

KING CONSERVATION DISTRICT
GRANT SUBCOMMITTEE MEETING
OF THE BOARD OF SUPERVISORS
Monday, August 23rd, 2021
5:00 pm – 5:30 pm
Join Zoom Meeting
<https://zoom.us/j/94234356584>
Meeting Agenda

Call to Order

1. Preliminary Matters

- a) Introductions
- b) Additions or Corrections to the Agenda
- c) Adoption of the Board Agenda

2. Public Comment

3. Grant Subcommittee Items:

Member Jurisdiction Grant Program Items

Updates & Discussion: none

Applications: none

Amendments: none

Finalized close out forms to be presented at the meeting include:

- 1. Mountains to Sound Greenway Trust - Rattlesnake Ledge Trail and Natural Area Improvement
- 2. Mountains to Sound Greenway Trust - Little Bear Creek Knotweed Control & Re-forestation
- 3. Mountains to Sound Greenway Trust – Raging River Floodplain Enhancement (WRIA)
- 4. Mountains to Sound Greenway Trust – Raging River Knotweed Survey and Control Phase 1
- 5. Mountains to Sound Greenway Trust – Raging River Knotweed Survey and Control Phase 2
- 6. Earth Corps – Burke Gilman Trail Pollinator Corridor

Regional Food System Grant Program Items

Updates & Discussion: none

Applications: none

Amendments: none

Close outs: none



**King Conservation District
Member Jurisdiction Grant Program
Grant Agreement Close Out**

Grant Summary Information

Recipient: Mountains to Sound Greenway Trust

Project Title: Rattlesnake Ledge Trail and Natural Area Improvement

Project Description: The Rattlesnake Ledge trail was built in a collaborative partnership between the City of Seattle-Seattle Public Utilities (SPU), the Greenway Trust, EarthCorps, and Washington Trails Association (WTA) in 2002-03. The trail was built with a limited budget, anticipating approximately 40,000 hikers would use the trail annually; last year, SPU's hike counter logged more than 277,000 hikers – nearly seven times the usage level for which the trail was built. The trail's relatively short length, stunning panoramic views, and accessibility for hikers of all abilities combine to provide an unparalleled hiking opportunity. The vantage point from the Ledges allows hikers to gaze into Seattle's publicly owned and wholly protected 90,000-acre watershed, the source of drinking water for much of the Seattle region.

Unfortunately, the popularity of the Rattlesnake Ledge trail is causing significant harm to the trail and to the surrounding environment. Hikers are expanding the width of the trail well beyond the desired 4-5' trail corridor; trail switchbacks are being eroded and short-cut; the out- slope of the trail is beginning to collapse in sections; the uphill slope of the trail is being eroded; wood-based trail structures (such as wood-framed walkways, walls, and steps) are deteriorating and collapsing; unofficial user-built trails are expanding, causing users to wander off-trail; trail tread conditions are deteriorating; and drainage structures (necessary for moving water off of the trail and preventing erosion) are filling with soil and brush. This deterioration in trail conditions is directly affecting the local environment: unsupported trail up- and downslope sections are at risk of erosion, poor drainage structures and trail short-cuts are leading to increased sedimentation, expanding trail width is impacting vegetation and increasing risk of slope destabilization, and all of these items are creating safety hazards for hikers.

Specific project goals for this proposal were developed by the Greenway Trust and SPU include:

1. Repairing a key section of trail where a major switchback is being routinely cut by hikers, eroding into the outer edge of the upper approach and creating a safety hazard along approximately 150' of trail.
2. Working with SPU to replace a user-built access point with a sustainable trail offshoot to overlook a stream feature, decommissioning approximately 50' of trail and building 30-50' of sustainable trail.
3. Improving water drainage structures (preventing soil and slope erosion) and improving tread on the lower mile of the trail.
4. Revegetating damaged natural areas adjacent to the trail corridor, with an emphasis on priority social trails, improving ecological and safety conditions, including approximately 6-10 social trails.
5. Stabilizing collapsing and sliding slopes.
6. Working with SPU to identify and remove dead or damaged trees with the potential to impact the trail, and to eliminate potential safety hazards.

Funding Source and Year: 2016 KCD-Seattle Member Jurisdiction Funds

Start Date: 11/01/16	End Date: 12/31/18	Date Awarded: 10/10/2016
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Grant Budget Summary		Returned Funds:		Payment Summary	
Award Amount:	\$25,000.00	Amount Returned:	N/A	Amount Paid to Date:	\$22,500.00 10/15/18

Amount Spent:	\$25,000.00	Date Returned:	N/A	Final Payment Date:	\$2,500.00 <i>After KCD signs this form and expense documentation is verified</i>
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Amendment Request Summary:

Yes N/A Notes:

Scope of Work Revision:

X

Budget Revision:

X

To reflect actual expenditures

Completion Date Extension:

X

Copies of Work Product (check box or describe below)

Designs/Plans

Brochures/Publications

Curricula

X Photos

Video

Sign Mock-Ups

Other:

KCD Acknowledgement: King Conservation District funding was acknowledged in several locations, including:

Greenway Trust annual reports and meetings

Greenway Trust website and social media (including Facebook)

Grant proposals to Washington State Recreation & Conservation Office

Volunteer events (that included more than 100 volunteers) and AmeriCorps members, and other locations.

Site Visit

Date: 8/11/21

N/A:

Description: We hiked the trail with MTS GT and SPU staff. We stopped along the way to see each of the areas. They described how they had to have crews bring up crushed rock gravel to replenish the heavily used trail. The gravel was provided by SPU, who owns the land and manages the trail and the surrounding watershed. Volunteers provided all of the manual labor including transporting gravel and mulch up the trail with bucket chains and wheel barrels.

In some areas, the goal was to decrease the width of trail with logs, rocks and plants where hikers had ventured off the trail and to keep people away from the edge. They shaped rock onsite by drilling into it and injecting expanding grout to split the rocks and move them to needed locations along the trail.

They received a RCO grant which paid for an excavator in areas where it was needed. They explained that the KCD grant provided the first critical source of funds that helped the overall trail project collaboration between agencies.

They conducted the noisy work to be done with chain saw and drills before Perringrine falcon nesting season.

Ongoing work will include crews pulling stumps out of ground. The stumps are removed from the trails

because they can push walkers to the edge of the trail and because they can block sightlines up and down the trail. The trail improvements are intended to discourage walkers from walking on edge and falling down the steep slope.

Any kind of root and rock outcropping is also removed to decrease tripping hazards.

In some areas, they utilized the method of drilling through rock then injecting expansion grout to clear a pinch in the trail to make the trail wider. In other areas they removed large steps with steep 1 foot drop and graded the area to create a sloping ramp.

KCD funds paid for two bridge crossings to keep people out of creek bed. Having this bridge installed helped with maintenance. The bridge crossings have decking and curb rails.

