

**KING CONSERVATION DISTRICT**  
**GRANT SUBCOMMITTEE MEETING**  
**OF THE BOARD OF SUPERVISORS**  
**Monday, July 13th, 2020**  
**3 – 4 pm**

Meeting Agenda

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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:**

Applications:

- 1. Des Moines Farmers Market – 2020 Low Income Senior Healthy Eating Initiative
- 2. King County – 2020 Keeping Farmers Farming

Amendments:

- 1. City of Shoreline – 2019 Richmond Beach Saltwater Park Restoration
- 2. Mountains to Sound Greenway Trust – Rotary Park and Little Bear Creek Park Volunteer Restoration

Close outs

- 1. Rainier Beach Action Coalition – Rainier Beach Community Farm Stand
- 2. Wild Fish Conservancy – Low Dissolved Oxygen in Cherry Creek Watershed
- 3. City of Tukwila – Green Tukwila 2018-19
- 4. Placeholder – City of Shoreline Master Native Plant Stewards
- 5. Placeholder – City of Shoreline 2019 Richmond Beach Saltwater Park Restoration

# Des Moines Farmers Market - KCD Low Income Senior Healthy Eating Initiative 2020

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## *Member Jurisdiction Grant Program*

### ***Des Moines Farmers Market***

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Kim Richmond

P.O. Box 98843

Des Moines, WA 98198

O: 206-595-9971

### ***Kim Richmond***

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22307 Dock Avenue South

P.O. Box 98843

Des Moines, WA 98198

kim@frogsongfarms.com

O: 206-595-9971

# Application Form

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## *Summary Information*

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### **Project Title\***

Des Moines Farmers Market - KCD Low Income Senior Healthy Eating Initiative 2020

### **Project Description - Short\***

Provide a short, concise description of the project no more than two or three sentences.

Our unique Low Income Senior Healthy Eating Program helps King County low-income senior participants purchase fresh fruits, vegetables, bread and other qualifying food items at the Des Moines Farmers Market through a weekly \$10 free market tokens.

### **Principal Partners (if any)**

City of Des Moines, Des Moines Legacy Foundation

### **Amount of KCD Funding Requested\***

You will need to upload a detailed budget document before you submit your application. Please make sure the amount requested and total project cost amounts you list here match the amounts in the uploaded budget document.

\$11,750.00

### **Total Project Cost\***

\$14,000.00

### **Total Matching Funds (optional)**

\$2,250.00

### **Project Start Date\***

06/01/2020

**Project End Date\***

10/31/2020

**Close Date****Project Location\***

Address, Parcel #, OR L&L Points, for site specific projects only.  
If more than two locations, state "multiple" and explain.

22307 Dock Ave S, Des Moines, WA 98198

**Jurisdiction\***

If the applicant is not a city or jurisdiction, please type in the city or jurisdiction this project is located in.

Des Moines

**Is your project on public or private land?\***

Public

**State Legislative District #\***

Click here to find it on the web. If your project resides in more than one district, type in the primary district or type in zero.

33

**King County District #\***

Click here to find it on the web. If your project resides in more than one district, type in the primary district or type in zero.

9

## ***Narratives, Budget, & Attachments***

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**Project Description - Detailed\***

Provide a description of the project that summarizes what you will do, how you will do it, and why you will do it. Describe target audience, outcomes, objectives and general timelines.

In 2012, the Des Moines Farmers Market decided to partner with KCD and the City of Des Moines to fill a small part of the food access gap.

Our seniors are a valued part of our communities, but many of them find it difficult to make ends meet. Quality fresh food is often priced at a premium at grocery stores, and some have to choose between quality or price, or even go without. Additionally, since the QFC in downtown Des Moines closed a couple of years ago, a greater part of the area has become a food desert, with access to only convenience store-type groceries for those without reliable vehicle transportation. Many of the seniors who visit the Market are brought by bus from a retirement community, and do not have a personal vehicle.

2020 has brought concerns with COVID-19 infection rates, particularly in the senior demographic. The Market is working closely with King County Department of Health to ensure all market shoppers, vendors, staff and volunteers are educated on how to remain safe at the Market, including hand washing and mandatory face coverings for all adults. Additionally, we have a seniors-only hour from 9-10 am to limit exposure of this more vulnerable population.

We help our seniors, help our farmers, and help our community by giving qualifying seniors \$10 in free tokens, to be used to purchase fruits, vegetables and other staples at the Des Moines Farmers Market.

The project is administered as follows:

1. Identify applicants - returning participants, word of mouth within local retirement communities, signage at the Market and at local senior communities (beginning May and through market season)
2. Take applications - simple one page form to self-declare eligibility at 135% of Federal poverty level or below, age and residency in a KCD-eligible city, verified by market staff (during market season)
  - In 2020, this form is also available online, and the Market Board of Directors has agreed to allow one person per household to receive tokens for other members if those other members have a current application on file.
3. Dispense tokens - participants are added to a checklist (see attached) and tracked for weekly participation
4. Receive back the \$1 KCD-logo tokens, count and record after each market day

## Project Activities and Measurable Results\*

List specific project activities to be completed with KCD grant funds and the associated outcomes or measurable results, and timeline.

1. Issuance and redemption of KCD grant program market tokens at the Market
2. Staff hours to administer the program (promote the program, process applications, hand out tokens, record participation, count redeemed tokens) – approximately 7 hours per week at \$15/hr.
3. Reusable shopping bags with KCD and other program partner logos distributed to participants
4. Consistent marketing and display of KCD logos, on applications, website and on the tokens themselves, to recognize KCD's support

Average participation during the 17 Saturdays and 7 Wednesdays of 2019 was 61 seniors per market day (a 32.6% increase over the prior year, exceeding our goal of 30% increase in participation), with an average of \$645 redeemed (50% increase over prior year average redemption of \$423). The improvement in redemption goes 100% to farm and food vendor sales, and was a result of both some redemption from 2018 token distribution, and a larger base of repeat participation throughout the 2019 season. The higher participation and redemption required us to order 500 additional \$1 tokens to meet demand.

The Senior Health Eating Initiative helps our farms and farmers, increasing sales in the Market dollar for dollar of KCD tokens distributed (almost \$12,000 in 2019). The redemption rate is high, with 93% of all tokens distributed during the season redeemed. There is overlap in redemption both with the prior year and tokens that will be redeemed in 2020, as tokens don't expire and can be used at a later date. It is our intent to honor these tokens regardless of whether we receive 2020 grant funding. While a small percentage of total farm sales, the KCD sales represent more than \$600 average per market day in additional revenue to farmers, encouraging continued farming and direct-to-the-consumer sales of fresh produce. Beyond the numbers, the response from participants is overwhelmingly positive. For some, we've given them hope, health, and a reason to get out of their rooms on a Saturday morning. In many cases, seniors are able to

combine their KCD grant tokens with EBT and Market Bucks, significantly expanding their resources for fresh food purchases at the market (ex. \$10 KCD plus \$10 EBT plus Market Bucks match equals \$30). Our program recipients have been and remain a part of our bigger Des Moines family. We see singles, couples, and whole apartment groups and are on a first-name basis with many. Our only challenge has been having to turn away those who are over the income level or do not reside in a KCD program city.

While not officially tracked at this time, observation suggests as much as 50% of participants are non-white or Hispanic.

## Project Budget and Expenses\*

Fill out and upload separate Application Budget Form also available on the KCD Member Jurisdiction Grant Program website. Budget must be detailed with footnotes, appropriate and reasonable, *meeting state auditor/GAAP guidelines*. Please do not use forms from previous applications. Please only upload the form linked above. Thank you!

KCD-Member-Jurisdiction-Grant-Program-Application-Budget-Form 2020.xlsx

## Member Jurisdiction Authorization Letter

If you are a nonprofit organization seeking Member Jurisdiction funding, you must upload written authorization from the Member Jurisdiction to apply for funding. This can be in the form of a letter or scanned copy of an email.

Senior Healthy Eating Initiative Support Letter 06.08.2020.pdf

## Additional Attachments

Upload any photos or maps of your project here. Only one file will be accepted. Please combine multiple files into one if possible.

IMG\_20190117\_180610871.jpg

## Natural Resource Improvement Actions- Criteria Checklist

Please **only** select "yes" below the action that your project **directly** addresses

### Direct Improvement of Natural Resource Conditions\*

To improve landscape and natural resource conditions as a result of direct action that enhances water quality, protects and conserves soils, implements ecosystem restoration and preservation projects (*examples include supporting private property owners with land stewardship, water quality, aquatic and wildlife habitat resources, removal of invasive weeds, stewardship on public land*)

**Does your project directly address this issue?**

No

## Education and Outreach\*

To raise awareness, deepen knowledge, and change behaviors of residents, landowners, and other land managers and organizations to practice exemplary stewardship of natural resources (*examples include education about stormwater management; the value of farmland, local farms and food systems, shorelines, salmon habitat, forests and other ecosystems*)

**Does your project directly address this issue?**

No

## Pilot and Demonstration Projects\*

To test and/or improve concepts and/or approaches in natural resource management that can be replicated by others (*examples include low impact development or green infrastructure demonstration projects, development of new best management practices, distribution of local farm products, urban agriculture (e.g. farmers markets and backyard food production to promote or support social economic independence and healthy living); technological innovation for natural resource conservation*)

**Does your project directly address this issue?**

No

## Capacity Building\*

To enhance the ability of organizations, agencies, residential landowners and other land owners and managers to have knowledge, skills, tools, support systems and technical resources to implement exemplary best management practices and deliver natural resource management actions on the ground (*examples include urban agriculture development, assistance to and inclusion of private property owners, preservation, restoration, and/or expansion of urban and/or rural agricultural lands, rural and urban forest lands, riparian restoration and stewardship on private and public lands*)

**Does your project directly address this issue?**

No

## Project Type\*

Agriculture, Urban

## KCD Acknowledgement and Signature

By signing below, the applicant agrees to acknowledge King Conservation District funding by placing the KCD-provided logo on signs, materials, and documents produced as part of the above proposal. In addition, the applicant will notify KCD of public events and activities funded by the KCD.

\*

I have read the above paragraph about acknowledging KCD and I will use the provided logo.

**Authorized Applicant Electronic Signature\***

Please enter your full name to sign and agree to the above.

Kim Richmond

**Title**

President

**Date\***

07/01/2020



## File Attachment Summary

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### ***Applicant File Uploads***

- KCD-Member-Jurisdiction-Grant-Program-Application-Budget-Form 2020.xlsx
- Senior Healthy Eating Initiative Support Letter 06.08.2020.pdf
- IMG\_20190117\_180610871.jpg



## Member Jurisdiction Grant Program

### Grant Application Project Budget Form

Promoting sustainable uses of natural resources through responsible stewardship

Project Name	Des Moines Farmers Market - KCD Low Income Senior Healthy Eating Initiative 2020		
Applicant	Des Moines Waterfront Farmers Market		
Contact	Kim Richmond		
Mailing Address	1644 S 260th St, Des Moines WA 98198		
E-mail	<a href="mailto:kim@frogsongfarms.com">kim@frogsongfarms.com</a>	Project Start Date:	6/1/2020
Phone	206.595.9971	Project End Date:	10/30/2020

**Please provide detailed budget information below. Itemize categories such as supplies, contracted services with footnotes and detailed descriptions below**

Budget Item	KCD Funds	Other Funds	Other Funds	Total
		<i>City of Des Moines - committed</i>	<i>Legacy Foundation - pending</i>	
Salaries & Benefits	\$1,100	\$400		\$1,500
Travel/ Meals/ Mileage (for - volunteers, staff)				\$0
Direct Participant Benefit (\$1 market tokens)	\$10,450	\$850	\$1,000	\$12,300
Office Supplies	\$200			\$200
Field Supplies				\$0
Contracted/ Professional Services				\$0
Permits				\$0
Other: (specify)				\$0
Other: (specify)				\$0
Other: (specify)				\$0
Other: (specify)				\$0
Other: (specify)				\$0
TOTAL	\$11,750	\$1,250	\$1,000	\$14,000

Total Project Cost	\$14,000
Total Match	\$2,250
Amount of KCD Funding Requested	\$11,750
Match Percentage	16%

Footnotes:



June 8, 2020

Kim Richmond  
Des Moines Farmers Market  
PO Box 98843  
Des Moines WA 98198

Dear Ms. Richmond,

The City of Des Moines approves the Des Moines Farmer's Market grant request of \$13,000 for their 2020 Des Moines Farmers Market Senior Health Eating Initiative to help feed low income seniors.

Best,

Michael Matthias  
City Manager

cc: Susan Cezar, Chief Strategic Officer



# Keeping Farmers Farming, King County Agriculture Program 2020

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## *Member Jurisdiction Grant Program*

### ***King County***

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Maureen Dahlstrom  
201 S Jackson St, Ste 600  
Seattle, WA 98104

O: 206-477-4687

### ***Maureen Dahlstrom***

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201 S. Jackson St Suite 600  
201 S. Jackson St Suite 600  
Seattle, WA 98104

Maureen.Dahlstrom@kingcounty.gov  
O: 206-477-4777

# Application Form

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## **Summary Information**

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### **Project Title\***

Keeping Farmers Farming, King County Agriculture Program 2020

### **Project Description - Short\***

Provide a short, concise description of the project no more than two or three sentences.

The goal of the King County Agriculture Program is to conserve farmland and agricultural soils, increase the economic success of farm enterprises, and improve farm management practices to protect soil, water quality and wildlife.

### **Principal Partners (if any)**

### **Amount of KCD Funding Requested\***

You will need to upload a detailed budget document before you submit your application. Please make sure the amount requested and total project cost amounts you list here match the amounts in the uploaded budget document.

\$172,500.00

### **Total Project Cost\***

\$346,935.00

### **Total Matching Funds (optional)**

\$174,435.00

### **Project Start Date\***

01/01/2020

### **Project End Date\***

12/31/2020

## Close Date

### Project Location\*

Address, Parcel #, OR L&L Points, for site specific projects only.

If more than two locations, state "multiple" and explain.

All of King County

### Jurisdiction\*

If the applicant is not a city or jurisdiction, please type in the city or jurisdiction this project is located in.

King County (UNIN)

### Is your project on public or private land?\*

Public

### State Legislative District #\*

Click here to find it on the web. If your project resides in more than one district, type in the primary district or type in zero.

0

### King County District #\*

Click here to find it on the web. If your project resides in more than one district, type in the primary district or type in zero.

0

## Narratives, Budget, & Attachments

### Project Description - Detailed\*

Provide a description of the project that summarizes what you will do, how you will do it, and why you will do it. Describe target audience, outcomes, objectives and general timelines.

The goal of the King County Agriculture Program, partially supported with King Conservation District funding, is to conserve farmland and agricultural soils, increase the economic success of farm enterprises, and improve farm management practices to protect soil, water quality and wildlife.

King County has a long history of preserving farmland and supporting farmers and their markets in the County. The 2009 FARMS Report identified major challenges for farmers and actions needed to be taken if farming is to continue to be successful in King County. Since then, the Agriculture Program, with the assistance of the Agriculture Commission, has made progress on the recommendations, continued to refine

them, and set annual priorities. In 2013, the County partnered with the City of Seattle and Pike Place Market in roundtable conversations to enhance farmland protection and increase market opportunities for the county's agricultural industry. In 2014, the King County Executive launched his Food Economy Initiative and created a "Kitchen Cabinet" to develop targets, strategies and actions to enhance the food economy in the County. In 2015, the Kitchen Cabinet released its "Local Food Initiative," which identified the top 20 priority action items and strategies to be implemented in 2015-2017. The King County Agricultural Program's 2020 work plan was structured to directly contribute to the Local Food Initiative priorities and some of the tasks in the work plan will be supported by the requested KCD funding.

