

*Greater Forest Park
Conservation Initiative*

Five Year Strategic Action Plan

Restoring Forest Park and 10,000 acres of public and private land surrounding the park.

This plan was prepared by the Forest Park Conservancy in collaboration with the Forest Park Alliance.

Adopted May 15, 2018



**Forest Park
Conservancy**

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Acronyms

BES	Bureau of Environmental Services (City of Portland)
BLM	Bureau of Land Management
BPA	Bonneville Power Administration
CDE	Center for Diversity & the Environment
CLT	Columbia Land Trust
CWMA	Cooperative Weed Management Area
CWS	Clean Water Services
EDRR	Early Detection and Rapid Response
EPOC	Environmental Professionals of Color
FPC	Forest Park Conservancy
FPNA	Forest Park Neighborhood Association
GFPCI	Greater Forest Park Conservation Initiative
HSPs	Healthy Streams Projects
LNA	Linnton Neighborhood Association
NARA	Native American Rehabilitation Association
NPCC	Northwest Power & Conservation Council
NRCS	Natural Resources Conservation Services
NRMP	Natural Resources Management Plan
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish & Wildlife
ODOT	Oregon Department of Transportation
OPWG	Oak Prairie Working Group
ORNHIC	Oregon Natural Heritage Information Center
OSU	Oregon State University
OWEB	Oregon Watershed Enhancement Board
OWF	Oregon Wildlife Foundation
PAWMAP	Portland Area Watershed Monitoring and Assessment Program
PBOT	Portland Bureau of Transportation
PGE	Portland General Electric
POC	people of color
PP&R	Portland Parks & Recreation
PPP	Pollinator Powerline Project

PSU	Portland State University
PWB	Portland Water Bureau
PWG	Pollinator Working Group
RCS	Regional Conservation Strategy
RCWG	Regional Connectivity Working Group
SBWC	Scappoose Bay Watershed Council
SID	Science & Integration Division (City of Portland)
TEES	Terrestrial Ecology Enhancement Strategy
THPRD	Tualatin Hills Parks & Recreation District
TSWCD	Tualatin Soil & Water Conservation District
UMP	Unified Monitoring Protocol
USFWS	U.S. Fish & Wildlife Service
WLAP	Watershed Land Acquisition
WMSWCD	West Multnomah Soil & Water Conservation District

Background

Forest Park Conservancy
(FPC)

City of Portland Parks &
Recreation (PP&R)

West Multnomah Soil & Water
Conservation District
(WMSWCD)

City of Portland Bureau of
Environmental Services (BES)

Metro Parks and Nature

Audubon Society of Portland

Friends of Trees

The Intertwine Alliance

Columbia Land Trust (CLT)

Forest Park Neighborhood
Association (FPNA)

Linnton Neighborhood
Association (LNA)

Clean Water Services (CWS)

This strategic action plan presents a set of priority projects—specific, near-term actions with assigned responsibilities and measurable outputs—that are intended to help protect and restore Portland’s 5,200-acre Forest Park and its surrounding ecosystem. Actions in this plan are consistent with goals presented in the master plan of the Greater Forest Park Conservation Initiative (GFPCI)¹. Launched in 2013, the initiative is a collaborative effort by a diverse group of local stakeholders (see sidebar) to ensure a healthy, sustainable Greater Forest Park ecosystem over the long term.

History

Forest Park and the surrounding area have been the focus of a number of complementary planning efforts that have addressed—variously—natural resource management, watershed health, wildfire risk, biodiversity, plant communities, wildlife, terrestrial species, recreational uses, and operations and maintenance.

As important as these and other planning efforts were, until 2013 no single effort had focused specifically on the entire Greater Forest Park ecosystem, took a holistic approach, involved both public and private entities (such as city agencies, non-profits, and neighborhood associations), and addressed the full range of ecological issues, from watersheds to wildfire.

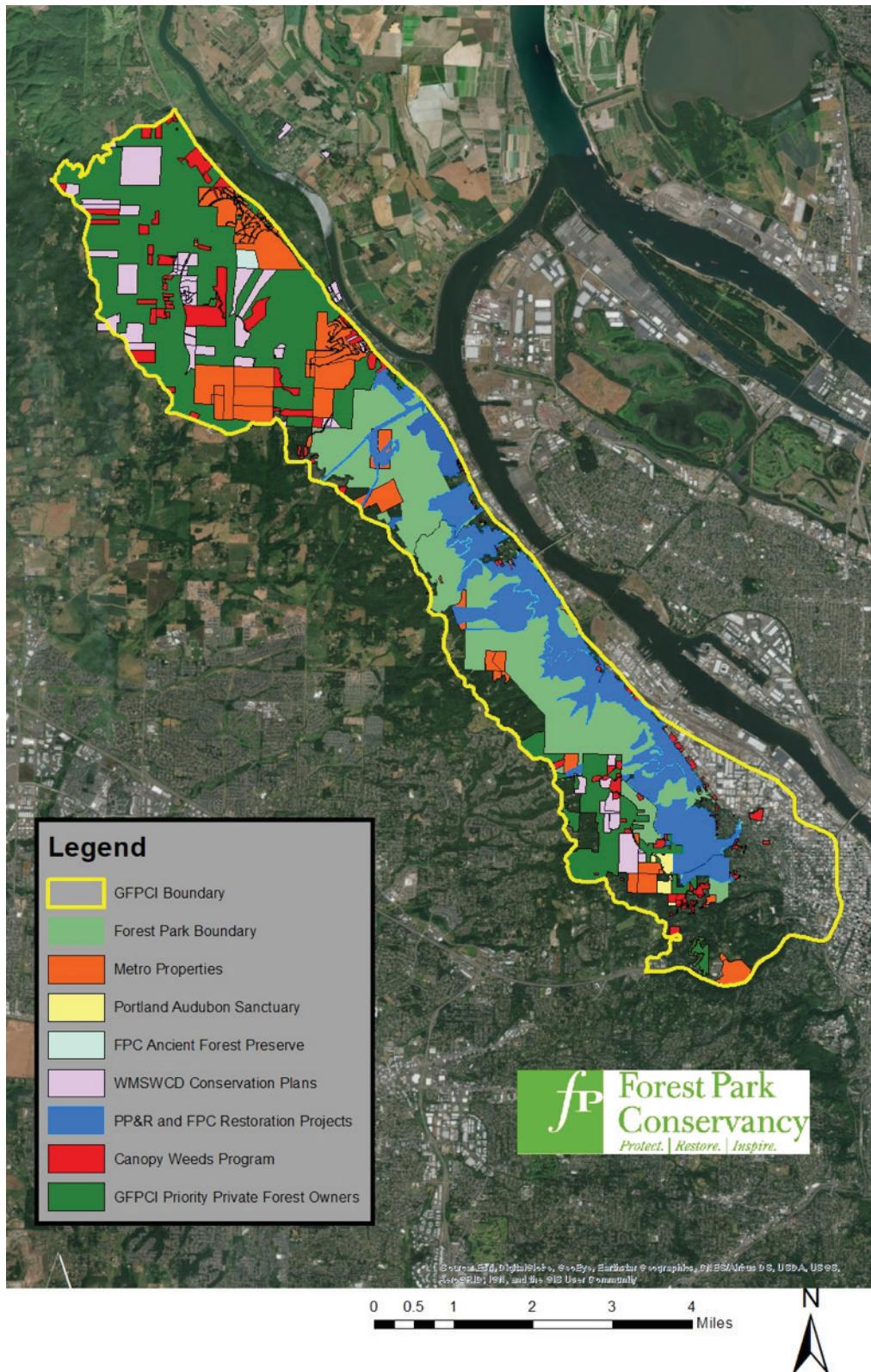
Thus the need for the Greater Forest Park Conservation Initiative. The initiative began as a collaboration among local and regional organizations and agencies dedicated to protecting the long-term viability and resiliency of not just Forest Park itself but of the surrounding ecosystem (see Figure 1), which includes privately owned woodlands, small farms, utility corridors, and industrial sites that still retain various levels of ecological value.