They reused a creosote log that was once a Seattle water pipe pre-1920 for the decking. material on the two bridges.

On switch back sections of the trail, they installed rock to prevent trail cutting and erosion placed logs on top to prevent that as well so it is less tempting cut through, yet it still allows people to climb the rocks.

Planting Projects:

Maintenance/Monitoring Needs to be tracked: Ongoing until:
Completed: N/A

Reporting Summary: Yes No Notes:

Progress Reports: X

Expense Reports: X

Final Report:

Project Accomplishments and Successes

With funding from the King Conservation District, the Mountains to Sound Greenway Trust proposed to complete several important trail improvements to the Rattlesnake Ledge Trail, that would result in improved trail user experience and improved ecological conditions along the trail. The Greenway Trust was able to meet and exceed the targets for the project, including:

1. Creation of a workplan for identified projects
 - a. Finalized project workplan December, 2016-January, 2017. The Greenway Trust worked with Seattle Public Utilities to outline a plan of work for the project.
2. Improve drainage structures
 - a. Repaired/improved drainage on the lower mile of trail (Greenway staff, conservation corps crews and volunteers). Summer, 2017 (and ongoing). The Greenway Trust worked with volunteers to continue efforts to improve drainage along the lower portion of the trail.
3. Repair damaged switchback at approximately 1.0 miles Repair switchback, repair and revegetate eroded slope, complete rock retaining wall
 - a. (Greenway staff, conservation corps crews and volunteers). Spring-summer, 2017. The Greenway Trust oversaw EarthCrops conservation corps crews who performed trail improvements in this section of trail. This project work was funded through this grant, and a grant from the Washington State Recreation & Conservation Office which supported the

overall effort. Leveraging of funding allowed the Greenway Trust to achieve greater project successes elsewhere.

4. Revegetate natural areas adjacent to trail corridor Work with SPU, conservation corps crews, volunteers to identify and revegetate social trails (Greenway staff, conservation corps crews and volunteers).
 - a. Summer, 2017. Greenway Trust staff worked with volunteers and EarthCorps members, along with Seattle Public Utilities staff, to repair and rehabilitate user-created "social" trails that were impacting the areas around the trail corridor.
5. Stream overlook and eliminate user-built social trail With SPU, create new trail, including excavation of full bench, for a stream overlook. Revegetate and decommission user built social trail (Greenway staff, conservation corps crews and volunteers).
 - a. Fall, 2017. The Greenway Trust worked with EarthCorps crews to complete this effort.
6. Work with SPU to identify, remove hazard trees Elimination of priority hazard trees from trail corridor (SPU and Greenway staff).
 - a. Winter, 2017-2018. SPU continues to lead the effort to remove hazard trees throughout the trail corridor.
7. Coordinate volunteer events 100 volunteers will contribute at least 300 hours toward this effort. Fall, 2017. The Greenway Trust coordinated two volunteer events that engaged more than 100 volunteers who contributed more than 400 hours toward the project.

Additionally, thanks to the leveraged funding, the Greenway Trust worked with EarthCorps conservation corps members and Seattle Public Utilities to complete the installation of two small trail structures that will keep hikers from damaging sensitive stream areas.

Regional Benefits

The success achieved with this project has resulted in significant improvements to the Rattlesnake Ledge Trail. The trail corridor is much improved thanks to the new switchback, many social trails have been cleaned up and revegetated to deter trail users from departing from the trail corridor and damaging the surrounding environment, two small boardwalk structures were replaced, a small patch of blackberry at the base of the trail was removed, trash was cleared from the base of the iconic Rattlesnake Ledges, and numerous volunteers were engaged in the process.

This project has led to a continuance of the original partnership that rebuilt the Rattlesnake Ledge Trail in the early 2000s, with the Greenway Trust collaborating with EarthCorps, volunteers, other AmeriCorps programs, and Seattle Public Utilities to complete much-needed improvements to this iconic city-owned resource, protecting sensitive natural areas and enhancing the trail user experience. This renewed partnership has also led to the Greenway Trust and SPU partnering on several applications to various grant programs to build upon the recently completed effort and complete additional maintenance efforts along the trail.

Obstacles and Challenges

This project included several obstacles and challenges in implementation:

The Rattlesnake Ledge Trail is an immensely popular destination for hikers and visitors to the region. This heavy use has substantial impacts upon the trail, and also limits when and how certain trail improvement projects can be completed. In order to accommodate the heavy use, the Greenway Trust had to coordinate trail activities in the spring and fall months when use is relatively lower. This means that project work is also often occurring in inclement weather, and a portion of the time that the EarthCorps crew was working on the project included snow and cold conditions that made some accomplishments more challenging.

Lessons Learned and Recommendations for Future Projects

Rattlesnake Ledge is one of the most popular hikes in the Puget Sound region. Many hikers are not aware that this site is part of the Cedar River Watershed, and is owned and managed by Seattle Public Utilities. Volunteer engagement and project work presented an opportunity to engage and educate the public on the trail, and the context in which it sits. The Greenway Trust worked with Seattle Public Utilities to coordinate some garbage clean up from the base of the Ledges during the project, and was able to share this imagery with other partners and elsewhere to demonstrate the importance of Leave No Trace principles while recreating.

I certify that the project has been completed, all expenditures have been paid, and the final report has been received by the District.

_____,
District Representative

Date: _____

I certify that the project has been completed, all expenditures have been reported, and the final report has been completed and submitted to the District.

_____,
Grant Recipient

Name:

Title:

Date: _____



**King Conservation District
Member Jurisdiction & WRIA Forum Grant Program
Grant Agreement Close Out**

Grant Summary Information

Recipient: Mountains to Sound Greenway Trust

Project Title: Little Bear Creek Knotweed Control & Re-forestation

Project Description: In partnership with the City of Woodinville and King County they will conduct a weed survey, control invasive weeds, and plant native vegetation along the lower two miles of the creek (including select private properties).

Funding Source and Year: KCD-WRIA Returned Funds Funds

Start Date: 01/01/2014

End Date: 12/31/2016

Date Awarded: 10/14/2013

Grant Budget Summary

Returned Funds:

Payment Summary

Award Amount:

\$5,553.00

Amount Returned:

\$

Amount Paid to Date:

Amount Spent:

Date Returned:

Final Payment Date:

/ /

Amendment Request Summary:

Yes N/A Notes:

Scope of Work Revision:

Budget Revision:

Completion Date Extension:

Copies of Work Product (check box or describe below)

Designs/Plans

Brochures/Publications

Curricula

Photos

Video

Sign Mock-Ups

Other:

KCD Acknowledgement: King Conservation District's support of this effort was acknowledge in the following locations:

- The Greenway Trust's annual knotweed training, held for interested private landowners from the Greenway Trust's three basin-wide knotweed campaigns (Issaquah Creek, the Raging River, and Little Bear Creek).
- As part of landowner outreach materials and efforts.
- In the Greenway Trust's Annual Reports, at meetings of the Greenway Trust Board of Directors, and in other locations.