The beneficiaries of this project are farmers, consumers of local farm products, farmers market managers, farmland owners and other residents of King County. Most of the activities target farmers in the agriculture production districts. However, we will also focus on rural and urban residents and city governments to build interest in local farm products, support for farmers, and understanding of the environmental challenges we face in trying to restore salmon and enhance agriculture within the same geographical area. Overall, the tasks outlined in this proposal will enhance conservation of agricultural land and natural resources, and increase opportunities to buy local food in stores, restaurants and farmers markets throughout King County and support immigrant/refugee farmers who have been traditionally underserved. The requested \$172,500 of KCD funds will be augmented by King County funds to carry out the specific programs defined here.

## Project Activities and Measurable Results\*

List specific project activities to be completed with KCD grant funds and the associated outcomes or measurable results, and timeline.

1. Provide technical support to Working Farmland Partnership. In 2018, King County and key stakeholders collaborated on a KCD-funded pilot project to determine whether focused engagement can accelerate rates of farmland returned to production. This project used information learned about "farmable but unfarmed lands" identified during the summer 2017 land use survey to work with landowners who were interested in leasing land to farmers, enhancing production on their lands, or transitioning away from farm management or ownership. The WFP grant from KCD was focused in the Snoqualmie APD and on Vashon Island, but program partners also responded to opportunities elsewhere in the county. Initial project results were very promising and KCD agreed to support PCC Farmland Trust to continue building the WFP. In 2020, we will:

- Serve on WFP Steering Committee and sub-committees
- Provide direct outreach and technical support to landowners and farmers to ultimately improve opportunities to restore or enhance agricultural production on underused land.
- Participate in landowner and farmer workshops, individual landowner and farmer consultations to understand needs and expectations and supporting other Working Farmland Partnership staff to plan and host team meetings.
- Assist with management and assessment of agricultural land use data, including GIS-based analyses and reporting.
- Primary staff: Melissa Borsting PPMII (0.2 FTE).

2. Enhance farming activities on King County-owned farmland. The County currently owns property that could be better utilized for farming and serve as platforms for good farm management and ecological sustainability. This portfolio includes lands that were acquired for long-term farming uses as well as lands acquired for other purposes but that have significant short-term farming potential (e.g., river/habitat restoration). In 2020, we will:

- Continue capital improvement to enhance production potential on county-owned farmland and make county farmland a platform to demonstrate good farm management.



- Provide interpretive services to Hmong farmers who lease county-owned farmland to help provide needed infrastructure improvements and to navigate the leasing process.
- Complete a plan, with partner engagement, that identifies how best King County-owned farmland can add value to the larger agricultural community, especially to provide land access for new/beginning farmers and immigrant/refugee farmers.

- Primary staff: Bee Cha PPM II (0.3 FTE), Melissa Borsting PPM II (0.1 FTE)

3. Increase water availability for irrigation. Farming requires adequate irrigation. Based upon earlier assessments, too many of the county's farms do not legal water rights or rights to water in quantities needed to irrigate high value crops. In 2020, we will:

- Complete the temporary transfer of water rights from 60 Acres soccer complex to county-owned Sammamish River Farms. Provide technical support to SRF farmers to provide much-needed irrigation water, which will allow farmers to grow higher value crops. Initiate water delivery summer 2020.
- Work with staff in Wastewater Treatment Division to further develop plans to deliver commercial quantities of recycled water to farmers in the Sammamish Valley. Options for direct delivery as well as indirect delivery via river withdrawals with replacement will be considered.
- Explore opportunities to claim "municipal rights" to irrigation water rights associated with King County properties. Ensure those rights are not lost due to non-use (e.g., place rights in state water trust) and initiate action to transfer water from at least one right to downstream agricultural properties.
- Primary staff: Melissa Borsting PPM II (0.2 FTE)

4. Provide technical support, outreach and education to King County farmers. DNRP agriculture staff provide frequent technical support for farmers and farm landowners, both through targeted outreach and one-on-one contacts. In 2020, we will:

- Update and provide new content for FarmKingCounty.org and DNRP agricultural websites.
- Lead the Farm King County Technical Assistance Team and complete an assessment of all farmer training in King County, strive to minimize duplication of effort and identify gaps in training that can be filled by team participants.
- Provide key support to efforts to gather and disseminate information to farmers, farmland owners and consumers challenged by Covid-19.
- Respond to KC farmers requesting assistance with management, regulations/permitting, transition planning, etc.
- Primary staff: Melissa Borsting (0.2 FTE)

5. Coordinate development and implementation of a strategic plan to support immigrant/refugee farmers. South King County immigrants and refugees were often farmers in their home countries but have not been afforded needed support to explore opportunities to farm commercially in King County. In 2018, we began a targeted outreach program to assess the immigrant farming communities in south King County and to determine the level of interest in commercial farming. In 2020, we will:

- Work with partner organizations to develop a strategic plan to deliver needed resources, including access to land and technical training and education.
- Coordinate implementation of initial high priority actions, which will include linking immigrant/refugee farmers searching for leasing opportunities with WFP.
- Explore opportunities to acquire property as an addition to the KC farmland portfolio to serve the needs of immigrant/refugee and beginning farmers.
- Work with partner organizations to develop a plan for collaborative farming on shared land provided by King County.
- Primary staff: Melissa Borsting PPM II (0.3 FTE)

## Project Budget and Expenses\*

Fill out and upload separate Application Budget Form also available on the KCD Member Jurisdiction Grant Program website. Budget must be detailed with footnotes, appropriate and reasonable, *meeting state auditor/GAAP guidelines*. Please do not use forms from previous applications. Please only upload the form linked above. Thank you!

2020 Jurisdictional Grant Budget.xlsx

## Member Jurisdiction Authorization Letter

If you are a nonprofit organization seeking Member Jurisdiction funding, you must upload written authorization from the Member Jurisdiction to apply for funding. This can be in the form of a letter or scanned copy of an email.

## Additional Attachments

Upload any photos or maps of your project here. Only one file will be accepted. Please combine multiple files into one if possible.

## Natural Resource Improvement Actions- Criteria Checklist

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Please **only** select "yes" below the action that your project **directly** addresses

### Direct Improvement of Natural Resource Conditions\*

To improve landscape and natural resource conditions as a result of direct action that enhances water quality, protects and conserves soils, implements ecosystem restoration and preservation projects (*examples include supporting private property owners with land stewardship, water quality, aquatic and wildlife habitat resources, removal of invasive weeds, stewardship on public land*)

**Does your project directly address this issue?**

Yes

### Education and Outreach\*

To raise awareness, deepen knowledge, and change behaviors of residents, landowners, and other land managers and organizations to practice exemplary stewardship of natural resources (*examples include education about stormwater management; the value of farmland, local farms and food systems, shorelines, salmon habitat, forests and other ecosystems*)

**Does your project directly address this issue?**

Yes

### Pilot and Demonstration Projects\*

To test and/or improve concepts and/or approaches in natural resource management that can be replicated by others (*examples include low impact development or green infrastructure demonstration projects, development of new best management practices, distribution of local farm products, urban agriculture (e.g. farmers markets and*

*backyard food production to promote or support social economic independence and healthy living); technological innovation for natural resource conservation)*

**Does your project directly address this issue?**

Yes

### Capacity Building\*

To enhance the ability of organizations, agencies, residential landowners and other land owners and managers to have knowledge, skills, tools, support systems and technical resources to implement exemplary best management practices and deliver natural resource management actions on the ground (*examples include urban agriculture development, assistance to and inclusion of private property owners, preservation, restoration, and/or expansion of urban and/or rural agricultural lands, rural and urban forest lands, riparian restoration and stewardship on private and public lands*)

**Does your project directly address this issue?**

Yes

### Project Type\*

Agriculture, Urban

## KCD Acknowledgement and Signature

By signing below, the applicant agrees to acknowledge King Conservation District funding by placing the KCD-provided logo on signs, materials, and documents produced as part of the above proposal. In addition, the applicant will notify KCD of public events and activities funded by the KCD.

\*

I have read the above paragraph about acknowledging KCD and I will use the provided logo.

### Authorized Applicant Electronic Signature\*

Please enter your full name to sign and agree to the above.

Maureen Dahlstrom

### Title

Program Manager

**Date\***

07/01/2020

## File Attachment Summary

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### ***Applicant File Uploads***

- 2020 Jurisdictional Grant Budget.xlsx



## Member Jurisdiction Grant Program

### Grant Application Project Budget Form

Promoting sustainable uses of natural resources through responsible stewardship

<b>Project Name</b>	Keeping Farmers Farming, King County Agricultural Program 2020			
<b>Applicant</b>	King County, Water and Land Resources Division			
<b>Contact</b>	Richard Martin			
<b>Mailing Address</b>	201 S Jackson Street, Suite 600, Seattle, WA 98104			
<b>E-mail</b>	<a href="mailto:richard.martin@kingcounty.gov">richard.martin@kingcounty.gov</a>	<b>Project Start Date:</b>	1/1/2020	
<b>Phone</b>	206-477-3876	<b>Project End Date:</b>	12/31/2020	
<b>Please provide detailed budget information below. Itemize categories such as supplies, contracted services with footnotes and detailed descriptions below</b>				
Budget Item	KCD Funds	Other Funds	Other Funds	Total
		(KC Funds)	(identify source and status of matching funds here ex. DON Small and Simple - Secured)	
<b>Salaries &amp; Benefits</b>	\$170,000	\$75,000		\$245,000
<b>Travel/ Meals/ Mileage</b> (for - volunteers, staff)				\$0
				\$0
				\$0
				\$0
<b>Office Supplies</b>	\$500			\$500
				\$0
				\$0
<b>Field Supplies</b>	\$2,000	\$5,000		\$7,000
<b>Contracted/ Professional Services</b>				\$0
<b>Permits</b>				\$0
<b>Other: (Indirect Costs 37.4%, all match)</b>		\$94,435	SWM, GF; secured	\$94,435
<b>Other: (specify)</b>				\$0
<b>Other: (specify)</b>				\$0
<b>Other: (specify)</b>				\$0
<b>TOTAL</b>	<b>\$172,500</b>	<b>\$174,435</b>	<b>\$0</b>	<b>\$346,935</b>

Total Project Cost	\$346,935
Total Match	\$174,435
Amount of KCD Funding Requested	\$172,500

Match Percentage	50%
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Unrecovered Indirect Costs are calculated at the King County WLR Indirect Rate of 37.4%

<p>Budget Notes</p> <p><b>Salaries and Benefits:</b> Melissa Borsting PPM II (1.0 FTE), TBD PPMII (.6 FTE) funded by KCD; Patrice Barrentine, Rick Reinlasoder, Ted Sullivan, Eric Beach and Richard Martin (.1 FTE each charged as match)</p> <p><b>Office Supplies:</b> miscellaneous office supplies, printing</p> <p><b>Contracted/Professional Services:</b> WSFMA Farmers Market Manager Forum coordination, economic study of sugar beverage tax invetment in purchasing local produce for public support programs, county water needs assessment</p> <p><b>Unrecovered Indirect:</b> calculated as 37.4% of total salary, benefits and other direct program costs (\$289,631)</p> <p><b>Other Funds:</b> SWM=Surface Water Management, GF=General Funds</p>
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## AMENDMENTS



# Rotary Community Park and Little Bear Creek Park Volunteer Restoration

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## *Member Jurisdiction Grant Program*

### ***Mountains to Sound Greenway Trust***

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Mr. Mackenzie Dolstad  
2701 First Avenue, Suite 240  
Seattle, WA 98121

O: 206-382-5565  
M: 206-503-0683

### ***Mr. Mackenzie Dolstad***

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2701 First Avenue  
Seattle, WA 98121

mackenzie.dolstad@mtsgreenway.org  
O: 206-503-0683  
M: 206-503-0683

# FollowUp Form

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## ***Member Jurisdiction Grant Program - Completion Date Extension Request #2***

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The purpose of this form is to request an extension to the stated completion date on the application.

Multiple completion date extensions have been granted, but are discouraged. It's recommended that you extend your completion date to include 2-3 months more than you think you will need to complete the project and reporting requirements. Please select a new completion date that won't likely require another extension request.

Please contact Jessica Saavedra by phone (425) 282-1906 or email [Jessica.Saavedra@kingcd.org](mailto:Jessica.Saavedra@kingcd.org) with questions.

### **Project Title\***

Rotary Community Park and Little Bear Creek Park Volunteer Restoration

### **Decision Date**

07/10/2017

### **Extend the Project Completion Date\***

Select the length of time you wish to extend the completion date to.

Extend the completion date one year

### **Project End Date**

This is the original completion date provided in the application.

12/31/2018

### **Extended Completion Date #1**

This extended completion date from the first extension request.

12/31/19

### **Extended Completion Date #2\***

Please add the date you would like to extend to.

12/31/20

**Reason for Completion Date Extension Request\***

Provide a brief explanation for your request to extend the completion date.

The Greenway Trust is requesting an extension to the project completion date to provide additional time to incorporate a third project year which will include spending remaining grant funds on site maintenance and plant establishment support. The City of Woodinville has also expressed an interest in finding funding to support ongoing restoration efforts, and an additional year will allow the Greenway Trust to leverage this partnership to achieve greater results.

**APPROVAL SECTION TO BE COMPLETED BY KCD****Authorized Signature of Approval, King Conservation District**

# 2019 Richmond Beach Saltwater Park Habitat Restoration

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## *Member Jurisdiction Grant Program*

### ***Shoreline***

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Susana Villamarin  
17500 Midvale Avenue North  
Shoreline, WA 98133-4921

### ***Susana Villamarin***

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17500 Midvale Ave N  
Shoreline, WA 98133-4905

svillamarin@shorelinewa.gov  
O: 206-801-2603

# FollowUp Form

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## ***Member Jurisdiction Grant Program - Final Budget Revision***

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This amendment form is necessary to revise the award to reflect actual and final expenditures.

All that is needed for this form is to attached the budget revision detail table and click submit.

Please contact Jessica Saavedra with any questions by phone (425) 282-1906 or email [Jessica.Saavedra@kingcd.org](mailto:Jessica.Saavedra@kingcd.org)

### **Project Title\***

2019 Richmond Beach Saltwater Park Habitat Restoration

### **Decision Date**

03/14/2019

### **Change the Project Budget\***

Select the type of budget revision you are requesting.

Revising the budget to reflect actual expenditures

### **Attach the Budget Revision Form Below\***

Download the Budget Revision Form, fill it out and upload it here to revise the budget to reflect actual, final expenditures If your project is not complete and you need to make minor changes to your budget, please email [Jessica.Saavedra@kingcd.org](mailto:Jessica.Saavedra@kingcd.org) describing the changes. Budget revisions are only accepted at the end of the project.

KCD-Member-Jurisdiction-Grant-Program-Budget-Revision-Detail-Form FINAL.xlsx

### **Amendment Description\***

Describe how actual, final expenditures differ from the original budget. In the case of returned funds or funds unspent, describe the cause below.

We have received donation of plants and supplies that resulted in budget savings. Also, there were less professional services needed to perform the entire scope of work.