Working together, the Forest Park Alliance partners developed a document—the *Greater Forest Park Conservation Initiative: Mapping the Trail to a Healthy and Sustainable Forest Park*²—that since 2013 has served as a master plan for protecting and restoring the Greater Forest Park ecosystem. The Conservation Initiative documents current conditions, identifies threats to ecosystem health, and presents general objectives and potential actions related to four different goals: streams, connectivity, forests, and wildlife.

¹ Forest Park Conservancy and Forest Park Alliance. 2013. Greater Forest Park Conservation Initiative: Mapping the Trail to a Healthy and Sustainable Forest Park. R. Myers, principal author. www.forestparkconservancy.org

² Forest Park Conservancy and Forest Park Alliance. 2013. Greater Forest Park Conservation Initiative: Mapping the Trail to a Healthy and Sustainable Forest Park. R. Myers, principal author. www.forestparkconservancy.org

FIGURE 1: GFPCI Areas and Projects



Planning History

- FOREST PARK NATURAL RESOURCES MANAGEMENT PLAN (NRMP).³ The 1995 NRMP was the first comprehensive set of guidelines for management of Forest Park. The NRMP detailed forest management actions that favor old-growth conifer forest. It also divided the park into management units for use in determining resource protection standards and recreational uses. An associated vegetation and ecological conditions inventory was completed in 2004.
- CITY WILDFIRE DOCUMENTS. In 2006, three City of Portland agencies—Portland Parks & Recreation (PP&R), the Bureau of Environmental Services (BES), and Fire & Rescue—created a set of long- and short-term plans and projects that evaluated Forest Park through the lens of wildfire risk. Recognizing the risk of wildfire adjacent to homes, the plans and projects encouraged deciduous forest of bigleaf maples (*Acer macrophyllum*) and red alders (*Alnus rubra*), which are less likely than conifers to ignite and burn.
- FRAMEWORK FOR INTEGRATED MANAGEMENT OF WATERSHED HEALTH⁴ AND PORTLAND WATERSHED MANAGEMENT PLAN.⁵ Adopted by Portland City Council in 2006, these two documents defined healthy urban watersheds in Portland, described a scientifically based approach for managing Portland’s watersheds, and established watershed health goals and objectives for streams and rivers throughout the city, including in Forest Park.
- TERRESTRIAL ECOLOGY ENHANCEMENT STRATEGY (TEES) SUMMARY⁶ (initiated in 2006 and updated through 2011). This City of Portland effort documented a body of information and agreed-upon priorities for conserving and restoring terrestrial plants, animals, and habitats in Portland. The *TEES Summary* listed special-status wildlife species whose range includes Portland.
- FOREST PARK DESIRED FUTURE CONDITION REPORT.⁷ This 2011 report was designed to complement the Forest Park NRMP and aid PP&R in setting and prioritizing goals for restoration activities in Forest Park. The report detailed specific actions for ecological restoration, recreational use, and operations and maintenance of the park, and it projected the area’s plant community structure for the next 25 years.
- FOREST PARK ECOLOGICAL PRESCRIPTIONS. Also in 2011, PP&R developed a 10-year plan⁸ that identifies and prioritizes ecological “prescriptions” for Forest Park, meaning projects that need to be completed to achieve PP&R’s desired future conditions for the park. Some of the prescriptions involve activities exclusively within Forest Park (such as removing invasive vines), while others focus largely on issues and areas outside of the park (such as identifying priority biodiversity corridor connections and mapping

³ Portland Parks and Recreation and Bureau of Planning, Portland Oregon. 1995. Forest Park Natural Resources Management Plan. Available at <https://www.portlandoregon.gov/bps/article/103939>

⁴ Portland Bureau of Environmental Services. 2005. Framework for Integrated Management of Watershed Health. Available at <https://www.portlandoregon.gov/bes/33528>

⁵ Portland Bureau of Environmental Services. 2005. 2005 Portland Watershed Management Plan. Available at https://www.portlandoregon.gov/bes/38965#cid_107808

⁶ Portland Bureau of Environmental Services. 2011. Terrestrial Ecology Enhancement Strategy (TEES): Summary and Update. Available at: <http://www.portlandonline.com/bes/index.cfm?c=51052&a=354986>

⁷ Portland Parks & Recreation. 2011. Forest Park Desired Future Condition. Available at <https://www.portlandoregon.gov/parks/article/335638>

⁸ Portland Parks & Recreation. 2011. Forest Park Ecological Prescriptions. Available at <https://www.portlandoregon.gov/parks/article/376345>

wildland/urban interface areas near the park).