Site Visit

Date: **8/12/21**

N/A:

Description: We visited the site which is located on City of Woodinville open space property. The site was likely used as a staging area some time ago because the soils in the upland area are extremely compacted. The riparian area on the other hand, has received knotweed treatment and native plants installed are mostly thriving. Crews performed in-water knotweed identification and treatment with herbicide for three seasons. The bank across the creek is not owned by the city and has quite an infestation of invasive weeds. Mountains to Sound Greenway Trust and the City of Woodinville have plans to partner together on ongoing riparian restoration activities and will probably apply for a Member Jurisdiction grant to accomplish this work. Ongoing work will include additional invasive weed treatment, including knotweed and blackberry, as well as replacement and infill planting of native plants in the riparian area.

Planting Projects:

Maintenance/Monitoring Needs to be tracked: Ongoing in partnership with the City
 Completed: N/A:

Reporting Summary: Yes No Notes:

Progress Reports:

Expense Reports:

Final Report:

Project Accomplishments and Successes

The Mountains to Sound Greenway Trust has partnered with the City of Woodinville (City), King Conservation District, King County over the last decade to initiate restoration efforts along Little Bear Creek. Efforts included significant vegetation management along the creek through controlling aggressive invasive weeds including knotweed, and installing thousands of native trees and shrubs.

The accomplishments of this project are measured through the amount of knotweed and other invasive weeds controlled and the number of native plants that are installed on public and private properties along Little Bear Creek. The Greenway Trust sought to control a minimum of 10 acres of knotweed and 5 acres of other weeds. To date, 14 acres of knotweed and other weeds have been controlled on the Creek as part of this first phase of the effort.

Additionally, plant installation is a significant measure of success. The successful installation of native plants on these sites will provide increased biodiversity, reduced erosion and provide valuable near-stream and in-stream habitats. It will also increase shade to the creek, thereby reducing stream temperatures and increasing dissolved oxygen. The Greenway Trust sought to install a minimum of 2,000 native trees and shrubs along Issaquah Creek. To date, the Greenway Trust has engaged with public and private landowners to install more than 7,000 native trees and shrubs along the Creek.

With this project, the Greenway Trust developed a new partnership with the City of Woodinville, that led directly to a successful grant and initiation of expanded restoration along Little Bear Creek at Rotary Creek Park and Little Bear Creek Community Park. The partnership formed to address knotweed along the Creek within the City boundaries allowed the Greenway Trust to develop a working relationship with the City that included a desire to expand restoration efforts to improve the urban forest cover, address stormwater, and improve natural resources within the City. The Greenway Trust worked with the City and KCD to secure a \$50,000 grant to implement restoration, including control of blackberry, knotweed, and reed canarygrass, along Little Bear Creek at two City-owned properties. The City is interested in continuing this relationship, and will work with the Greenway Trust on the current projects and future restoration efforts. The Greenway Trust was also able to leverage this initial phase of knotweed control along Little Bear Creek with a commensurate WRIA 8 Cooperative Watershed Management grant for Phase 1, and then a second WRIA 8 CWM grant for Phase 2.

Regional Benefits

The WRIA 8 Conservation Plan lists restoration on Little Bear Creek as Tier 2, the second highest priority level assigned to restoration projects. The Little Bear Creek Basin support or has habitat potential for Chinook, coho and kokanee salmon. Methodically eradicating knotweed and planting native vegetation will aid in the conservation of salmon by significantly enhancing salmon habitat. Restoring the riparian zone will prevent bank erosion, decrease water temperature, allow for the opening of small waterways, improve water quality and increase the contribution of large woody debris over time.

Reaching the overall goals of the WRIA 8 Conservation Plan will have region-wide benefits. Improving habitat on a Tier 2 creek within WRIA 8 in King County is one step closer to reaching the goals of salmon recovery throughout the region. Improvements to the riparian area along Little Bear Creek will also include other benefits, such as water quality, stormwater management, reduced erosion, and improved wildlife habitat. Trees and shrubs installed in the riparian buffer will also contribute to improved habitat complexity within Little Bear Creek in the long-term, as the trees will ultimately provide recruitment of large woody material in the stream. Improvements to these parks and natural areas will also benefit residents and visitors to the City of Woodinville, helping to make these spaces more open and inviting for users.

Obstacles and Challenges

While receiving grant funding is the first step towards successfully implementing knotweed removal projects within communities, it has been found that funding cycles are not long enough to allow sufficient time to reach full success. Projects such as this effort, which relies heavily on private landowner cooperation and engagement, can take several years before there is sufficient buy-in and trust between landowners and the Greenway Trust to achieve meaningful results within a basin. Initial outreach on these projects is sometimes met with scrutiny, and we often find that the project starts to gain momentum after several years of being active in the community. It takes time to earn public trust and develop a reputation. As more landowners see positive results, word of mouth becomes a driving factor in the long-term success of these collaborative, community-wide projects. The Greenway Trust experienced challenges with landowner engagement on this project, as the relationships with Creekside landowners were newly formed during the duration of the project. Additionally, this project included multiple commercial properties, and access and treatment permission was more challenging to secure for parcels with owners who were harder to reach.

This project also included several unique challenges, as several seasons of knotweed control were interrupted through Emergency Response disaster recovery deployment for Washington Conservation Corps teams, and staff transition at the City of Woodinville and the Greenway Trust. Additionally, efforts beyond the King County boundary and the upper limit of this project did not occur commensurately with this project as anticipated, leading to complications for project maintenance in the near and long-term if additional control does not occur upstream.

Lessons Learned and Recommendations for Future Projects

As a small conservation-oriented nonprofit organization, and with many years of successful restoration efforts in King County, the Greenway Trust has slowly developed and cultivated relationships with many public and private landowners in the region.

While gaining planting permission is a long-term effort, we have worked with a handful of landowners who have allowed us to install hundreds of native trees and shrubs on their property, greatly propelling us towards our goals of enhancing salmon habitat. This effort was the start of a new initiative in Woodinville and along Little Bear Creek. Though some long-term outcomes may be more challenging with a stream system that crosses county boundaries, this new partnership has already led to the development of a relationship between the Greenway Trust and the City of Woodinville that is expected to contribute to continued restoration and volunteer engagement efforts in the future.

Delays in treatment permissions postpone implementation of herbicide treatments on certain properties. Knotweed must be treated for three consecutive years to be fully controlled, so permissions granted the third and final year of a project will not allow for a full treatment cycle to be accomplished, or for the installation of native trees post-treatment during the same grant cycle. The shared commitment to the Little Bear Creek system requires constant funding to achieve long-term success.