**Authorized Signature of Approval, King Conservation District**

## File Attachment Summary

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### ***Applicant File Uploads***

- KCD-Member-Jurisdiction-Grant-Program-Budget-Revision-Detail-Form FINAL.xlsx



## Member Jurisdiction Grant Program Budget Revision Detail Form

Grantee: City of Shoreline

Project Name: 2019 Richmond Beach Saltwater Park Habitat Restoration

### Revising the Project Budget:

Awarded Project Budget (same as grant application budget)

	KCD Funds	Volunteer Match	City Match	Total (by line item)
Salaries and Benefits	\$ 100.00		\$ 4,533.00	\$ 4,633.00
Volunteer Community		\$ 10,000.00		\$ 10,000.00
Office and/or Field Supplies	\$ 3,754.00			\$ 3,754.00
Contracted & Professional Services	\$ 27,090.00			\$ 27,090.00
Native Plants		\$ 800.00		\$ 800.00
Permits				\$ -
Other (specify)				\$ -
Other (specify)				\$ -
TOTAL (by source)	\$ 30,944.00	\$ 10,800.00	\$ 4,533.00	\$ 46,277.00

Revised Budget (same as information in most recent Expense Report-YTD actual expenditures)

	KCD Funds	Volunteer Match	City Match	Total (by line item)
Salaries and Benefits	\$ 25.35		\$ 4,533.00	\$ 4,558.35
Travel, Meals, Mileage				\$ -
Office and/or Field Supplies	\$ 2,886.42			\$ 2,886.42
Contracted & Professional Services	\$ 23,062.50			\$ 23,062.50
Native Plants		\$ 1,500.00		\$ 1,500.00
Permits				\$ -
Other (specify)				\$ -
Other (specify)				\$ -
TOTAL (by source)	\$ 25,974.27	\$ 1,500.00	\$ 4,533.00	\$ 32,007.27



## CLOSE OUTS



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

**Grant Summary Information**

**Recipient:** Rainier Valley Corps dba Rainier Beach Action Coalition

**Project Title:** Rainier Beach Community Farm Stands

**Project Description:** There is no other neighborhood like Rainier Beach. While Seattle grows and puts communities at risk of displacement, the residents look out for each other, and create opportunities for their youths.

With the new farm stand, they have access to healthy, fresh, affordable and culturally relevant produce they long for. They support local farms and share their cultural heritage, and celebrated diversity. They give youths a chance to thrive in the neighborhood they call home.

**Funding Source and Year:** 2017 Seattle Community Partnership Grant Program

**Start Date:** 03/01/2018

**End Date:** 02/28/2019

**Date Awarded:** 10/09/2017

**Grant Budget Summary**

**Returned Funds:**

**Payment Summary**

Award Amount:

\$75,000

Amount Returned:

\$N/A

Amount Paid to Date:

\$20,853.31 1/27/20

Amount Spent:

\$75,000

Date Returned:

N/A

Final Payment: Date:

\$54,146.69  
After KCD signs this form

**Amendment Request Summary:**

Yes    N/A    Notes:

Scope of Work Revision:

☐
☒

Budget Revision:

☐
☒

Completion Date Extension:

☐
☐

Extended from 2/28/2019 to 02/28/2020

**Copies of Work Product (check box or describe below)**

☐ Designs/Plans

☒ Brochures/Publications

☐ Curricula

☒ Photos

☐ Video

☐ Sign Mock-Ups

Other: **Rainier Beach Farm Stand 2018-2020 Report** (attached)

**KCD Acknowledgement:** RBAC used a mix of flyers, posters, and social media to promote the Farm Stand and acknowledge KCD. Attached are several samples used throughout the seasons. KCD funding was also acknowledged on the report and at each day of the farm stand.

**Site Visit**

Date:

N/A: ☐

Description: KCD staff visited the farm stand on multiple occasions in 2018 and 2019 including opening day. Each time was a wonderful experience meeting members of RBAC community including the youth fellows as well as making connections with new partners such as Chef Ariel. Each market day there was a variety of fresh, local produce including culturally relevant foods such as chickpeas and bitter melon. Chef Ariel worked with young adults at the farm stand showing them how to cook various vegetables offered at the farm stand into a delicious meal. Holding the farm stand in the parking lot of the Ethiopian Community of Seattle gave the community an amazing opportunity to partake in unique cultural events such as coffee ceremonies. ECS also generously opened their doors to share meals with the community.

### Planting Projects:

Maintenance/Monitoring Needs to be tracked: ☐ Ongoing until: \_\_\_\_\_  
 Completed: ☐ N/A: ☒

### Reporting Summary: Yes No Notes:

Progress Reports: ☒ ☐

Expense Reports: ☒ ☐

Final Reports: ☒ ☐

**(See attached report for details and photos)**

### Project Accomplishments and Successes

In 2019, **3,594 pounds of produce was sourced** and 2,837 pounds (79% ) were sold to residents, an increase of 15% from 2018. The rest was split between **ECS Senior meals and RBAC's dinner program**.

**The number of shoppers also grew** from 2018 by 35%, with a weekly average going from 31 customers in 2018 to 42 in 2019. Additionally, not only did the number of transactions increase by 20% (668 versus 556), but the amount spent per transaction was 10% higher. This was particularly noticeable in the last weeks of the 2019 season when the number of transactions was consistently above 50, with a peak at 65, and the total daily sales reached highs close to \$800 compared to half that earlier in July.

The Farm Stand accomplished just what it set out to do. It made the fresh, healthy, and **culturally-relevant produce available and affordable to the residents of Rainier Beach**. There is still room for improvement and opportunities to grow, support farms in other ways, serve more residents, reach out to local businesses.

**But the Farm Stand, as a pilot, has delivered on so many levels, as a diverse cross-generational space, a vehicle of economic development for young people, and not so young, a platform for chefs and caterers' cooking demo, for local and cultural artists, dancers, musicians, a place to meet neighbors, discover new produce and share recipes, as well as a source of for Senior meals and food bank.**

### Regional Benefits

In March 2018, the farm stand manager began outreach to area farmers, including neighborhood gardeners at a nearby market garden. The program focus is on **centering farmers of color**. We established communication with over 10 POC farms, including Kamayan Farm, Nurturing Roots, Clean Greens, TukMuk Farm, Faithbeyond Farm, Alvarez Organics, Namaste Garden and the market gardeners from New Holly to purchase food from them throughout the farm season and sell it at our stand. We began recruiting farmers of color throughout King County and sought to understand their products and their practices for delivery and invoicing. Most farmers were small-scale producers who had limited

experience with sending out regular fresh sheets. Consequently, the farm stand manager spent much of her time calling and emailing to order and prepare for that week's farm stand. It was important to have a good tracking system for the inventory. It often happened that the produce that arrived was different from what was ordered – either in quantity or item – because of harvesting issues, yet the invoice forms sometimes still reflected the original order. This made reconciling invoices difficult. In 2019, changes in the system were put in place ensuring control of orders and that farmers were paid appropriately but obtaining and filing receipts remained difficult.

## **Obstacles and Challenges**

**Our aim with this project is to support low-income community members in getting better access to fresh food.** Part of the strategy was to get certified to accept both EBT and Fresh Bucks. **Getting certified to accept EBT and fresh bucks took longer than expected.** Indeed, we weren't able to get approved for EBT until the end of the first summer, which meant we were unable to advertise it. We also had some issues with the equipment. Using the EBT wired machine required us to connect to the internet via an extension cord into the ECS building. This made processing transactions difficult than necessary. We were also excited to participate in the City's Fresh Bucks program, which offers \$2 coupons for produce. We had some challenges because our pricing structure didn't match the program very well. We encouraged customers to get a little extra produce so the total would equal their coupons. As a marketing tool we also created RBAC coupons to encourage neighbors to attend the farm stand. Originally, we distributed \$2 coupons, but didn't find that they increased attendance. We ultimately increased the coupons to \$5 and had some uptick in numbers. We used this opportunity to outreach with folks and connect with other business and nonprofits to advertise for us. These programs and coupons all allowed us to serve low-income neighbors. However, we were able to overcome the challenges of the 2018 season with getting the programs up and running, when redemption rates were lower than anticipated, and get the EBT machines and Fresh Bucks issues resolved so that, with increased marketing, those programs run more effectively.

## **Lessons Learned and Recommendations for Future Projects**

**Farm Stand Fellows who participated in the program ranged in age from late teens to early 20s.** Throughout the season they participated in extensive training, exploration, and collaboration with one another. For all of them, this was their first job, so in **addition to learning about the work of managing a farm stand, they were also learning basic professional skills like showing up for work on time, how to be accountable to the team, how to communicate with a supervisor.** Having a farm stand manager who was experienced in youth mentoring was a critical part of the success the Fellowship program.

The Fellows made suggestions about the kinds of training and support they needed for the next season. They expressed interest in having closer relationships with the other RBAC programs, especially the Corner Greeters, so that they feel more connected to RBAC's work and other young people. **They also became proficient at cash handling and transaction processing.**

At the end of the season, the Fellows reflected on their experience. **They all expressed gratitude for what they learned about food security, the importance of healthy eating, and the role of community in supporting a more vibrant food system.**

## **Long-term Sustainability**

Customers were very clear when asked why they shop at the Farm Stand. The primary reasons are: healthy food, affordable prices, quality of produce and convenience. People aged between 16 and 65 came through the Farm Stand. We saw young athletes stop by on their way to practice for a healthy snack. People from all cultures and walks-of life, either came on purpose or stumble across the Farm Stand. East African seniors came to visit our elder helpers. Mixed-race families came for classes at ECS

and stopped by on their way out. Residents in nearby housing crossed the street to see what this was about, or because the word had spread from their neighbors. Local stores shared our coupons, others found us on Social Media, and ultimately, the Farm Stand came to be. The pilot established its footprint as a staple of the neighborhood and last we heard as we packed for the last time of the season, is that customers will miss it and looked forward to next year!

*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: David Sauvion

Title: Food Innovation Strategist

Date: 6/22/2020 \_\_\_\_\_



**Healthy, affordable, fresh fruits & vegetables**  
Support local farmers of color & cultural arts

**Every Saturday at the  
Ethiopian Community in Seattle**  
8323 Rainier Ave S @ Rose St.

**Contact: Liya Rubio**  
[Liya@rbactioncoalition.org](mailto:Liya@rbactioncoalition.org)

**SATURDAYS 10AM-2PM**

**GRAND OPENING JUNE 16 @ ECS!**

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# RAINIER BEACH FARM STAND





# RAINIER BEACH FARM STAND

START FRESH



COMMUNITY



*Ethiopian  
Community  
in Seattle*  
8323 Rainer Ave S

**SATURDAYS**  
10am - 2pm



HEALTHY FOOD

## GRAND OPENING JUNE 16th!



CULTURE

*All Welcome!*

LOCAL FARMS



@rainierbeach  
#RBFarmStand

For more info, [www.rbcoalition.org](http://www.rbcoalition.org)



THE  
KRESGE  
FOUNDATION





## Who We Are



### Participating in our farm stand will:

- ▶ Supply fresh produce to the Rainier Beach neighborhood.
- ▶ Provide youth and young adults with training and jobs.
- ▶ Educate the neighborhood in healthy eating and supporting local farmers.
- ▶ Bring different Rainier Beach communities together through food.

**For more information, contact Liya Rubio:**

Phone: 206.747.6952

Email: [liya@rbactioncoalition.org](mailto:liya@rbactioncoalition.org)



## RAINIER BEACH FARM STAND

*Bringing fresh, local produce to Rainier Beach*





## *Why should you participate?*

Farmers will be guaranteed a weekly purchase of their produce, which they can deliver to the market or have picked up for sale at the farm stand.

Your produce can help increase access to healthy food for families in south Seattle.

## *Where is the market?*

The farm stand market will take place at the Ethiopian Community of Seattle, 8323 Rainier Ave S. in Rainier Beach.

## *What is the Rainier Beach Farm Stand?*

The Rainier Beach Farm Stand will run on Saturdays from June to October, 2018. Our goal is to partner with 5-6 King County farmers who reflect the different cultures in Rainier Beach.

The small farm stand will be operated at the Ethiopian Community in Seattle by one farm manager, five paid fellows and a group of neighborhood volunteers.

The stand is funded by King County Conservation District and run by Rainier Beach Action Coalition in partnership with Ethiopian Community in Seattle and Roots Of All Roads.



## *What We Offer*

- ✓ We will place a weekly order and pay you directly
- ✓ Our farm stand manager can assist with pick-up of your produce if necessary.
- ✓ We will hold “Meet the Farmer” events during the summer. You can participate and meet the customers who are buying your product.



**David Sauvion** @RBAC\_David · Jun 7, 2018

Surely a future shopper @ Farm Stand [#foodsecurity](#) [#FreshLo](#) [#CoO](#)  
[@King\\_CD\\_WA](#)



**Rainier Beach** @rainierbeach · Jun 7, 2018

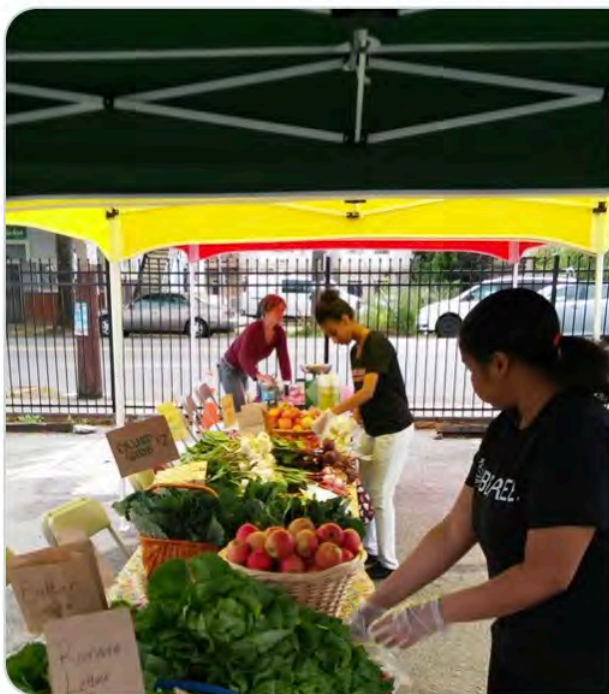
Corner Greeters In Lake WA Apt, ran into a friendly resident as we passed out leaflets promoting RB Farm Stand Grand Opening on June 16th at Ethiopian Community in Seattle 8323 Rainier Ave So, 10 am  
[#rbac](#)





**David Sauvion** @RBAC\_David · Jun 9, 2018

The long awaited moment is finally here and we're open for business!  
[#rbfarmstand](#) [#FreshLo](#) @kresgefdn @King\_CD\_WA