- REGIONAL CONSERVATION STRATEGY FOR THE GREATER PORTLAND-VANCOUVER REGION⁹ (RCS). In 2012, The Intertwine Alliance completed the RCS, a collaboratively developed strategy for conserving and restoring biodiversity across the region, including in Forest Park. In addition to outlining the most effective ways to invest in natural areas, the RCS and its companion document, the *Biodiversity Guide for the Greater Portland-Vancouver Region*,¹⁰ provided maps and web resources for use in understanding, sustaining, restoring, and expanding remnant natural communities.
- FOREST PARK WILDLIFE REPORT.¹¹ This 2012 report provided a broad description of Forest Park wildlife and detailed species information. It also identified knowledge gaps and threats to Forest Park wildlife and defined next steps for research and management of the park's wildlife.

An Ecological Treasure

Nested near the heart of the greater Portland-Vancouver region, the Greater Forest Park ecosystem consists of 5,200-acre Forest Park and more than 10,000 acres of surrounding natural areas owned by Metro, the Audubon Society of Portland, the Forest Park Conservancy, and private landowners. Together, these lands provide an expanse of relatively unfragmented habitat that supports an impressive diversity of native plants and animal species, many of them rarely seen near an urban area. Each year, thousands of nature lovers and recreational users are drawn to Forest Park's 79 miles of trails to experience this diversity.

In addition to its recreational opportunities, the Greater Forest Park ecosystem helps to provide the Portland region with clean air and water, stormwater control, flood abatement, and wildlife habitat. The ecosystem's forest plays an important role in helping the region adapt to climate change because its trees sequester significant amounts of carbon dioxide and contribute to improved air quality. In addition, the ecosystem is an integral part of the wildlife corridor that connects the Portland area to the Coast Range, providing an opportunity for recruitment of flora and fauna from outside the urban area.¹²

Given the Greater Forest Park ecosystem's size, location, and species assemblages, its conservation is critical to maintaining biological diversity, ecological integrity, and ecosystem services in the region and beyond. Yet it faces significant threats, most notably invasive species, climate change, and habitat loss, degradation, and fragmentation.

- INVASIVE SPECIES. Infestations of invasive plants and animals are significant in some areas of the Greater Forest Park ecosystem. Invasive animal species—including invertebrates such as introduced earthworms—have the potential to disrupt the ecosystem, while non-native plants such as English and Irish ivy (*Hedera helix* and *Hedera hibernica*, respectively), *Clematis vitalba* (i.e., old man's beard), and garlic

⁹ The Intertwine Alliance. 2012. Regional Conservation Strategy for the Greater Portland-Vancouver Region. A Sihler, editor. Available at http://www.theintertwine.org/sites/default/files/Regional%20Conservation%20Strategy%20for%20the%20Greater%20Portland-Vancouver%20Region_o.pdf

¹⁰ The Intertwine Alliance. 2012. Biodiversity Guide for the Greater Portland-Vancouver Region. A Sihler, editor. Available at http://www.theintertwine.org/sites/default/files/Biodiversity%20Guide%20for%20the%20Greater%20Portland-Vancouver%20Region_o.pdf

¹¹ Portland Parks and Recreation. 2012. Forest Park Wildlife Report. Available at <https://www.portlandoregon.gov/parks/article/427357>

¹² M.C. Houle. 1982. Forest Park: One City's Wilderness. Its Wildlife and Habitat Interrelationships. Oregon Parks Foundation, Portland, Oregon.

mustard (*Alliaria petiolata*) are damaging native trees, disrupting the establishment of native understory plants, and altering habitat. Without aggressive action, the forest risks becoming an “ivy desert,” devoid of native trees, with only trace numbers of native shrubs and unable to provide habitat for many native wildlife species.

- **CLIMATE CHANGE.** Over the last century, the Pacific Northwest has seen a 1.5-degree Fahrenheit increase in average temperature, the loss of snowpack in the Cascades, and shifts in the timing and flow of streams. Documented shifts in habitat, the extent and timing of migrations, and the geographic range of many insects, birds, trees, and flowering plants strongly suggest that climate change already is affecting our natural systems. During the coming years, additional impacts are expected to the region’s birds, terrestrial wildlife, plants, aquatic species, and river flow. Additionally, an increase in fire frequency is likely to cause changes in Forest Park’s structure and function.
- **HABITAT LOSS, DEGRADATION, AND FRAGMENTATION.** Many streams in the Greater Forest Park ecosystem have been piped or channelized, and some of the wetlands, meadows, and forests have been converted to agriculture, roadways, urban and suburban development, and utility corridors. The process of habitat conversion continues in some parts of the ecosystem, increasing the amount of sediment and toxic contaminants in streams, changing hydrology and thus habitat-forming processes, causing light and noise pollution, and introducing invasive species. Improper use and siting of trails also can degrade habitat. Fragmentation of native habitat contributes to the loss of foraging and migration habitat and the potential isolation of wildlife populations.

Considering the highly altered state of the Greater Forest Park ecosystem’s natural systems and the ongoing threats it faces, it is our responsibility to actively manage the ecosystem for long-term biodiversity and ecosystem health. Otherwise the ecosystem will continue to degrade and become less resilient to the influence of its largely urban surroundings.

Turning Plans Into Action

The *Greater Forest Park Conservation Initiative* is a 20-year plan with numerous goals and objectives. Partners wanted to identify five years of specific projects and measurable outcomes that, collaboratively, they could achieve. So in 2017-2018 the Forest Park Alliance Partners collaborated again to produce this strategic action plan, which presents a specific set of priority action items to be completed over the next five years in order to advance the four long-term goals outlined in the GFPCI master plan. The strategic action plan also includes a new, fifth goal related to community and outreach.

The broad level of participation by the Forest Park Alliance Partners in developing the strategic action plan ensures a level of agreement among the organizations supporting its implementation that will aid them in efficiently and effectively coordinating and sharing resources in service of achieving the goals of the plan.

The following themes reappear throughout the conservation objectives and action items in this strategic action plan:

- **INFORMATION GATHERING.** Information gathering. In some cases, additional data need to be collected to inform detailed work plans for on-the-ground actions.
- **ACQUISITION OR PROTECTION OF KEY HABITATS.** Conservation easements, acquisition of ecologically valuable property, habitat restoration, and preventive care and

maintenance will help protect and restore key ecological functions.