I certify that the project has been completed, all expenditures have been paid, and the final report has been received by the District.

_____ ,

District Representative

Date: _____

I certify that the project has been completed, all expenditures have been reported, and the final report has been completed and submitted to the District.

_____ ,

Grant Recipient

Name:

Title:

Date: _____



**King Conservation District
Member Jurisdiction & WRIA Forum Grant Program
Grant Agreement Close Out**

Grant Summary Information

Recipient: Mountains to Sound Greenway Trust

Project Title: Raging River Floodplain Enhancement

Project Description: The proposed project seeks to enhance three acres of riparian habitat and forested wetland along the Raging River at river mile 4. It would include the control of encroaching noxious weeds and the installation of native trees and shrubs throughout the three acres. The Greenway Trust, working with local volunteers and conservation corps crews, would implement the project during the summer and fall of 2007.

Improved habitat conditions and increased native plant diversity would benefit chinook, coho, steelhead and chum that spawn and rear in this reach of the river as well as other wildlife. (The protection and restoration of spawning and rearing areas is the focus of the WRIA 7 salmon recovery effort.)

The project site is located immediately upstream and adjacent to the 2006 King County Raging River Preston Reach Floodplain Reconnection project that removed 1,300 feet of levee within the floodplain and opened seven acres of riparian habitat. (See map.) The project builds on the county's successful efforts downstream.

The majority of the project site is owned by the YMCA (Camp Terry). King County is currently in negotiations for the purchase of this property (and project work would go forward whether the land is in public or private ownership). The remaining area is on the slope above the county's 2006 project.

Funding Source and Year: KCD-Snoqualmie Forum 2006-07 Funds

Start Date: 07/15/2007	End Date: 03/31/2011	Date Awarded: 06/11/2007
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Grant Budget Summary

Returned Funds:

Payment Summary

Award Amount:	\$25,500.00	Amount Returned:	\$0.99	Amount Paid to Date:	\$22,950.00 8/17/2007
Amount Spent:	\$25,499.01	Date Returned:		Final Payment Date:	<i>TBD by KCD Board of Supervisors - if approved = \$2,549.01</i>

Amendment Request Summary:

Yes N/A Notes:

Scope of Work Revision:

Budget Revision:

Completion Date Extension:

Extended completion date from 9/31/11 to 3/31/11 in order to replace willow stakes and other plants browsed by beaver

Copies of Work Product (check box or describe below) Designs/Plans Brochures/Publications Curricula Photos Video Sign Mock-Ups

Other:

KCD Acknowledgement: The Greenway Trust acknowledged KCD funding in numerous methods. KCD's support of the project was mentioned during work and outreach with the YMCA, King County and at multiple volunteer events. Additionally, the project and funding support was highlighted at meetings of the Greenway Trust board of directors and at the Greenway Trust's annual celebration of events across the Greenway landscape.

Site VisitDate: **4/15/2010**N/A:

Description: As part of an overall view of the larger work happening on the Raging River, Mountains to Sound staff took KCD to several sites as representative samples of the larger work being accomplished.

They explained that they have been working in partnership with King County and private landowners since 2007. They took a top-down approach, starting at the headwaters and working down. Their work has been successful because they have remained involved and formed relationships with many landowners along this reach. They've accomplished this work by cobbling together numerous funding sources including past KCD-WRIA funding and current funds available through the King County Flood Control District and Watershed Forums.

They knew that controlling knotweed takes at least three years and have come to realize that eradication of the weed altogether is not feasible. However, they are confirming that knotweed control is possible with continuous and consistent treatment, they've been able to substantially reduce the plant infestations enough so that native plants can thrive. They return to sites that have been controlled to check for any regrowth or new plants. They're partnering with King County on knotweed control on newly acquired land.

In some places, replanting native plants is tough due to the large cobble and rock. Although this tough terrain is good for fish habitat.

Their general approach has been to have crews control knotweed by spraying herbicide in the appropriate season, then planting with native plants after 3 seasons. They would also install native plants, working with the landowner, in other areas on their property that have not been treated because landowners liked to get plants in ground.

In sections of the river where there are levees. King County manages knotweed control in the levee areas and MTSGT helped with planting.

There is a major floodplain project nearby in Fall City that is the largest in watershed. Knotweed control happening nearby this project will help with the long-term success of the project.

They planted conifers and did lots of blackberry control tackling sections each year.

Because of the long-term nature of knotweed control, KCD funds for initial knotweed control have been the catalyst that started the momentum that is still happening today.

At one of the sites we visited, 740-800 plants were installed. Will continue treatment 2 more years.

They started in areas that were once a knotweed monoculture. Once the knotweed was substantially controlled, secondary invaders such as blackberry would spring up and require control before planting.

KCD staff recommended that they consider planting more densely in clusters with a diverse palette of native trees and shrubs as opposed to a homogenous stand that could get taken out by a pest or climate.

They have new grant for infill planting here at this location because the county does treatment but often doesn't have funds for replanting.

We visited the YMCA Camp Terry where they did control treatment and plantings. It's only on the other side of the river that you can see substantial knotweed plants.

They coordinated the treatment to happen while kids are not present at the camp and are working with the camp on a new grant to do watershed education, fencing and more planting.

We discussed how they mostly sprayed the knotweed with herbicide because practitioners have found that injecting the knotweed with herbicide is more labor-intensive, uses a lot more herbicide than spraying and is inefficient in terms of the area you can cover with injecting is much less than spraying.

We visit another site where work was done on private property.

It's hard to believe that the understory was once all knotweed because the native shrub buffer is well established. It looks so good because this is one of the earliest landowners they worked with.

This property is a mile or two from the headwaters.

They helped this landowner with knotweed in their garden in addition to on the river.

They did knotweed treatment where they got permission. In some cases permissions were granted recently from property owners who were contacted years ago.

Partners are working together on data collection to combine with King County data to better track knotweed treatment from the last three years to compare all agencies work and build upon their shared approach.

Planting Projects:

Maintenance/Monitoring Needs to be tracked: Ongoing until: _____
Completed: N/A:

Reporting Summary: Yes No Notes:

Progress Reports:

Expense Reports:

Final Report:

Project Accomplishments and Successes

The Mountains to Sound Greenway Trust (Greenway Trust), working in partnership with King County and the YMCA successfully completed three acres of restoration along the Raging River on properties owned by King County and the YMCA. The project ties into King County's earlier restoration on the Carlin property and the levee removal that was completed during that time. The project was supported by funding from the King Conservation District and private contributions from Carter Motors.