**David Sauvion** @RBAC\_David · Jul 27, 2019

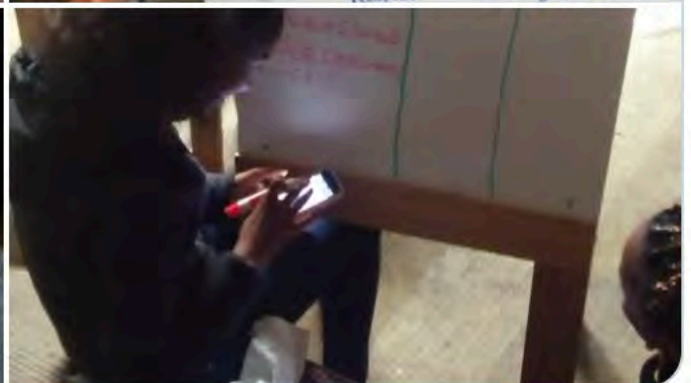
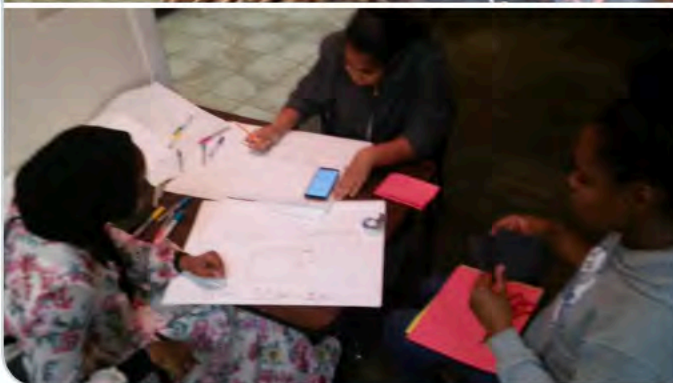
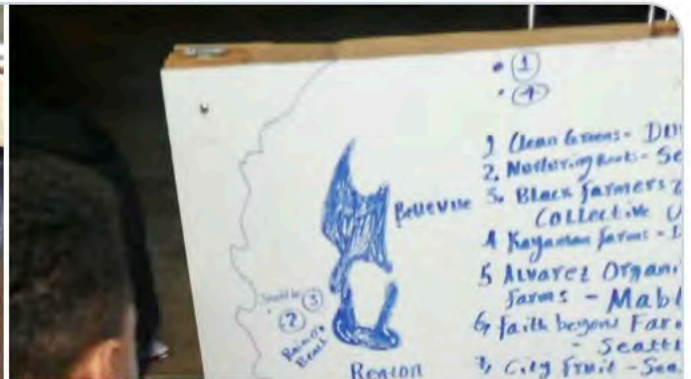
Recognizing our partners Ethiopian Community in Seattle [@ROARSeattle](#)  
[@kresgefdn](#) [@King\\_CD\\_WA](#) [@COOPartnerships](#)





**David Sauvion** @RBAC\_David · Oct 3, 2018

Artists at work! Preparing Saturday's Farm Stand End of Season Celebration [#startfresh](#) [#freshlo](#) [#COO](#) @King\_CD\_WA





rainierbeach\_farmstand



rainierbeach\_farmstand Next week...  
you don't wanna miss it.. don't you

91w



mabuttaflylovely I will be there



91w Reply



Liked by thefarmerfrog and 11 others

SEPTEMBER 29, 2018

Add a comment...

Post

Screenshot





**rainierbeach\_farmstand**

Ethiopian Community in Seattle - ECS

...



**rainierbeach\_farmstand** Rainier Beach Action Coalition and the Rainier Beach Farm Stand team will be hosting youth day! We will have music, games, free food and fun activities for the whole family. [#foodjustice](#) [#youthempowerment](#) [#rainierbeachfarmstand](#).

86w



Liked by [niieessshaaaaa](#) and 13 others

NOVEMBER 5, 2018

Screenshot

Add a comment...

Post





COLLARD GREENS \$2

SPINACH  
\$2 Bunch

SNAP  
PEAS  
4.25 lb

EARLY SPRING  
GARLIC  
ONIONS  
\$1.60

BEETS  
\$2.75

3.60















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

**Grant Summary Information**

**Recipient:** Wild Fish Conservancy

**Project Title:** Investigation of Low Dissolved Oxygen in Cherry Creek Floodplain Project

**Project Description:** Water quality in the Cherry Creek watershed is degraded (Snoqualmie Watershed Water Quality Synthesis Report), with measurable impacts on the fish communities that utilize the creek and associated floodplain habitat (WFC 2008 unpublished data). Dissolved oxygen (DO) concentrations have frequently failed to meet TMDL standards in floodplain drainage channels that contribute to Cherry Creek (WDOE, 2008; Tulalip Tribes, unpublished data 2008). Low DO conditions have been documented during multiple temperature and discharge conditions. This suggests an independent mechanism may drive this condition, and emphasizes the need to understand the physical, biological, and hydraulic properties that affect DO in the floodplain.

Identifying the mechanism behind the impaired DO conditions is paramount to protecting important salmon rearing and migration corridors in the Snoqualmie.

The two factors most likely causing the observed DO deficiencies in Cherry Valley are 1) groundwater quality and the influence surface water- groundwater (hyporheic) interactions exert on water quality in the floodplain, and 2) elevated sediment oxygen demand (SOD) and biological oxygen demand (BOD) resulting from the decomposition of floodplain vegetation (reed canary grass) and the soil characteristics in the valley.

We will monitor groundwater stage and DO concentration by deploying data loggers in existing monitoring wells in the floodplain, and characterize the hyporheic exchange dynamics and drain tile influences using piezometers installed in the floodplain channels

We will also thoroughly characterize the DO, BOD, and SOD in three Cherry Valley ditches both before and after floodplain restoration occurs in Summer 2011. The results of this study will allow us to better understand the mechanisms causing DO depletion, and thus provide better direction for restoration actions

**Funding Source and Year:** KCD-Snoqualmie Watershed Forum 2010 Funds

**Start Date:** 04/01/2011

**End Date:** 12/31/2014

**Date Awarded:** 07/12/2010

**Grant Budget Summary**

**Returned Funds:**

**Payment Summary**

Award Amount: \$50,000.00

Amount Returned: \$N/A

Amount Paid to Date: \$13,466 12/31/10  
\$31,534 2/22/11  
\$45,000

Amount Spent: \$48,348.11

Date Returned: N/A

Final Payment: \$3,348.11  
Date: After KCD signs this form

**Amendment Request Summary:**

Yes N/A

Notes:

Scope of Work Revision:



The scope of work was revised based on input from the WA Department of Ecology to include the Ames Creek drainage basin



Budget Revision:

☒ ☐

in the study and include analysis of ditches and flooding. In addition, an informational brochure with the results of the study will be distributed at Snoqualmie Valley Farmers Markets. Data loggers will be installed at 6 sites to include Ames Creek. Budget was revised to reflect the equipment and staff contributions from Ecology, and the increased amount of data collection and field work that can now be accomplished by Wild Fish Conservancy staff.

Completion Date  
Extension:

☐ ☒

**Copies of Work Product (check box or describe below)**

☐ Designs/Plans

☒ Brochures/Publications

☐ Curricula

☐ Photos

☐ Video

☐ Sign Mock-Ups

Other: **Cherry Valley Water Quality Monitoring – Final Report November 2014**

**Kardouni, J. and W. Marsh. 2012. Dissolved oxygen study: Lower Cherry Creek and Ames Creek Watersheds. Washington State Department of Ecology. Publication No. 12-03-037. Olympia**

**KCD Acknowledgement:** In final report “Funding for this project has been provided in part through the King Conservation District. The contents of this document do not necessarily reflect the views and policies of the King Conservation District, nor does the mention of trade names or commercial products constitute endorsement or recommendation for their use.”

**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:

☒ ☐

As of 12/5/12, draft report of data collected in Spring 2011. Construction of naturalized channel in Cherry Valley completed, data collection to continue in 2013 to assess WQ conditions following restoration in Cherry Valley and ditch maintenance efforts in Ames Creek. In spring 2013, Data collection will continue at the sampling sites in Ames Creek ditch network and following channel reconstruction and restoration of Waterwheel Creek in Cherry Valley. Monitoring sites will be established in new channel to assess the effectiveness of the restoration efforts.

Expense Reports:

☒ ☐

**Final Report:**

☒ ☐

**Abstract (excerpts from 53-page report - Cherry Valley Water Quality Monitoring – Final Report November 2014)**

Since initiation of monitoring efforts, the Cherry Creek Watershed—located in King County north of Duvall, WA—has often failed to meet water quality standards set by the Washington State Department of Ecology and has been identified as a priority area for research and rehabilitation. Anthropogenic alteration of watershed processes subsequent to the arrival of Europeans is suspected to be the cause of water quality problems within Cherry Valley, which

frequently exhibits low dissolved oxygen, elevated water temperatures, and low pH. Consequently, large fish-kill events and anoxic conditions have been observed. In 2012, the local non-profit organization Wild Fish Conservancy (WFC) completed a habitat rehabilitation project within the lower Cherry Valley in order to improve water quality and in-stream habitat for the recovery of ESA-listed salmonids. The project entailed consolidating flow from three ditched floodplain tributaries into one newly-constructed naturalized channel. WFC collected continuous water quality data utilizing stationary sonde instruments in 2013 to document potential post-rehabilitation changes in DO, temperature, and pH parameters. Additionally, WFC initiated 2013 monitoring efforts to better characterize water quality of Cherry Valley, provide continuous baseline data, and investigate the mechanisms causing low DO conditions. Results indicate that the post-treatment condition has improved DO concentrations relative to pre-treatment conditions. Furthermore, ranges of temperature and pH have been moderated in the restored channel. Considering that the rehabilitation project was completed less than a year prior to initiation of post-project monitoring efforts, water quality is likely to further improve as natural stream processes, watershed drainage, and riparian health are recovered over time.

Nevertheless, lacking spatial replication and substantial pre-treatment data, the results of this effort may be difficult to apply outside the Cherry Creek Watershed. 2013 water quality data will serve well as baseline information against which future data collection efforts can be compared to document the recovery of water quality in Cherry Valley.

At excessive temperatures and low concentrations of DO, salmonids become increasingly lethargic, exhibiting diminished competitiveness, metabolic efficiency, feeding capacity, food conversion efficiency, swimming fitness, and pathogen resistance; this translates to reduced growth, predator avoidance, reproductive capacity, and survival (Bjourn and Reiser 1991; Quinn 2005). Although juveniles and adults have the ability to migrate to avoid sub-optimal water quality conditions, suitable habitat with appropriate cover and substrate is limited. Furthermore, migration due to avoidance of prevailing conditions results in adverse energy expenditure and exposure to predators. As a result, the ranges of temperature and DO available within a watershed strongly affect survival of salmon and trout at all life-history stages.

While the production of oxygen from plant activity provides great benefit to aquatic consumers, excessive growth in the water column and on substrates can eventually result in adverse effects on local fish and invertebrate communities. Hindrance of stream flow and water surface exposure may result in diminished aeration and light penetration necessary for photosynthetic activity; ultimately, this may decrease oxygen availability resulting in anoxic conditions.

The quantity of oxygen consumed in the water column to meet the needs of microbial metabolism is known as the biochemical oxygen demand (BOD) (Sawyer et al. 2003). While decomposition in the water column plays a major role in aquatic oxygen depletion, decomposition within the underlying sediment layers also affects concentrations of DO available to aquatic life. Sediment oxygen demand (SOD) is the quantity of oxygen removed from the overlying water column to meet the metabolic requirements of microorganisms (bacteria and nitrifiers) which degrade sediment organic compounds through chemical oxidation (Wang 1981). In addition to the removal of oxygen, this process can result in the release of nutrients and metals that may at times produce toxic conditions (Gunnison, Chen, and Brannon 1983).

Therefore, vulnerability of aquatic animals to lowered DO levels is often greatest in the early morning hours of hot summer days during periods of low flow.

Thorough mixing of the water column and improved aeration can work to counter these hypoxic conditions.

It has been hypothesized that altered drainage patterns, valley floor subsidence associated with the disconnection of Cherry Creek and its floodplain, and the prolonged saturation of valley soils has contributed toward the degradation of water quality within the watershed (Hersh 2009; Kardouni and Marsh 2012).

Despite research efforts, the impact of groundwater inputs on local DO conditions remained inconclusive. However, flooding of the Snoqualmie River and stratification—influenced in part by nearby manmade ponds—were noted as potential mechanisms for conditions in Lateral A. On two occasions, Lateral A exhibited rapid spikes and crashes in daily minimum DO concentrations in mid-May and in early June. These patterns were highly correlated with flooding of the Snoqualmie River may have caused backwatering of Lateral A monitoring stations.

The effectiveness of the 2012 Waterwheel Creek restoration in improving water quality parameters of the Cherry Creek Watershed was analyzed through a before-after control-treatment study in which DO, pH, and temperature were monitored both before and after the completion of restoration activities. Specifically, objectives were to evaluate how DO, temperature, and pH responded to WFC restoration activities within Waterwheel Creek one year after implementation, and to provide a baseline against which future data comparisons can be made as the restoration project matures.

One year after rehabilitation activities, Waterwheel Creek (treatment) and Lateral A (control) frequently failed to meet state water quality criteria for DO and temperature parameters (Figures 7-8; Table 2).

Although water quality criteria were frequently violated, the 2013 continuous water quality monitoring results show that mean DO and pH were greater, and temperatures were lower in the restored reach of Waterwheel Creek relative to the non-restored reach, Lateral A (Table 3).

Post-treatment conditions generally demonstrated greater DO concentrations relative to pre-treatment conditions in Laterals B, C, and D individually (Figures 11-12)

Although differences in water quality between Waterwheel Creek and Lateral A in 2013 are slight, future improvements may be realized considering the fact that restoration activities occurred only a year prior to initiation of post-project monitoring efforts. Generally, process- based restoration takes decades for objectives to be fully achieved (Roni and Beechie 2013).

Analyzing the results of continuous temperature and pH monitoring data, Waterwheel Creek met state water quality criteria at a greater percentage of the study period relative to Lateral A (Table 4).

### Conclusions and Recommendations

Although the mechanisms driving water quality issues within the Cherry Valley are complex due to the high degree of anthropogenic watershed alteration and influence from the Snoqualmie River floodplain, we documented slight improvements in DO between treatment and pre-treatment datasets that are likely, in part, a result of reach rehabilitation efforts.

It is recommended that funding for future projects be appropriated toward pre-restoration monitoring efforts.

Without consistent data before and after the completion of stream rehabilitation actions, validation of project effectiveness is difficult. Adequate monitoring is critical for guiding future restoration projects and determining whether investments and restoration actions are properly meeting objectives (Roni and

Beechie 2013).

In regard to future monitoring of the Cherry Valley Watershed, efforts to continuously monitor post-treatment water quality conditions should be expanded; it is recommended that continuous data are gathered on a year-round basis. Furthermore, additional stationary instruments should be distributed throughout the valley to provide a more thorough characterization of water quality within the Cherry Creek Watershed.

Moreover, existing data demonstrate that rehabilitation actions within Cherry Valley are likely improving DO conditions, and to a lesser extent, temperature, and pH.

(photos below from WFC website, fish kills)



***Abstract from Kardouni, J. and W. Marsh. 2012. Dissolved oxygen study: Lower Cherry Creek and Ames Creek Watersheds. Washington State Department of Ecology. Publication No. 12-03-037. Olympia (72 pages)***

Dissolved oxygen (DO) concentrations have frequently failed to meet Washington State water quality standards in the Snoqualmie River flood plain Agricultural Production District (APD) reaches of Cherry and Ames Creeks. However, Cherry and Ames Creeks are not on the federal Clean Water Act Section 303(d) list for DO because the data were yet to be verified for the most recent 2008 water quality assessment.

This study was conducted in order to: (1) characterize DO concentrations, (2) identify possible mechanisms that influence DO, and (3) provide information about the possibility of low DO coinciding with high groundwater-to-surface-water ratios during late spring following long periods of soil saturation. Study results will be used for future water quality improvement projects and help form a basis for continuing investigations. This report presents time-series (continuous) DO concentrations recorded from May through June 2011 in the lower Cherry and lower Ames Creek watersheds.