- PREVENTION, EARLY DETECTION AND RAPID RESPONSE (EDRR), OR CONTROL OF INVASIVE SPECIES. The Greater Forest Park ecosystem already is at risk from and partly damaged by invasive species. Keeping additional invasives from becoming established can prevent a cascade of harmful ecological impacts.
- COMMUNITY OUTREACH AND EDUCATION. Educating private landowners, park users, and surrounding communities on invasive species removal, sustainable management on working lands, the value of enhancing native wildlife habitat, and how to protect stream health on the park and/or their own properties can go a long way in enhancing and connecting the habitat that native species rely on.
- BEST MANAGEMENT PRACTICES. Choosing to use methods or techniques that have already been found to work well will make the actions more effective.
- MONITORING. Systematically collecting data on changes in environmental conditions will indicate whether we are making progress in achieving the long-term goals.
- ADAPTIVE MANAGEMENT. Action planning is the first step in adaptive management, which is a structured process for working with uncertainties. Action planning is followed by regular monitoring and evaluation of progress toward the long-term goals, along with adjustments as needed to improve action implementation and effectiveness.

Collaboration as an Underlying Value

Large-scale restoration efforts cannot succeed when undertaken by one organization alone. Instead, restoration takes the work of many committed partners who can broaden engagement and cooperation while making efficient use of funding and human resources.

This has been the approach of the Forest Park Alliance, whose members value cooperative effort. Alliance partners currently are collaborating on restoring and maintaining the Greater Forest Park ecosystem, and they expect to continue to work together to raise funds to implement the conservation action items identified in this document. Toward that end, this strategic action plan and the GFPCI master plan are expected to serve as tools for coordinating activities and telling a larger, more comprehensive story of the ecological significance of the Greater Forest Park ecosystem and local efforts to protect it.

Underlying this work is an agreement by all partner organizations to commit to developing a clear timeline of engagement and cooperation that optimizes shared time, resources, and funding over the next five years. This includes finalizing the timeline and budget for implementation, planning quarterly gatherings, developing yearly work plans, and reporting data, results, and successes in annual reports.

More funding is needed than is currently available or likely to become available under current financial scenarios. Traditional conservation funding mechanisms such as bond measures, system development charges, agency grants, and private contributions (funneled through land trusts and other non-profit organizations) may need to be supplemented by more novel methods, such as green infrastructure, market-based funding, or as-yet unidentified approaches. Either way, it is important to act now to develop stable, long-term sources of funding so that we can address immediate conservation needs and plan future expenditures for the most opportune time, both financially and ecologically.

Metrics

Critical to establishing a successful collaboration is identifying shared quantitative and qualitative indicators that can be tracked. Taken together with internal monitoring activities, the metrics will shape partners' understanding of their individual and collective impact. Partners commit to diligently collect this data and to make it available to all other Alliance Partners. As part of annual reviews, partners also will assess whether the selected quantitative and qualitative indicators provide insights that are useful in measuring effectiveness.

The following have been proposed as initial metrics for the action items as a whole, but additional, measurable metrics for each specific goal also will be developed:

1. Number of acres treated (by treatment type), miles of roadway decommissioned, culverts removed or replaced, linear feet of streams restored, etc.
2. Number of new and ongoing GFPCI-specific projects
3. Number of funding sources across the Forest Park Alliance and total revenue dedicated to implementing the action items in this plan
4. Amount of dollars spent for new and ongoing action items
5. Number of actively participating partners and approximate collaboration hours
6. Ratings from partners regarding budget allocations, project prioritization, and perceived short-term benefits from collaboration
7. Number of volunteers, volunteer events, and volunteer hours contributed
8. Number of property owners (and/or number of acres) outside the park participating in voluntary programs

Reviewing and Revising the Plan

The long-term goals will remain consistent throughout the five-year implementation period for this strategic plan. However, objectives and action items may need to be modified for the plan to remain effective and efficient. Forest Park Alliance Partners are dedicated to adapting this and future work plans to meet changing circumstances. Diligent project management and regular updates to partners will be essential in tracking implementation of the activities in this plan. Primary outputs will include aggregation of quantitative and qualitative metrics, as well as an annual report from the Forest Park Conservancy. Partners will devote modest planning time and resources, as needed, to assess the plan's effectiveness and revise elements of it as needed.

Strategic Actions

This following tables present specific action items to be completed over the next five years in order to advance the long-term goals outlined in the GFPCI master plan. Action items are organized by goal and, within each goal, by objective.

The language of the goals has been updated since the GFPCI master plan was published in 2013, and a fifth goal—Community and Outreach—has been added. Similarly, the objectives presented here are in line with those in the master plan but not exactly the same; the objectives here reflect a more current and nuanced understanding of how the goals can be transformed into action.

Gaps in table cells reflect the current state of action planning as of publication of this document. Tables will continue to be populated as detailed action planning progresses through the life of this plan.

Goal 1: Streams

Protect and improve hydrologic processes, riparian function, and water quality in area streams to safeguard watershed functions and human health.

EXPLANATION: Healthy river and stream corridors, riparian areas, and connected floodplains provide habitat for a wide diversity of tree, plant, and wildlife species; support some of the highest levels of biodiversity; and serve as important avenues for wildlife movement. They also provide services to the human population by attenuating and reducing stormwater runoff and flood flows, recharging groundwater, storing sediment, offering recreational opportunities, and delivering cool, clean water to larger regional waterways, such as the Tualatin and Willamette rivers. Carbon sequestration, climate and aesthetic benefits, and erosion prevention are other benefits of these environments.

TABLE 1
Goal 1: Streams

Streams Objective 1: Participate in ongoing subwatershed planning, project development, and project implementation.