Specific accomplishments include:

- Conservation Corps crews and volunteers provided substantial assistance in the restoration of the site. More than 60 volunteers provided 291.5 hours of service over the course of the project. Crews and volunteers assisted with the control of invasive plants, maintenance and monitoring of the project. In addition to manual control of blackberry and ivy, crews chemically treated Bohemian knotweed and blackberry.
- 600 potted native trees and shrubs were planted throughout the site and an additional 3,750 willow, cottonwood and dogwood stakes, surpassing the estimated 1,500 plants identified in the original grant.

Regional Benefits

Adjacent to one of the significant Chinook spawning habitats in the Snoqualmie watershed, this project

improves habitat for salmon and other wildlife. Previously a field of reed canary grass, alder, cottonwood and conifers are all establishing in the area and shading out the grass. Overtime, these trees will provide an upper canopy that will shade the river (keeping temperatures lower), provide habitat for other wildlife, and allow for native shrubs and wetland species to naturally recruit or be subsequently planted.

Furthermore, these successful restoration projects tie-in and provide connectivity with other restoration efforts, specifically the Carlin restoration project King County completed and on-going riverside work the Greenway Trust is completing controlling knotweed and re-establishing native plants along the entire Raging River. These efforts are critical to increasing habitat for fish and wildlife in this rapidly urbanizing part of King County.

Obstacles and Challenges

The primary challenge that occurred post installation of the native plants was the impact of beavers on some of the willow, dogwood, and cottonwood stakes. Installed stakes bordering the small creek that runs through the properties were "cut" down by the beavers two years after planting and the cuttings incorporated into the beaver dam where the old levee was located. Remnants of the stakes left behind by the beavers subsequently resprouted. However, the area immediately adjacent to the creek remains less tree covered than areas just 20 feet away.

Lessons Learned and Recommendations for Future Projects

One of the lessons learned is the need for more protection of the emerging vegetation from beaver predation. More could have been done on this front on the front end, eliminating the need to replant some of the creekside areas.

This project, as mentioned above, is also part of a larger, long-term collaboration to restore riparian areas along the Raging River. Thanks to this collaboration, and the partnership with King Conservation District and King County on the ongoing Raging River Knotweed Survey & Control efforts, the Greenway Trust will

I certify that the project has been completed, all expenditures have been paid, and the final report has been received by the District.

District Representative

Date: _____

I certify that the project has been completed, all expenditures have been reported, and the final report has been completed and submitted to the District.

mackenzie.dolstad@mtsgreenway.org

Digitally signed by
mackenzie.dolstad@mtsgreenway.org
DN: cn=mackenzie.dolstad@mtsgreenway.org
Date: 2020.05.26 11:30:54 -07'00'

Grant Recipient

Name: Mackenzie Dolstad

Title: Senior Manager | Stewardship

Date: May 26, 2020

Date: _____



**King Conservation District
Member Jurisdiction & WRIA Forum Grant Program
Grant Agreement Close Out**

Grant Summary Information

Recipient: Mountains to Sound Greenway Trust

Project Title: Raging River Knotweed Survey & Control

Project Description:

Funding Source and Year: KCD-WRIA 2009 Funds

Start Date: 07/01/2009

End Date: 03/31/2014

Date Awarded: 07/13/2009

Grant Budget Summary

Returned Funds:

Payment Summary

Award Amount:

\$50,000.00

Amount Returned:

\$

Amount Paid to Date:

Amount Spent:

Date Returned:

Final Payment Date:

/ /

Amendment Request Summary:

Yes N/A Notes:

Scope of Work Revision:

Budget Revision:

Completion Date Extension:

Copies of Work Product (check box or describe below)

Designs/Plans

Brochures/Publications

Curricula

Photos

Video

Sign Mock-Ups

Other:

KCD Acknowledgement: KCD's contributions were acknowledged in landowner outreach/engagement and communications, at meetings of the Greenway Trust Board of Directors, on the Greenway Trust website, and in other areas.

Site Visit

Date:

N/A:

Description:

Planting Projects:

Maintenance/Monitoring

Needs to be tracked:

Ongoing until: _____

Completed: N/A:

Reporting Summary: Yes No Notes:

Progress Reports:

Expense Reports:

Final Report:

Project Accomplishments and Successes

The Raging River is one of the most important Chinook salmon spawning locations in the Snoqualmie Watershed and important for steelhead trout as well. Unfortunately, it has been significantly impacted by the introduction of Bohemian knotweed. In 2008, with funding from the Snoqualmie Forum, the Mountains to Sound Greenway Trust (Greenway Trust) completed a knotweed survey of more than eight miles of the Raging River and its tributaries, and found that more than 28 acres on 132 properties were infested with knotweed. The worst infestations were located along important Chinook salmon spawning habitat.

The Greenway Trust sought funding from the King Conservation District, and in 2009 began a campaign to continue survey efforts along the Raging River, and to control a minimum of 12 acres of knotweed.

Specific project accomplishments include:

- Controlling an initial 32.6 acres of knotweed on public and private parcels.
- Completing follow up control of a total of 20.2 acres
- Survey efforts on an additional 6 miles of the Raging River and feeder streams
- All landowners along the Raging River were mailed information on the project.
- Installation of 2,055 native plants (1,900 live stakes and 155 native trees and shrubs)

Regional Benefits

Systematically controlling knotweed is the first step in restoring native plant communities, improving water quality and ultimately re-establishing a healthy riparian buffer. Therefore, it is critical that a strategic basin-wide approach is used to control this weed, starting at the uppermost infestations and working down river. The Snohomish Basin Salmon Conservation Plan lists "Riparian Enhancement" in the Raging River as one of the "highest priorities for ecological recovery."

Obstacles and Challenges

This grant was the Greenway Trust's first programmatic approach to knotweed survey and control in the Raging River Basin on a comprehensive scale. Initial efforts began in the upper reaches of the system. As the project emphasized engagement with private landowners, this effort required initial outreach in multiple avenues to connect with public and private landowners, to explain the approach, to identify knotweed, and to return to the effort in order to add new native plantings in areas treated for knotweed. As this was the Greenway Trust's first consistent approach in the area, new relationships with landowners and project partners needed time to develop. Dedication of Greenway Trust staff to make connections with landowners required multiple means of communication. As with any initiative of this nature, not all landowners participated, and the Greenway Trust has worked with other partners (including the King Conservation District, King County, Washington Dept. of Natural Resources, Washington Dept. of Agriculture) to continue this effort for more than a decade.

Lessons Learned and Recommendations for Future Projects

Successful knotweed control often requires multiple years of chemical treatment, and this effort compounded that need with the need to develop relationships with landowners throughout the basin. As a nonprofit entity, the Greenway Trust is uniquely situated to connect with private landowners to perform voluntary survey, treatment, and native planting. Funding from the King Conservation District allowed the Greenway Trust to pursue these efforts in a manner that was more amenable to landowners in the basin, and while developing relationships through letters, phone calls, emails, and door-to-door and neighbor-to-neighbor can be challenging, it also creates long-term opportunities in the basin.