Based on study results, waterways of the lower Ames Creek and Cherry Creek watersheds did not meet Washington State quality criteria for DO. Sites with low stream velocities such as the recently dredged agricultural waterway had the highest DO range, and Lateral A showed erratic diurnal signatures often reaching DO concentrations of 0 mg/L. Sites with higher stream velocities such as Cherry and Ames Creeks showed a lower range of DO concentrations diurnally. Temperature did not appear to be the driving factor influencing DO fluctuations. Water column stratification and nearby ponds may have affected DO concentrations in Lateral A. Fluctuations of the Snoqualmie River streamflow may have affected its tributary DO concentrations.

Other studies suggest waterway dredging may influence DO concentrations initially as soils rebuild in the recently dredged waterways.



### Recommendations

Results of this spring 2011 lower Cherry Creek and lower Ames Creek watersheds study support the following recommendations:

- Use best management practices (BMPs) for land use to increase the chances of improving water quality.
- Follow-up studies, including nutrient, streamflow, and groundwater assessment, may assist in determining the factors that influence DO concentrations.
- The recently dredged agricultural waterway in the Ames Creek watershed should be monitored to assess the long-term effect of post-dredging.
- Lateral A and Cherry Creek, both upstream and downstream of their confluence, should be monitored as a follow-up in order to assess potential water quality effects from the Water Wheel project.
- Consider previous studies where DO characteristics may be driven by eutrophication, primary production, sediment oxygen demand (SOD), groundwater characteristics, and watershed management practices.

*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.*

Wild Fish Conservancy \_\_\_\_\_,

Grant Recipient

Name: Jamie Glasgow

Title: Director of Science

Date: June 22, 2020 \_\_\_\_\_

## Pacific Salmon at the Crossroads

Salmon and trout once teemed in rivers and streams of the Pacific Northwest with annual catch averaging around 10 million wild fish in the early 20<sup>th</sup> century. However, as a result of overharvest, dams, habitat loss, and detrimental effects from hatchery production, over a third of Washington's salmon and trout populations are now extinct or near extinction.



*Floodplain habitat degradation contributes to the decline of wild salmon and steelhead.*

With the number of returning adult salmon continuing to decline, various wild fish populations have been listed under the U.S Endangered Species Act (ESA) in order to prevent the loss of our region's cultural icon. Three Snoqualmie River stocks are now protected under the Endangered Species Act:

- Puget Sound Chinook
- Puget Sound Steelhead
- Puget Sound Bull Trout

## Salmon in your Backyard

After migrating hundreds of miles from the ocean to return to their river or stream of origin, adult salmon generally spawn in the fall to give rise to a new generation. Offspring will emerge from the stream gravel in the spring, and then migrate to rearing habitats to hide from predators, feed on insects, and avoid high flows. Depending on the species, juvenile fish will rear in low-flow freshwater environments for a period of weeks to years.



*Juvenile coho rearing in ditch near Carnation, WA*

What might appear to be only a ditch for agricultural drainage is commonly high-use rearing habitat for ESA-listed juvenile salmon and trout. Despite the often degraded conditions of these altered channels, rearing juvenile salmonids can be found in abundance. While you may not be able to see these young fish taking shelter in channels of your backyard or fields, they are utilizing habitat on your property – feeding and growing as much as possible to prepare for life in the ocean.

## Habitat and Water Quality

Degraded water quality and the loss of complex in-stream habitats are among the causes of salmon and trout decline. In the past, juvenile salmonids would rear in high-quality off-channel wetlands, ponds, sloughs, and floodplain tributaries. However, due to human alteration of valley lowlands, many fish now use agricultural drainages for shelter during juvenile life-stages.



*Ditch in Cherry Valley, home to thousands of juvenile salmon*

Most agricultural drainages exhibit little in-stream habitat complexity. Ditched, diked, straightened, and cleaned habitats provide little shelter compared to the natural environment. Due to human alteration, these channels exhibit reduced flow, depth, and shade. Additionally, nutrient inputs from livestock and fertilizers can often be too high. As a result, water quality may be severely impaired with high water temperatures and acidity, and low dissolved oxygen. When this happens, salmon and trout growth and survival are substantially reduced.

## What can I do to help?

To help the recovery of ESA-listed salmon and trout, you can work to improve habitat and water quality in your own backyard!

- Fence-off buffers to prevent livestock from entering drainage channels and to protect streamside vegetation.
- Remove invasive weeds like reed canary grass, Himalayan blackberry, and knotweed.
- Plant native trees and shrubs adjacent to ditches.
- Do not remove large woody debris from tributaries or drainage channels.
- Reduce nutrient inputs from livestock and minimize the use of fertilizers, herbicides, and pesticides.
- Plant and maintain untilled buffers to conserve soil.
- Respect water rights, and minimize removal of water from drainage channels where fish may be living.
- Coordinate ditch maintenance with local and state agencies.

Taking these actions will improve habitat and water quality by decreasing temperatures and increasing flow, shade, and dissolved oxygen. These actions will also reduce nutrient and sediment inputs. Incentives, grants, and cost-sharing opportunities are available to property owners engaged in habitat restoration. For more information, contact the King County Conservation District, Wild Fish Conservancy, Sound Salmon Solutions, and Stewardship Partners.

## Contact WFC!

Storefront: 15629 Main St. Duvall

Telephone: (425) 788-1167

Email: [info@wildfishconservancy.org](mailto:info@wildfishconservancy.org)

Website: [www.wildfishconservancy.org](http://www.wildfishconservancy.org)

Wild Fish Conservancy, a non-profit organization based in Duvall, WA, is dedicated to the recovery and conservation of the region's wild-fish populations and ecosystems. Through science, education, and advocacy, WFC promotes technically and socially responsible habitat, hatchery, and harvest management to better sustain the region's wild-fish heritage.

Since 1989, we have worked with landowners – at their request - to help them improve conditions for wild fish. With 25 years of experience, WFC understands the techniques, tools, and resources that are available to help willing landowners make healthier ecosystems. Contact us to identify how habitat on your property can be improved to aid the recovery of salmon and trout!

*Funding for this brochure was provided by the King Conservation District.*



Wild Fish Conservancy

NORTHWEST

SCIENCE · EDUCATION · ADVOCACY



**Improving Habitat and Water Quality in Agricultural Drainages and Tributaries of the Snoqualmie River**



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

**Grant Summary Information**

**Recipient:** City of Tukwila

**Project Title:** Green Tukwila Implementation - 2018 & 2019

**Project Description:** *The Green Tukwila Program was adopted by the Tukwila City Council on March 6, 2017. A 20-Year Stewardship Plan was developed to guide the overall program. The first step in implementation is recruiting and developing Forest Stewards that will adopt parks or areas of parks and be the volunteer point person for that site. The Parks & Recreation Department and KCD funds supports of .50 FTE dedicated to this project for 2018-2019. KCD Funds and existing city budget funds will also be used to contract professional crew days to support and augment this project. There is great need for this as well as developing the stewardship program. As this is a new program to the city, this grant project will focus on outreach, supporting and developing stewards, and beginning the boots on-the-ground work through volunteer events.*

*The work focused on three sites Tukwila Park, Crystal Springs Park, and S. 128th Parcel (now renamed Cottonwood Corner). At the time of application, the City had interested stewards for all three sites including a local resident and a local company.*

*The goal of the on-site work is to take portions of all three sites (Tukwila Park, Crystal Springs Park, and S. 128th Parcel) through the four phases of restoration: All three sites are currently in crisis due to English ivy, Himalayan Blackberry and Knotweed. Volunteers will be working in phase 1, invasive removal and phase 2, planting, of the 4 phases of restoration. Volunteers will be taught the impact of invasive species of plants on native plants, recognizing the invasive species, removal of invasive species, how to use tools, safe practices with equipment and why it is important to have healthy, sustainable forests in the urban landscape.*

*Throughout this project, staff will continue to develop and grow the stewardship program and train stewards which promotes community and a sense of ownership.*

**Funding Source and Year:** 2012-2017 KCD-Tukwila Member Jurisdiction Funds

**Start Date:** 01/01/2018

**End Date:** 12/31/2019

**Date Awarded:** 02/12/2018

**Grant Budget Summary**

**Returned Funds:**

**Payment Summary**

Award  
Amount:

\$47,400.00

Amount  
Returned:

\$-0-

Amount Paid to  
Date:

-\$0-

Amount  
Spent:

\$47,400.00

Date  
Returned:

Final Payment:  
Date:

\$47,400.00  
After KCD signs this form

**Amendment Request  
Summary:**

Yes    N/A    Notes:

Scope of Work Revision:

☐☒



Budget Revision: ☐ ☒

Completion Date ☐ ☒ Extended to:  
Extension:

**Copies of Work Product (check box or describe below)**

☐ Designs/Plans ☐ Brochures/Publications ☐ Curricula  
☒ Photos ☐ Video ☐ Sign Mock-Ups

Other:

**KCD Acknowledgement:** Acknowledgement for KCD funding appeared on all print materials including the Tukwila Parks and Recreation activity guide for two years (total circulation 100,000), posters, flyers, postcards and city-reports related to Green Tukwila. . Logo and mentions can be found on the City of Tukwila website: <https://www.tukwilawa.gov/departments/parks-and-recreation/green-tukwila/> Finally, verbal recognition is always given at all Green Tukwila events.

**Site Visit Description:** Date: **6/24/20** N/A: ☐

KCD Staff Jessica Saavedra and Mike Lasecki met two City of Tukwila Staff, Stephanie Gardener and Olena Perry at the Tukwila Community Center. We caravanned to the three focus sites stewarded during the period of this grant. We visited **the S. 128<sup>th</sup> parcel** which was recently acquired by the City and renamed **Cottonwood Corner**. The steward at this site is a local resident, Heidi, who runs a homeschool stewardship program. She is also a regular volunteer at the KCD Nursery. Many of the plants onsite are in exchange for her work with KCD. She drafted the plan for the site and organized events largely comprised of children and youth volunteers. The Tukwila Parks Commission purchased large rocks and tree rounds to fit the site as it transformed into an outdoor classroom. A large steel box for tools is located at the site for neighborhood work parties. Neighbors contribute by mowing along the road and picking up trash.

When the site was purchased by the City, it was so overgrown with blackberry and a substantial knotweed stand that it couldn't be surveyed. They started in 2018 with clearing blackberry. The stand of healthy knotweed was treated by EarthCorps annually. All that remains are dry knotweed canes and sprouts. They plan to continue to work with EarthCorps to manage the invasives and other activities volunteers shouldn't perform.

Children and adults have learned about the salmon stream on the site. Kids were very exciting to find dragonfly larvae. The site fostered lots of conversations about worms, forest versus manicured landscapes, ground bees, felled wood for habitat creation and how knotweed and other invasive plants spread from other properties. They plan to make this an Orca Day site.

At the **Crystal spring site**, city staff explained that the portion of the park they targeted for restoration was an ivy and laurel thicket. EarthCorps injected a massive amount of laurel. Forterra's partnership with McKinstry brought in 20-30 interns who removed ivy from the ground and growing up the trees. They held several large McKinstry work parties with not necessarily the same people every time, but they were able to get new people to do micro weeding/the not-so-fun work. They are considering asking the company to pay for a crew since large volunteer work parties are not allowed. They will reassess in August.

The site has a historically important, active, natural spring that is home to a special endangered snail being studied by UW.

The City created signs to explain the invasive weed compost piles left on site which they have shared with Burien and will share with KCD.

With the removal of the invasive weeds, the City had many conversations with the public and volunteers about

what healthy wildlife habitats look like. Prior to restoration, only crows were seen at the park. Now owls and Pileated Woodpeckers are prevalent.

We discussed die-off of aging native trees and how certain species are struggling due to drought stress and climate change.

They said that as a result of the activity at this park, adjacent neighbors started asking about their landscape and how to treat invasive plants in their yards. There are several planting islands surrounded by grass which serves as another educational opportunity demonstrating the level of work required for lawn versus native landscape and also how the two go well together.

Currently, in lieu of volunteer events which are largely educational events, the City created educational videos about removing Herb Robert aka Stinky Bob and how to create ivy survival rings around trees.

**Tukwila Park** is Tukwila's first park. Historically, the park used to have bears and residents came to the park to cut their Christmas trees here. It went from being devoid of wildlife to seeing snakes and stellar jays. The site was covered in ivy. Ivy remains on the edges and steep slopes, but it's a good comparison to point volunteers to demonstrate the importance of their work clearing ivy survival rings around the large trees and on the ground.

While they are searching for a steward, business volunteers have put in a lot of hard work clearing the ivy. Work parties started with REI. This park is great for Green Tukwila Day and other events because of the restoration sites are easy to access from a paved trail (ADA accessible) and not a far walk from the parking lot. The park is within walking distance of several apartment complexes. Three families are recurring volunteers. At first, because people didn't want to see compost piles left from the work parties, they got a dumpster, however, the dumpster quickly filled with mattresses and other trash. Instead they decided to dig out an area, off-trail, with a tractor to serve as a large compost pile for the ivy removed. The pile is rotated with a tractor. EarthCorps and Forterra are watching to see if this may be a solution for other cities. The compost area is the size of the playground.

Prior to restoration activities the ivy was growing over the trail. Once ivy was cleared, concrete they didn't realize was there along with a rock wall and historic trail were exposed. Existing native plants were uncovered and are thriving. They've also found old trash.

They plan to have EarthCorps come in and do more Injection of laurel and plant additional plants since volunteers cannot be utilized for this work currently.

***KCD staff recommendation is to allow grantees to contract with crews to conduct invasive plant removal and planting of native plants in lieu of volunteer events in order to continue making progress on restoration sites while gathering large groups of people is not permitted.***

#### **Planting Projects:**

Maintenance/Monitoring

Needs to be tracked: ☒

Ongoing until: end of 2020

Completed: ☐ N/A: ☐

#### **Reporting Summary:**

Yes No

Notes:

Progress Reports: ☒ ☐

Expense Reports: ☒ ☐

Final Reports: ☒ ☐

#### **Project Accomplishments and Successes**

Throughout 2018 and 2019 Tukwila Parks and Recreation staff developed the Green Tukwila Program and regional Green Cities Partnership Program by utilizing the Green Tukwila 20-Year Stewardship Plan which was adopted by the Tukwila City Council in 2017. King Conservation District funding supported staffing, supplies, and contracted services, along with city of Tukwila matching funds to ensure the program had an opportunity for a proactive approach to developing the program.

Three sites had been identified as the initial focus as they were each in a state of crisis due to English Ivy, Himalayan Blackberry, and Knotweed invasion. Those three sites were Tukwila Park, S. 128th Street Parcel (now officially named "Cottonwood Corner"), and Crystal Springs Park. Project Activities identified in the original funding request were as follows:

1. Host events and work parties at all three sites with a focus on restoration work and stewardship development.
2. Develop and strengthen partnerships with Green Tukwila Stewards.
3. Contract professional crew work days.
4. Visible evidence at each site, it will be observable that invasive plants have been removed and native plants will thrive.
5. Develop and grow stewardship program and train stewards.