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
S1.1	Review and share results of BES's Westside Watersheds Team's subwatershed analysis for Balch, Kittridge, Miller, Saltzman, Doane, and Linnton creeks.	2018-2019	BES	PP&R	Document summarizing agreed-upon critical issues and priority areas within Balch, Kittridge, Miller, Saltzman, Doane, and Linnton subwatersheds
S1.2	Provide collective feedback and assist BES in developing watershed improvement projects.	2018-2019	BES	WMSWCD and FPC	A list of priority watershed improvement projects in Forest Park that can be funded and implemented
S1.3	Identify priority trail and/or stream culvert replacements in Forest Park (Leif Erickson, Saltzman Road, etc.) that would jointly address erosion, turbidity, and aquatic habitat improvements along NW Leif Erickson Drive and in other areas of the park.	2018-2023	BES and PP&R	FPC	Prioritized list of culvert projects that identifies larger capital improvement projects and smaller replacements that PP&R, BES, and FPC can help fund and implement.
S1.4	Pursue collaboration with Multnomah County, Portland Bureau of Transportation (PBOT), Portland Water Bureau (PWB), etc. to leverage funds for projects in the northwest subwatersheds.	2020	BES and FPC	PP&R	New sources of funding for watershed improvement projects
S1.5	Leverage WMSWCD's ongoing partnership with Scappoose Bay Watershed Council (SBWC) to ensure that planning, monitoring, and outreach goals in the Sauvie Island Conservation Opportunity Plan are aligned with the GFPCI.	2018-2022	WMSWCD	FPC	Collaborative meetings twice per year to coordinate efforts
S1.6	Pursue opportunities to collaborate on capital improvement projects	2018-2023	BES and PP&R	Alliance Partners	A list of potential projects that have the potential to facilitate species movement if funds are available
S1.7	Prioritize opportunities for salmonid refugia in low-gradient sections of perennial streams in Forest Park. Work with Oregon Department of Transportation (ODOT) to improve fish passage into Forest Park by replacing culverts.	2019	BES and FPC	ODFW and PP&R	List of opportunities with at least one completed scope of work and associated budget

TABLE (CONTINUED)**Goal 1: Streams**

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
S1.8	Continue to monitor water quality at sites in McCarthy and Miller creeks and continue BES's Portland Area Watershed Monitoring and Assessment Program (PAWMAP) monitoring of in-stream and riparian habitat, water quality, macroinvertebrates, fish, and riparian birds in the northwest subwatersheds.	2018-2023	BES and WMSWCD		Annual summary reports
S1.9	Engage in restoration at the Native American Rehabilitation Association (NARA) site on McCarthy Creek and upland habitat enhancements.	2018-2022	WMSWCD	FPC	Increased capacity in NARA to train more individuals in restoration techniques and skills
S1.10	Implement road repairs and decommissioning work at McCarthy Creek Natural Area.	2019-2020	Metro		Decommissioning of approximately 2 miles of roadway and repair of 1.5 miles of roadway.
S1.11	Conduct a road and culvert inventory of McCarthy Creek.	2019	FPC and WMSWCD		Road and culvert Inventory of McCarthy Creek
S1.12	Maintain, selectively monitor, and adaptively manage 11 Healthy Streams Projects (HSPs) within the Greater Forest Park ecosystem; and identify and plan for one or two new sites	2018-2022	WMSWCD		Collection of data on HSPs maintained (number, stream length, acreage, plant survival/density)
S1.13	Identify additional conservation practices at HSP sites within the Greater Forest Park ecosystem (e.g., livestock exclusion fencing, water bars on trails or private roads, educational signage, installation of boot brush stations, cultural plant use, and education).		WMSWCD		Collection of data on HSPs enhanced (number, stream length, acreage, plant survival/density)
S1.14	Continue to implement road repairs and decommissioning work at the Ennis Creek Forest Natural Area.	2018	Metro		Decommissioning of approximately 2.5 miles of roadway and repair of 1 mile of roadway
S1.15	Commission a road assessment of Burlington Creek Forest Natural Area completed by AKS Engineering and Forestry; assessment to examine culverts, roads, and problem areas and develop a schedule of repairs.	2018	Metro		Schedule of repairs for Burlington Creek Forest
S1.16	Begin road repairs at Burlington Creek Forest Natural Area.	2018	Metro		Complete proposed repair work according to road assessment
S1.17	Develop a natural resource master plan for the Audubon Sanctuary.	2022	Audubon		Final master plan

Goal 2: Connectivity

Protect and improve connectivity between Forest Park, the Tualatin Mountains, the Coast Range, the Willamette River, and the Columbia River Gorge.

EXPLANATION: Plants and animals need connectivity within and between landscapes so they can cross less suitable habitats to carry out essential life functions, such as dispersing, finding a mate, or overwintering. The physical movement and genetic mixing that connectivity allows are crucial in preventing extirpations of native species. As the human population and the effects of climate change increase, biodiversity corridors need to be deliberately planned if we are to maintain connectivity for a wide range of native plant and animal species.

TABLE (CONTINUED)

Goal 2: Connectivity

Connectivity Objective 1: Ensure programmatic coordination between partners and with regional working groups.

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
C1.1	<p>Assist The Intertwine Alliance Oak Prairie Working Group (OPWG) in pursuing the goals laid out in the Regional Conservation Strategy (RCS) and the OPWG's new strategic action plan, by:</p> <ul style="list-style-type: none"> • Attending quarterly OPWG meetings • Providing field-based information on oak prairie habitat areas and vegetation structure and composition in and adjacent to Forest Park • Contributing to the integration of OPWG data into regional connectivity goals • Assisting with education and outreach about white oak habitat 	2018-2023	Metro	Urban Greenpaces Institute (PSU) and The Intertwine Alliance	Coordinated participation in the regional OPWG, possibly through GFPCI liaison
C1.2	<p>Assist The Intertwine Alliance Regional Connectivity Working Group (RCWG) in pursuing RCS' strategic goals, by:</p> <ul style="list-style-type: none"> • Participating in strategic action plan development, review, and finalization • Helping to identify anchor habitat, special habitat areas, and connectivity hotspots • Assisting in field testing and providing feedback for Portland State University's (PSU) Connectivity Toolkit • Exploring additional roles in contributing to the management of maps and models • Connecting RCWG work with future GFPCI acquisition partnership and strategy 	2018-2023	Metro	Urban Greenpaces Institute (PSU)	Application of PSU-Metro Connectivity Toolkit within the GFPCI boundary

TABLE (CONTINUED)**Goal 2: Connectivity**

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
C1.3	<p>Assist The Intertwine Alliance Pollinator Working Group (PWG) in pursuing the RCS's strategic goals, by:</p> <ul style="list-style-type: none"> • Collaborating with appropriate partners to identify key strategies and actions for enhancing pollinator connectivity • Drafting GFPCI pollinator goals and focal areas in advance of the strategic action plan process • Contributing to the formation of regional pollinator goals 	2018-2023	Intertwine Alliance and PP&R	Alliance Partners	Coordinated participation in the regional PWG, possibly through GFPCI liaison
C1.4	Pursue working relationships with Multnomah County, ODOT, and PBOT for opportunities with capital improvement projects to facilitate amphibian movement between upland and lowland wetland habitats.	2018-2023	WMSWCD and Metro	Alliance Partners	

Connectivity Objective 2: Update Portland's Terrestrial Ecology Enhancement Strategy (TEES) species list.