A key lesson learned in this basin, and in other similar projects, is that to bring knotweed to a reduced, "maintenance level" requires a long-term commitment by many partners and agencies. The Greenway

Trust is fortunate to have support from KCD, King County, WA DNR, WSDA, and the Snoqualmie Watershed Forum, and has used multiple funding sources to return to the Raging River basin annually since this Phase 1 project was initiated to maintain and control new knotweed infestations. This program is now entering it's 11th season of control, and recently secured funding for another 2+ seasons.

Greenway Trust staff have also joined a recent knotweed working group to help determine long-term plans and goals for knotweed management in the Snoqualmie/Snohomish Watershed, identifying what measures success and objectives for this and other similar initiatives.

I certify that the project has been completed, all expenditures have been paid, and the final report has been received by the District.

_____,
District Representative

Date: _____

I certify that the project has been completed, all expenditures have been reported, and the final report has been completed and submitted to the District.

_____,
Grant Recipient

Name:

Title:

Date: _____



**King Conservation District
Member Jurisdiction & WRIA Forum Grant Program
Grant Agreement Close Out**

Grant Summary Information

Recipient: Mountains to Sound Greenway Trust

Project Title: Raging River Knotweed Control, Phase 2

Project Description:

Funding Source and Year: KCD-WRIA 2010 Funds

Start Date: 10/01/2010

End Date: 12/31/2014

Date Awarded: 06/14/2010

Grant Budget Summary

Returned Funds:

Payment Summary

Award Amount:

\$50,000.00

Amount Returned:

\$

Amount Paid to Date:

Amount Spent:

Date Returned:

Final Payment Date: / /

Amendment Request Summary:

Yes N/A Notes:

Scope of Work Revision:

Budget Revision:

Completion Date Extension:

Copies of Work Product (check box or describe below)

Designs/Plans

Brochures/Publications

Curricula

Photos

Video

Sign Mock-Ups

Other:

KCD Acknowledgement: King Conservation District support of the project was acknowledged in the following areas:

- The Greenway Trust's annual knotweed training, held for interested private landowners.
- On outreach materials sent to landowners, and in conversations with landowners about the project.
- KCD was also recognized in the Greenway Trust's Annual Reports, at meetings of the Greenway Trust Board of Directors, and in other locations.

Site Visit

Date:

N/A:

Description:

Planting Projects:

Maintenance/Monitoring Needs to be tracked: Ongoing until: _____

Completed: N/A:

Reporting Summary: Yes No Notes:

Progress Reports:

Expense Reports:

Final Report:

Project Accomplishments and Successes

The Raging River is one of the most important Chinook salmon spawning locations in the Snoqualmie Watershed and important for steelhead trout as well. Unfortunately, it has been significantly impacted by the introduction of Bohemian knotweed. In 2008, with funding from the Snoqualmie Forum, the Mountains to Sound Greenway Trust (Greenway Trust) completed a knotweed survey of more than eight miles of the Raging River and its tributaries, and found that more than XX acres on YYY properties were infested with knotweed. The worst infestations were located along important Chinook salmon spawning habitat.

The Greenway Trust sought funding from the King Conservation District, and in 2010 began a campaign to continue survey efforts along the Raging River, and to control a minimum of ZZ acres of knotweed.

Specific project accomplishments include:

- Controlling an initial 38.25 gross acres of knotweed on public and private parcels.
- Completing follow up control of a total of 13.5 acres
- Knotweed control well exceeded the target of an additional 12 acres of control.
- All landowners along the project stretch of Raging River were contacted about the project. The Greenway Trust received access permission to survey/treat on 15 parcels, as part of this phase.
- Installation of 2,350 native plants were installed, a mix of trees, shrubs, and live willow and dogwood stakes, exceeding the target of 2,000.

Regional Benefits

The Snohomish Basin Conservation Plan lists "Riparian Enhancement" in the Raging River as one of the "highest priorities for ecological recovery." Systematically controlling knotweed is the first step in enhancing these riparian areas, restoring native plant communities, improving water quality and ultimately re-establishing a healthy riparian buffer. Therefore it is critical that a strategic basinwide approach is used to control this weed, starting at the uppermost infestations and working down river.

Reaching the overall goals of the Snohomish Basin Conservation Plan will have region-wide benefits. Improving habitat on a important Chinook-bearing systems within the Snoqualmie Watershed is one step closer to reaching the goals of salmon recovery throughout the region. Improvements to the riparian area along the Raging River will also include other benefits, such as water quality, stormwater management, reduced erosion, and improved wildlife habitat. Trees and shrubs installed in the riparian buffer will also contribute to improved habitat complexity within the Raging River in the long-term, as the trees will ultimately provide recruitment of large woody material in the stream.

Obstacles and Challenges

While receiving grant funding is the first step towards successfully implementing knotweed removal projects within communities, it has been found that funding cycles are not long enough to allow us sufficient time to reach full success. Projects such as this effort, which relies heavily on private landowner cooperation and engagement, can take several years before there is enough buy-in and trust between landowners and the Greenway Trust to achieve meaningful results within a basin. Initial outreach on these projects is sometimes met with scrutiny, and we often find that the project starts to gain momentum after several years of being active in the community. It takes time to earn public trust and develop a reputation. As more landowners see positive results, word of mouth becomes a driving factor in the long-term

success of these collaborative, community-wide projects.

The Greenway Trust has recently started to see significant benefits in word-of-mouth encouragement toward cooperation within the private landowner community – after multiple years of outreach efforts and successful treatment and planting projects, landowners are now forwarding communications with the Greenway Trust to their neighbors, recommending participation in the project.

Once knotweed has been removed successfully, not every landowner is interested in the revegetation of their property. Oftentimes, a view of the creek has been blocked by knotweed for years; a new viewing corridor is more attractive than blocking these corridors with conifers. Though we make every attempt to educate landowners about the necessity of installing plants on their banks once the knotweed is no longer present, some still refuse to partake in this aspect of the project.

Lessons Learned and Recommendations for Future Projects

As a small conservation-oriented nonprofit organization, and with many years of successful restoration efforts in the Raging River basin, the Greenway Trust has slowly developed and cultivated relationships with many private landowners in the region.

Over the years, the Greenway Trust has improved outreach and education techniques for knotweed removal and revegetation projects. Outreaching to over 170 people within the Raging River Basin is quite an endeavor, but through the creation of more attractive and inviting materials, as well as longevity in the community, we have reached a milestone with our permissions granted.

Delays in treatment permissions postpone implementation of herbicide treatments on certain properties. Knotweed must be treated for three consecutive years to be fully controlled, so permissions granted the third and final year of a project will not allow for a full treatment cycle to be accomplished, or for the installation of native trees post-treatment during the same grant cycle. The shared commitment to the Raging River Basin system requires constant funding to achieve long-term success, and the Greenway Trust has been successful in working with many different partners to secure funding for this effort on an ongoing basis since 2008.