**Tukwila Park:** Located at 15460 65th Ave. South. Tukwila Park was established in 1934, initial park development was performed by the Works Project Association during the Great Depression. Throughout the years English Ivy, Himalayan blackberry and other invasive plants have taken over the park. In 2018 volunteers started to clear out invasive plants and replace native plants such as sword ferns, salal, and winter huckleberry. While removing invasive plants original trails and stonework were discovered in the park, as well as snakes, banana slugs, and other native animals. In addition to volunteers, the City contracted with the Student Conservation Corp to further restoration efforts. Students learned about restoration and the importance of native plants throughout their two-week experience at the park. Tukwila Park was the site of the MLK Day of Service, second annual Green Tukwila Day and annual Day of Caring in 2018. Each event hosted several volunteers in a festive atmosphere that included an education component, food, and roving music. Additionally, several private work parties were held with Tukwila area businesses looking for a site to perform restoration work, learn about stewardship opportunities, learn about native habitat, and give back through team building opportunities. A total of 180 volunteers contributed 492 hours of work at Tukwila Park in 2018 and they removed approximately 22,000 square feet of invasive plants.

In 2019, Tukwila Park hosted the 3rd Annual Green Tukwila Day, the annual Day of Caring, and private business work parties. Most of the volunteers were new to restoration and had tons of questions. The events hosted 109 volunteers that put in 330 hours at the park. Tukwila Park has been covered in a thick blanket of established English ivy for many years. Volunteers have cleared and micro weeded 16,200 square feet, completed 22 tree survival rings and planted 110 native plants. They also mulched 11,000 square feet around young native plants.

**Crystal Springs Park:** Located 15832 51st Ave. S., Crystal Springs Park protects and preserves a natural spring that was used by Native Americans and early pioneers in region. The 11-acre park was originally developed in 1984, after nearly 25 years Laurel and English ivy have invaded the park. The City partnered with Forterra and McKinstry Corporation to begin restoration work in mid-2018. McKinstry selected Crystal Springs Park to give back to the community while creating team building opportunities for their staff. 114 volunteers dedicated 291 hours in the park. Volunteers learned about invasive plants, including how to properly remove and re-plant with native plants. Additionally, professional crews worked over a period of four days to inject invasive Laurel. McKinstry Construction became Tukwila's first business to officially steward a site and they continued their work through 2019. The several work parties that were also open to the public, and park neighbors have started participating in the work. Crystal Springs had 137 volunteers that put in 278 hours in 2019 and they cleared 49,000 square feet of invasive plants and planted 300 native trees, plants and shrubs.

**S. 128th St. Parcel:** Located on the corner of S. 128th St. and 37th Ave S., this parcel is one of Tukwila's newest open space locations. The site was officially named through the City Council process in late 2019 – "Cottonwood Corner." When acquired in 2017, the parcel was inaccessible due blackberry overgrowth and knotweed invasion. Thanks to Heidi Waters (volunteer forest steward) and her Homeschool Stewardship Squad the park is turning into an easily accessible nature playground for neighborhood children. Heidi Waters created a site restoration plan with support from Parks and Recreation Staff and

the Tukwila Parks Commission. Throughout 2018, 104 volunteers dedicated 306 hours to the site. The City contracted with professional work crews to inject invasive knotweed in 2018 and 2019. In 2019, 116 volunteers completed 327 hours of service on the site. The volunteers cleared 2,000 square feet of dense Himalayan blackberry, bindweed, and some ivy. Two of the work parties had a focus on planting, by the end of the year the volunteers had planted 247 native plants on the site. Riverton creek flows through the site and one of the highlights was finding a dragonfly larva in the creek and talking about how the work we are doing today supports life in the future.

### **Regional Benefits**

The Green Tukwila Program is an important regional program that has provided several opportunities to the public to learn about native habitat through hands on experience at restoration work parties in Tukwila. While the program is located in Tukwila, the program is also a member of Forterra's Green Cities Partnership. This regional partnership continues to attract attention to efforts cities are putting forth to restore habitat and care for open spaces.

The Green Tukwila Program focuses on attracting local residents as well as regional residents and businesses. Tukwila is unique as there are over 100,000 people that work in Tukwila and only 20,000 people that call Tukwila home. The opportunity to attract businesses into Tukwila's open/green spaces is vast and several employees of businesses participated in hands-on experiences to remove invasive growth and plant native foliage. Through this experience, participants have learned the importance of caring for native landscapes. These experiences were first-time exposures for many volunteers, who subsequently returned to help at other work parties. Additionally, we heard from volunteers that they were taking what they learned home to care for backyard landscapes and/or participate in other restoration work parties in their home towns.

The visible changes at all three sites is remarkable: 134,128 square feet of invasives were removed, and 847 native plants were planted by 760 volunteers who contributed 2,024 hours of time to the overall project. The contribution is extremely valuable to the overall region as Tukwila is a small city working hard to contribute to the overall restoration of the region - training volunteers and attracting businesses to participate in the greater good and care for natural landscapes.

The native landscape in Tukwila is as much a part of the city as the sidewalks, building and roads. Like the built infrastructure, urban forests need maintenance and care. The Green Tukwila Partnership has become the pipeline for volunteers, businesses, and partner organizations to care for these important spaces. Volunteers removed invasive plants like English ivy, Himalayan blackberry, bindweed and holly and replaced them with native shrubs like Sword ferns, Nootka roses, Sala, Hookers willow, Red Flowering Currant and Evergreen Huckleberry to name a few. The impact is not only the landscape but is on the people who come out. Over the past two years the program has been educating people about native ecosystems, tools and how to safely use them, native wildlife, history of the sites, watersheds, and how we are all connected.

### **Obstacles and Challenges**

Overall, there were not significant challenges. One obstacle that occurred was a change in Parks and Recreation Department policy, which eliminated 2019 staffing of holidays, therefore the MLK Day of Service did not occur in 2019. Staff worked around this challenge by adding more work parties and clean up projects at different times throughout the year.

One other challenge has been finding a dedicated steward for Tukwila Park. There is significant interest in Tukwila Park from various southcenter area businesses and staff are working diligently to formalize a business steward for the park. It is expected that an official steward will be joining the Green Tukwila Program in early 2020.



### Lessons Learned and Recommendations for Future Projects

Fortunately, staff had a fantastic tool for kicking off this program with the 20-Year Green Tukwila Stewardship Plan. The plan has provided a roadmap for starting a stewardship program and how to begin work in crisis areas.

*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

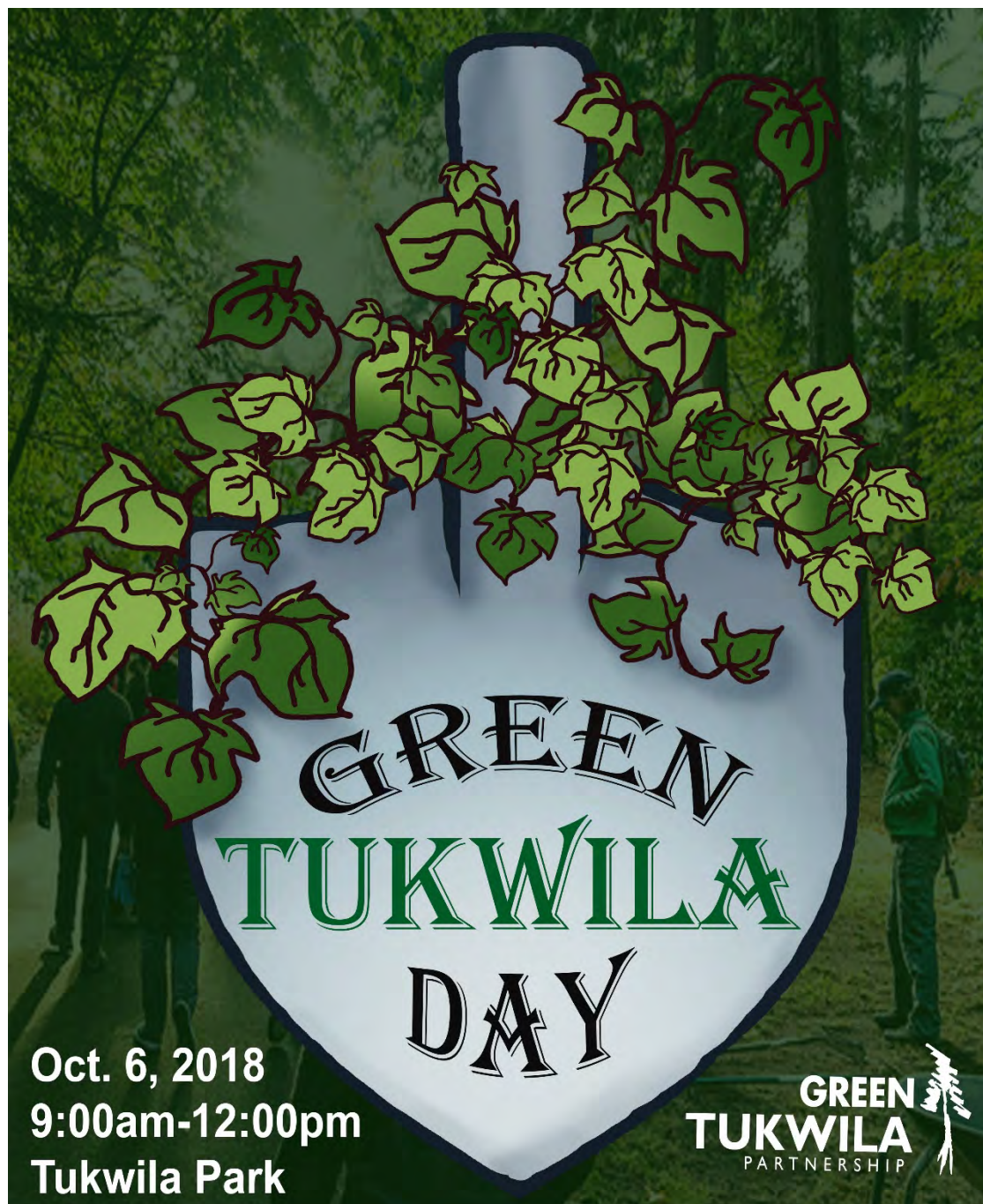
Date: \_\_\_\_\_

*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: Stephanie Gardner Brown  
Title: Parks and Recreation Management Analyst  
Date: 7/1/2020



**Oct. 6, 2018**  
**9:00am-12:00pm**  
**Tukwila Park**

**GREEN**  
**TUKWILA**  
PARTNERSHIP

Celebrate Green Tukwila Day and learn about healthy forests,  
Volunteers will remove invasive English ivy, plant native trees, and shrubs.  
No Experience Necessary \* Tools Provided \* Family Friendly \* Rain or Shine  
Sign up today: [www.TukwilaWA.gov/GreenTukwila](http://www.TukwilaWA.gov/GreenTukwila)















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

**Grant Summary Information**

**Recipient:** City of Shoreline

**Project Title:** Master Native Plant Stewards Ecological Restoration

**Project Description:** Continue restoration work at parks Boeing Creek Park, Brugger's Bog Park, Hamlin Park, Shoreview Park, and Twin Ponds Park.

**Funding Source and Year:** KCD-Shoreline Member Jurisdiction 2018-19 Funds

**Start Date:** 01/01/2019

**End Date:** 12/31/2019

**Date Awarded:** 08/13/2019

**Grant Budget Summary**

**Returned Funds:**

**Payment Summary**

Award Amount: \$36,970.00

Amount Returned: \$127.57

Amount Paid to Date: \$33,158.19 – 2/10/20

Amount Spent: \$36,842.43

Date Returned: N/A

Final Payment: \$3,684.24  
Date: After KCD signs this form

**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:** • At the beginning of each work party, it has been observed that Master Native Plant Stewards acknowledge KCD as a major supporter throughout the longevity of the program RAD designed a "Restoration in Progress" sign to install at all the sites, and Tony Hamilton constructs the signs for stewards as needed. The sign acknowledges KCD for their extensive role in making this program possible

**Site Visit Description:**

Date: 6/25/20

N/A: ☐

KCD Staff, Jessica Saavedra and Mike Lasecki visited 5 sites with City of Shoreline Staff, Tony Hamilton and contractor, Joy Woods from Restoration Analytics and Design.

Work began on all sites in 2017.

At the **South Twin Ponds Park** site, a woman-led team started in 2017, holding consistent, large work parties on either side of the trail. Plantings have been successful because they were densely planted and have kept people and pets out. Conifers were interplanted to increase diversity and conifer canopy cover in the park. (Stp Sarah on planting list)

Prior to restoration, the site contained 15-20 feet tall Himalayan blackberry thicket all of which were manually removed by volunteers. The City of Shoreline does not chemically treat weeds as part of their stewardship program. Like many sites this time of year, the bindweed growth is surging after other weeds are removed. Stewards will work to clear the bindweed as they are able. Bindweed is a lower priority for control since it dies back every year. In 2019, they planted conifers and a good diversity of native plants. (STP C a and Y),

Buckhorn baggies are a technique they used to control invasive trees such as Norway Maples that grow from the stem and not from runners. The baggies are placed over the cut stump to block the trees' access to resources, it stops respiration from the stem. The skirt of the baggie is buried to prevent resprouting from the trunk. They leave the baggie on until they know the invasive tree is dead. The baggies were put down in 2019 and then examined at end of year,

They held large work parties with school participants. In the future, they will know more when we are in Phase 3 about what kinds of volunteer events that will be allowed. In addition, people in the restoration business are looking to King County for event protocols with small groups. Most of the stewards are interested in doing maintenance on their sites, which is the primary activity stewards can do under current circumstances. They've also been mulching trails and plantings as well as reporting poison hemlock.

The **North Twin Ponds** site also has had consistent work parties.

They worked in pockets, planting conifers, sword fern and other shrubs. They flagged everything planted to find and monitor later. The sites worked on were once an area covered in ivy, now with the hard work by stewards, the understory has been cleared. The invasive weed, Italian Arum, was buried with a foot of mulch but still came up, it was suppressed but not killed. We've seen this with other sites where herbicide cannot be used. Some of the pockets received sheet mulching with cardboard, to control weeds, and planted later. They've found applying thick layers of mulch has been very effective at retaining moisture, reducing irrigation needs and suppressing weeds of all types.

The City is exploring was to have a central location where volunteers can work and it's easy for the City to provide mulch and tools.

KCD Staff described the different stewardship model being done through urban forestry program in Lake Forest Park and Normandy park, to expand on existing base and bring in more stewards,

At **Hamlin Park**, there was 20 feet of scotch broom, They controlled it by cutting it down, which stresses it enough to kill it. 150 plants were installed in 2019. They are very well established, even with full sun exposure. They applied 18 inches of mulch and have had great survival rates of the plants because of the thick mulch retains water. They did irrigate a couple times with backyard sprayer, but this site is like a demonstration area for landscaping with native plants and how all of the right techniques can lead to a successful restoration site.

Volunteers worked progressively on this site. They've identified maintenance zone to tackle small areas of blackberry regrowth. All invasive weeds on this site were controlled manually by volunteers.

This site has also had consistent work parties, but they take summer off. Audubon summer camps take on the work. This park is designated as a regional park, it is 60 acres and was a base. They plan to install conifers every year. They purchased all of their plants from Sound Native Plants, Go Natives, and Fourth Corner nurseries. They have 4 committed stewards on this site.

At the **Bruggers Bog** site, it is very wet. Like with the other sites, they started having lots of work parties in 2017. At this site they cannot plant conifers under the power line, but elsewhere they planted 40-50 conifers in 2019.

The **Shoreview site** is located on the Shoreline Community College campus.

While they lost stewards because of travel constraints, they did an amazing job creating a terraced native plant bed along stairs and a walkway.