C2.1	Update the TEES's Portland At-Risk and Special Status Species lists and cross-reference results with PP&R's 2012 BioBlitz results in order to get an overview for Forest Park.	2018	BES-SID	PP&R	Updated TEES list
C2.2	Work with partners to create a list of research priorities.	2019-2020	PP&R	FPC and Audubon	List of proposed research projects focused on target species in the Greater Forest Park ecosystem
C2.3	Pursue joint research projects to fill knowledge gaps regarding species presence/absence.	2020	BES and PP&R	Audubon	List of research projects and secure funding
C2.4	Assist with TEES site assessments when specific habitat restoration/enhancement project opportunities are identified.	2018-2023	BES-SID		TEES site assessments on project sites

Connectivity Objective 3: Expand vegetation treatment to restore native pollinator habitat, including along powerline corridors.

C3.1	Continue treatment on the Pollinator Powerline Project (PPP) in the northern portion of Forest Park, along the BPA powerline.	2018	PP&R, FPC and Metro	100 acres restored and a template created for additional large-scale pollinator projects
C3.2	Expand pollinator habitat in the PPP to include PGE land inside of Forest Park.	2020	PP&R, Metro and FPC	
C3.3	Continue to monitor and assess changes in vegetation, using the Unified Monitoring Protocol.	2018-2023	FPC	Annual report or summary of data
C3.4	Map and assess oak resources on new Calvert acquisition.	2018	PP&R	Creation of map and report
C3.5	Share changes in vegetation composition and insect and avian diversity from initial treatments on PPP with Forest Park Alliance Partners and RCS Pollinator Working Group.	2020	PP&R, FPC, and Metro	Summary of monitoring data results on BPA site; reports to RCS Pollinator Working Group sessions
C3.6	Propose pollinator-powerline enhancement on additional acreage at Burlington Creek Forest Natural Area.	2019	Metro and FPC	Funded project with well-defined scope of work

TABLE (CONTINUED)**Goal 2: Connectivity**

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
C3.7	With successful enhancement, phase in additional sites on Portland General Electric (PGE) easements for pollinator habitat outside of Forest Park boundary.	2020	FPC, WMSWCD, and Metro		Additional restored pollinator habitat
C3.8	Pursue goals related to community science, outreach, and education; host two pollinator trainings and two pollinator walks on existing pollinator restoration sites.	2020	FPC		
C3.9	Identify a long-term strategy with CWS, Tualatin Hills Parks & Recreation District (THPRD), and/or Tualatin Soil & Water Conservation District (TSWCD) to connect pollinator habitat from North Abbey Road Creek to the GFPCI boundary via the powerline corridor, with potential linkage to the Willamette River through the industrial district.	2020	Metro and FPC		Initial powerline corridor strategy with Clean Water Services and partners ready for work planning and funding
C3.10	Continue Community Science Pollinator Monitoring Program.	2018	WMSWCD		Annual monitoring report with number of pollinator habitat projects monitored and acres of pollinator habitat projects implemented under powerline corridors on private lands
C3.11	Conduct outreach to and write conservation plans for private forest landowners that have powerline corridors on property to enable connectivity between Metro's Burlington Creek property and Forest Park.	2018-2023	WMSWCD	FPC	

Connectivity Objective 4: Establish partnerships for pursuing a joint property acquisition and easement strategy.

C4.1	Leverage support from Columbia Land Trust for strategic planning, landowner engagement, transaction support, technical assistance, and fundraising assistance.	2018-2023	FPC and Columbia Land Trust	Audubon	List of properties for potential easement or acquisition
C4.2	Use updated RCS maps and partner resources to compile a list of lands with significant habitat protection and connectivity value for potential pursuit of acquisition or easements.	2019	Metro and Audubon	FPC	Initial list of high-value lands
C4.3	Convene CWS, land trusts, the BES Watershed Land Acquisition (WLAP) Program, and county agencies to develop an acquisition/easement strategy in and around the GFPCI boundary.	2019	FPC	CWS and BES	Long-term acquisition/easement strategy
C4.4	Coordinate promotion of acquisition strategy in relevant regional policy and planning settings.	2018-2023	Alliance Partners		

Goal 3: Forests

Protect and improve the health and resilience of forests to support diversity, structural integrity, connectivity, and complexity.

EXPLANATION: Forests filter the air we breathe, sequester significant amounts of carbon, and play a role in maintaining hydrologic processes that support healthy rivers, streams, and fish populations. In addition, healthy forests contain a diversity of native trees and structural complexity and provide habitat for native plants and wildlife.

TABLE 3
Goal 3: Forests

Forests Objective 1: Establish and support annual collective treatment/restoration targets.

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
F1.1	Compile recent GFPCI treatment acres, by treatment type, and project FY2018 treatment acres.	2018	FPC, WMSWCD, Metro, and PP&R		Annual report
F1.2	Create a list of prioritized target species for treatment and thresholds for tolerance and determine annual targets for FY2019 forward.	2018-2020	FPC, PP&R, Metro, and BES	Alliance Partners	List of priority target species, percent cover, geographic thresholds, and targets of acres to be treated/restored annually
F1.3	Establish a process and timeline for reporting based on standardized protocols, co-located databases, and streamlined data integration.	2019	FPC	Alliance Partners	Annual reporting
F1.4	Write conservation plans for FPC conservation easements on private properties and for the Ancient Forest Reserve.	2018-2019	FPC and WMSWCD		Conservation plans written (and forest acres covered)
F1.5	Continue to implement “Restore Forest Park” with the addition of one new project every year, as funding and partnership opportunities allow.	2018-2023	PP&R	FPC and Metro	Five new “Restore” projects implemented
F1.6	Identify and foster joint work planning goals with BES’s EDRR and Watershed Revegetation Programs, PP&R’s Protect the Best, and the 4-County Cooperative Weed Management Area (CWMA). <ul style="list-style-type: none"> Continue to engage in interagency coordination of outreach and treatment activities for EDRR and canopy weeds. Continue to support the CWMA through steering committee participation, education and outreach, and technical advising. 	2018	WMSWCD, BES, and PP&R	FPC	Consolidated invasive species work plan for the Greater Forest Park ecosystem
		2018-2023	WMSWCD and FPC		Identification of the number of properties surveyed for canopy weeds, EDRR priority weeds, and the area of EDRR weed sites impacted or removed
		2018-2023	Metro, PP&R, BES, and WMSWCD		

Forests Objective 2: Continue building on the strength of existing invasive species removal collaborations.