As the project matures, more and more landowners are participating. While much of this newer participation has been a result of lessons learned and improving our outreach, word of mouth from people in the community has greatly contributed to expanding participation in our program.

Expanding our invasive weed control and native planting efforts to private properties along Issaquah Creek build on our successes of prior restoration efforts which have occurred in the Raging River Basin on public land. Our organization has over a decade of success in partnering with King County, Washington State Dept. of Natural Resources, and the other partners on land restoration efforts within the basin. Adding private parcels assists with connecting these restored lands, and results in longer stretches of improved habitat for salmon.

I certify that the project has been completed, all expenditures have been paid, and the final report has been received by the District.

_____,
District Representative

Date: _____

I certify that the project has been completed, all expenditures have been reported, and the final report has been completed and submitted to the District.

_____,

Grant Recipient

Name:

Title:

Date: _____



**King Conservation District
Member Jurisdiction Grant Program
Grant Agreement Close Out**

Grant Summary Information

Recipient: EarthCorps

Project Title: Burke Gilman Trail Pollinator Corridor

Project Description: Habitat loss and fragmentation has critically imperiled native pollinators. This project seeks to implement native pollinator habitat restoration on the Burke Gilman trail (BGT). The BGT has potential to serve as a high quality connective corridor to facilitate the safe passage of birds, butterflies and pollinators of all kinds, across several highly urbanized neighborhoods. For example, with best practice habitat design, the BGT can directly connect the bird and insect populations of the Kincaid Ravine Natural Area on the University of Washington campus with Ravenna Woods. Furthermore, the BGT can serve as an educational corridor, in regards to native pollinator curriculum, for the high volumes of bicyclists and pedestrians. Lastly, this project will boost the aesthetic value of the BGT, recognizing that a diversity of flowering native shrubs and herbs is an important tool in promoting public interest in Seattle's natural areas.

The goals of the project are to:

- 1) Implement the direct improvement of pollinator habitat on the BGT- including invasive weed removal, pollinator-friendly native plant installation, and habitat structure installation. This contributes to the Green Seattle Partnership's (GSP) goal of restoring 2,500 acres of urban parks. This project will target several sites in GSP Phases 2 (Planting) and 3 (Establishment) from Ravenna Woods to Fairway Estates.
- 2) Create a Best Management Practice to guide the implementation of similar projects across Seattle by Forest Stewards. Workshops led by EarthCorps staff will use the BGT project as an on-the-ground model for teaching the Best Management Practice. Any technical resources or workshop materials will be made public.
- 3) Educate and involve community members through educational signage and opportunities to participate in Volunteer Events. Volunteer Events will be used as a tool to involve community members in restoration while providing a valuable educational opportunity.

The expected outcomes relate to the three goals of the project. Firstly, the creation of successful pollinator habitat will be gauged by pollinator use of the BGT and native plant survivorship. This will necessitate a baseline survey and follow-up monitoring of pollinator abundance and diversity. It will also necessitate yearly monitoring of installed plant survivorship, based on percent cover. Secondly, the education and support of Forest Stewards to proliferate this type of restoration around Seattle will be gauged by the number of pollinator habitat restoration projects implemented citywide in the next 5 years. Thirdly, the education of BGT users and volunteers may be gauged and documented using survey techniques during Volunteer Events, as well as in general communications between project partners and this audience.

During Year 1, EarthCorps crews will complete the invasive plant removal and install any habitat structures. They will prepare sites for native plant installation, which will be conducted by volunteers at events hosted by EarthCorps and Friends of the Burke Gilman. During Year 2, further volunteer events will continue to install plants. During Years 3-5, maintenance of plantings will be conducted by EarthCorps crews and during quarterly volunteer events.

Additional info provided in application

The decline of pollinator insects has received unprecedented media attention locally and globally, due to the growing understanding of the negative implications for local food supply and health. The Burke Gilman Trail Pollinator Corridor project is a strategic attempt to apply the best available science to create connected habitat for pollinators along a highly visible urban bike trail in northeast Seattle. It extends past work restoring Kincaid Ravine, which is adjacent to the bike trail and the University of Washington (UW)

campus. It leverages the productive relationships developed during that project.

Our approach includes developing a Best Management Practice (BMP) for native pollinator plantings, and implementing the practice in a sustainable way that can be shared, repeated, monitored and maintained. Specifically, the incorporation of any educational materials into Forest Steward curriculum will be closely coordinated with Seattle Parks so as to most seamlessly match the needs and goals of that program. We also plan to integrate community groups including Friends of the Burke Gilman Trail, UW students, AmeriCorps members, and Adobe employees in the project. This holistic integration of science, education, outreach and implementation can help drive Seattle forward in transforming underutilized urban green spaces into functional habitats.

Pollinator Corridors offer a novel solution to a well-known problem in the restoration field: how to transition sites from the early 'active' phases, which require significant effort and funding, into the 'long term stewardship' phase involving maintenance work and a decreasing amount of effort and funding. In the GSP vernacular, this is the transition from Phase III to Phase IV. This project targets this transition with an exciting and specific incentive to interested volunteers including Forest Stewards and community members. Offering an intriguing project at the restoration 'finish line,' Pollinator Corridors can help transition restoration projects into long-term community supported successes. Through our combined networks, EarthCorps, Seattle Parks and the Friends of the Burke Gilman Trail can leverage the novelty and aesthetic appeal of pollinator plants to attract strong participation by new and returning volunteers to re-invigorate restoration and set up long-term stewardship in this section of the trail.

Finally, we will forge an innovative new partnership with Adobe, which has offices in Fremont along the Burke- Gilman Trail. They have already expressed interest in the project and its ultimate long-term vision to extend restoration and pollinator plantings along various lengths of the bike trail from the University of Washington heading west. So far, we have a vocal champion at Adobe, a sizeable matching grant from the Adobe Foundation, and interest from Adobe employees in volunteering for the project. With this initial collaboration, we expect to garner more support from Adobe's peers in the technology corridor along the Ship Canal in Fremont. (We plan to capitalize on our strong relationships with Adobe neighbors Tableau Software and Google.)

This project will be restricted to specific geographic locations that are in active restoration within the GSP program. Jurisdictional challenges will be addressed between the landowner and the project partners in order to find appropriate site locations.