The **Boeing Creek site** is also on the Shoreline Community College campus by a large dog park.

They cleared tall blackberry by grubbing out the roots and installed 150 Pacific Ninebark stakes. There is a sunny exposed area and an expansive established forest area with dense canopy cover where they controlled Herb Robert by manually pulling it and cut Butterfly Bush and covered with a Buckthorne baggies since it resprouts at the stem.

The steward holds a once a year work party. This is another site where they may bring in the Audubon summer camps kids.

#### Planting Projects:

Maintenance/Monitoring

Needs to be tracked: ☒

**Ongoing until:** By stewards and work parties. Three year monitoring and maintenance period required by grant would be completed by 2020 or three years from when each site began installing plants.

Completed: ☐ N/A: ☐

#### Reporting Summary:

Yes No

Notes:

Progress Reports: ☒ ☐

Expense Reports: ☒ ☐

Final Reports: ☒ ☐

#### Project Accomplishments and Successes

Restoration Analytics and Design (RAD) is the contractor who worked to assist city staff by providing training, stewardship management, and ecological expertise, in support of the Shoreline Master Stewards in their restoration work in Shoreline's parks.

The 2019 parks selected and approved to host MNPS volunteers and community events included: Boeing Creek, Brugger's Bog, Hamlin Park, Shoreview, and Twin Ponds Park. Twin Ponds now hosts three separate stewardship teams

- Regular, monthly work parties were held at Brugger's Bog, Hamlin Park, Shoreview, and Twin Ponds Park
- In July a maintenance work party was held at Boeing Creek
- In April a maintenance work party was held at Shoreview

RAD connected and engaged with volunteers and the greater community through the following:

- Shoreline Community College to increase community volunteer recruitment, training, and coordination, contact included: 5 faculty members and 5 students
- Recruited volunteers from the general community, who engaged with stewards at work parties.
- Attended large events such as Earth Day and Diggin' Shoreline for outreach
- Assisted stewards to communicate appreciation with work party volunteers,
- Performed other modes of retention and outreach such as:
- provided table, canopy, warm coffee, and hot water for teas and cocoa, creamer (dairy and non-dairy)
- Worked on-site with stewards to develop complete restoration management plans specific to each restoration project area from implementation through plant installation in the fall

RAD, as principle consultant ensured ecological restoration was accomplished by means deemed scientifically valuable by the Society for Ecological Restoration (SER).

- RAD Ecologist designed, coordinated, and implemented an ecological restoration workshop series for all interested stewards
- Completed work done outside of the scope of the project:
  - Invasive control of Norway maples: Buckthorn baggies research, coordination, and implementation, and adaptive management and meetings to complete the task

#### Plants

- Installed over 800 native trees and shrubs; 675 of which were planted at multiple Green Shoreline Days planting parties, 140 wetland plants at STP-SF
- Distributed ~135 cubic yards of mulch around newly installed plants for weed barrier and moisture retention functions
- Removed and or controlled 74,000 square feet of invasive species in preparation of installing new plants. Additionally, maintained 99,485 square feet to minimize invasive resurgence and infestations.

#### People

- Retained the support of 12 trained volunteer stewards, which is just under half of the originally trained group three years later. These stewards contributed over 500 volunteer hours towards restoring community natural areas in 2019
- Recruited a total of 1,137 hours of volunteer support from the community
- Engaged youth groups from Evergreen, Lakeside, and Seattle Audubon
- Connected and engaged with Shoreline Community College, including 5 faculty members and 5 students
- Held a total of 52 community work parties at the seven MNPS sites
- Partnerships
- Participated as an integral partner in support of the first Green Shoreline Day events and development of the Green Shoreline Partnership
- Coordinated, recruited, presented and/or hosted 7 workshops within and for the steward community
- As part of the workshop series, conducted thorough and extensive site visits which resulted in adaptive and improved management plans for spring and fall

#### Regional Benefits

Regional benefits aid in the support of the goals for restoration in the City of Shoreline Urban Forestry Initiative Strategic Plan and the KCD Urban Forestry Program Guiding Principles.

In addition to many quantitative and tangible benefits, restoration of lands and waters have invaluable benefits to the health and well-being of residents and visitors to the Puget Sound Trough ecoregion.

Below are some of the most prevalent benefits observed during this year's program:

- Support of the overall health and functionality of the Thornton Creek and Lyons Creek watersheds. These small but highly impacted systems directly affect the greater Lake Washington watershed.
- Increasing native canopy cover in urban parks benefits both human residents as well as wildlife. Increase cover at different heights and functions provide shade, forage, nesting materials and other ecosystem services.
- Community based restoration increases public awareness and understanding of regional and local issues in the environment. Restoration projects attended by the public are a positive and easy way to encourage participants to put learned practices into action at home or other public lands.
- Removal, control and intentional management of invasive species have benefits to both the immediate area of concern as well as widespread urban and rural areas subject to infestations.
- Inclusion and equity of all community members to participate in restoration where they live work or play is vital to the health of the community and the greater society. Utilizing a variety of recruitment techniques and platforms helps ensure everyone has an equal chance to get involved.



### Obstacles and Challenges

As with any large-scale project involving multiple organizations, stakeholders, staff and volunteers there are bound to be obstacles and challenges. Much like addressing ecological situations with adaptive management, RAD also address the implementation of organizing projects in a flexible and adaptive manner. Below are some of the obstacles and challenges faced during this reporting period:

- Limited tools available for work party events scheduled to take place at the same time, but RAD helped steward teams adapt and offered guidance in doing so
- Volunteers taking an ownership role of assigned site and treating it as gardening or their "own backyard", therefore they tend to veer off course and not follow restoration guidelines. RAD has successfully been able to communicate and convey the importance and differences between gardening and ecological restoration
- Master Native Plant Stewards want to sincerely show appreciation for their volunteers, but there is no monetary support for them to buy work party snacks. RAD provided much needed warm drinks and condiments, but it would be good for stewards to be able to purchase fresh snacks for each work party that they host
- During the first three quarters of 2019, RAD provided a table and canopy for work parties. Tony Hamilton has since made it possible for Shoreline Parks to deliver a canopy and table with the tools
- RAD's workshops took awhile to catch on to the steward population. It would be nice to continue these workshops as they not only provide good information and interactive learning experiences, but they also serve as a platform from which stewards across the city parks can interact, socialize, and learn from each other. Participation in the interactive workshops steadily increased throughout Quarters 2-4 when they were offered.
- Parks must help and support RAD in conveying to Master Native Plant Stewards that stewardship programs in Shoreline are presently not funded well, but that as interest in the programs grows so will funding, and thus also grow the resources available to stewards to do the work

### Lessons Learned and Recommendations for Future Projects

- RAD and Tony Hamilton with Shoreline Parks work well together to solve challenges and obstacles
- RAD makes sound ecological recommendations, based on the Society for Ecological Restoration guidelines and principles
- Provide resources and funding for snacks and warm drinks to further demonstrate appreciation for work party volunteers

*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: Kirk Peterson

Title: Parks Superintendent

Date: 7/7/20



City of Shoreline – site visit photos top Master Native Stewards Twin Ponds Park, bottom Richmond Beach Saltwater Park







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

## Grant Summary Information

**Recipient:** City of Shoreline

**Project Title:** 2019 Richmond Beach Saltwater Park Habitat Restoration

**Project Description:** Sustain native habitat restoration efforts at this city park by restoring a 0.24-acre area, maintaining approximately 3 acres of restored areas, and clearing and stabilizing a 0.05 acre steep slope area.

**Funding Source and Year:** KCD-Shoreline Member Jurisdiction 2016-19 Funds

**Start Date:** 01/01/2019

**End Date:** 12/31/2019

**Date Awarded:** 03/14/2019

## Grant Budget Summary

## Returned Funds:

## Payment Summary

**Award Amount:** \$27,296.00  
Revised to \$30,944.00

**Amount Returned:** \$4,969.73

**Amount Paid to Date:** \$23,370.20  
2/10/20

**Amount Spent:** \$25,974.27

**Date Returned:** N/A

**Final Payment:** \$2,604.07  
Date: *After KCD signs this form*

## Amendment Request Summary:

Scope of Work Revision:

Yes ☒ N/A ☐

Notes:

This amendment is in response to feedback from King Conservation District (KCD) regarding the difficulty in meeting the 90-percent plant survival performance standard given the poor sandy soils and steep west-facing slopes at the Richmond Beach Saltwater Park. The proposed pilot project will blow in compost (2 inches deep) and woody mulch (4 inches deep) supplied and applied by Pacific Topsoil. The majority of the site includes steep slopes (45-degree or higher slopes) with 2 small areas less than 45-degree slopes that constitute less than 10% of the total area. The compost used will be premixed DOT (Washington State Department of Transportation) Erosion Control fine compost; as recommended by King Conservation District. Woody mulch will be suitable for steep inclines. Compost and mulch will be blown in the late fall 2019. The existing plantings will be protected using TreePro tubes – these are easy to install and can be re-used for other projects. The tubes will be removed following application of the compost and mulch.

The approximately 2,000 sq. ft. site is located in the 2018 Restoration Area (see Figure 1). Large areas of Himalayan blackberry and Scotch broom, were removed from this area. There were 128 woody native plantings in the area including shrubs and ground cover kinnickinnick.

The budget was revised to add \$3,648 to accommodate the addition of mulch as recommended

Budget Revision:

☒ ☐

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:** King Conservation District is acknowledged in a variety of ways:

At the beginning of each work party, an announcement is made to recognize the financial support and technical guidance that KCD provides for our restoration efforts. KCD signs are also posted at the volunteer sign-in table.

During community events, such as Shoreline Earth Day and presentations at Richmond Beach Neighborhood Association, we also include acknowledgement of KCD's grant and technical guidance for restoration projects at the park.

Restoration signs with the city and KCD logo are placed along the boundary of restoration areas (see Appendix B).

Work Party announcements included acknowledgement of financial and technical guidance from KCD on Facebook, Meetup, VolunteerMatch announcements; and online volunteer calendar listings at Shorewood High School, the City of Shoreline.

**Site Visit Description:**Date: **6/26/20**N/A: ☐

KCD Staff, Jessica Saavedra and Debbie Meisinger visited the site with City of Shoreline staff, Tony Hamilton and contractor Diane Brewster. We looked at the new restoration area adjacent to the walkway that leads to the beach. Unfortunately, they've experienced theft of native plants. They received reports of someone with a burlap sack removing plants in the middle of the day. The area was planted in November, replanted in winter 2019-20. The community steward reported people walking through the site. They are exploring options for a fence around the area.

Horsetail is prevalent at the site because it is a wetland, so they decided to let horsetail grow. They are also tackling reed canary grass. Prior to removal, blackberry canes were hanging from the trees. Once removed they were able to allow a salmon berry thicket and other discovered native plants to thrive. They have watered individual plants as needed but the site is mostly wet and shady, requiring almost no watering.

The 2018 area, which received the blown in mulch had people snow sledding down the hills when it snowed in early 2020.

Plants were donated in spring by Forterra. 18 bare root trees including hemlock and western red cedar were planted among the alder grove, most of hemlocks surviving, some cedar,

They haven't been able to do work parties, but the community steward comes out on own.

The 2017 area continues to have problems with plant survival. KCD staff noted that is weeds, like blackberry aren't growing on the site then our native plants aren't likely to be able to grow there either. KCD recommends abandoning those areas that continue to not support native plants. Either that or plant more of what is growing there such as Oceanspray and Nootka Rose, instead of adding plants that are not likely to survive.

They are hoping to plant the whole area now that have organic material has been added. The plants that are surviving, are doing well there just needs to be more of those specific plants planted.

While there are ollas buried for irrigation, they are hoping the need water is reduced with all of the mulch applied.

KCD staff told the City about KCD's crew and what they could do for the City. They City does not have a crew, all of the restoration work at this park is done by friends of group. More work will be done as soon as safe invite people back.

In terms of invasive weed management, the City has to go through process to apply herbicide.

On a case by case basis foliar spray or injection of herbicide is allowed.

Overall, plantings at the park in the new space are doing well and it is good to see some plants surviving on the exposed, sandy slopes. Time will tell if the mulch application aids plant growth and improves soil. KCD recommends continuing to utilize this method of spraying in mulch if the City continues to try to plant new plants on those challenging slopes.

### Planting Projects:

Maintenance/Monitoring

Needs to be tracked: ☐

Ongoing until: by contractor and volunteers

Completed: ☐ N/A: ☐

### Reporting Summary:

Yes No

Notes:

Progress Reports: ☒ ☐

Expense Reports: ☒ ☐

Final Reports: ☒ ☐

### Project Accomplishments and Successes

Of the four 2019 goals for the Richmond Beach Saltwater Park (RBSP) Native Habitat Restoration, goals A, B, and D were accomplished and most of goal C was accomplished. The first three goals were approved under this grant in early 2019. Goal 4 was added later in the year in response to the difficulty of meeting KCD's 90-percent plant survival performance standard given the poor sandy soils and steep west-facing slopes. The 2019 grant goals are described briefly below and photographs of accomplishments are presented in Appendix B uploaded.

Goal A: Plan and implement a new 0.24-acre restoration project (see Figure 2 in Appendix B) including invasive species removal, stabilizing sandy steep slopes using bioengineering techniques. Apply mulch in areas to be planted and install native trees, shrubs, and groundcover plantings. This goal was completed in the early spring during five UW-REN work parties carried out by the University of Washington Restoration Ecology Network Students, Friends of the park, and community volunteers. While the students did prepare an As-Built Report, it did not accurately represent the restoration area or the number of plantings and species used; so it is not included in this grant close-out package.

#### Achievement Details:

Implementation of The 0.24-acre restoration project was completed from January through mid-April during six 4-hour work parties. A brief tutorial about protecting critical areas (wetland, seep, and steep slopes) and techniques for restoration tasks was presented at each work party.

The central upland portion of the restoration site is densely vegetated with red alder trees, red elderberry, salmonberry, English ivy, and blackberry in the upland habitat; and lady fern in the seep area. The narrow stream along the southern portion of the site did not support vegetation. The northern edge of the site is primarily dune grass with two relatively small areas of pampas grass. Most of the restoration area has groundwater close to the soil surface for all but the driest summer months. For this reason, no ollas were installed at this restoration area.

Invasive species (Himalayan blackberry, morning glory, English ivy, and reed canarygrass) were removed prior to planting. Invasive species removal was completed throughout the restoration site. Nuisance species (teasel; tall and densely growing stinging nettle, and holly trees) also controlled during plan implementation.

Prior to mulching and planting, fascines were constructed using biodegradable jute twine and seedless/flowerless scotch broom branches and were placed on the eastern steep slope area surrounding the seep at intervals of two feet from the base to nearly the top of slope. Three rows of fascines were secured using wooden stakes. Fifteen cubic yards of arborist chip mulch procured from Cedar Grove Compost was placed throughout all areas to be planted, to depths ranging from 2 inches on slightly sloped ground up to 5 inches on steep slopes.

Native plantings were procured as bare root, plugs, and 1-gal. material. Plantings specified in the restoration planting plan (developed by the UW-REN students and their professors) included two trees, 75 shrubs, and 275 ferns, forbs, and sedges/bulrush (see Table 1 in Appendix A uploaded). More trees and shrubs were planted than were specified in order to ensure that plant survival will equal or exceed the

original plant schedule count.