F2.1	Continue/expand FY2017-18 activities (i.e., forest thinning, habitat restoration, invasive weed treatment).	2018-2023	WMSWCD	FPC	Increase in the number of acres restored
F2.2	Establish and maintain active contact with PBOT and PWB invasives coordinator.	2018-2023	WMSWCD	PP&R and FPC	Continued coordination

TABLE (CONTINUED)**Goal 3: Forests**

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
F2.3	Conduct Early Detection, Rapid Response eradication treatment for high-priority weeds such as garlic mustard, knotweed, spurge laurel, false brome, and policemen's helmet.	2018-2023	WMSWCD, PP&R, and BES		Increased on-the-ground treatment and success

Forests Objective 3: Promote use of the Unified Monitoring Protocol (UMP).

F3.1	Track partner usage and encourage data collection, such as:	2018-2023	WMSWCD, Metro, and FPC	PP&R	Recommendations and reminders to partners as necessary
	<ul style="list-style-type: none"> • Use UMP to perform annual summer monitoring with field interns on 13 forestry sites and five WMSWCD Healthy Streams/Habitats sites. • Use UMP to perform spring/summer monitoring within thinned units at McCarthy Creek and Burlington Creek natural areas. • Use UMP to perform annual monitoring associated with Restore Forest Park on UMP schedule. 				
F3.2	Compile and analyze available data.	2018-2023	FPC		Co-located database of UMP use data, with regular validation and verification, and annual report with summary of findings
F3.3	Ensure availability of training support resources, including manual and on-the-ground training if needed.	2018-2023	FPC		

Forests Objective 4: Complete stand trajectory assessments across managed areas.

F4.1	Assemble a working group to establish long-term assessment targets; identify gaps, funding and research methodologies, tools and resources for assessment; and develop a sampling strategy that provides significant geographic distribution and stakeholder representation.	2019-2021	PP&R, Metro, and WMSWCD	Define assessment targets; identify gaps, resources, and sampling sites
F4.2	Implement forest stand trajectory assessments.	2020-2021	PP&R, Metro, and WMSWCD	Initial stand assessment reports
F4.3	Analyze results and develop management/project recommendations.	2020-2021	PP&R, Metro, and WMSWCD	Working group review summary; biannual summary reports; completed stand trajectory report; long-term stand management plans, recommendations, and/or BMPs; regeneration, recruitment, or renewal pilot project(s)

Forests Objective 5: Develop and adopt a GFPCI Community Wildfire Protection Plan that documents fuel conditions, evaluates threats and risks from wildfire, and prioritizes home defensible space, fuel breaks, and hazardous fuel reduction projects.

F5.1	Identify community leaders who share concern about wildfire risk.	2018-2019	WMSWCD, ODF	Engagement of at least three community members to help lead local efforts
F5.2	Provide technical and financial assistance to Citizen Fire Academy graduates to develop a Community Wildfire Protection Plan for the North Tualatin Mountains (Tualatin Valley Fire and Oregon Department of Forestry Fire Protection Districts).	2019-2023	WMSWCD, Oregon Department of Forestry (ODF), and FPC	PP&R Completion of a community wildfire protection plan and at least two workshops

Goal 4: Wildlife

Protect and encourage native wildlife diversity.

EXPLANATION: A diversity of native wildlife is necessary to maintain a healthy ecosystem. Biologically diverse ecosystems help regulate atmospheric chemistry and the chemical composition of our water supplies, are critical to nutrient cycling and soil fertility, and address many basic human needs by providing clean air and water and sustaining productive agriculture. Healthy, biologically diverse ecosystems support a variety of species that pollinate flowers and crops, clean up waste, and help put food on the table. Diverse natural systems exhibit more stability, as well as a greater ability to recover from disturbances (including climate change and other human-caused disturbances) than do more simplified systems.

TABLE 4
Goal 4: Wildlife

Wildlife Objective 1: Increase resources for habitat enhancement/restoration for red-legged frogs and other amphibians, including work on ponds and other features.

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
W1.1	Gather information from Oregon Department of Fish and Wildlife (ODFW) on minimum requirements for private pond installations and provide targeted outreach to landowners regarding creation/enhancement of ponds and/or wetlands, including: <ul style="list-style-type: none"> • Collaboration with Skyline and Linnton neighborhood associations on communications to one or both neighborhoods • Help in recruit volunteers for a new frog rescue similar to the Harborton frog shuttle 	2019	WMSWCD		Prioritized list of potential sites for creation or enhancement of ponds, and preparation of outreach materials related to pond development on private land
W1.2	Consult with ODFW regarding pond installations and corridors along Highway 30.	2019	Alliance Partners		Summary of ODFW input on Highway 30 crossing
W1.3	Identify wetlands and breeding ponds within Forest Park, and compile key missing field data and mapping information on priority habitats.	2019	Alliance partners		Complete map of wetlands and ponds, such as BES's wetland inventory, including summary of Forest Park wetlands
W1.4	Develop forest/wetland connectivity goals that integrate updated knowledge of amphibians across the Greater Forest Park ecosystem.	2020	Alliance Partners		
W1.5	Explore feasibility of possible pond demonstration projects in GFPCI area such as PP&R Harborton Drive.	2021	Alliance Partners		Completed demonstration project(s), with outreach component

Wildlife Objective 2: Assess special-status habitats and develop conservation goals for connectivity.