- Clear roles and responsibilities of partners (including landowners if applicable)

EarthCorps will provide project management, scientific and technical oversight, crew labor, tools, materials, and plants. Seattle Parks and Recreation is the landowner and a project partner. Seattle Parks/Green Seattle Partnership will provide permissions to work on sites, help coordinate workshops for Forest Stewards, support implementation efforts as needed, and will work together with EarthCorps on a long term stewardship plan for the project sites. Friends of the Burke Gilman is a project partner. They provide area and location information, including site history and future site planning. They will cooperate with EarthCorps to coordinate volunteer events and conduct outreach. The University of Washington (UW) is a longstanding partner and may provide scientific counsel in regards to entomology, pollinator surveys, and monitoring protocols. UW will partner with EarthCorps to publicize opportunities for students to participate in Volunteer Events and Service Learning.

EarthCorps has a long track record of engaging students in environmental service, as well as implementing restoration and monitoring in Kincaid Ravine, a property on the UW campus adjacent to the Burke Gilman Trail (BGT.)

- Methods for assessment and evaluation of intended result

The intended results of this project include:

- 1) the creation of successful pollinator habitat;
- 2) the education and support of Forest Stewards to proliferate this type of restoration around Seattle, and
- 3) the education of BGT users and volunteers.

Result 1) - To assess the creation of successful pollinator habitat, a baseline survey that observes the a) abundance and b) diversity of both vegetation and pollinator use of the project sites will be conducted. This survey will be created to be user friendly and easily repeat able. This survey will be completed for 5 years to gauge survivability of installed native plants, re-growth of invasive plants, and pollinator use of the created habitat.

Result 2) -- The education and support of Forest Stewards to proliferate this type of restoration around Seattle will be gauged by the number of pollinator habitat restoration projects developed and implemented citywide in the next 5 years as a result of this project. The current model of education and resource provision for Forest Stewards through Seattle Parks and the Green Seattle Partnership will continue to support the Forest Stewards to manage successful project s. The Burke Gilman Trail Pollinator Corridor site will serve as a model project from which Forest Stewards can learn.

Result 3) -- The education of BGT user s and volunteers will be documented using on-site survey techniques during Volunteer Events , as well as in general communications between project partners and this audience.

Funding Source and Year:

Start Date: 01/01/17

End Date: 12/31/21

Date Awarded: 10/10/2016

Grant Budget Summary

Returned Funds:

Payment Summary

Award Amount:

\$45,000.00

Amount Returned:

\$

Amount Paid to Date:

Amount Spent:

Date Returned:

Final Payment Date:

/ /

Amendment Request Summary:

Yes N/A Notes:

Scope of Work Revision:

Budget Revision:

 To reflect actual expenditures

Completion Date Extension:

 Extended to:

Copies of Work Product (check box or describe below)

Designs/Plans

Brochures/Publications

Curricula

Photos

Video

Sign Mock-Ups

Other:

KCD Acknowledgement: Funding and support from King Conservation District and other partners is prominently displayed at the project site along the Burke Gilman Trail with laminated signs posted each of

the last 3-years (see photos). Furthermore, KCD support is recognized on EarthCorps' web site (<https://www.earthcorps.org/our-story/key-initiatives/pollinators/>) and in The Native Pollinator Habitat Restoration Guide (<https://www.earthcorps.org/wp-content/uploads/The-Native-Pollinator-Habitat-Restoration-Guide-EarthCorps.pdf>).

Site Visit

Date:

N/A:

Description:

Planting Projects:

Maintenance/Monitoring

Needs to be tracked:

Ongoing until:

Completed:

N/A

Reporting Summary:

Yes No

Notes:

Progress Reports:

Expense Reports:

Final Report:

Project Accomplishments and Successes

The need for pollinator insects is well known and researched for our food systems and health, and the decline in this habitat is significant. The Burke Gilman Trail (BGT) Pollinator Corridor project was a strategic initiative to apply best available science to create connected habitat for pollinators along a highly visible urban multiuse trail in Northeast Seattle. The goals of the project include:

1. Creation of a successful pollinator habitat
2. Education and support of Forest Stewards
3. Education of BGT users and volunteers

After much consultation with Seattle Parks & Recreation and other stakeholders, 44,000 square feet of pollinator habitat was created with 72 adult and 15 youth volunteers and EarthCorps young adult crews (542 hours). This included installation of 4,850 native pollinator plants, over 44,000 square feet of area mulched, large wood debris and ongoing maintenance.

Stewardship of these sites continued throughout the grant period with Forest Stewards (though limited due to transitions and COVID 19 restrictions) and EarthCorps crews.

Education and support to Forest Stewards and the general public was achieved through the publication of the well-received guide, The Native Pollinator Habitat Restoration Guide. In addition, outreach events were held at the Green Seattle Partnership Annual Shareholders Meeting (2017), a formal workshop on the BGT site (2017), a pollinator symposium and brown bag event at the Seattle Public Library (2018).

Regional Benefits

The Burke Gilman Trail Pollinator Corridor project provided and continues to provide a wide range of regional benefits including:

- An adaptive model on how to convert a weedy strip of land to a sustainable, productive habitat.
- The project placed a spotlight on the value and need for pollinator habitat with the construction of a highly visible project, the publication of a widely distributed guidebook, and the engagement of funders, land managers, corporations and community volunteers.
- The development of a pollinator corridor benefitting pollinators, native plants, food, health and enjoyment of trail users.
- Set the stage for expansion of the site in 2021 (pending final approval and funding from Seattle Parks & Recreation) and providing a model for other projects throughout the region.

Obstacles and Challenges

In hindsight, our vision on how large (square footage) of a project that could be constructed and maintained with the available resources was not sustainable. Though over the period of the grant we reduced the original size and focused resources on a smaller area. Creating a smaller site with more resources as a pilot that could be expanded on would have been more beneficial.

Establishment of native herbaceous plant species can be difficult in areas with high weed pressure. The project site will continue to have high pressure from non-native grass species that will continue to compete with the native plantings. Active management will be required to maintain the balance of native species in the landscape through continued weed management and native plant infill planting or seeding. Areas that received higher planting densities combined with more targeted and intensive weed maintenance were most successful. The area that was being stewarded by volunteers had increased plant survival and establishment. Future expansion should keep this in mind in order to maximize success.

Lessons Learned and Recommendations for Future Projects

Establish photo monitoring points to show change over time. Furthermore, for future pilot projects consider establishing monitoring plots since the data will support future efforts and adaptive management.

The pollinator guide was and is a great and needed resource in our region. Though it is available digitally, having more hard copies printed would have been beneficial.

Additional recommendations:

- Concentrate resources in smaller targeted areas in order to maintain and maximize weed management and plant establishment
- Consider more intensive non-native grass control and management (including the use of grass specific herbicide)
- Encourage and facilitate regular stewardship activities to ensure consistent and seasonally targeted weed control efforts.

I certify that the project has been completed, all expenditures have been paid, and the final report has been received by the District.

District Representative

Date: _____

I certify that the project has been completed, all expenditures have been reported, and the final report has been completed and submitted to the District.

Grant Recipient

Name:

Title:

Date: _____