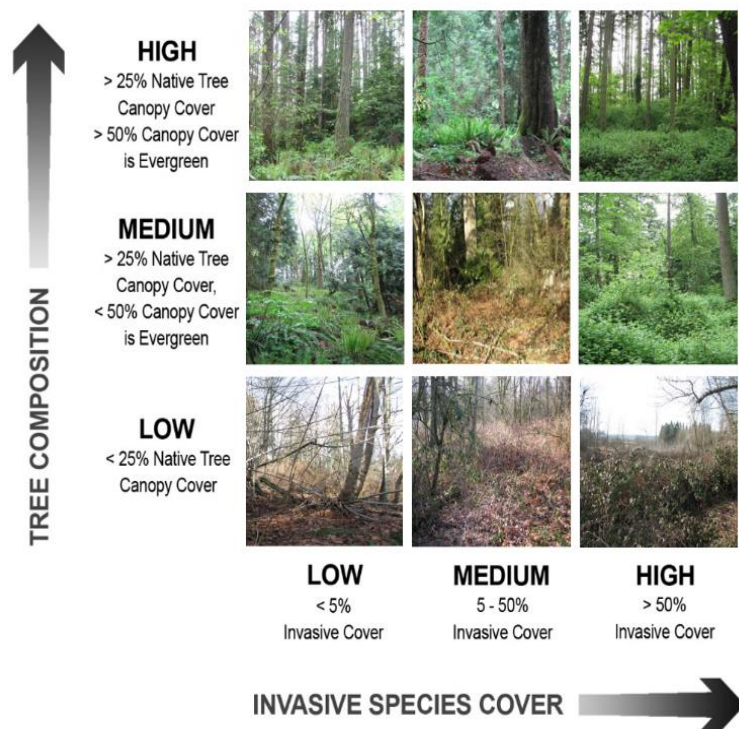

Figre 1. Tree-iage Matrix describing tree composition and invasive cover categories (Image credit: Forterra)

In addition to a summary of ecological conditions, the 20-year plans include an analysis of the labor and funding resources necessary to carry out the restoration work. Community values and volunteer opportunities are noted. The resulting cost-per-acre estimate is generated using an aggregate of site conditions, including slope and other environmental critical areas, along with known costs developed from the past 14 years of Green City Partnerships programming.

Once the programs are moved from strategic planning to implementation, a new level of prioritization and planning work is necessary. Initially in Seattle, proximity to volunteer work, salmon-bearing streams, or status as a higher quality forest determined funding commitments in individual parks. Now, sites for professional crew support are prioritized using equity and social

justice as a guide. Visibility, grant-funded work, volunteer-friendly sites, and emergency response priorities are also always at play. These changes are reflected in the recent update to the 2005 GSP 20-Year Plan (GSP 2017).

The complexity of annual work planning is determined by identifying follow-up establishment and maintenance needs. In Seattle, the 2,750 acres identified for restoration are spread across 246 parks and 1,529 management units. GSP uses data from work records along with ecological assessment data to inform annual work plans.

RESOURCES

In Seattle, early work was funded privately. Entities such as the Starflower Foundation invested in the initial ecological assessment, and Cascade Land Conservancy (now Forterra) raised 3 million dollars in donations and grants to launch the program, including the creation of the 20-year plan. Other cities, such as Redmond and Tukwila, also utilized private funding, often procured by Forterra and matched by each City. Across the different cities, ongoing program funding comes from general funds, levies, capital improvement projects, parks districts, private foundation and governmental grants, as well as a range of non-profit and for-profit organizational funding.

This program takes considerable political will and resources to implement; it is necessary to "sell" the multi-million-dollar price tag that is captured in the 20-Year Plans to complete on the ground projects year-by-year. The Green Cities Network, coordinated by Forterra, meets quarterly to share resources and build strength in numbers.

Many assessment and coordination tools have been created and modified over the years. These include but are not limited to: CEDAR online event and data portal (Green City Partnerships 2019), the Forest Landscape Assessment Tool (Ciecko et al. 2016), Forterra's Cost Per Acre Calculator, forest steward field guides (GSP 2016), Steward Annual Plan Workbook (Green City Partnerships 2014a), The Urban Forest & Natural Areas Stewardship Planning Guide (Green City Partnerships 2014b) and Monitoring Data Collection Methods (Green City Partnerships 2013). These tools, processes, and products help to build in efficiencies when bringing on new Green City Partnerships.

KEY RESULTS

- GSP has been operating continuously for nearly 15 years and boasts over 1 million volunteer hours, over 1 million native plants installed, and over 1,700 acres of natural areas in active restoration.
- Building on the lessons learned and the success of the GSP, there are now 12 cities with a 20-year plan and accompanying program, as well as 2 municipalities and 1 county currently in the planning process.

- Flexibility in the GSP has allowed adaptation in planning and prioritization annually, resulting in more detailed and informed decision making that incorporates updated best practices, the latest data from the field, and responsiveness to unplanned needs.
- The community organizations, individual volunteers, and agencies that make up a Green City Partnership advocate tirelessly for urban natural areas, fulfilling a primary goal of the program to galvanize resident action and city commitment. This dedication to the 20-year plan has provided consistency for programs even during financial uncertainty and changes in administrations and staff.
- Building commitment and investment beyond the 20-year benchmark is increasingly important, especially as climate change and new urban growth pressures are impacting restoration investments and increasing the cost-per-acre.

Image 2. Volunteers plant trees at Green Seattle Day at Magnuson Park (Photo Credit: Jim Avery 2018.)

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