W2.1	Establish a working group to set initial connectivity goals and objectives based on determined need and potential value.	2019	Alliance Partners	GFPCI connectivity goals
W2.2	Set initial assessment goals, seeking alignment with Regional Connectivity Working Group (RCWG) goals. Use the RCS map viewer (narrowed within a GFPCI conservation area shapefile) to establish a baseline for discussing goals.	2020	Metro	

TABLE (CONTINUED)**Goal 4: Wildlife**

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
W2.3	Compile key missing field data and mapping information on priority habitats; map priority habitats within Forest Park and provide maps to partners.	2021-2023	PP&R		GFPCI-specific connectivity maps
W2.4	Begin developing and prioritizing projects around specific connectivity goals and objectives.	2019	FPC and Audubon	PP&R	Recommendations regarding project development and acquisition
W2.5	Embark on the North Tualatin elk monitoring study. Adapt existing tools, such as PP&R's connectivity prioritization matrix, to provide a rigorous framework for reaching consensus.	2018-2019	Metro and Alliance Partners	PP&R	

Wildlife Objective 3: Implement projects that improve overall conditions for fish.

W3.1	Monitor, protect, and enhance habitat for the remnant population of cutthroat trout in Balch Creek.	2018-2023	BES	ODFW and PP&R	
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Goal 5: Community and Outreach

Expand the GFPCI's social and ecological scope.

EXPLANATION: Success of a conservation initiative of this scale, within an urban and rural area, will require a concerted effort and committed supporters who are aware of and engaged in the issues. Engaging a wide range of communities—such as historically underserved populations, park users, and neighbors—and attracting both financial support and volunteer hours is a major undertaking. Yet it is critical that conservation leaders be supported and backed by citizen leaders and the community as a whole.

TABLE 5

Goal 5: Community & Outreach

Community and Outreach Objective 1: Create and pursue equity and inclusion goals for the GFPCI.

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
CO1.1	Monitor and coordinate equity and inclusion initiatives within the Forest Park Alliance, such as (1) WMSWCD's collaboration with Wisdom of the Elders, demographic analysis, and upcoming Equity & Inclusion internship, (2) BES's watershed outreach work and new equity plan, (3) FPC's equity leadership training, and restoration partnership with Verde, and (4) Metro's diversity, equity, and inclusion work planning.	2021	Alliance Partners		GFPCI equity and inclusion report and/or strategy
CO1.2	Build relationships with community-based organizations in and around the GFPCI boundary by: <ul style="list-style-type: none"> Inviting partners representing communities of color and other underrepresented communities in and around the GFPCI boundary to share and help expand their work Using Oregon Watershed Enhancement Board (OWEB) funding to develop a model partnership framework that moves away from “consumptive” restoration partnership to deeper institutionalized partnership where restoration and equity goals are developed simultaneously. 	2018-2023	Alliance Partners		Field trips, guest presentations, and other outreach activities; development of partnership framework model that can be shared across the state
CO1.3	Encourage equity leadership development among GFPCI partners, including the following: <ul style="list-style-type: none"> Ensure that at least one partner organization is enrolling key staff in Center for Diversity and the Environment (CDE) leadership trainings Encourage Forest Park Alliance Partners to work with CDE's Environmental Professionals of Color (EPOC) and other relevant people of color (POC) career development resources (through informational tours, recruitment, etc.) 	2018-2023	Alliance Partners		

TABLE (CONTINUED)**Goal 5: Community & Outreach**

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
CO1.4	Assemble an equity advisory committee for the GFPCI to work on defining desired long-term equity and inclusion outcomes, and to develop and track indicators for those desired outcomes.	2019-2020	Alliance Partners		
<i>Community and Outreach Objective 2: Develop a GFPCI communications and outreach strategy.</i>					
CO2.1	Establish a working group to craft an outreach and communications strategy with input from relevant communications and outreach staff, with partner approval and external review.	2018-2019	FPC		Unified outreach and communications strategy
CO2.2	Inventory existing communications, outreach, and educational programs within the GFPCI.	2018	Alliance Partners		Priorities for collective outreach and education
CO2.3	Increase community literacy about the issues addressed by the GFPCI (streams, connectivity, etc.) and connect people in the area to actions and resources that are already available in the community (WMWCD, Backyard Habitat Program, BES, etc.)	2018	Alliance Partners		
CO2.4	Provide outreach to surrounding landowners regarding wildlife stewardship and resolving human/wildlife conflicts.	2018-2023	Audubon		
<i>Community and Outreach Objective 3: Bolster community science and volunteer programs.</i>					
CO3.1	Convene volunteer program managers and coordinators to identify volunteer resources, share best practices, and explore collaboration opportunities, such as: <ul style="list-style-type: none"> Establish a common list of volunteers and determine the feasibility of cross-pollinating strategies (e.g., GFPCI volunteer email newsletter, shared calendar embedded on partner websites) Reach out to university programs (e.g., PSU ESM, Pacific University, Lewis & Clark Environmental Education MA, Oregon State University) for potential collaboration 	2018-2023	FPC	Alliance Partners	Targets or strategy for increasing volunteer participation; unified email list of volunteer groups; estimated total volunteer resources for GFPCI
CO3.2	Continue Community Science Pollinator Monitoring Program.	2018	WMSWCD		Annual monitoring report with number of pollinator habitat projects monitored and acres of pollinator habitat projects implemented under powerline corridors on private lands
CO3.3	Leverage community science opportunities for monitoring through funding, co-programming, and partnerships, such as: <ul style="list-style-type: none"> Help expand programs (such as WMSWCD's Pollinator Monitoring Program) through partnerships with the OSU Master Naturalist program and the Xerces Society Coordinate pollinator monitoring trainings among Forest Park Alliance Partners with outside organizations 		Alliance Partners		Unified approach to community science monitoring within the GFPCI landscape

TABLE (CONTINUED)**Goal 5: Community & Outreach**

ACTION #	ACTION ITEM	YEAR	LEAD ORGANIZATION	SUPPORTING ORGANIZATION	OUTPUTS
CO3.4	Determine potential value in leveraging iNaturalist, iMap Invasives, and other digital science media.		Alliance Partners		Assessment of value of existing tools
CO3.5	Develop a list of project areas within the Greater Forest Park ecosystem to use in testing new community science models.		Alliance Partners		List of community science initiatives
CO3.6	Seek opportunities to expand the Backyard Habitat Certification Program.		Audubon, Columbia Land Trust		
CO3.7	Explore new volunteer leadership models to expand volunteer pool (similar to WMSWCD's existing citizen/community science pollinator abundance and diversity monitoring program) and make recommendations regarding possible development and implementation.		WMSWCD		