Plants were placed throughout the restoration area with the exception of the existing forest area due to the many roots of trees and shrubs that made it impossible to dig holes large enough for shrubs and trees without injuring the existing roots. In addition, a small area in the northeast portion of the site was not planted because of the lack of groundwater near enough to the soil surface to support plantings in the hot summer months. The eastern seep area and stream edges were planted with sedges and bulrushes. These wetland species were also placed in areas where reed canarygrass was removed in the western portion of the site.

Most of the plantings were installed in March with the remainder planted in early April due to availability issues at the University of Washington green house. Of all the plant species installed, only lady fern and salmonberry were present prior to habitat restoration.

Goal B: Maintain approximately 3.0 acres in areas cleared in previous years (see Figure 3 in Appendix B), and the 0.24-acre 2019 restoration area, through invasive species removal and irrigating native plantings; extend the drip irrigation system to include the 2015 restoration area ollas; conduct the annual plant survival count in the 2015 through 2018 restoration areas; augment native plantings in restoration areas to maintain 90% survival rate using the 2018 annual monitoring count as the baseline. All of these activities were completed at eight monthly community work parties and 24 watering days from April through December. As we had hoped, the new irrigation set up has allowed for both watering and regular invasive management. It has been a boon to be able to water and keep the invasives from regaining a foothold. Specific information about work completed can be found in the Approved Grant Activity Status section of this package.

#### Achievement Details:

Restoration Maintenance was completed March to mid-December in the 3-acres of previous restoration activities and the current 0.24-acre restoration area. Maintenance included removal of scotch broom, Himalayan blackberry, English ivy, English holly, reed canarygrass, and morning glory. All material was bagged and taken offsite by City Staff. Removed material was discarded and not composted. Watering events were held on every weekend from May through early October and included irrigating the 2015, 2016, 2017, and 2018 restoration areas. The 2019 restoration area was watered; a total of three times from mid-September through October. Thirty-three broken ollas in the 2015 and 2016 areas were replaced with newly made ollas. The irrigation system for the 2015 planting area was completed and included all 32 ollas. Plant survival in all restoration areas was documented on August 17, 2019 (see Table 2 in Appendix A). All these tasks were accomplished during eight monthly community work parties and the 24 weekly watering days. Maintenance at previous restoration areas (approximately 3.0-acres) was completed at eight community work parties from May through December.

Additional plants were installed on November 16, 2019 (see Table 3 in Appendix A). All plantings were 1-gal. size and were obtained from Go Natives! Nursery. They were procured through a memoriam donated to the Friends of RBSP. All plants were chosen based on the species with demonstrated success in each specific restoration area. They were placed at ollas where the previously plantings had died.

In addition to the stated maintenance goals two other tasks were completed:

- 20 yards of compost was spread in an approximately 0.1-acre area located between the roadway and the playground (see Figure 4 in Appendix B). Compost was donated by Cedar Grove and The Nature Conservancy; coordinated through the Green Cities program. This area had been cleared of invasive species in 2011, but never planted. Soil amendment was done to precondition the soil and to discover if this step will help with survival and vigor of native plants planted the following season.
- In the 2006 restoration area (just south of the staircase) two shore pine were planted on the north side of densely growing dune grass and a tall ocean spray. This was done as an experiment after reviewing a study that used this method to increase low tree survival in an area with sandy soils and dry summers. The two saplings, procured through the memoriam, will be monitored for health and vigor each year to determine whether establishing tall shrubs prior to planting trees will increase tree survival rates.

Goal C: Clear and mulch the 0.05-acre steep slope along the south boundary of the 2018 restoration area (see Figure 5 in Appendix B) and stabilize slopes, as needed, for the purpose of conditioning the soil for planting in following years. Scotch broom and blackberry were removed from this area throughout the summer and fall; completed at the last work party on December 14th.

#### **Achievement Details:**

The area cleared of invasive species extends further south than proposed; it totals approximately 0.08 acre. As stated above, woody mulch was not placed on the steep slopes because the 2019 restoration area required more mulch than anticipated and used 15 yards of mulch specified for this year. In place of the mulch, bare stems and large branches of the scotch broom were left on the ground to stabilize soils over the winter. Mulch will be blown in to this next year.

Goal D: Complete a pilot project to determine whether blowing in compost and woody mulch will increase native plant survival on steep, sandy slopes. Soil amendments were added on an approximately 2,000 sq. ft. area in the 2018 restoration area (see Figure 5 in Appendix B), installing temporary protection around woody plants during application.

#### **Achievement Details:**

Thirteen yards of the specified compost and 20 yards woody mulch was blown into the 2018 area by Pacific Topsoil on November 18th. Heavy duty yard waste bags kept in place with heavy gauge turf stakes were placed over shrubs and olla openings to protect them during amendment application. The bags and stakes were removed immediately following application and mulch was moved away from plant stems. The pearly everlasting plants were covered with compost and mulch; its unknown if they will grow through this medium next spring.

#### **Regional Benefits**

In keeping with the city's Vegetation Management Plan for RBSP, annual restoration projects since 2006 have removed Scotch broom and blackberry from approximately 3 acres in the park, an area that has remained relatively weed-free area year after year. This year, we also removed English ivy, English holly, and morning glory from the new restoration area. Through restoration projects and maintenance of restored areas native species will continue to replace invasive species; serving to reduce the annual invasive seed load in the park.

With the addition of the olla/drip irrigation system, and commitment of the Friends of RBSP, plant survival has shown a marked improvement compared to the pop-up irrigation spray that was initially used. The difference between the two irrigation techniques is that ollas hold a week's supply of water that is delivered directly to the plants' roots. Regional benefits include an increase in water efficient gardens outside the park. With olla information (construction and use) provided at work parties, the community has started to incorporate this low-cost, efficient, and water-saving method to their own gardens. Park-users, volunteers, and teachers at local schools have shared that they made and used ollas in gardens for vegetables, flowers, and shrubs with excellent results. One teacher at the local King's High School now teaches this method to her students.

Re-establishment of woody native shrubs, trees, and grasses tolerant of dry, sandy soils has already begun to support small bird and mammal use of the area, with nests and hatchlings of a variety of small bird species observed in the shrubs and grasses each spring. Mice and voles have also been observed in the restoration areas. As native habitat matures it will serve provide a wildlife migration corridor along the Puget Sound shore line.

As we monitor restoration success, we can identify and address the specific limiting factors in reestablishing native habitat at the park. The more success we have in amending soils and using shrubs to provide shade for young trees, the more rapidly we can establish structurally-rich native habitat. This, in turn, will provide amelioration of effects of climate change. According to the UN's Intergovernmental Panel on Climate Change (IPCC) report reforestation and ecosystem restoration along with similar nature-based activities are named as the only methods that are well understood to be effective on reducing carbon dioxide and other polluting gasses that are already in the atmosphere. Trees are the anchors for plant and wildlife biodiversity; creating healthy ecosystems that absorb and transfer carbon into the soil with a single mature tree able to absorb 48 lbs. of carbon a year.

#### **Obstacles and Challenges**

While we have been able to attract volunteers to the monthly work parties throughout the year, we are still working on finding help with the weekly irrigation work parties. With the irrigation system, the watering for all restoration areas can be completed in 1.5 to 2 hours with the help of four people. The irrigation system

has allowed for some flexibility in scheduling. However, the majority of the work tends to get done solely by the Friends of the park. Watering the lower areas (the 2015 and 2016 areas) is less onerous because hoses can be left in place all summer, obscured by grasses, and the water source is nearby. The upper areas (the 2017 and 2018 areas) are more challenging because the water source at the house requires laying out and putting away four 50- to 100-foot hoses at each weekly watering due to the parking lot located between the restoration areas and the house. Watering the upper restoration areas would be less labor intensive if a spigot could be installed in the area to the south east of the upper restoration areas. This would allow hoses to remain in place during the watering season and, as the slope to the south of the 2018 area is planted, will provide a water source located such that additional hoses and time will not be necessary.

Environmental challenges and obstacles that can't be avoided include:

- The blazing sun in the late spring, summer, and fall months.
- The steep hill side to the east of the park road limits the number of volunteers to those who have good knees, ankles, and backs; and is not conducive to having young children in the areas.
- Vandalism of ollas

### **Lessons Learned and Recommendations for Future Projects**

The Goal D project taught us that blowing in compost and mulch is a much better option on steep slopes in relation to use of volunteer time. Particularly give that the cost is not prohibitively greater than when compost and mulch is applied by hand.

VolunteerMatch garnered the most success with increasing our outreach to the community and attendance at work parties. The response was good for both adults and youth using this site. MeetUp was a disappointment with a few people responding to it so we stopped using it in August having determined that the interest it garnered was not worth the fee. Attending Shoreline's Earth Day booth was a success with several groups attending one or more work parties this year.

The 2017 plantings on the upper hill slope (2017 restoration) are still struggling, while the 2018 plantings on steeper slopes are have a much better survival rate. We believe this is due to placing woody mulch on the cleared 2018 hillside and continuing to remove removing blackberry roots for the following two growing seasons. This resulted in the soils under the mulch changing appreciably from strictly sandy soil to soil that had at least 5 to 10 percent organic material with notably better health and survival of plantings in the 2018 area even though the majority of those plantings were bare roots plants. Even though the 2017 gets watered weekly and repeated augmentation plantings the survival rate is frustratingly low. It may be that this area would benefit from blowing in compost and woody mulch. However, this area also is highly impacted by park users. We find a lot of trash there and plants and irrigation lines appear to be affected by people playing in this area. For now, we will continue to water this area in the summer, but unless the plantings can show the same growth and vigor as other restoration areas it may be best to refrain from additional augmentation plantings until we can create a plan that we know will work.

*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.*

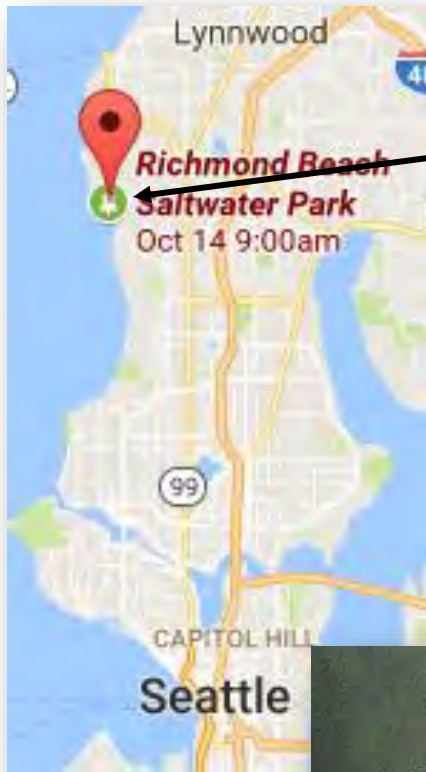
\_\_\_\_\_,  
Grant Recipient

Name:

Title:

Date: \_\_\_\_\_





**Richmond Beach  
Saltwater Park**  
2021 NW 190th St,  
Shoreline, WA 98177



Aerial Photograph Source: Google Earth, dated May 2018

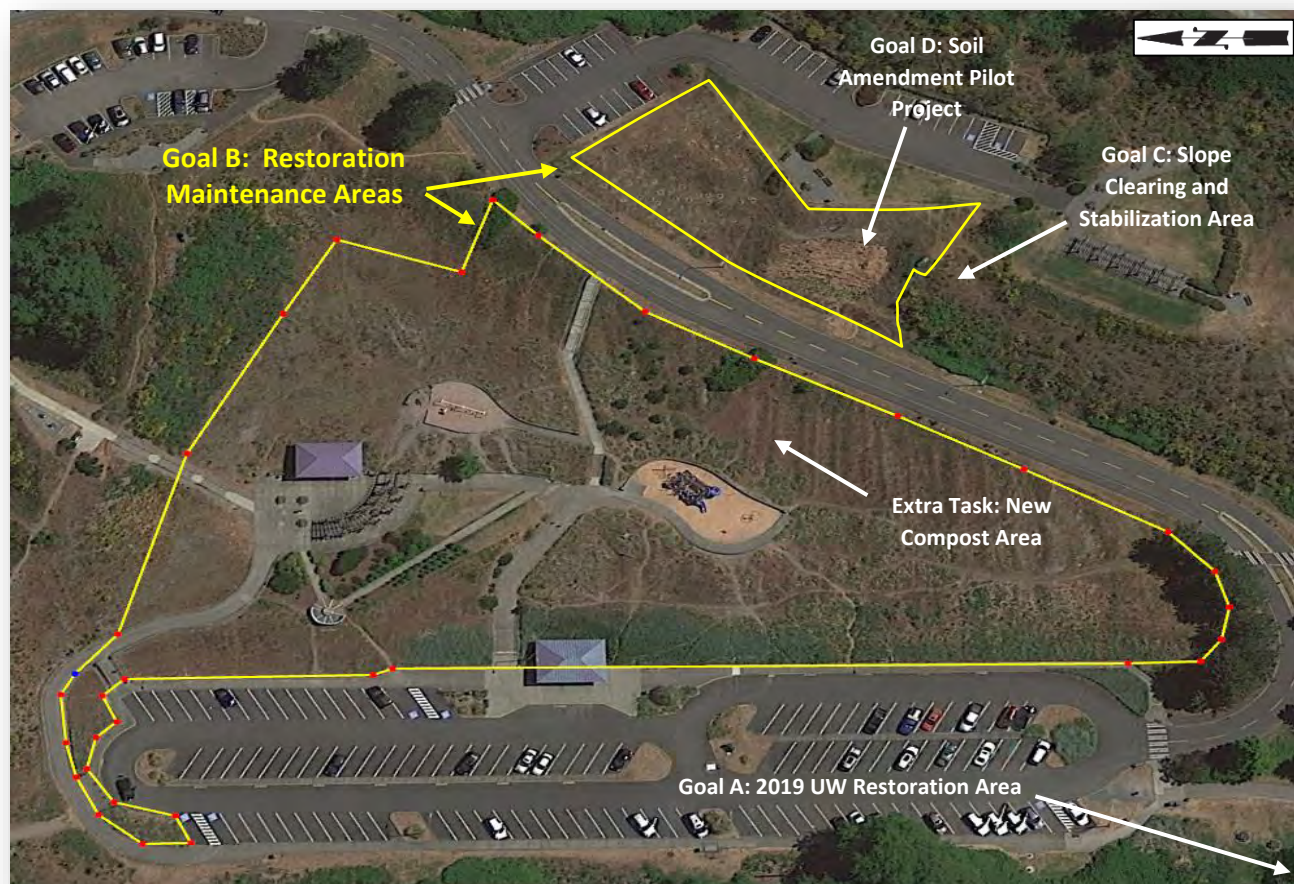
**Figure 1: Park Vicinity Map and Aerial Photograph**





**Figure 2: Goal A - 2019 Restoration Area (0.24 acre)**

Work completed by UW-REN students, Friends of the park, and community volunteers.



**Figure 3: Goal B - 2019 Restoration Maintenance Areas (approx. 3.0 acres)**

Work completed by Friends of the park and community volunteers.





**Figure 4: Extra Task - New Composted Area (approx. 0.1 acre)**  
Work completed by Friends of the park and community volunteers.



**Figure 5: 2019 Goal C: Steep Slope Invasive Species Removal and Stabilization Area (approx. 0.08 acre)**  
Work completed by Friends of the park and community volunteers.



**Figure 6: Goal D: 2019 Steep Slope Soil Amendment Pilot Project (approx. 2,000 sq. ft.)**  
Compost and woody mulch professionally blown in with support from Friends of the park.